AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF PAGES
	1	2047

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
0002	06/17/2026		See Block 14

6. ISSUED BY CODE 693C73

FEDERAL HIGHWAY ADMINISTRATION
EASTERN FEDERAL LANDS HIGHWAY DIVISION
QUANTUM PARK, 22001 LOUDOUN COUNTY PKWY
SUITE E2-3-300
Attn: Acquisitions
ASHBURN VA 20147

7. ADMINISTERED BY *(If other than Item 6)* CODE 693C73

FEDERAL HIGHWAY ADMINISTRATION
EASTERN FEDERAL LANDS HIGHWAY DIVISION
QUANTUM PARK, 22001 LOUDOUN COUNTY PKWY
SUITE E2-3-300
Attn: Construction
ASHBURN VA 20147

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

CODE | FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.
693C7326B000013

x 9B. DATED *(SEE ITEM 11)*
05/13/2026

10A. MODIFICATION OF CONTRACT/ORDER NO.

10B. DATED *(SEE ITEM 13)*

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended , by one of the following methods: (a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted ; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted , such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation data, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Project TN ERFO FS CHRKE804 2020-2(5)

The purpose of this Amendment is to:
1) Provide a summary of responses to questions/clarifications asked by potential bidders.
2) Provide amended Sheets C12 through C14 and E12 through E21.
3) Provide Bridge Load Rating Reports.

The bid opening date of Tuesday, June 30, 2026, at 2:00 pm EDT remains unchanged.

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*	
15B. CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA *(Signature of Contracting Officer)*	16C. DATE SIGNED

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
EASTERN FEDERAL LANDS HIGHWAY DIVISION

Amendment No. 0002
Project TN ERFO FS CHRKE804 2020-2(5)
Repair of Storm and Flood Damage on Spring Creek Road (FS 27)
and Citico Creek Road (FS 35-1)
Solicitation: 693C73-26-B-000013

The purpose of this Amendment is to:

1) Provide a summary of responses to questions/clarifications asked by potential bidders.
2) Provide amended Sheets C12 through C14 and E12 through E21.
3) Provide Bridge Load Rating Reports.

The bid opening date of Tuesday, June 30, 2026, at 2:00 pm EDT remains unchanged.

Questions / Clarifications

The following questions and issues were submitted to EFLHD at eflhd.conracts@dot.gov. The Government response or clarification is provided. Due to the repetitive nature of several questions and issues, the wording of the questions may have been revised and some questions have not been included. The Government's direct response to the sender may also have been updated below for better clarity.

General

1. Typically for FHWA project we will see Line Items associated for Temporary Water Diversions. The large diameter culvert pipe (54" and 60" SCH A, 72" SCH B) will require some type of temporary diversion for pipe replacement. Please Advise if this needs to be added to the price schedules? **Response: Any required temporary diversion needed for the pipe replacement is incidental to the pipe replacement.**
2. Please clarify the period of performance: **Response: The period of performance is correctly stated in the solicitation. The contractor is permitted to work on both schedules concurrently.**

Spring Creek Road (Schedule A)

3. Please confirm any weight restrictions for the bridge located at the entrance to the project site, including any limitations applicable to construction equipment and material hauling operations (35.238457, -84.551909). **Response: The road at this location is maintained by the State and the Government has no information on this structure.**

4. Near Campsite No. 3, there is an existing wooden double barrel culvert structure observed in the field that does not appear to be shown on the plans. Please confirm whether this structure is to remain in place unchanged, be protected during construction or be modified/removed as part of the project scope (35.231259, -84.495855). **Response: Protect the structure in-place during construction.**
5. Near Station 303+00, there is an existing culvert observed in the field that does not appear to be identified on the plans. Please clarify the intended treatment of this culvert, including whether it is to remain, be replaced, extended, cleaned, abandoned, or otherwise modified under this contract (35.231390, -84.495818). **Response: Repair recommendations will be determined by the CO during construction. Contingencies have been provided in the bid quantities to account for differing site conditions.**
6. In the Drainage Schedule the Latitude and longitude seem to be incorrect for most of the culverts. **Response: The coordinates have been updated with the correct latitude and longitude.**
7. Springs Creek Road Area appears to have a copper communication line and or fiber optics crossing and or running alongside the road. Based on the condition of some of the Communication Pedestals, lines missing or lines cut. Is the communication line active? The Road Conditioning will likely be unachievable due to the specification requirements for pothole areas if this line is at a shallow depth. What is the depth of the communication line? If the communication lines are at a shallow depth, what are the limits or restrictions for the depth of road conditioning repair? **Response: The depth and location of the utility lines are unknown. The contractor is responsible for locating and protecting the utility lines in place.**

Citico Creek Road (Schedule B)

8. Several culverts shown within the drainage schedule appear to be listed out of station order. Please confirm whether this was intentional and advise if there is any specific reasoning or sequencing associated with the current schedule arrangement. **Response: There is no specific reason why they are listed out of station order.**
9. Please provide more information for the "Contractor Provided Retaining Structure Design." **Response: See FP-24 Section 257.**
10. Please provide more information regarding the welded wire faced MSE wall. The extent of demolition of the old and placement of the new. **Response: See Sheets E28, S09, and S10 for mechanically stabilized earth wall details. The contractor is responsible for designing the mechanically stabilized earth wall according to FP-24 Section 257.**
11. Drawing C06, shows the MSE wall is to be shown on drawing E15 Between STA 801+00 to 825+00. Drawing E15 shows, Special Rock Embankment and does not show a MSE wall. Please provide a location of the MSE Wall? **Response: Sheet E15 has been revised to show the location of the MSE wall.**

12. If the MSE wall is to be installed in this location, the MSE wall be at the end of a bridge. Due to the excavation required for an MSE, the bridge abutment and structure will be in the way and limit the required excavation for a MSE wall. Please Advise. **Response: The contractor is responsible for protecting the existing structure in place.**
13. In the past, FHWA projects have line items for items associated with the MSE wall. For example, Structural Backfill, Underdrains, etc. These items are not listed in the Tabulation of Quantities. Are we missing Pay Items for this proposal? **Response: The referenced items are incidental to Pay Item 25501-1000.**
14. Please confirm the posted and/or allowable weight capacities for the bridges located near Stations 807+00 and 850+00, including any restrictions applicable to contractor hauling and construction equipment access (35.431361, -84.104589), (35.423970, -84.099000). **Response: Bridge Load Rating Reports are provided for the following structures:**
    a. **(35.431361, -84.104589) NFSR 35-1 MP 5.91.**
    b. **(35.423970, -84.099000) NFSR 35-1 MP 4.78.**
    c. **(35.42738300, -84.10786940) NFSR 35-1 MP 5.42.**
15. Please provide additional detail regarding the "small repairs" noted for the wing walls at the drainage structure located near Station 783+73. Specifically, please clarify the intended scope of repair, acceptable repair methods/materials, and anticipated limits of work for bidding purposes. **Response: This work has been eliminated from the contract. See revised Sheet C12.**

<u>Plan Sheet Revisions</u>

1. Remove Sheets C12 through C14 and replace them with Amended Sheets C12 through C14.
2. Remove Sheets E12 through E21 and replace them with Amended Sheets E12 through E21.

AMENDMENT NO.2 ⟨2⟩	PROJECT	SHEET NUMBER
	TN ERFO FS CHRKE804 2020-2(5)	C12

ROADWAY SCHEDULE

Citico Creek Road (FS 35-1)

SHEET NO	STATION	LAT	LONG	REMARKS
E01	503+06.33	35.3979729	-84.1041416	Roadway reconditioning and ditch reconditioning (Approx. MP 0.18 to MP 8.37). Add 6" of aggregate base course for length of project, approximately 14' wide.
E01	509+50.40	35.3989942	-84.1023845	Begin roadway reconditioning and ditch reconditioning.
E10	705+26.64	35.4184257	-84.0886139	Begin special 6" fill of all aggregate surface through Double Camp area. Approximately 450 LF x 50'-wide average. Add fill material behind wing wall of bridge.
E10	709+77.00	35.4188730	-84.0900072	End special 6" fill at Double Camp area.
⟨2⟩ ~~E14~~	~~783+67.84~~	~~35.4282652~~	~~-84.1079932~~	~~Small repairs to the 4 wing walls of existing drainage structure.~~
E15	808+97.72	35.4311628	-84.1047252	Fill in road surface at bridge ends.
E15	809+97.88	35.4311109	-84.1045271	Fill in road surface at bridge ends.
E20	941+93.60	35.4507729	-84.1186969	End roadway reconditioning and ditch reconditioning.

NO.	DATE	BY	REVISIONS
⟨2⟩	06/15/26	JMF	AMD #2 - Removed from schedule.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

CHEROKEE NATIONAL FOREST

ROADWAY SCHEDULE

CITICO CREEK ROAD (FS 35-1)

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AMENDMENT NO.2	PROJECT	SHEET NUMBER
	TN ERFO FS CHRKE804 2020-2(5)	C13

	SHEET	CULVERT ID	LOCATION				EXIST DIA (IN)	EXIST LENGTH (LF) (B)	PROP DIA (IN)	PROP LENGTH (LF)	DETAIL TYPE (A)	RIPRAP CLASS	REMARKS (C) (D)
			MASTER PIN	STATION	LAT	LONG							
	D01	P-FS27-01	400	105+12	35.2322973	-84.5443827	UNK	UNK	24	24	1	2	Remove and replace ex. pipe; place 20 LF riprap at outfall.
	D01	P-FS27-02	401	108+65	35.2315656	-84.5435970	UNK	UNK	42	40	1	4	Remove and replace ex. pipe; place 10 LF riprap at outfall.
2	D01	P-FS27-03	402	117+66	35.2295726	-84.5418219	UNK	UNK			3		Clean existing pipe.
2	D01	P-FS27-04	404	121+29	35.2289799	-84.5408436	UNK	UNK	24	30	2	2	Install new pipe culvert.
2	D01	P-FS27-05	405	121+85	35.2288805	-84.5407036	UNK	UNK			3		Clean existing pipe. Recondition ditch 15 LF at outfall.
2	D02	P-FS27-06	406	134+68	35.2272970	-84.5369925	UNK	UNK	96 X 60	32	1	9	Remove ex. pipe and replace with box culvert; place 40 LF riprap at outfall. See Plan Sheet
2	D02	P-FS27-07	407	136+30	35.2270792	-84.5364172	UNK	UNK	24	30	1	2	Remove and replace ex. pipe; place 10 LF riprap at outfall. Add 12" roadway fill
2	D02	P-FS27-08	408	137+78	35.2269194	-84.5359576	UNK	UNK	24	30	1	2	Remove and replace ex. pipe; place 10 LF riprap at outfall. Add 12" roadway fill
2	D02	P-FS27-09	409	142+03	35.2263078	-84.5347539	UNK	UNK	24	30	1	2	Remove and replace ex. pipe.
2	D03	P-FS27-10	411	155+56	35.2249112	-84.5306064	UNK	UNK	96 X 60	32	1	9	Remove ex. pipe and replace with box culvert. Place 35 LF riprap at outfall. See Plan Sheet
2	D03	P-FS27-11	412	160+53	35.2244200	-84.5290328	UNK	UNK	24	22	1	2	Remove and replace ex. pipe. Place 10 LF riprap at outfall.
2	D03	P-FS27-12	413	162+59	35.2240891	-84.5284711	UNK	UNK	24	26	1	2	Remove and replace ex.pipe.
2	D03	P-FS27-13	414	168+09	35.2234379	-84.5268054	UNK	UNK	24	30	1	2	Remove and replace ex.pipe.
2	D04	P-FS27-14	416	172+42	35.2230501	-84.5254474	UNK	UNK	24	30	1	2	Remove and replace ex.pipe.
2	D04	P-FS27-15	418	176+16	35.2290440	-84.5242240	UNK	UNK	24	30	2	2	Install new pipe culvert.
2	D04	P-FS27-16	419	178+06	35.2230482	-84.5236104	UNK	UNK	24	26	1	2	Remove and replace ex.pipe.
2	D04	P-FS27-17	420	182+08	35.2229942	-84.5222549	UNK	UNK	36	26	1	3	Remove and replace ex.pipe.
2	D04	P-FS27-18	422	188+15	35.2225866	-84.5203037	UNK.	UNK.	24	30	1	2	Remove and replace ex.pipe. Recondition ditch at inlet.
2	D04	P-FS27-19	423	194+50	35.2224524	-84.5183468	UNK.	UNK.	54	26	1	4	Remove existing pipe with Arch Pipe Culvert
2	D05	P-FS27-20	424	202+70	35.2216040	-84.5158261	UNK.	UNK.			3		Clean existing pipe
2	D05	P-FS27-21	425	208+41	35.2208264	-84.5142996	UNK.	UNK.	24	30	2	2	Install new pipe culvert in sag.
2	D05	P-FS27-22	426	209+66	35.2209682	-84.5139005	UNK.	UNK.	24	30	2	2	Install new pipe culvert.
2	D05	P-FS27-23	428	218+77	35.2231619	-84.5131083	UNK.	UNK.	96 x 48	30	1	9	Remove ex. pipe and replace with box culvert. Place 32 LF riprap at outfall. See Plan Sheet

NOTES:

(A) *See Drainage Construction detail.*

(B) *Exact measurements were not taken for existing pipe. Average pipe length is approximately 24 feet.*

(C) *Place riprap at the outfall of all Type 1 and Type 2 pipe installations according to Detail E251-01 for pipes up to 48".*

(D) *Proposed pipe lengths are estimates from field measurements, but may need to be adjusted for field conditions and to comply with the construction details. Submit lengths and location of all pipes for approval to the CO prior to ordering any pipe culvert materials.*

NO.	DATE	BY	REVISIONS
2	06/15/26	JMF	AMD #2 - Revised coordinates.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

CHEROKEE NATIONAL FOREST

DRAINAGE SCHEDULE

SPRING CREEK ROAD (FS 27)

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AMENDMENT NO.2	PROJECT	SHEET NUMBER
	TN ERFO FS CHRKE804 2020-2(5)	C14

	SHEET	CULVERT ID	LOCATION				EXIST DIA (IN)	EXIST LENGTH (LF) (B)	PROP DIA (IN)	PROP LENGTH (LF)	DETAIL TYPE (A)	RIPRAP CLASS	REMARKS (C) (D)
			MASTER PIN	STATION	LAT	LONG							
	D06	P-FS27-24	429		35.2242285	-84.5130283	UNK.	UNK.					Clean existing pipe.
2	D06	P-FS27-25	430	233+28	35.2237046	-84.5097507	UNK.	UNK.					Cut off 1 LF of existing pipe on inlet side.
2	D06	P-FS27-26		233+71	35.2243044	-84.5127606	UNK.	UNK.			2		Clean existing pipe.
	D07	P-FS27-27		242+50	35.224506	-84.5072115	UNK.	UNK.	24	22		2	Install new pipe culvert.
2	D07	P-FS27-28	431	243+00	35.2245732	-84.5070697	UNK.	UNK.	96 x 48	22	1	9	Remove ex. pipe and replace with box culvert. Place 32 LF riprap at outfall. See Plan Sheet
	D07	P-FS27-29		243+80	35.2246013	-84.5067943	UNK.	UNK.	24	22		2	Install new pipe culvert.
2	D07	P-FS27-30	433	251+85	35.2245255	-84.5041359	UNK.	UNK.	150 X 95	24	1	9	Install proposed structure plate AOP structure. See Plan Sheet
2	D08	P-FS27-31	434	258+94	35.2238808	-84.5018714	UNK.	UNK.	24	30	2	2	Install new pipe culvert.
2	D08	P-FS27-32	435	261+23	35.2237407	-84.5011404	UNK.	UNK.	24	32	1	2	Remove and replace ex.pipe.
2	D08	P-FS27-33	436	263+74	35.2236581	-84.5003123	UNK.	UNK.	24	28	1	2	Remove and replace ex.pipe.
	D08	P-FS27-34		273+57	35.2247405	-84.497814	UNK.	UNK.			3		Clean existing pipe.
	D08	P-FS27-35		276+74	35.225442	-84.4972101	UNK.	UNK.			3		Clean existing pipe.
2	D08	P-FS27-36	439	278+33	35.2254589	-84.4967502	UNK.	UNK.			3		Clean existing pipe.
2	D09	P-FS27-37	440	283+03	35.2259947	-84.4954366	UNK.	UNK.			3		Clean existing pipe.
2	D09	P-FS27-38	442	286+53	35.2269491	-84.4952794	UNK.	UNK.	24	32	1	2	Remove and replace ex.pipe.
2	D09	P-FS27-39	443	290+34	35.2279372	-84.4956463	UNK.	UNK.	24	30	1	2	Remove and replace ex.pipe. Reduce skew angle of pipe.
2	D10	P-FS27-40	448	310+18	35.2329446	-84.4946868	UNK.	UNK.	30	40	1	3	Remove and replace ex.pipe.
2	D11	P-FS27-41	450	327+31	35.2350165	-84.4924914	UNK.	UNK.	24	30	2	2	Install new pipe culvert.
2	D11	P-FS27-42	452	331+11	35.2360003	-84.4920329	UNK.	UNK.	217 X 142	26	1	9	Remove ex. Pipe; Install proposed structure plate AOP structure. See Plan Sheet
2	D11	P-FS27-43	453	332+42	35.2359811	-84.4915614	UNK.	UNK.	24	30	1	2	Remove and replace ex.pipe.
2	D11	P-FS27-44	454	333+69	35.2360983	-84.4912792	UNK.	UNK.	24	30	2	2	Install new pipe culvert.
2	D11	P-FS27-45	455	334+15	35.2361608	-84.4911043	UNK.	UNK.	42	26	1	4	Remove and replace ex.pipe.
2	D12	P-FS27-46	456	336+56	35.2360412	-84.4903094	UNK.	UNK.			3		Clean existing pipe.
	D12	P-FS27-47		346+44	35.2372073	-84.4875893	UNK.	UNK.			3		Clean existing pipe.

NOTES:

(A) *See Drainage Construction detail.*

(B) *Exact measurements were not taken for existing pipe. Average pipe length is approximately 24 feet.*

(C) *Place riprap at the outfall of all Type 1 and Type 2 pipe installations according to Detail E251-01 for pipes up to 48".*

(D) *Proposed pipe lengths are estimates from field measurements, but may need to be adjusted for field conditions and to comply with the construction details. Submit lengths and location of all pipes for approval to the CO prior to ordering any pipe culvert materials.*

NO.	DATE	BY	REVISIONS
2	06/09/26	JMF	AMD #2 - Revised coordinates.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

CHEROKEE NATIONAL FOREST

DRAINAGE SCHEDULE

SPRING CREEK ROAD (FS 27)

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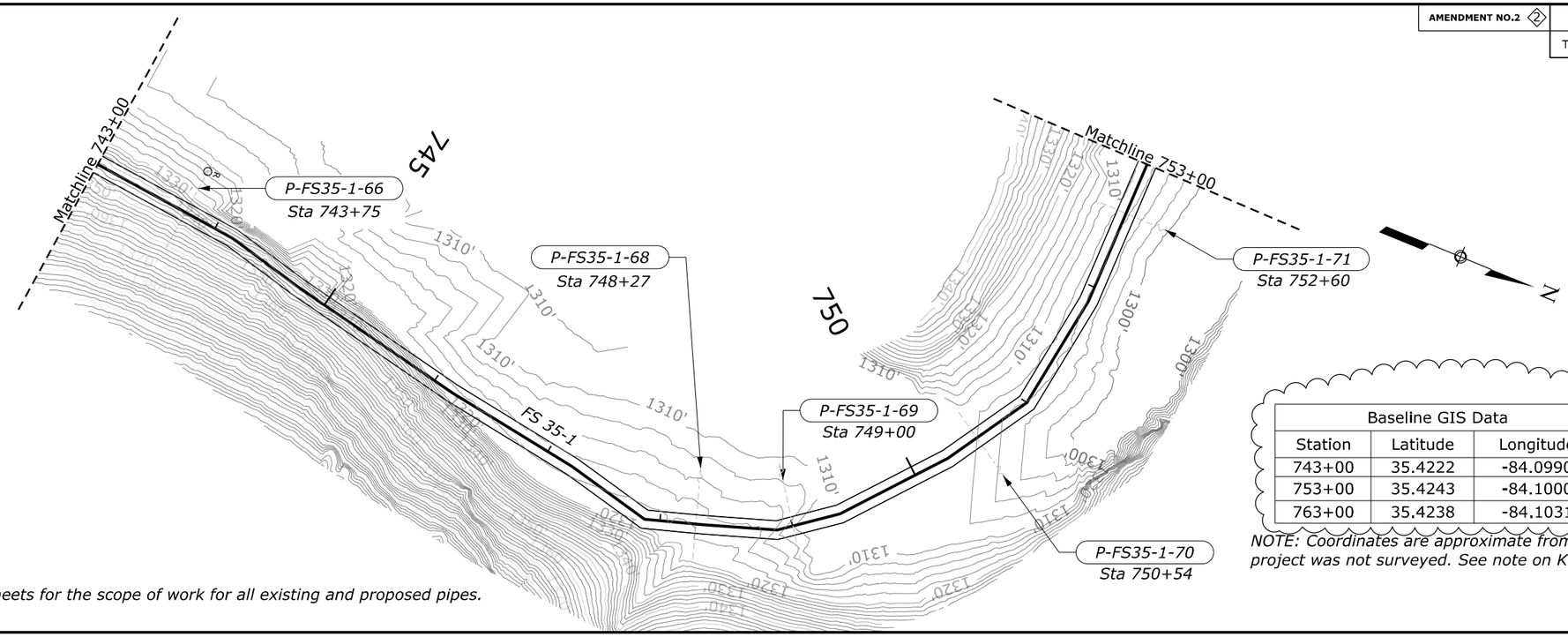
AMENDMENT NO.2	PROJECT	SHEET NUMBER
	TN ERFO FS CHRKE804 2020-2(5)	E12

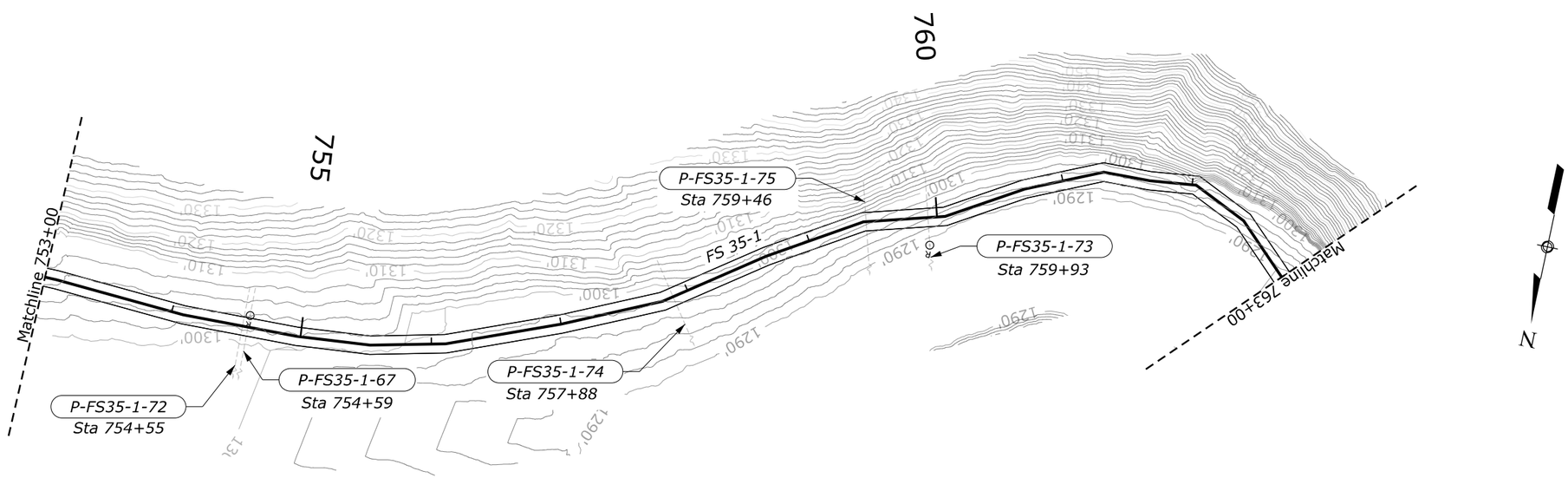


Baseline GIS Data		
Station	Latitude	Longitude
743+00	35.4222	-84.0990
753+00	35.4243	-84.1000
763+00	35.4238	-84.1031

NOTE: Coordinates are approximate from GIS. The project was not surveyed. See note on Key Map sheet.

NOTE:

See the Drainage Schedule sheets for the scope of work for all existing and proposed pipes.



NO.	DATE	BY	REVISIONS
2	06/15/26	JMF	AMD #2 - Revised coordinates.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

0 50 100
Scale in Feet

CHEROKEE NATIONAL FOREST

CITICO CREEK PLANS

CITICO CREEK ROAD (FS 35-1)
743+00.00 to 763+00.00

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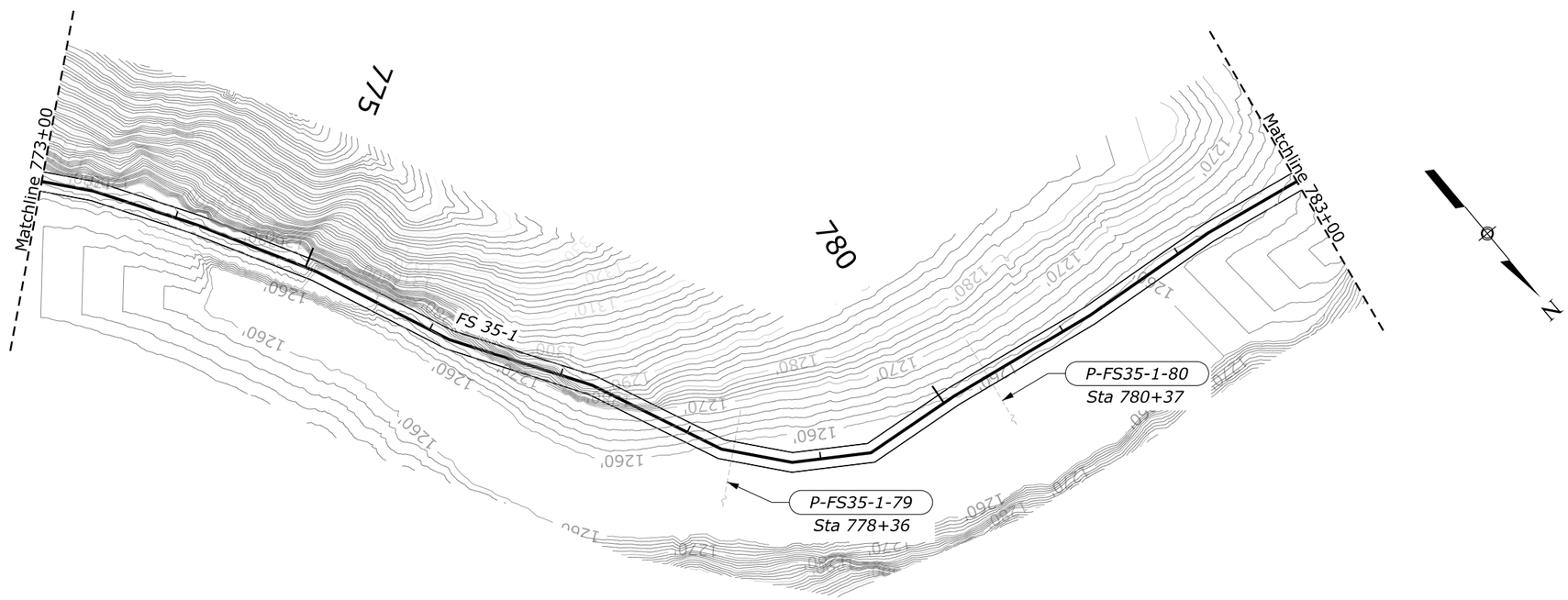
AMENDMENT NO.2	PROJECT	SHEET NUMBER
	TN ERFO FS CHRKE804 2020-2(5)	E13

NOTE:

See the Drainage Schedule sheets for the scope of work for all existing and proposed pipes.

Baseline GIS Data		
Station	Latitude	Longitude
763+00	35.4238	-84.1031
773+00	35.4256	-84.1055
783+00	35.4272	-84.1078

NOTE: Coordinates are approximate from GIS. The project was not surveyed. See note on Key Map sheet.



NO.	DATE	BY	REVISIONS
2	06/15/26	JMF	AMD #2 - Revised coordinates.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

0 50 100
Scale in Feet

CHEROKEE NATIONAL FOREST

CITICO CREEK PLANS

CITICO CREEK ROAD (FS 35-1)
763+00.00 to 783+00.00

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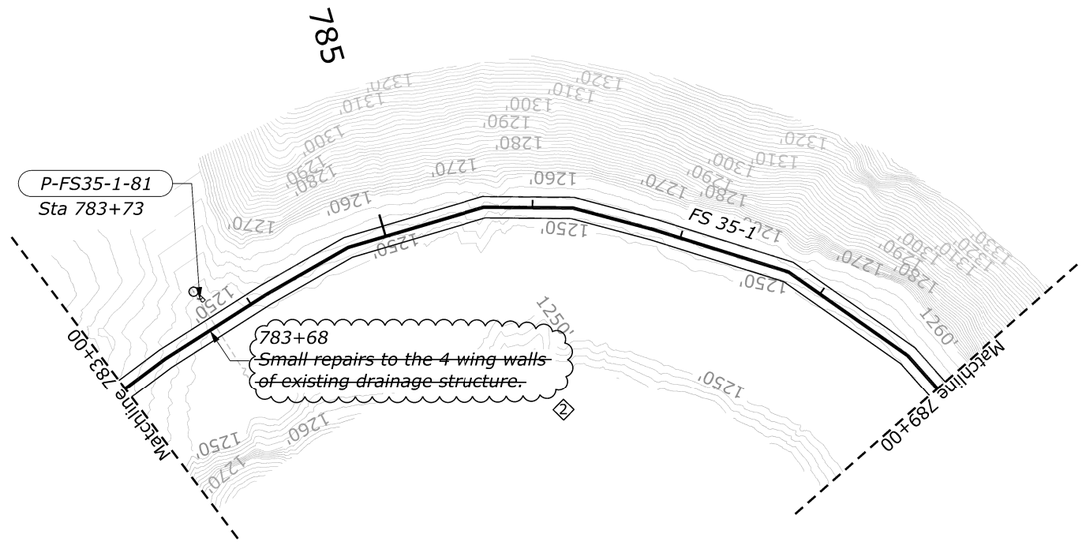
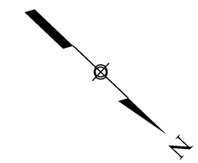
AMENDMENT NO.2 2	PROJECT	SHEET NUMBER
	TN ERFO FS CHRKE804 2020-2(5)	E14





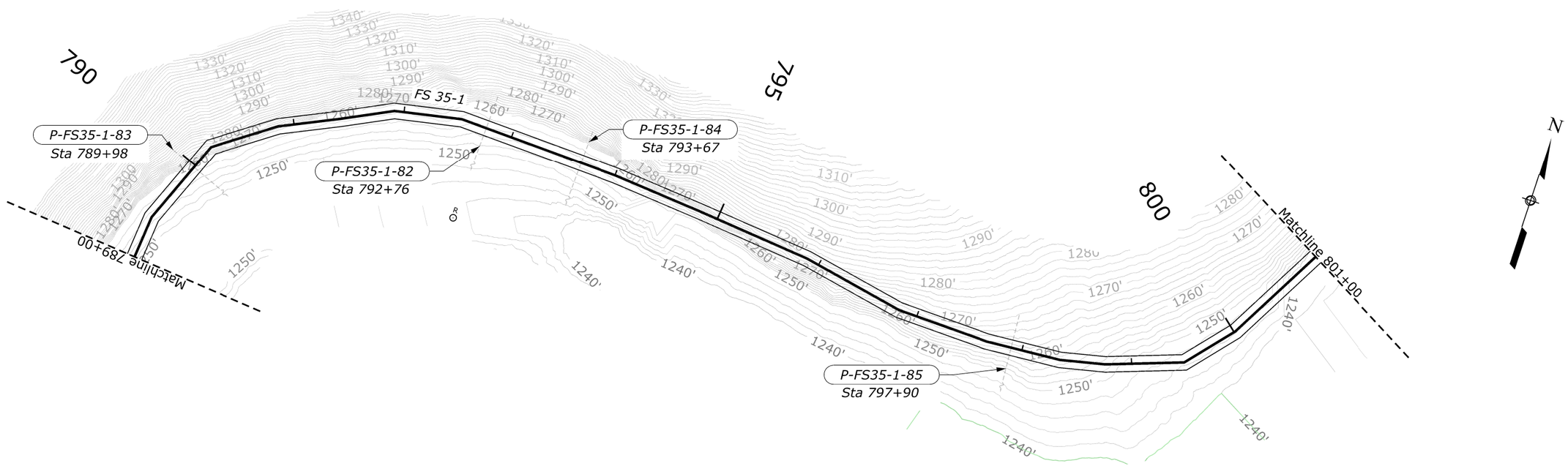
Baseline GIS Data		
Station	Latitude	Longitude
783+00	35.4272	-84.1078
789+00	35.4283	-84.1090
801+00	35.4292	-84.1056

2

NOTE: Coordinates are approximate from GIS. The project was not surveyed. See note on Key Map sheet.

NOTE:

See the Drainage Schedule sheets for the scope of work for all existing and proposed pipes.



NO.	DATE	BY	REVISIONS
2	06/15/26	JMF	AMD #2 - Revised coordinates/Removed callout

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

0 50 100
Scale in Feet

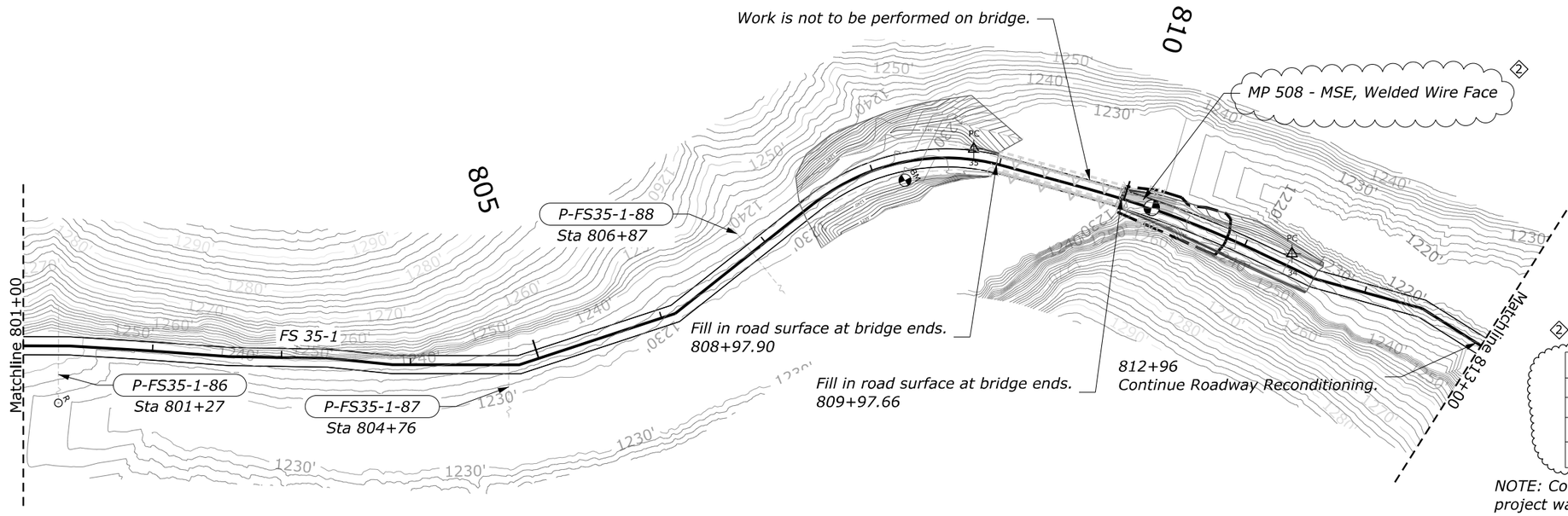
CHEROKEE NATIONAL FOREST

CITICO CREEK PLANS

CITICO CREEK ROAD (FS 35-1)
783+00.00 to 801+00.00

c:\pw_working\infra03\lrakes\d0149754\AMEND_01_TNERFO-2020-2(5)_pln_gen10.dgn [Plan 14]
16 June 2026 2:43 PM

AMENDMENT NO.2 2	PROJECT	SHEET NUMBER
	TN ERFO FS CHRKE804 2020-2(5)	E15



Baseline GIS Data		
Station	Latitude	Longitude
801+00	35.4292	-84.1056
813+00	35.4319	-84.1037
825+00	35.4339	-84.1057

NOTE: Coordinates are approximate from GIS. The project was not surveyed. See note on Key Map sheet.

NOTE:

See the Drainage Schedule sheets for the scope of work for all existing and proposed pipes.

NO.	DATE	BY	REVISIONS
2	06/15/26	JMF	AMD #2 - Revised coordinates/callout.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

0 50 100
Scale in Feet

CHEROKEE NATIONAL FOREST

CITICO CREEK PLANS

CITICO CREEK ROAD (FS 35-1)
801+00.00 to 825+00.00

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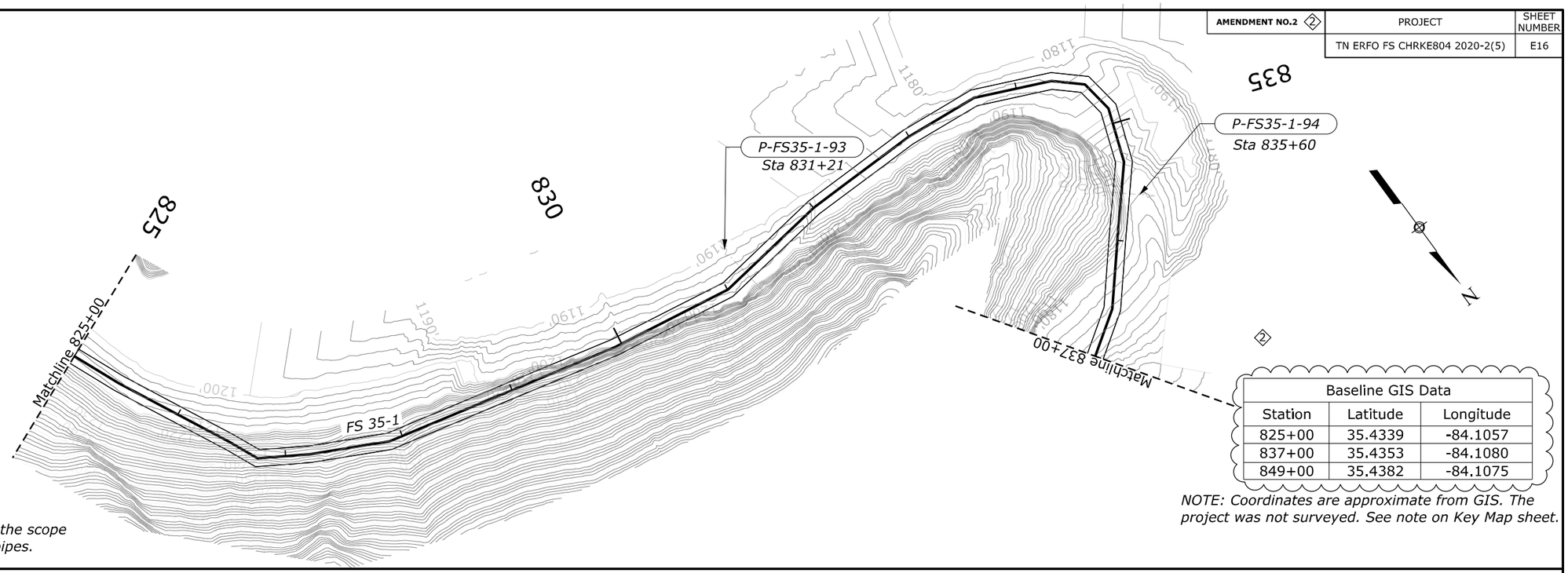
15 June 2026 2:23 PM

AMENDMENT NO.2	PROJECT	SHEET NUMBER
	TN ERFO FS CHRKE804 2020-2(5)	E16



Baseline GIS Data		
Station	Latitude	Longitude
825+00	35.4339	-84.1057
837+00	35.4353	-84.1080
849+00	35.4382	-84.1075

NOTE: Coordinates are approximate from GIS. The project was not surveyed. See note on Key Map sheet.

NOTE:

See the Drainage Schedule sheets for the scope of work for all existing and proposed pipes.

NO.	DATE	BY	REVISIONS
2	06/15/26	JMF	AMD #2 - Revised coordinates.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

0 50 100
Scale in Feet

CHEROKEE NATIONAL FOREST

CITICO CREEK PLANS

CITICO CREEK ROAD (FS 35-1)
825+00.00 to 849+00.00

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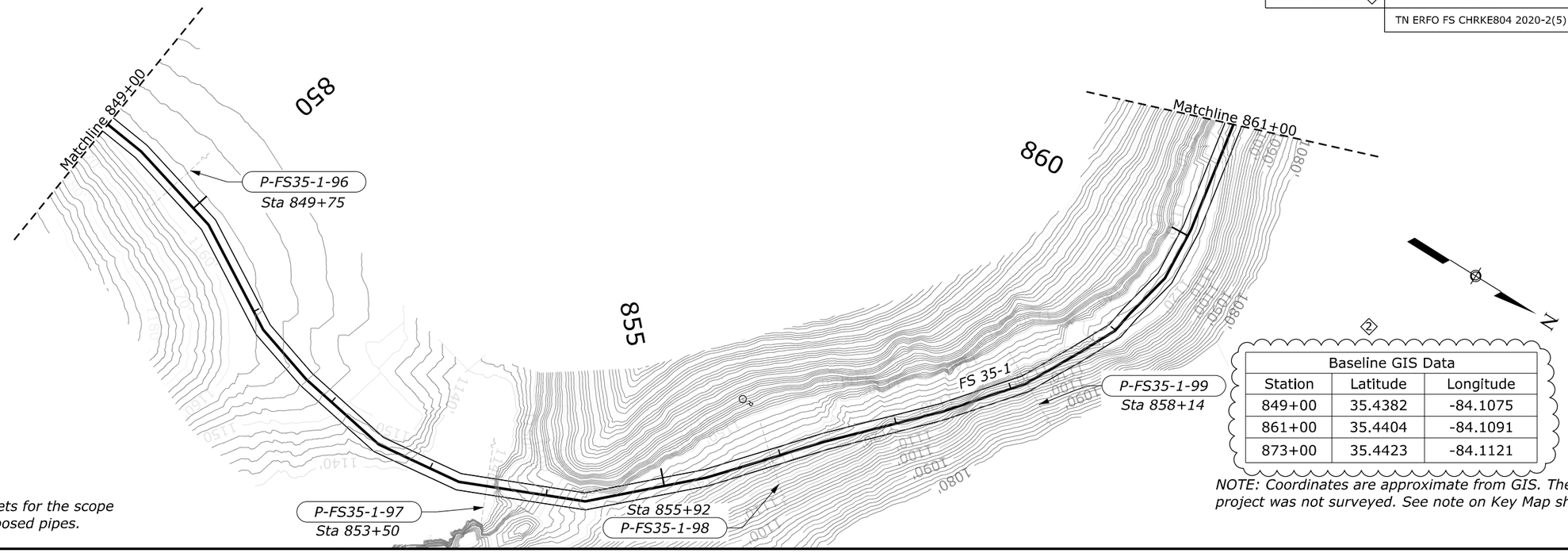
15 June 2026 2:24 PM

AMENDMENT NO.2 ②	PROJECT	SHEET NUMBER
	TN ERFO FS CHRKE804 2020-2(5)	E17



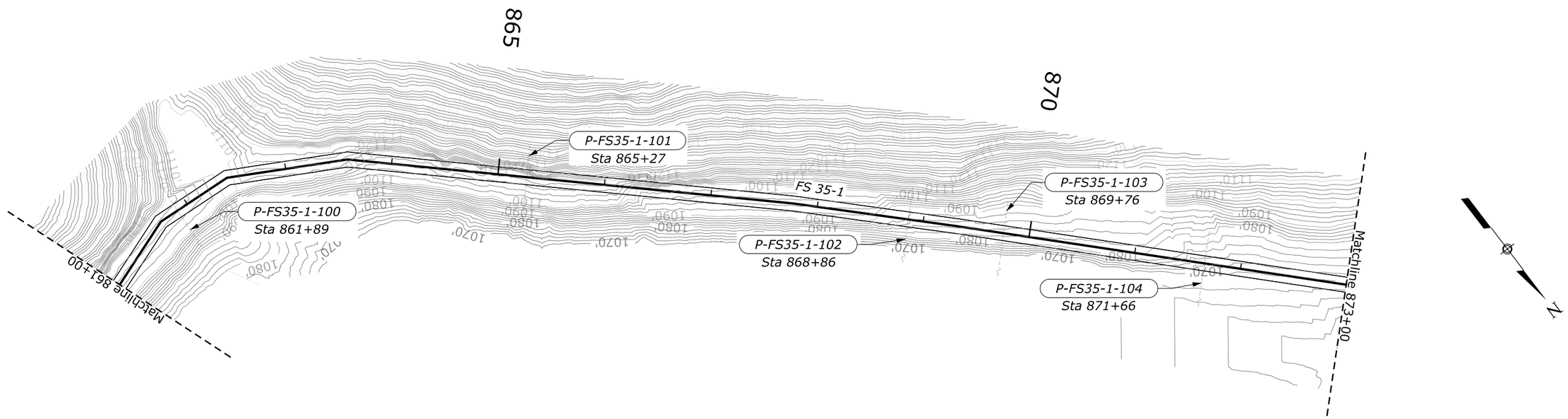
NOTE:

See the Drainage Schedule sheets for the scope of work for all existing and proposed pipes.

②

Baseline GIS Data		
Station	Latitude	Longitude
849+00	35.4382	-84.1075
861+00	35.4404	-84.1091
873+00	35.4423	-84.1121

NOTE: Coordinates are approximate from GIS. The project was not surveyed. See note on Key Map sheet.



NO.	DATE	BY	REVISIONS
②	06/15/26	JMF	AMD #2 - Revised coordinates.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

0 50 100
Scale in Feet

CHEROKEE NATIONAL FOREST

CITICO CREEK PLANS

CITICO CREEK ROAD (FS 35-1)
849+00.00 to 873+00.00

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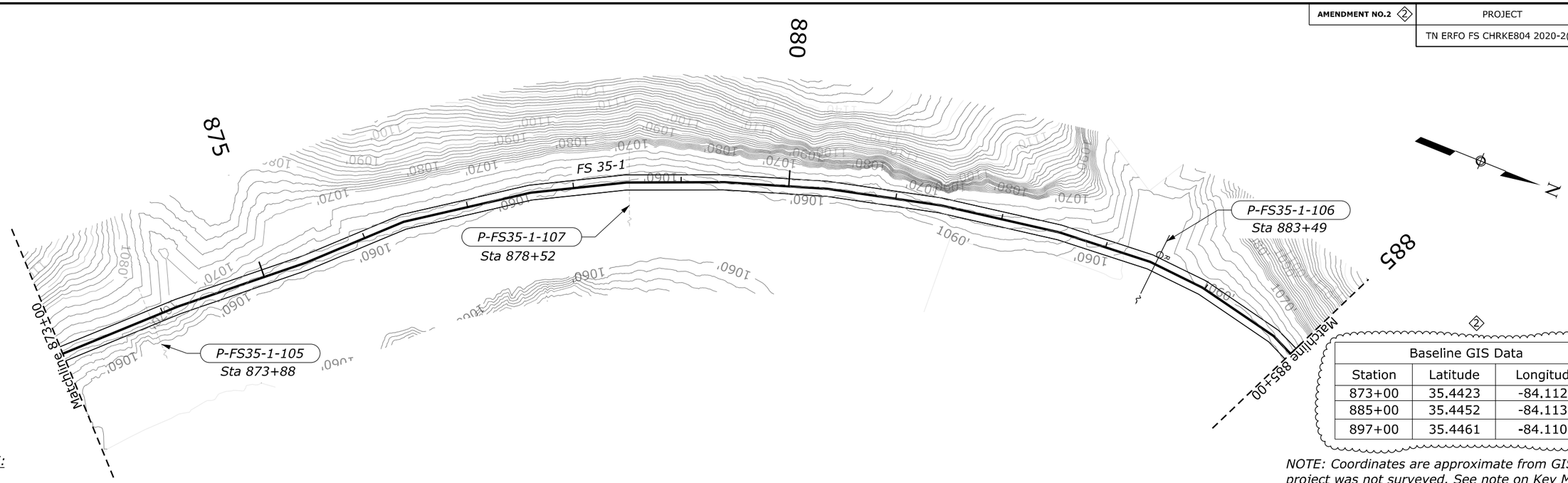
15 June 2026 2:24 PM

AMENDMENT NO.2	PROJECT	SHEET NUMBER
	TN ERFO FS CHRKE804 2020-2(5)	E18



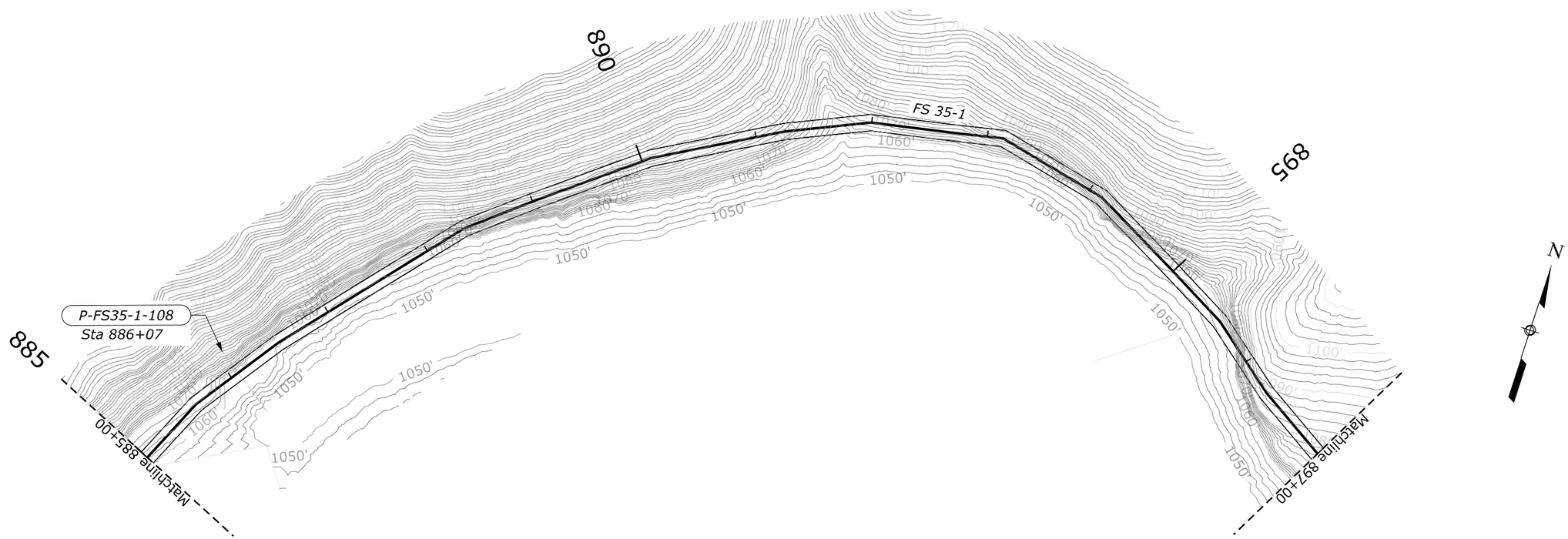
NOTE:

See the Drainage Schedule sheets for the scope of work for all existing and proposed pipes.

2

Baseline GIS Data		
Station	Latitude	Longitude
873+00	35.4423	-84.1121
885+00	35.4452	-84.1135
897+00	35.4461	-84.1102

NOTE: Coordinates are approximate from GIS. The project was not surveyed. See note on Key Map sheet.



NO.	DATE	BY	REVISIONS
2	06/15/26	JMF	AMD #2 - Revised coordinates.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

0 50 100
Scale in Feet

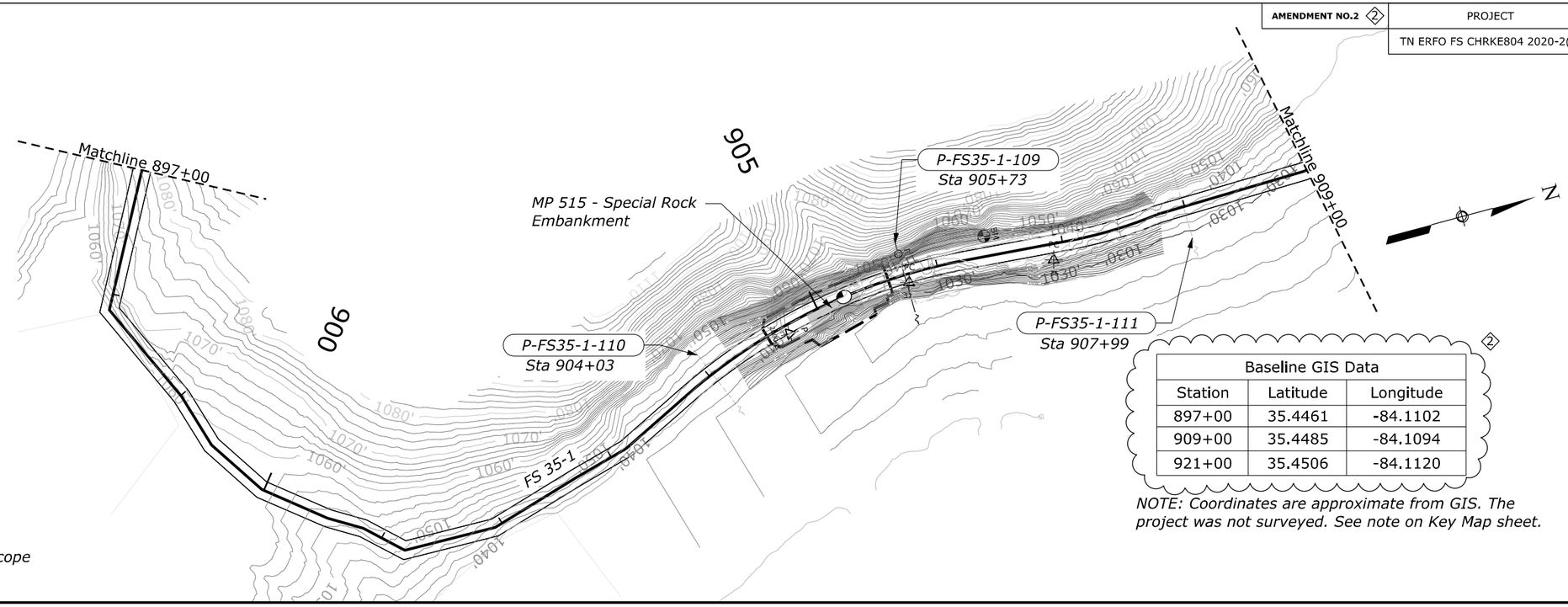
CHEROKEE NATIONAL FOREST

CITICO CREEK PLANS

CITICO CREEK ROAD (FS 35-1)
873+00.00 to 897+00.00

15 June 2026 2:24 PM
cc:\pw_working\infra03\fhdds\d0149754\AMEND_01_TNERFO-2020-2(5)_pln_gen10.dgn [Plan 18]

AMENDMENT NO.2	PROJECT	SHEET NUMBER
	TN ERFO FS CHRKE804 2020-2(5)	E19

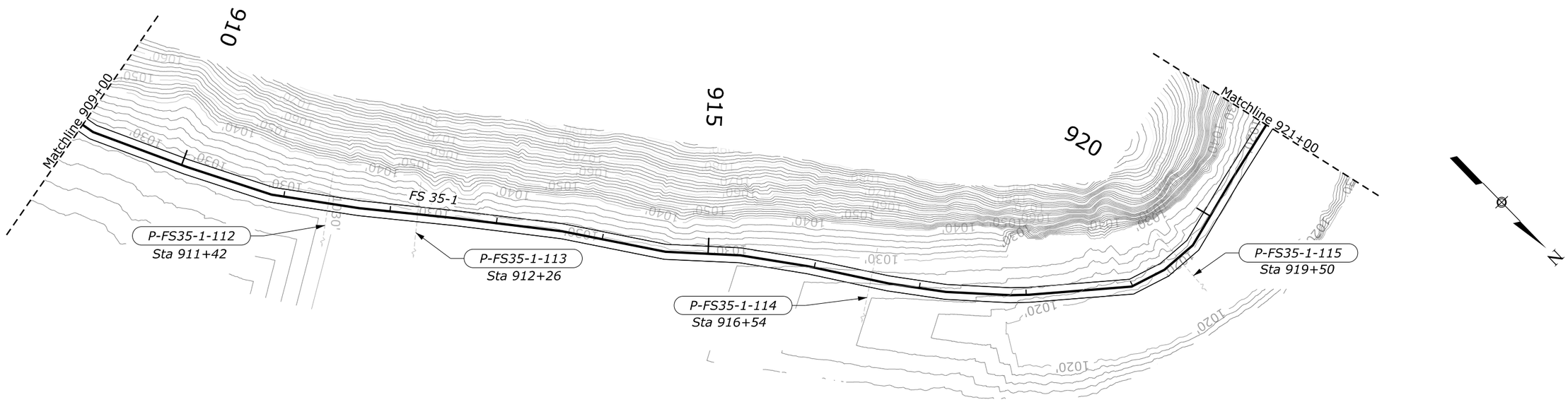


Baseline GIS Data		
Station	Latitude	Longitude
897+00	35.4461	-84.1102
909+00	35.4485	-84.1094
921+00	35.4506	-84.1120

NOTE: Coordinates are approximate from GIS. The project was not surveyed. See note on Key Map sheet.

NOTE:

See the Drainage Schedule sheets for the scope of work for all existing and proposed pipes.



NO.	DATE	BY	REVISIONS
2	06/15/26	JMF	AMD #2 - Revised coordinates.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

0 50 100
Scale in Feet

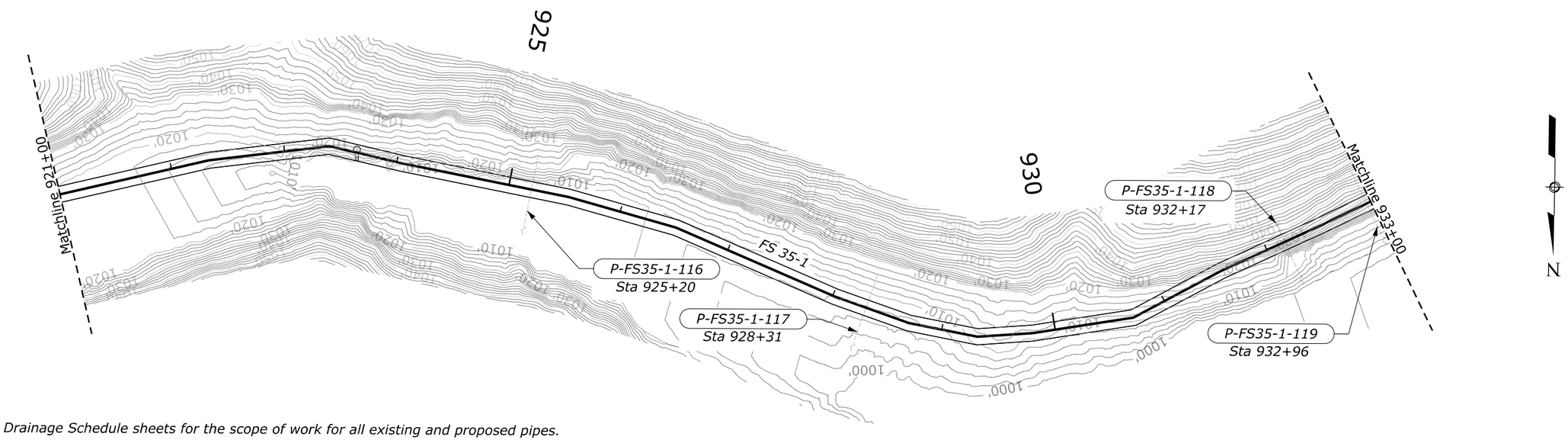
CHEROKEE NATIONAL FOREST

CITICO CREEK PLANS

CITICO CREEK ROAD (FS 35-1)
897+00.00 to 921+00.00

c:\pw_working\infra03\jfields\d0149754\AMEND_01_TNERFO-2020-2(5)_pln_gen10.dgn [Plan 19]
15 June 2026 2:24 PM

AMENDMENT NO.2 ②	PROJECT	SHEET NUMBER
	TN ERFO FS CHRKE804 2020-2(5)	E20



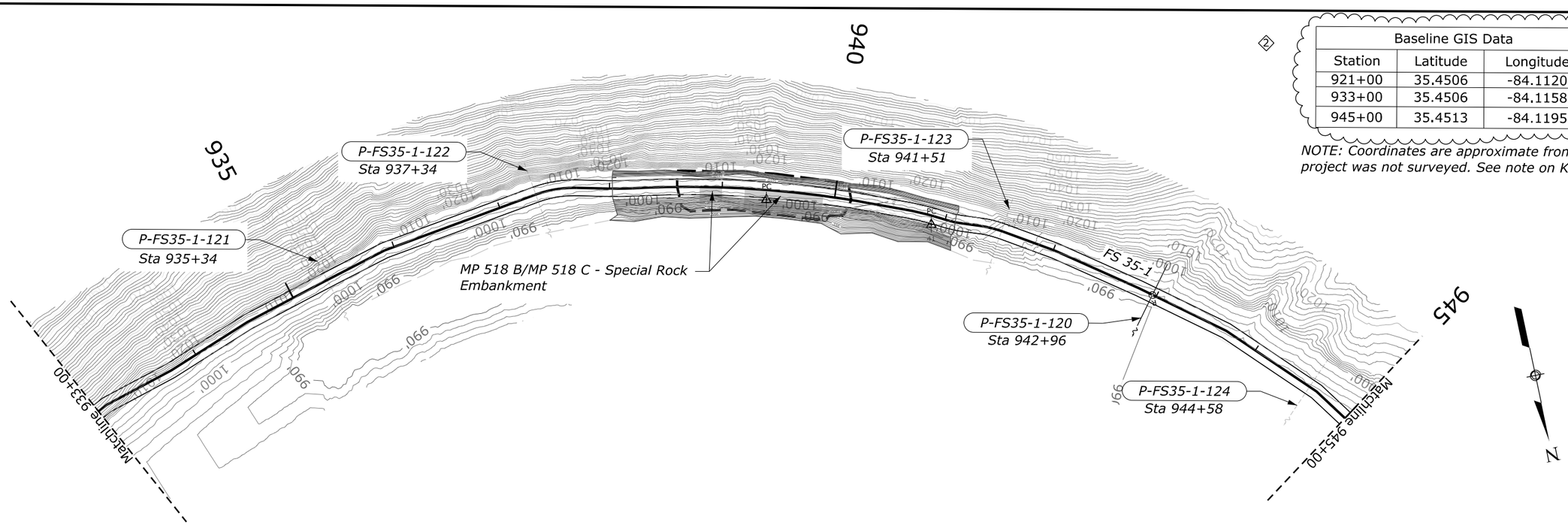
NOTE:

See the Drainage Schedule sheets for the scope of work for all existing and proposed pipes.

②

Baseline GIS Data		
Station	Latitude	Longitude
921+00	35.4506	-84.1120
933+00	35.4506	-84.1158
945+00	35.4513	-84.1195

NOTE: Coordinates are approximate from GIS. The project was not surveyed. See note on Key Map sheet.



NO.	DATE	BY	REVISIONS
②	06/15/26	JMF	AMD #2 - Revised coordinates.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

0 50 100
Scale in Feet

CHEROKEE NATIONAL FOREST

CITICO CREEK PLANS

CITICO CREEK ROAD (FS 35-1)
921+00.00 to 945+00.00

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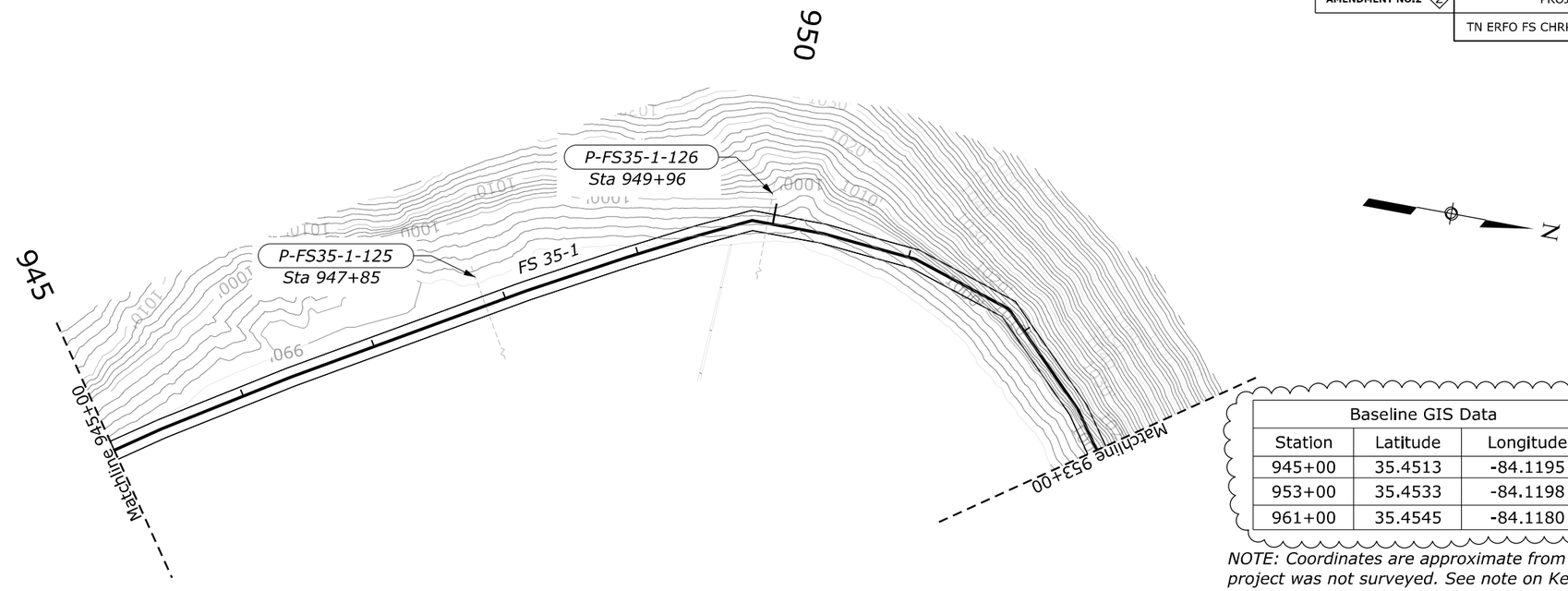
15 June 2026 3:29 PM

AMENDMENT NO.2	PROJECT	SHEET NUMBER
	TN ERFO FS CHRKE804 2020-2(5)	E21

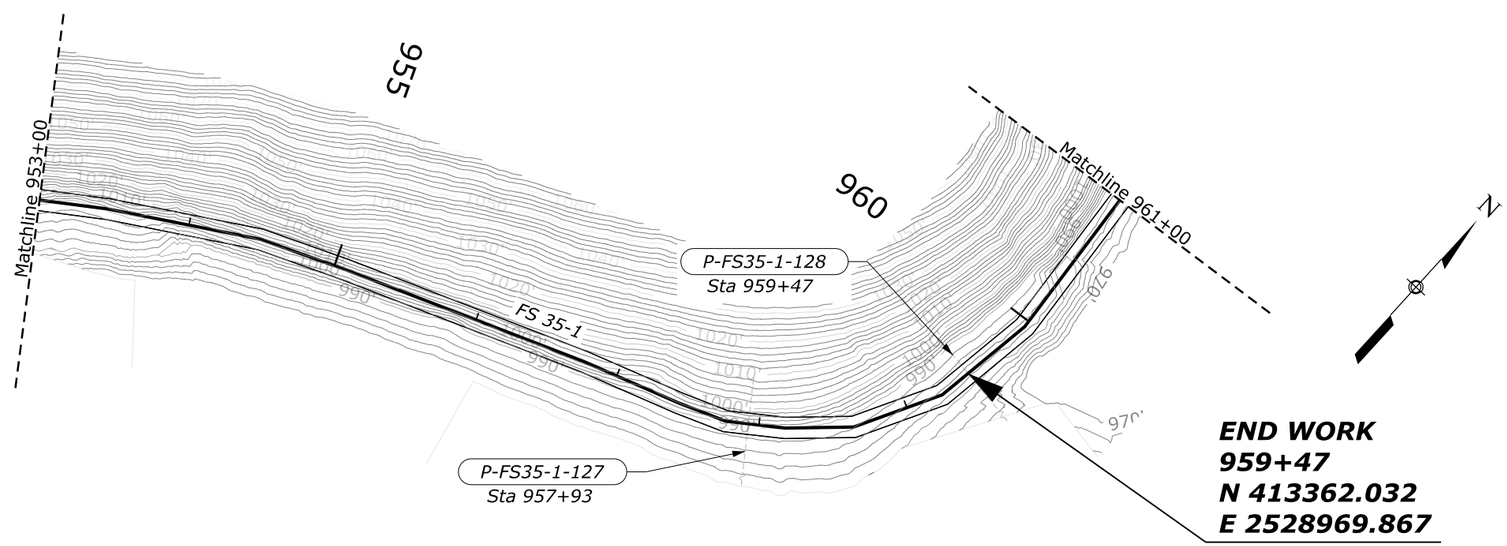


Baseline GIS Data		
Station	Latitude	Longitude
945+00	35.4513	-84.1195
953+00	35.4533	-84.1198
961+00	35.4545	-84.1180

NOTE: Coordinates are approximate from GIS. The project was not surveyed. See note on Key Map sheet.

NOTE:

See the Drainage Schedule sheets for the scope of work for all existing and proposed pipes.



NO.	DATE	BY	REVISIONS
2	06/15/26	JMF	AMD #2 - Revised coordinates.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

0 50 100
Scale in Feet

CHEROKEE NATIONAL FOREST

CITICO CREEK PLANS

CITICO CREEK ROAD (FS 35-1)
945+00.00 to 961+00.00

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15 June 2026 2:24 PM

BRIDGE LOAD RATING REPORT

BRIDGE 35-1-4.78, Structure No. 080404000003073

Single Lane Steel Bridge, (110'-9" Girder Length)

Cherokee National Forest
Tellico Ranger District
Southern Region, USFS

May 2019

PREPARED BY:
DJ&A, P.C. Engineers – Planners – Surveyors
3203 Russell Street
Missoula, MT 59801

RATED BY:
Ammon Groesbeck, P.E.

CHECKED BY:
Brad Miller, P.E.

RATING ENGINEER:
Ammon Groesbeck, P.E.

GENERAL COMMENTS:

Rating factors are calculated for the HL-93 design live loads (Inventory and Operating), Type 3, Type 3S2, Type 3-3, and SU4, SU5, SU6, SU7 legal vehicles, and the AASHTO Notional Rating Load (NRL).

BRASS 8.0, Microsoft Excel, MathCAD 15.0, and Visual Analysis 18.0 are used for bridge rating calculations.

BRASS output is furnished for the controlling girder line (interior or exterior) only.

See the calculation sheets immediately following the Rating Form for detailed rating assumption information.

DRAWING/DESIGN ASSUMPTIONS:

Available design drawings for the deck were used as a reference for this bridge load rating. All other information for this rating was field-measured by DJ&A at a site visit.

BRIDGE CONDITION ASSUMPTIONS:

This bridge is rated based on the latest USFS bridge inspection, available USFS design drawings, and DJ&A site visit measurements. This site was visited by DJ&A prior to completing rating calculations to verify dimensions and condition assumptions.

CONTROLLING RATING:

The rating factors for Type 3, Type 3S2, and Type 3-3 AASHTO legal vehicles are less than 1.0; therefore load posting of the bridge is required.

Based on the analysis, the rating factors for the SU4-SU7 and NRL legal vehicles are less than 1.0. Load posting of the bridge for these loads should be considered if vehicles of this type can legally travel on the road. Safe posting loads are provided on the attached Bridge Rating Form.

BRIDGE RATING FORM
USFS REGION 8 LOAD RATING REPORT

Forest:	Cherokee	Ranger District:	Tellico
Bridge Name:	35-1-4.78	Structure No.:	080404000003073
Rated By:	Ammon Groesbeck	Date:	May 2019
Firm:	DJ&A P.C.	Drawing No.	-

==========

SUMMARY OF CONTROLLING RATING

(Rating Factors)

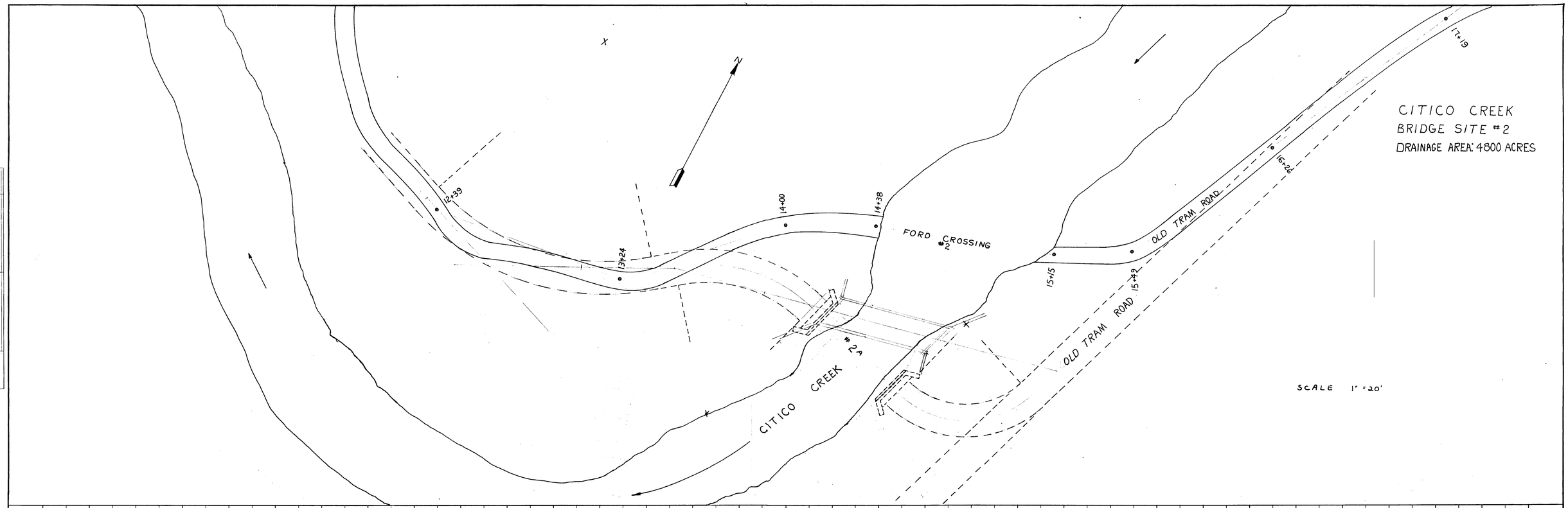
	RF	Safe Load Capacity (tons)	Controlling Member	Location (Span Ratio)	M, V, or B
HL-93 Inventory	0.30	-	Girder	105.00	M
HL-93 Operating	0.38	-	Girder	105.00	M
Type 3 Truck	0.59	10	Girder	105.00	M
Type 3S2 Truck	0.48	9	Girder	105.00	M
Type 3-3 Truck	0.47	9	Girder	105.00	M
SU4 Truck	0.53	8	Girder	105.00	M
SU5 Truck	0.47	7	Girder	105.00	M
SU6 Truck	0.42	6	Girder	105.00	M
SU7 Truck	0.38	4	Girder	105.00	M
NRL	0.37	4	Girder	105.00	M

Notes or Comments:

Safe load capacity is calculated as RF x GVW if RF ≥ 1.0. If RF < 1.0, equation 6A.8.3-1 in the Manual for Bridge Evaluation is used to calculate the safe posting load (highlighted).

Locations are span fractions as designated in BRASS (e.g. 105.00 = Mid-span).

M = Moment, V = Shear, and B = Bearing



PLAN			BY	DATE
NOTE BOOK	SURVEYED	DFL	SWH	8/59
	PLOTTED			
	ALIGNMENT CHECKED		SWH	9/59
NO.	RT. OF WAY CHECKED	F.S.		

PROFILE			BY	DATE
NOTE BOOK	SURVEYED	DFL	SWH	8/59
	PLOTTED			
	GRADES CHECKED		SWH	9/59
NO.	RW & STRUCTURE NOTATNS CHKD			

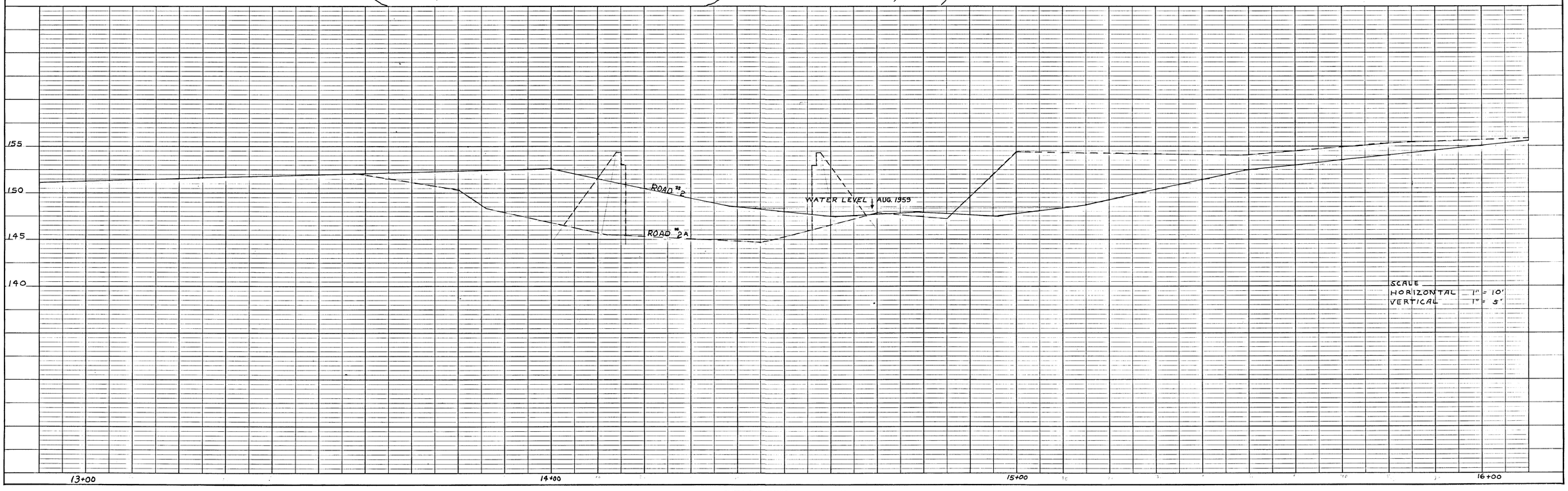
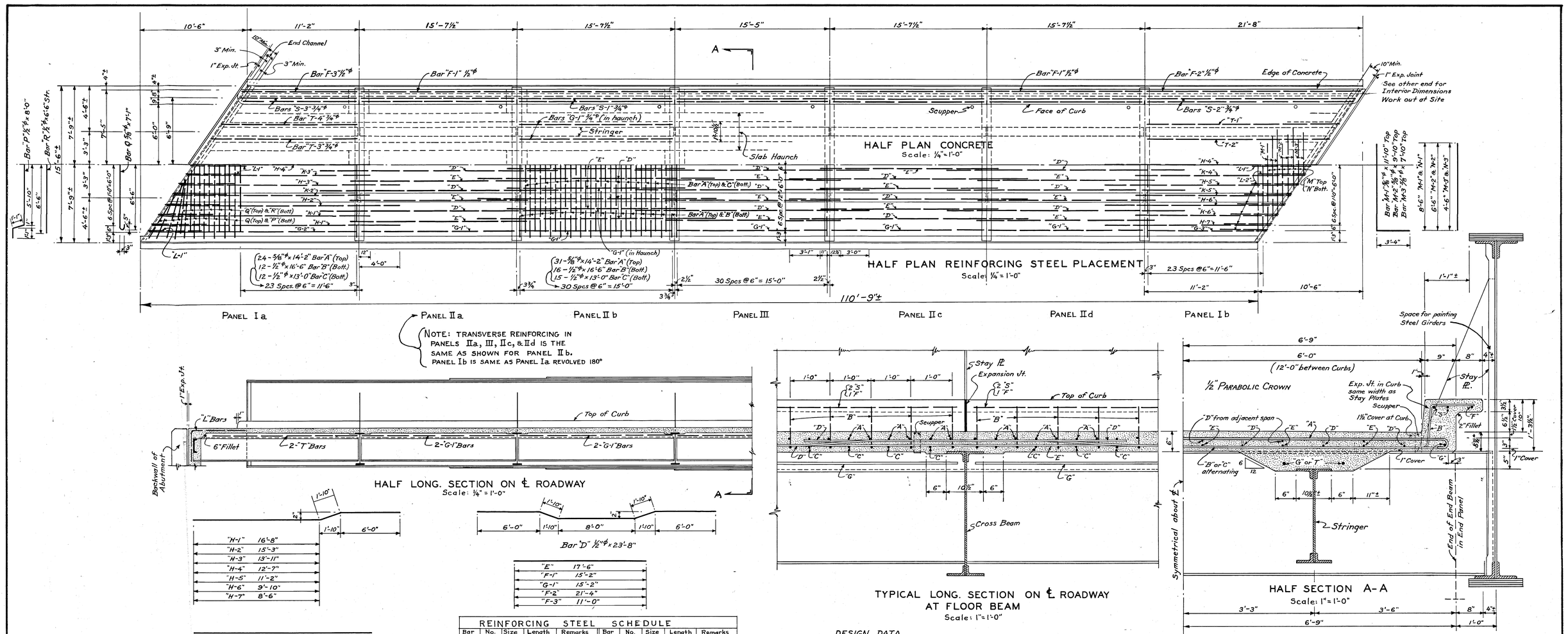


PLATE 1 - PLAN - PROFILE O.P.R.&R.E. STANDARD

KEUFFEL & ESSER CO., NEW YORK.

K & E CO. NO. 345-1 MADE IN U.S.A. 23690

26700



NOTE: TRANSVERSE REINFORCING IN PANELS IIa, III, IIc, & IId IS THE SAME AS SHOWN FOR PANEL IIb. PANEL Ib IS SAME AS PANEL Ia REVOLVED 180°

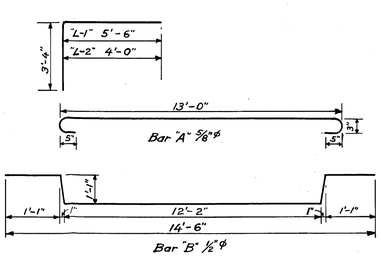
HALF LONG. SECTION ON ℄ ROADWAY
Scale: 1/4" = 1'-0"

Bar "D" 1/2" φ x 23'-8"

"H-1"	16'-8"
"H-2"	15'-3"
"H-3"	13'-11"
"H-4"	12'-7"
"H-5"	11'-2"
"H-6"	9'-10"
"H-7"	8'-6"

"E"	17'-6"
"F-1"	15'-2"
"G-1"	15'-2"
"F-2"	21'-4"
"F-3"	11'-0"

"K-1"	20'-8"
"K-2"	19'-4"
"K-3"	18'-0"
"K-4"	16'-8"
"K-5"	15'-4"
"K-6"	14'-0"
"G-2"	20'-8"
"G-3"	11'-10"
"C"	13'-0"



TYPICAL LONG. SECTION ON ℄ ROADWAY AT FLOOR BEAM
Scale: 1" = 1'-0"

REINFORCING STEEL SCHEDULE									
Bar Mk.	No. Reqd.	Size in.	Length Ft. In.	Remarks	Bar Mk.	No. Reqd.	Size in.	Length Ft. In.	Remarks
A	203	5/8" φ	14'-2"	Bnt.	L-1	16	1/2" φ	8'-10"	Bnt.
B	104	1/2" φ	16'-6"	"	L-2	14	"	7'-4"	"
C	99	"	13'-0"	Str.	M-1	6	5/8" φ	11'-10"	"
D	30	"	23'-8"	Bnt.	M-2	6	"	9'-10"	Str.
E	30	"	17'-6"	Str.	M-3	4	"	7'-10"	"
F-1	10	"	15'-2"	"	N-1	6	1/2" φ	8'-6"	"
F-2	2	"	21'-4	"	N-2	6	"	6'-6"	"
F-3	2	"	11'-0"	"	N-3	4	"	4'-6"	"
G-1	30	3/4" φ	15'-2"	"	P	20	"	8'-0"	Bnt.
G-2	2	"	20'-8"	"	Q	32	5/8" φ	7'-1"	"
G-3	2	"	11'-10"	"	R	12	1/2" φ	6'-6"	Str.
H-1	2	1/2" φ	24'-6"	Bnt.	S-1	20	3/4" φ	15'-2"	"
H-2	2	"	23'-1"	"	S-2	4	"	20'-6"	"
H-3	2	"	21'-9"	"	S-3	4	"	11'-6"	"
H-4	2	"	20'-5"	"	T-1	2	"	19'-0"	"
H-5	2	"	19'-0"	"	T-2	2	"	18'-2"	"
H-6	2	"	17'-8"	"	T-3	2	"	14'-6"	"
H-7	2	"	16'-4"	"	T-4	2	"	13'-5"	"
K-1	2	"	20'-8"	Str.					
K-2	2	"	19'-4"	"	X	6	1/2" φ	20'-0"	Str. Spare Bars
K-3	2	"	18'-0"	"					
K-4	2	"	16'-8"	"					
K-5	2	"	15'-4"	"					
K-6	2	"	14'-0"	"					

DESIGN DATA

Loading (Deck) H-15-44 AASHO
Concrete minimum strength at 28 days 3600 psi. fc = 1200 psi
Reinforcing Steel fs = 18,000 psi

SPECIFICATIONS

Concrete: Class A, Not more than 6 gals of water per sack cement. Max. agg. 3/4"
Reinforcing Steel: Federal Specification QQ-B-71a Grade 2 (Intermediate) Type B (deformed)

ESTIMATED QUANTITIES

Class "A" concrete 49 Cu. Yds.
Reinforcing Steel 8810 lbs
Scuppers (2" φ x 0'-6" Std. pipe 2 oz. galv.) 14 each

GENERAL NOTES

All chamfers and fillets to be 3/4" unless otherwise shown
Scuppers in deck are to be set in slight depression.
All dimensions on bending diagrams are out to out unless otherwise noted.
Construction joints to be transverse over ℄ cross beams

U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION 8 R. E. PIDGEON REGIONAL ENGR.

CHEROKEE NAT'L. FOR.
CITICO RIVER BRIDGE NO. 2
CONCRETE DECK

DESIGNED G.T.P. DRAWN G.T.P. TRACED K.B.H.
SCALE As Shown CHECKED C.F.M.
APPROVED [signature] DATE 2/23/48

SHEET 1 OF 1 DRAWING R-8601

5-2-15

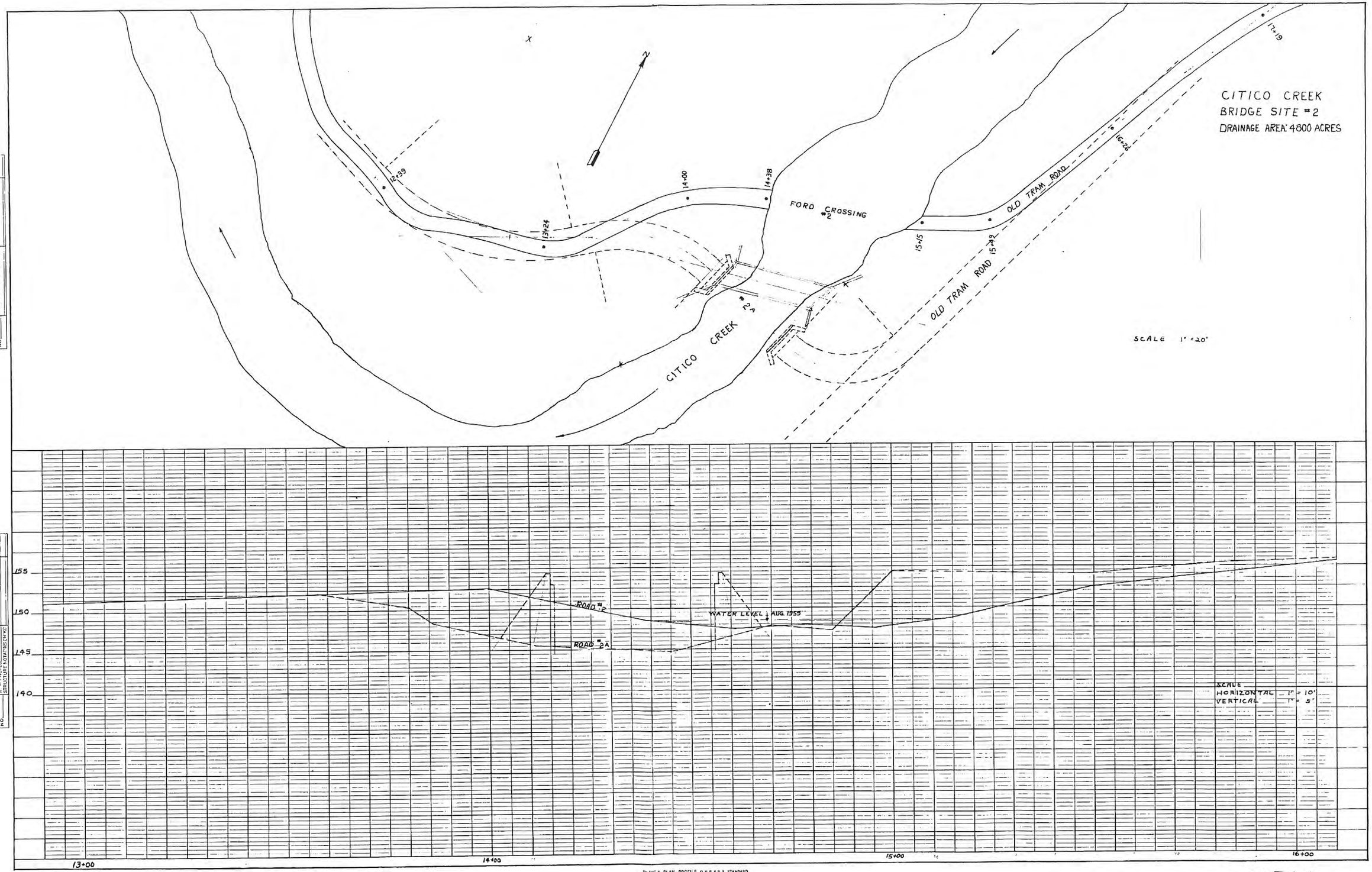


PLATE 1 PLAN - PROFILE O. P. R. & R. L. STANDARD
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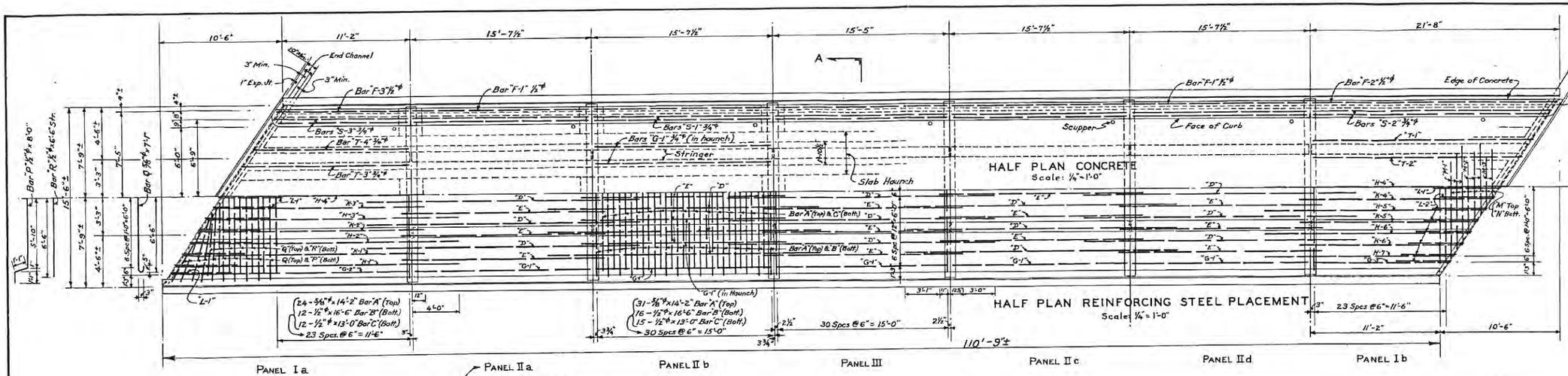
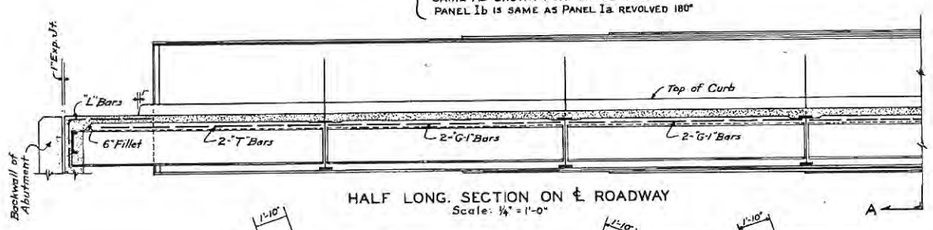
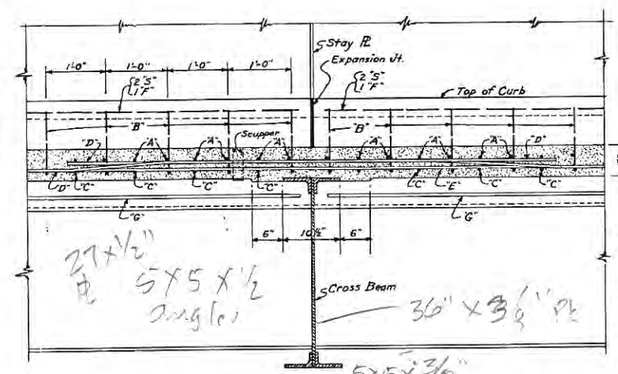


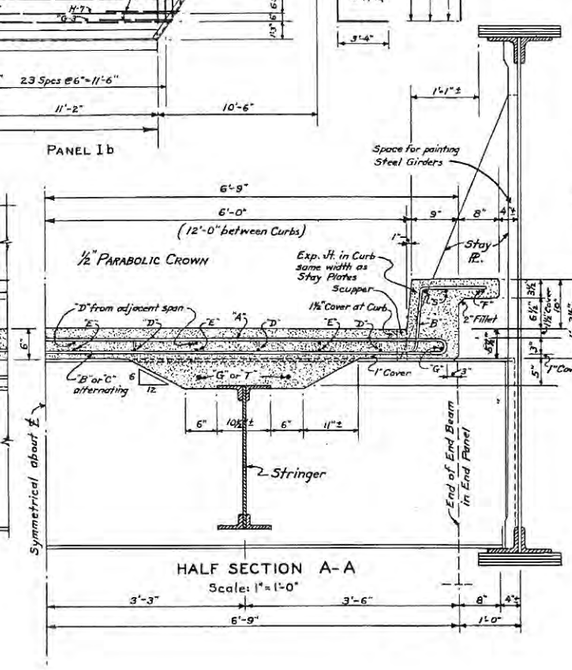
NOTE: TRANSVERSE REINFORCING IN PANELS IIa, III, IIc, & IId IS THE SAME AS SHOWN FOR PANEL IIb. PANEL Ib IS SAME AS PANEL Ia REVOLVED 180°

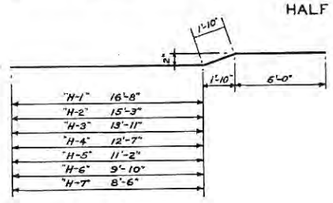


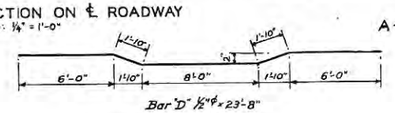
HALF LONG. SECTION ON ℄ ROADWAY
Scale: 1/4" = 1'-0"

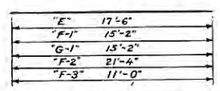


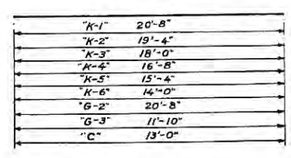
TYPICAL LONG. SECTION ON ℄ ROADWAY AT FLOOR BEAM
Scale: 1" = 1'-0"

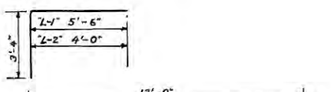


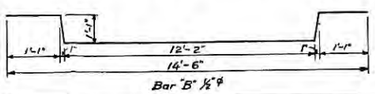












REINFORCING STEEL SCHEDULE

Bar Mk.	No. Reqd.	Size in.	Length Ft. In.	Remarks	Bar Mk.	No. Reqd.	Size in	Length Ft. In.	Remarks
A	203	5/8"φ	14'-2"	Bnt.	L-1	16	1/2"φ	8'-10"	Bnt.
B	104	1/2"φ	16'-6"	"	L-2	14	"	7'-4"	"
C	99	"	13'-0"	Str.	M-1	6	5/8"φ	11'-10"	"
D	30	"	23'-8"	Bnt.	M-2	6	"	9'-10"	Str.
E	30	"	17'-6"	Str.	M-3	4	"	7'-10"	"
F-1	10	"	15'-2"	"	N-1	6	1/2"φ	8'-6"	"
F-2	2	"	21'-4	"	N-2	6	"	6'-6"	"
F-3	2	"	11'-0"	"	N-3	4	"	4'-6"	"
G-1	30	3/4"φ	15'-2"	"	P	20	"	8'-0"	Bnt.
G-2	2	"	20'-8"	"	Q	32	5/8"φ	7'-1"	"
G-3	2	"	11'-10"	"	R	12	1/2"φ	6'-6"	Str.
H-1	2	1/2"φ	24'-6"	Bnt.	S-1	20	3/4"φ	15'-2"	"
H-2	2	"	23'-1"	"	S-2	4	"	20'-6"	"
H-3	2	"	21'-9"	"	S-3	4	"	11'-6"	"
H-4	2	"	20'-5"	"	T-1	2	"	19'-0"	"
H-5	2	"	19'-0"	"	T-2	2	"	18'-2"	"
H-6	2	"	17'-8"	"	T-3	2	"	14'-6"	"
H-7	2	"	16'-4"	"	T-4	2	"	13'-5"	"
K-1	2	"	20'-8"	Str.					
K-2	2	"	19'-4"	"	X	6	1/2"φ	20'-0"	Str. Spare Bars
K-3	2	"	18'-0"	"					
K-4	2	"	16'-8"	"					
K-5	2	"	15'-4"	"					
K-6	2	"	14'-0"	"					

DESIGN DATA

Loading (Deck) H-15-44 AASHO
Concrete minimum strength at 28 days 3600 psi. fc = 1200 psi
Reinforcing Steel fs = 18,000 psi

SPECIFICATIONS

Concrete: Class A, Not more than 6 gals of water per sack cement. Max. agg. 3/4"
Reinforcing Steel: Federal Specification QQ-B-712 Grade 2 (Intermediate) Type B (deformed)

GENERAL NOTES

All chamfers and fillets to be 3/4" unless otherwise shown
Scuppers in deck are to be set in slight depression.
All dimensions on bending diagrams are out to out unless otherwise noted.
Construction joints to be transverse over ℄ cross beams

ESTIMATED QUANTITIES

Class "A" concrete 49 Cu. Yds.
Reinforcing Steel 8810 lbs
Scuppers (2"φ x 0'-6" Std. pipe 2 oz. galv.) 14 each

(See other side)

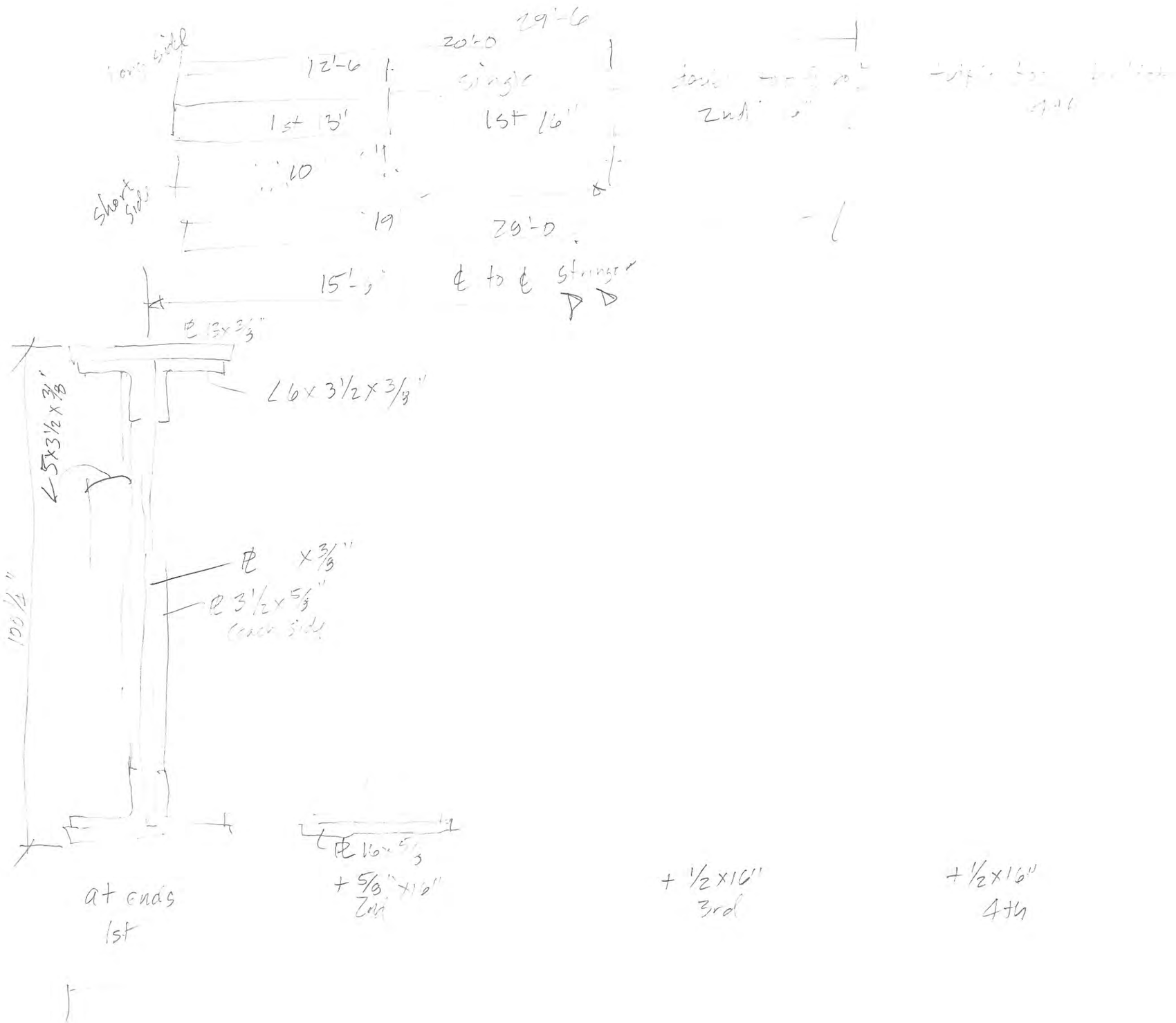
U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION 8 R. E. PIDGEON REGIONAL ENGR.

CHEROKEE NAT'L. FOR.
CITICO RIVER BRIDGE NO. 2
CONCRETE DECK

DESIGNED G.T.P. DRAWN G.T.P. TRACED K.B.H.
SCALE As Shown CHECKED C.F.M.
APPROVED [signature] DATE 2/25/48

SHEET 1 OF 1 DRAWING R-8601

5-2-15


long side
12'-6
20'-0
29'-6
single
1st 3'
1st 16"
2nd
10
short side
19
29'-0
15'-9
℄ to ℄ stringer
℄ 13x3/8"
L6x3½x3/8"
L5x3½x3/8"
100½"
℄ x3/8"
℄ 3½x5/8"
each side
℄ 16x5/8
+ 5/8"x16"
2nd
at ends
1st
+ ½x16"
3rd
+ ½x16"
4th

Calculations are in accordance with AASHTO LRFD Bridge Design Specifications, 8th Ed. & AASHTO Manual for Bridge Evaluation, 3rd Ed.
References to the Design Specifications are shown in [ ] brackets, references to the Bridge Evaluation Manual are shown in { } brackets.

ENGINEERS PLANNERS SURVEYORS

GENERAL COMMENTS AND ASSUMPTIONS

All dimensions and properties of the existing bridge taken from USFS design drawings and field measurements.
Load Resistance Factor Rating (LRFR) methodology is used.
Load rating calculations are completed for superstructure elements only.
Live load distribution by approximate method.
BRASS-GIRDER v.8.0 program used for girder rating calculations. Electronic input/output BRASS files can be found in the Regional Bridge Engineer's files.

GENERAL INFORMATION

The following unit weights are used:

Concrete,	$\gamma c := 150 \cdot pcf$	pcf = Pounds Per Cubic Foot
Asphalt,	$\gamma ws := 140 \cdot pcf$	[Table 3.5.1-1]
Steel,	$\gamma s := 490 \cdot pcf$	
Wood,	$\gamma w := 50 \cdot pcf$	

Load Modifiers are as follows:

Ductility	$\eta D := 1.0$	For Conventional Designs		[1.3.3]
Redundancy	$\eta R := 1.0$	For Conventional Redundancy	** System factor reduction made for non-redundant bridges. **	[1.3.4]
Importance	$\eta I := 1.0$	For Typical Bridges		[1.3.5]

$\eta i = \eta D \cdot \eta R \cdot \eta I \geq 0.95$ [1.3.2.1] therefore, $\eta i := \max(\eta D \cdot \eta R \cdot \eta I, 0.95) = 1.00$
(maximum load factors)

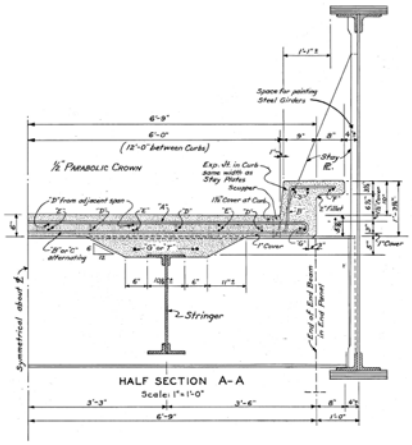
Load Factors are as follows:

	STRENGTH	SERVICE		
DC:	$\gamma DC := 1.25$	$\gamma DC_S := 1.0$	Dead Load of Components	
DW:	$\gamma DW := 1.50$	$\gamma DW_S := 1.0$	Dead Load of Wearing Surface	{6A.4.2.2-1 Notes}
Design LL:	$\gamma HL93_I := 1.75$	$\gamma HL93_{I.S} := 1.30$	HL-93 Live Load - Inventory Level	{Table 6A.4.2.2-1}
	$\gamma HL93_O := 1.35$	$\gamma HL93_{O.S} := 1.0$	HL-93 Live Load - Operating Level	
AASHTO Legal LL:	$\gamma LEGAL := 1.30$	$\gamma LEGAL_S := 1.30$	Type 3, Type 3S2, Type 3-3, SU4-SU7, NRL	{Table 6A.4.4.2.3a-1} $ADTT \leq 1000$

Resistance Factors are as follows:

Resistance Factor:		$\phi_f := 1.0$ $\phi_v := 1.0$	Steel Girders Flexure or Shear	[6.5.4.2]
		$\phi_{f.D} := 0.9$	Tension-Controlled Reinforced Concrete Sections	[5.5.4.2.1]
Condition Factor:	Girders,	$\phi c := 0.95$	** Based on Most Recent Inspection **	{Table 6A.4.2.3-1}
		$\phi c_{FB} := 1.0$	Floor Beams	
		$\phi c_S := 0.85$	Stringers	
		$\phi c_{deck} := 1.0$	For the Deck	
System Factor:		$\phi s := 0.85$	For 2 Girder Bridge Per USFS (& Stringers)	{Table 6A.4.2.4-1}
		$\phi s_{FB} := 1.0$	Floor Beams	
		$\phi s_{deck} := 1.0$	Deck	

BRIDGE GEOMETRY



Roadway Width,	$Wr := 11.8333 \cdot ft$	Skew,	$Skew := 34 \cdot deg$	
Out-to-Out Deck Width,	$Wd := 13.5 \cdot ft$	Span,	$Span := 108.8333 \cdot ft$	CL Brg. to CL Brg.
Girder Spacing,	$S := 15.5 \cdot ft$	Stringer Span,	$Span_S := 20.6667 \cdot ft$	Max
Stringer Spacing,	$S_S := 6.5 \cdot ft$	Stringer Span,	$Span_{S2} := 15.625 \cdot ft$	Typical
Number of Lanes,	$N_L := 1$	Number of Girders,	$N := 2$	
		Number of Stringers,	$N_S := 2$	

Overhang, $S_{over} := \frac{Wd - (N - 1) \cdot S_S}{2} = 3.5000 \cdot ft$

MATERIAL PROPERTIES

Concrete Deck: **Cast-In-Place Concrete Deck**

$t_D := 5.5 \cdot in$	Deck Thickness
$t_{D.OH} := 10.5 \cdot in$	Deck Thickness at Face of Exterior Soffit
$t_{D.OH.avg} := 5.5 \cdot in$	Average Deck Thickness for DL Calcs - Overhang
$Fc_D := 3600 \cdot psi$	28-day Compressive Strength
$Fy_D := 40 \cdot ksi$	Deck Rebar Yield
$cover_{top} := 1.5 \cdot in$	Concrete Cover to Top Transverse Bars
$cover_{bot} := 1 \cdot in$	Concrete Cover to Bottom Transverse Bars

Steel Stringer: **Built-Up Steel Stringer**

$b_{f.S} := 10.5 \cdot in$	Flange Width - Out to Out of Angles & Web	Angles Top & Bottom are L5x5x1/2
$t_{f.S} := 0.5 \cdot in$	Flange Thickness - Angles	
$d_S := 27 \cdot in$	Beam Depth - Web Only	
$t_{w.S} := 0.5 \cdot in$	Web Thickness	
$A_{Angle.S} := 4.79 \cdot in^2$	Angle Area	
$E := 29000 \cdot ksi$	Modulus of Elasticity	
$F_y := 30 \cdot ksi$	Yield Stress - Based on Construction Between 1905 & 1935	{Table 6.A.6.2.1-1}

$A_S := 4 \cdot A_{Angle.S} + d_S \cdot t_{w.S} = 32.66 \cdot in^2$ Gross Area

Steel Floor Beam: **Built-Up Steel Floor Beam**

Angles Top & Bottom are L5x5x3/8

$b_{f.FB} := 10.375 \cdot in$ Flange Width - Out to Out of Angles & Web

$t_{f.FB} := 0.375 \cdot in$ Flange Thickness - Angles

$d_{FB} := 36 \cdot in$ Floor Beam Depth - Web Only

$t_{w.FB} := 0.375 \cdot in$ Web Thickness

$A_{Angle.FB} := 3.65 \cdot in^2$ Angle Area

$A_{FB} := 4 \cdot A_{Angle.FB} + d_{FB} \cdot t_{w.FB} = 28.10 \cdot in^2$ Gross Area

Steel Girder: **Plate Girder**

Angles Top & Bottom are L6x3-1/2x3/8

$b_{f.G} := 12.375 \cdot in$ Flange Width - Out to Out of Angles & Web

$t_{f.G} := 0.375 \cdot in$ Flange Thickness - Angles

$d_G := 99.875 \cdot in$ Girder Depth - Web Only

$t_{w.G} := 0.375 \cdot in$ Web Thickness

$b_{tp} := 13 \cdot in$ Top Cover Plate 1 Width

$t_{tp} := 0.375 \cdot in$ Top Cover Plate 1 Thickness

$L_{tp1} := Span = 108.83\,ft$ Top Cover Plate 1 Length - Centered at Mid-Span

$L_{tp2} := 83.75 \cdot ft$ Top Cover Plate 2 Length - Centered at Mid-Span

$L_{tp3} := 68.75 \cdot ft$ Top Cover Plate 2 Length - Centered at Mid-Span

$b_{bp} := 16 \cdot in$ Bottom Cover Plate 1, 2, & 3 Width

$t_{bp1} := 0.625 \cdot in$ Bottom Cover Plate 1 Thickness

$t_{bp23} := 0.5 \cdot in$ Bottom Cover Plate 2 & 3 Thickness

$L_{bp1} := 83.75 \cdot ft$ Bottom Cover Plate 1 Length - Centered at Mid-Span

$L_{bp2} := 68.75 \cdot ft$ Bottom Cover Plate 2 Length - Centered at Mid-Span

$L_{bp3} := 49.75 \cdot ft$ Bottom Cover Plate 3 Length - Centered at Mid-Span

BRIDGE RATING FACTOR ANALYSIS:

DEAD LOADS

Girder and curb weight computed by BRASS.

Component Dead Load, DC:

Concrete Curb,

$w_{curb} := 10 \cdot in$ $t_{curb} := 9 \cdot in$ $h_{curb} := 10 \cdot in$

$w_{curb2} := 8 \cdot in$ $t_{curb2} := 3.5 \cdot in$ $DC_{curb} := \left(\frac{w_{curb} + t_{curb}}{2} \cdot h_{curb} + w_{curb2} \cdot t_{curb2}\right) \cdot \gamma c = 0.128 \cdot klf$

Deck (Interior), $DC_{Deck} := t_D \cdot \gamma c = 0.069 \cdot ksf$

Deck (Overhang), $DC_{Deck.OH} := t_{D.OH.avg} \cdot \gamma c = 0.069 \cdot ksf$

$DC_{Deck.OH.Brass} := \left(t_{D.OH.avg} - t_D\right) \cdot \gamma c = 0.000 \cdot ksf$

Steel Stringer Self Weight, $DC_S := A_S \cdot \gamma s = 0.111 \cdot klf$

Steel Floor Beam Self Weight, $DC_{FB} := A_{FB} \cdot \gamma s = 0.096 \cdot klf$

Cross Bracing & Gussets (Plate Girder),

L 4 x 4 x 3/8 (Assumed),

$w_{Angle.G} := 9.8 \cdot plf$ $L_{Angle.G} := 22 \cdot ft$ $N_{Angle.G} := 2$

Increase by 20% for Gussets & Connections $DC_{brace.G} := \frac{1.2 \cdot w_{Angle.G} \cdot L_{Angle.G} \cdot N_{Angle.G}}{2 \cdot Span_{S2}} = 0.017 \cdot klf$

Wearing Surface Dead Load, DW:

Asphalt Wearing Surface,

$t_{ws} := 0 \cdot in$ Average Thickness $DW_{ws} := t_{ws} \cdot \gamma ws = 0.000 \cdot ksf$

LIVE LOADS

Live loads and live load distribution factors are computed directly by BRASS.

Multiple Presence Factor: Multiple Presence Factor for live loads is included per [3.6.1.1.2].
Multiple Presence Factor may be reduced to 95% of given value for $ADTT \le 1000$

$m_1 := 1.2$ Multiple Presence Factor for Single Lane Bridge [Table 3.6.1.1.2-1]

Adjust m for Low ADTT? $Adjust_m1 := 1$ 1 for "Yes", 0 for "No"

$$m_{1adjusted} := \begin{cases} (0.95 \cdot m_1) & \text{if } Adjust_m1 = 1 \\ m_1 & \text{if } Adjust_m1 = 0 \end{cases} \qquad m_{1adjusted} = 1.14$$

CONCRETE DECK RATING FACTOR ANALYSIS:

CONCRETE DECK RATING

The deck transverse reinforcement is rated for moment. AASHTO LRFD strip widths are used to distribute the wheel loads.

DESIGN STRIP WIDTHS - [4.6.2.1]:

$X := 14.75 \cdot in$ Distance from Load to Point of Support

$B_{Pos} := 26 \cdot in + \frac{6.6 \cdot S}{12} = 10.69\ ft$ Interior Portion Between Girders (+Moment) [Table 4.6.2.1.3-1]

$B_{Neg} := 48 \cdot in + \frac{3.0 \cdot S}{12} = 7.87\ ft$ Interior Portion Over Girders (-Moment) [Table 4.6.2.1.3-1]

$B_{OH} := 45 \cdot in + \frac{10 \cdot X}{12} = 4.77\ ft$ Overhang (-Moment) [Table 4.6.2.1.3-1]

$B_{unit} := 1 \cdot ft$ Unit Strip Width for Dead & Live Loads in Visual Analysis

DECK NOMINAL RESISTANCE

Deck Thickness, $t_D = 5.50 \cdot in$

Nominal Flexural Resistance [5.7.3.2]

+Moment $Bar_No_{bot} := 4$ $Dia_{bar.bot} := \frac{Bar_No_{bot}}{8} \cdot in = 0.50 \cdot in$ $A_{bar.bot} := \frac{\pi}{4} \cdot (Dia_{bar.bot})^2 = 0.20 \cdot in^2$

$d_{bot} := t_D - cover_{bot} - \frac{Dia_{bar.bot}}{2} = 4.25 \cdot in$

$Spa_{bar.bot} := 6 \cdot in$ $As_{bot} := A_{bar.bot} \cdot \frac{B_{Pos}}{Spa_{bar.bot}} = 4.20 \cdot in^2$ $a_{bot} := \frac{As_{bot} \cdot Fy_D}{0.85 \cdot Fc_D \cdot B_{Pos}} = 0.43 \cdot in$

$Mn_{D.Pos} := As_{bot} \cdot Fy_D \cdot \left(d_{bot} - \frac{a_{bot}}{2}\right) = 56.49 \cdot kip \cdot ft$ [5.7.3.2.2-1]

- Moment $Bar_No_{top} := 5$ $Dia_{bar.top} := \frac{Bar_No_{top}}{8} \cdot in = 0.63 \cdot in$ $A_{bar.top} := \frac{\pi}{4} \cdot (Dia_{bar.top})^2 = 0.31 \cdot in^2$

$Spa_{bar.top} := 6 \cdot in$ $d_{top} := t_D - cover_{top} - \frac{Dia_{bar.top}}{2} = 3.69 \cdot in$

$As_{top} := A_{bar.top} \cdot \frac{B_{Neg}}{Spa_{bar.top}} = 4.83 \cdot in^2$ $a_{top} := \frac{As_{top} \cdot Fy_D}{0.85 \cdot Fc_D \cdot B_{Neg}} = 0.67 \cdot in$

$Mn_{D.Neg} := As_{top} \cdot Fy_D \cdot \left(d_{top} - \frac{a_{top}}{2}\right) = 54.01 \cdot kip \cdot ft$ [5.7.3.2.2-1]

Overhang -Moment

$Bar_No_{OH} := 5$ $\quad Dia_{bar.OH} := \frac{Bar_No_{OH}}{8} \cdot in = 0.63 \cdot in$ $\quad A_{bar.OH} := \frac{\pi}{4} \cdot (Dia_{bar.OH})^2 = 0.31 \cdot in^2$

$Spa_{bar.OH} := 6 \cdot in$ $\quad As_{OH} := A_{bar.OH} \cdot \frac{B_{OH}}{Spa_{bar.OH}} = 2.93 \cdot in^2$

$d_{OH} := t_{D.OH} - \left(cover_{top} + \frac{Dia_{bar.OH}}{2}\right) = 8.69 \cdot in$ $\quad a_{OH} := \frac{As_{OH} \cdot Fy_D}{0.85 \cdot Fc_D \cdot B_{OH}} = 0.67 \cdot in$

$Mn_{D.OH} := As_{OH} \cdot Fy_D \cdot \left(d_{OH} - \frac{a_{OH}}{2}\right) = 81.57 \cdot kip \cdot ft$ [5.7.3.2.2-1]

DECK DEAD LOADS:

Component Dead Load, DC:

Curb Weight per Foot of Width - Apply at Edge of Deck in Visual Analysis: $DC_{Rail.D} := DC_{curb} \cdot B_{unit} = 0.128 \cdot kip$

Deck (Interior), $DC_D := DC_{Deck} \cdot B_{unit} = 0.069 \cdot klf$

Deck (Overhang), $DC_{D.OH} := DC_{Deck.OH} \cdot B_{unit} = 0.069 \cdot klf$

$DC_{D.OH.soffit} := t_{D.OH} \cdot B_{unit} \cdot \gamma c = 0.131 \cdot klf$

Wearing Surface Dead Load, DW:

Asphalt Wearing Surface, $DW_D := DW_{ws} \cdot B_{unit} = 0.000 \cdot klf$

DECK LIVE LOADS:

Add Dynamic Load Allowance per {6A.4.4.3} $IM_D := 0.33$

AASHTO LRFD 3.6.1.2.1 Specifies the **HL-93** vehicular live loading shall consist of the maximum of a design truck or design tandem. The design truck and design tandem must include the dynamic load allowance. Lane loads are not applied per 3.6.1.3.3. Only the axles of the design and legal vehicles are analyzed.

Live loads are applied as moving point loads equal to a 1 kip unit axle weight at 6' spacing in Visual Analysis.

DECK ANALYSIS RESULTS: (Per Unit Strip Width)

Deck loads were calculated using Visual Analysis.

	MAX (+) MOMENT	MAX (-) MOMENT	MAX (-) OH. MOMENT
DC	$M_{DC.Pos} := -0.51 \cdot kip \cdot ft$	$M_{DC.Neg} := 0.93 \cdot kip \cdot ft$	$M_{DC.OH} := 0.93 \cdot kip \cdot ft$
DW	$M_{DW.Pos} := 0 \cdot kip \cdot ft$	$M_{DW.Neg} := 0 \cdot kip \cdot ft$	$M_{DW.OH} := 0 \cdot kip \cdot ft$
1 kip Unit Truck	$M_{Unit.Pos} := 0.64 \cdot kip \cdot ft$	$M_{Unit.Neg} := 0.92 \cdot kip \cdot ft$	$M_{Unit.OH} := 0.92 \cdot kip \cdot ft$

Max Moments for Axle Loads:

	MAX (+) MOMENT	MAX (-) MOMENT
HL-93 $W_{HL93} := 32 \cdot kip$	$M_{HL93.Pos} := M_{Unit.Pos} \cdot \frac{W_{HL93}}{1 \cdot kip} = 20.48 \cdot kip \cdot ft$	$M_{HL93.Neg} := M_{Unit.Neg} \cdot \frac{W_{HL93}}{1 \cdot kip} = 29.44 \cdot kip \cdot ft$
TANDEM TRUCK $W_{Tdm} := 25 \cdot kip$	$M_{Tdm.Pos} := M_{Unit.Pos} \cdot \frac{W_{Tdm}}{1 \cdot kip} = 16.00 \cdot kip \cdot ft$	$M_{Tdm.Neg} := M_{Unit.Neg} \cdot \frac{W_{Tdm}}{1 \cdot kip} = 23.00 \cdot kip \cdot ft$
TYPE 3 $W_{T3} := 17 \cdot kip$	$M_{T3.Pos} := M_{Unit.Pos} \cdot \frac{W_{T3}}{1 \cdot kip} = 10.88 \cdot kip \cdot ft$	$M_{T3.Neg} := M_{Unit.Neg} \cdot \frac{W_{T3}}{1 \cdot kip} = 15.64 \cdot kip \cdot ft$
TYPE 3S2 $W_{T3S2} := 15.5 \cdot kip$	$M_{T3S2.Pos} := M_{Unit.Pos} \cdot \frac{W_{T3S2}}{1 \cdot kip} = 9.92 \cdot kip \cdot ft$	$M_{T3S2.Neg} := M_{Unit.Neg} \cdot \frac{W_{T3S2}}{1 \cdot kip} = 14.26 \cdot kip \cdot ft$
TYPE 3-3 $W_{T33} := 16 \cdot kip$	$M_{T33.Pos} := M_{Unit.Pos} \cdot \frac{W_{T33}}{1 \cdot kip} = 10.24 \cdot kip \cdot ft$	$M_{T33.Neg} := M_{Unit.Neg} \cdot \frac{W_{T33}}{1 \cdot kip} = 14.72 \cdot kip \cdot ft$
SU4-SU7, & NRL $W_{NRL} := 17 \cdot kip$	$M_{NRL.Pos} := M_{Unit.Pos} \cdot \frac{W_{NRL}}{1 \cdot kip} = 10.88 \cdot kip \cdot ft$	$M_{NRL.Neg} := M_{Unit.Neg} \cdot \frac{W_{NRL}}{1 \cdot kip} = 15.64 \cdot kip \cdot ft$

MAX (-) OH. MOMENT

HL-93	$M_{HL93.OH} := M_{Unit.OH} \cdot \frac{W_{HL93}}{1 \cdot kip} = 29.44 \cdot kip \cdot ft$
Tandem Truck	$M_{Tdm.OH} := M_{Unit.OH} \cdot \frac{W_{Tdm}}{1 \cdot kip} = 23.00 \cdot kip \cdot ft$
Type 3	$M_{T3.OH} := M_{Unit.OH} \cdot \frac{W_{T3}}{1 \cdot kip} = 15.64 \cdot kip \cdot ft$
Type 3S2	$M_{T3S2.OH} := M_{Unit.OH} \cdot \frac{W_{T3S2}}{1 \cdot kip} = 14.26 \cdot kip \cdot ft$
Type 3-3	$M_{T33.OH} := M_{Unit.OH} \cdot \frac{W_{T33}}{1 \cdot kip} = 14.72 \cdot kip \cdot ft$
SU4-SU7, & NRL	$M_{NRL.OH} := M_{Unit.OH} \cdot \frac{W_{NRL}}{1 \cdot kip} = 15.64 \cdot kip \cdot ft$

STRIP WIDTH SCALE FACTOR

$$B_{Pos.D} := \frac{B_{Pos}}{B_{unit}} = 10.69$$

$$B_{Neg.D} := \frac{B_{Neg}}{B_{unit}} = 7.87$$

$$B_{OH.D} := \frac{B_{OH}}{B_{unit}} = 4.77$$

Note: All SU Vehicles & NRL have same max wheel load.

RATING FACTOR GENERAL EQUATION

Rating Factor, $RF = \dfrac{\text{Member Capacity - Factored DL effects}}{\text{Factored LL effects}}$ {6A.4.2.1} {Eq. 6A.4.2.1-1}

Member Capacity, $C = \text{Nominal_Capacity} \cdot \phi c \cdot \phi s \cdot \phi$ {Eq. 6A.4.2.1-2}

$\phi c_{deck} = 1.00 \qquad \phi s_{deck} = 1.00$

$\phi c_{deck} \cdot \phi s_{deck} = 1.00$

Deck Capacity: {Table 6A.4.2.2-1}

$C_{M.D.Pos} := \max(\phi c_{deck} \cdot \phi s_{deck}, 0.85) \cdot \phi_{f.D} \cdot Mn_{D.Pos} = 50.84 \cdot kip \cdot ft$

$C_{M.D.Neg} := \max(\phi c_{deck} \cdot \phi s_{deck}, 0.85) \cdot \phi_{f.D} \cdot Mn_{D.Neg} = 48.61 \cdot kip \cdot ft$

$C_{M.D.OH} := \max(\phi c_{deck} \cdot \phi s_{deck}, 0.85) \cdot \phi_{f.D} \cdot Mn_{D.OH} = 73.41 \cdot kip \cdot ft$

STRENGTH Factored Force Effects: {Table 6A.4.2.2-1}

Dead Load

$MuDL_{D.Pos} := \eta i \cdot (\gamma DC \cdot M_{DC.Pos} + \gamma DW \cdot M_{DW.Pos}) \cdot B_{Pos.D} = -6.82 \cdot kip \cdot ft$

$MuDL_{D.Neg} := \eta i \cdot (\gamma DC \cdot M_{DC.Neg} + \gamma DW \cdot M_{DW.Neg}) \cdot B_{Neg.D} = 9.15 \cdot kip \cdot ft$

$MuDL_{D.OH} := \eta i \cdot (\gamma DC \cdot M_{DC.OH} + \gamma DW \cdot M_{DW.OH}) \cdot B_{OH.D} = 5.55 \cdot kip \cdot ft$

HL-93 INVENTORY

$MuHL93_{D.Pos.I} := \eta i \cdot \gamma HL93_I \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.Pos}, M_{Tdm.Pos}) = 54.34 \cdot kip \cdot ft$

$MuHL93_{D.Neg.I} := \eta i \cdot \gamma HL93_I \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.Neg}, M_{Tdm.Neg}) = 78.11 \cdot kip \cdot ft$

$MuHL93_{D.OH.I} := \eta i \cdot \gamma HL93_I \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.OH}, M_{Tdm.OH}) = 78.11 \cdot kip \cdot ft$

HL-93 OPERATING

$MuHL93_{D.Pos.O} := \eta i \cdot \gamma HL93_O \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.Pos}, M_{Tdm.Pos}) = 41.92 \cdot kip \cdot ft$

$MuHL93_{D.Neg.O} := \eta i \cdot \gamma HL93_O \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.Neg}, M_{Tdm.Neg}) = 60.26 \cdot kip \cdot ft$

$MuHL93_{D.OH.O} := \eta i \cdot \gamma HL93_O \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.OH}, M_{Tdm.OH}) = 60.26 \cdot kip \cdot ft$

Type 3

$MuT3_{D.Pos} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3.Pos} = 21.45 \cdot kip \cdot ft$

$MuT3_{D.Neg} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3.Neg} = 30.83 \cdot kip \cdot ft$

$MuT3_{D.OH} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3.OH} = 30.83 \cdot kip \cdot ft$

Type 3S2

$MuT3S2_{D.Pos} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3S2.Pos} = 19.55 \cdot kip \cdot ft$

$MuT3S2_{D.Neg} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3S2.Neg} = 28.11 \cdot kip \cdot ft$

$MuT3S2_{D.OH} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3S2.OH} = 28.11 \cdot kip \cdot ft$

Type 3-3

$MuT33_{D.Pos} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T33.Pos} = 20.18 \cdot kip \cdot ft$

$MuT33_{D.Neg} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T33.Neg} = 29.01 \cdot kip \cdot ft$

$MuT33_{D.OH} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T33.OH} = 29.01 \cdot kip \cdot ft$

SU4-SU7, & NRL

$MuNRL_{D.Pos} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{NRL.Pos} = 21.45 \cdot kip \cdot ft$

$MuNRL_{D.Neg} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{NRL.Neg} = 30.83 \cdot kip \cdot ft$

$MuNRL_{D.OH} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{NRL.OH} = 30.83 \cdot kip \cdot ft$

DECK RATING FACTORS

	POSITIVE MOMENT	NEGATIVE MOMENT
HL-93 INVENTORY	$RF_{HL93.I.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuHL93_{D.Pos.I}} = 1.06$	$RF_{HL93.I.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuHL93_{D.Neg.I}} = 0.51$
HL-93 OPERATING	$RF_{HL93.O.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuHL93_{D.Pos.O}} = 1.38$	$RF_{HL93.O.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuHL93_{D.Neg.O}} = 0.65$
Type 3	$RF_{T3.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuT3_{D.Pos}} = 2.69$	$RF_{T3.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuT3_{D.Neg}} = 1.28$
Type 3S2	$RF_{T3S2.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuT3S2_{D.Pos}} = 2.95$	$RF_{T3S2.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuT3S2_{D.Neg}} = 1.40$
Type 3-3	$RF_{T33.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuT33_{D.Pos}} = 2.86$	$RF_{T33.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuT33_{D.Neg}} = 1.36$
SU4-SU7, & NRL	$RF_{NRL.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuNRL_{D.Pos}} = 2.69$	$RF_{NRL.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuNRL_{D.Neg}} = 1.28$

	NEGATIVE OH. MOMENT
HL-93 INVENTORY	$RF_{HL93.I.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuHL93_{D.OH.I}} = 0.87$
HL-93 OPERATING	$RF_{HL93.O.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuHL93_{D.OH.O}} = 1.13$
Type 3	$RF_{T3.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuT3_{D.OH}} = 2.20$
Type 3S2	$RF_{T3S2.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuT3S2_{D.OH}} = 2.41$
Type 3-3	$RF_{T33.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuT33_{D.OH}} = 2.34$
SU4-SU7, & NRL	$RF_{NRL.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuNRL_{D.OH}} = 2.20$

DECK RATING FACTOR SUMMARY:

HL-93 INVENTORY	$RF_{HL93.I} := \min(RF_{HL93.I.P}, RF_{HL93.I.N}, RF_{HL93.I.OH}) = 0.51$
HL-93 OPERATING	$RF_{HL93.O} := \min(RF_{HL93.O.P}, RF_{HL93.O.N}, RF_{HL93.O.OH}) = 0.65$
Type 3	$RF_{T3} := \min(RF_{T3.P}, RF_{T3.N}, RF_{T3.OH}) = 1.28$
Type 3S2	$RF_{T3S2} := \min(RF_{T3S2.P}, RF_{T3S2.N}, RF_{T3S2.OH}) = 1.40$
Type 3-3	$RF_{T33} := \min(RF_{T33.P}, RF_{T33.N}, RF_{T33.OH}) = 1.36$
SU4-SU7, & NRL	$RF_{NRL} := \min(RF_{NRL.P}, RF_{NRL.N}, RF_{NRL.OH}) = 1.28$

STEEL STRINGER RATING FACTOR ANALYSIS:

DEAD LOADS

Stringer, deck, and curb self weight computed by BRASS.

Component Dead Load, DC:

All loads applied in BRASS.

Wearing Surface Dead Load, DW:

Asphalt Wearing Surface, $DW_{ws} = 0.000 \cdot ksf$

LIVE LOADS

Add Dynamic Load Allowance per {6A.4.4.3} $IM_S := 0.33$ Applies only to truck loads

AASHTO LRFD 3.6.1.2.1 Specifies the **HL-93** vehicular live loading shall consist of the maximum of a design truck or design tandem in combination with a 64 psf lane load over a 10' wide design lane. The design truck and design tandem must include the dynamic load allowance, but the design lane load need not include the dynamic load allowance.

BRASS POINTS OF INTEREST

The design is investigated at the 10th points along the span, at any changes in bottom plate conditions, and at either side of hinge locations. Locations are span fractions as designated in BRASS (e.g. 105.00 = Mid-span)

At Tenth Points:

$POI_{0.0} := 100.00$ $POI_{0.1} := 101.00$ $POI_{0.2} := 102.00$ $POI_{0.3} := 103.00$ $POI_{0.4} := 104.00$ $POI_{0.5} := 105.00$

(etc.)

SUMMARY OF RATING FACTORS

Rating Factors calculated using BRASS are shown for the stringer below.

STRENGTH I Limit State results are:

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load No.	Combination Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I	1.69	60.76
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I	1.36	33.92
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I	1.36	33.92

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I-O	2.19	78.76
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I-O	1.76	43.96
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I-O	1.76	43.96

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load							
3	TYPE3	(TRK)	25.00	104.5000	STRENGTH I	3.01	75.23
4	TYPE3S2	(TRK)	36.00	104.5000	STRENGTH I	3.30	118.93
5	TYPE3-3	(TRK)	40.00	104.5000	STRENGTH I	3.66	146.40
6	SU4	(TRK)	27.00	105.0000	STRENGTH I	2.58	69.75
7	SU5	(TRK)	31.00	105.0000	STRENGTH I	2.45	76.00
8	SU6	(TRK)	34.75	105.0000	STRENGTH I	2.32	80.79
9	SU7	(TRK)	38.75	105.0000	STRENGTH I	2.32	90.09
10	NRL	(TRK)	40.00	105.0000	STRENGTH I	2.32	92.92
Crit	NRL	(TRK)	40.00	105.0000	STRENGTH I	2.32	92.92

SERVICE II Limit State results are:

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load No.	Combination Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	SERVICE II	2.17	78.22
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	SERVICE II	1.75	43.66
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	SERVICE II	1.75	43.66

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	SERVICE II-O	2.82	101.69
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	SERVICE II-O	2.27	56.75
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	SERVICE II-O	2.27	56.75

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load							
3	TYPE3	(TRK)	25.00	104.5000	SERVICE II	2.88	71.94
4	TYPE3S2	(TRK)	36.00	104.5000	SERVICE II	3.16	113.72
5	TYPE3-3	(TRK)	40.00	104.5000	SERVICE II	3.50	139.99
6	SU4	(TRK)	27.00	105.0000	SERVICE II	2.47	66.71
7	SU5	(TRK)	31.00	105.0000	SERVICE II	2.34	72.68
8	SU6	(TRK)	34.75	105.0000	SERVICE II	2.22	77.27
9	SU7	(TRK)	38.75	105.0000	SERVICE II	2.22	86.16
10	NRL	(TRK)	40.00	105.0000	SERVICE II	2.22	88.87
Crit	NRL	(TRK)	40.00	105.0000	SERVICE II	2.22	88.87

** Full electronic copy of BRASS output can be found in the Regional Bridge Engineer's files **

STEEL FLOOR BEAM RATING FACTOR ANALYSIS:

DEAD LOADS

Floor Beam self weight computed by BRASS.

Component Dead Load, DC:

Tributary width for the floor beam is equal to stringer span.

Concrete Curb, $DC_{curb.FB} := \frac{2 \cdot DC_{curb} \cdot Span_S}{S} = 0.342 \cdot klf$

Deck, $DC_{Deck.FB} := DC_{Deck} \cdot Span_S = 1.421 \cdot klf$

Steel Stringer, $DC_{S.FB} := \frac{DC_S \cdot N_S \cdot Span_S}{S} = 0.296 \cdot klf$

Total: $DC_{TotalFB} := DC_{curb.FB} + DC_{Deck.FB} + DC_{S.FB} = 2.059 \cdot klf$

Wearing Surface Dead Load, DW:

Asphalt Wearing Surface, $DW_{ws.FB} := DW_{ws} \cdot Span_S = 0.000 \cdot klf$

LIVE LOADS

Add Dynamic Load Allowance per {6A.4.4.3} $IM_{FB} := 0.33$ Applies only to truck loads

AASHTO LRFD 3.6.1.2.1 Specifies the **HL-93** vehicular live loading shall consist of the maximum of a design truck or design tandem in combination with a 64 psf lane load over a 10' wide design lane. The design truck and design tandem must include the dynamic load allowance, but the design lane load need not include the dynamic load allowance.

Reactions from the stringers on the floor beams were calculated using Visual Analysis. The resulting live load reactions are used in BRASS for the applied floor beam live loads.

Max Live Load Reactions:

HL-93	$R_{HL93} := 43.1 \cdot kip$	**Type 3**	$R_{T3} := 33.9 \cdot kip$	**SU4**	$R_{SU4} := 39.6 \cdot kip$	**SU7**	$R_{SU7} := 48.5 \cdot kip$
Tandem	$R_{Tdm} := 45.2 \cdot kip$	**Type 3S2**	$R_{T3S2} := 31.5 \cdot kip$	**SU5**	$R_{SU5} := 42.5 \cdot kip$	**NRL**	$R_{NRL} := 51.4 \cdot kip$
Lane	$R_{Lane} := 11.6 \cdot kip$	**Type 3-3**	$R_{T33} := 27.7 \cdot kip$	**SU6**	$R_{SU6} := 46.4 \cdot kip$		

BRASS POINTS OF INTEREST

The design is investigated at the 10th points along the span, at any changes in bottom plate conditions, and at either side of hinge locations. Locations are span fractions as designated in BRASS (e.g. 105.00 = Mid-span)

At Tenth Points:

$POI_{0.0} = 100.00$ $POI_{0.1} = 101.00$ $POI_{0.2} = 102.00$ $POI_{0.3} = 103.00$ $POI_{0.4} = 104.00$ $POI_{0.5} = 105.00$

(etc.)

SUMMARY OF RATING FACTORS

Rating Factors calculated using BRASS are shown for the stringer below.

STRENGTH I Limit State results are:

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load Combination No.	Description			Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory								
1	HL-93	+ HL-93	(TRK)	27.35	104.0000	STRENGTH I	1.98	54.06
2	TANDEM	+ TANDEM	(TRK)	28.40	104.0000	STRENGTH I	1.90	53.95
Crit	TANDEM	+ TANDEM	(TRK)	28.40	104.0000	STRENGTH I	1.90	53.95

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating								
1	HL-93	+ HL-93	(TRK)	27.35	104.0000	STRENGTH I-O	2.56	70.08
2	TANDEM	+ TANDEM	(TRK)	28.40	104.0000	STRENGTH I-O	2.46	69.94
Crit	TANDEM	+ TANDEM	(TRK)	28.40	104.0000	STRENGTH I-O	2.46	69.94

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load								
3	TYPE 3	+ TYPE 3	(TRK)	16.95	104.0000	STRENGTH I	4.07	68.95
4	TYPE 3S2	+ TYPE 3S2	(TRK)	15.75	104.0000	STRENGTH I	4.38	68.95
5	TYPE 3-3	+ TYPE 3-3	(TRK)	13.85	104.0000	STRENGTH I	4.98	68.95
6	SU4	+ SU4	(TRK)	19.80	104.0000	STRENGTH I	3.48	68.95
7	SU5	+ SU5	(TRK)	21.25	104.0000	STRENGTH I	3.24	68.95
8	SU6	+ SU6	(TRK)	23.20	104.0000	STRENGTH I	2.97	68.95
9	SU7	+ SU7	(TRK)	24.25	104.0000	STRENGTH I	2.84	68.95
10	NRL	+ NRL	(TRK)	25.70	104.0000	STRENGTH I	2.68	68.95
Crit	NRL	+ NRL	(TRK)	25.70	104.0000	STRENGTH I	2.68	68.95

SERVICE II Limit State results are:

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load Combination No.	Description			Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory								
1	HL-93	+ HL-93	(TRK)	27.35	104.0000	SERVICE II	2.13	58.22
2	TANDEM	+ TANDEM	(TRK)	28.40	104.0000	SERVICE II	2.05	58.10
Crit	TANDEM	+ TANDEM	(TRK)	28.40	104.0000	SERVICE II	2.05	58.10

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating								
1	HL-93	+ HL-93	(TRK)	27.35	104.0000	SERVICE II-O	2.77	75.69
2	TANDEM	+ TANDEM	(TRK)	28.40	104.0000	SERVICE II-O	2.66	75.53
Crit	TANDEM	+ TANDEM	(TRK)	28.40	104.0000	SERVICE II-O	2.66	75.53

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load								
3	TYPE 3	+ TYPE 3	(TRK)	16.95	104.0000	SERVICE II	3.25	55.16
4	TYPE 3S2	+ TYPE 3S2	(TRK)	15.75	104.0000	SERVICE II	3.50	55.16
5	TYPE 3-3	+ TYPE 3-3	(TRK)	13.85	104.0000	SERVICE II	3.98	55.16
6	SU4	+ SU4	(TRK)	19.80	104.0000	SERVICE II	2.79	55.16
7	SU5	+ SU5	(TRK)	21.25	104.0000	SERVICE II	2.60	55.16
8	SU6	+ SU6	(TRK)	23.20	104.0000	SERVICE II	2.38	55.16
9	SU7	+ SU7	(TRK)	24.25	104.0000	SERVICE II	2.27	55.16
10	NRL	+ NRL	(TRK)	25.70	104.0000	SERVICE II	2.15	55.16
Crit	NRL	+ NRL	(TRK)	25.70	104.0000	SERVICE II	2.15	55.16

** Full electronic copy of BRASS output can be found in the Regional Bridge Engineer's files **

STEEL GIRDER RATING FACTOR ANALYSIS:

DEAD LOADS

Girder self weight computed by BRASS.

Component Dead Load, DC:

Loads are calculated per tributariy width of the floor beams and applied as point loads to the girders.

Concrete Curb, $DC_{curb.G} := DC_{curb} \cdot Span_{S2} = 2.002 \cdot kip$

Deck, $DC_{Deck.G} := DC_{Deck} \cdot Span_{S2} \cdot \frac{Wd}{2} = 7.251 \cdot kip$

Stringer Haunch,

$w_{H1} := b_{f.S} + 2 \cdot 6 \cdot in = 22.50 \cdot in$

$w_{H2} := w_{H1} + 2 \cdot 11 \cdot in = 44.50 \cdot in$

$t_H := 5 \cdot in$

$DC_{H.G} := \frac{w_{H1} + w_{H2}}{2} \cdot t_H \cdot \gamma c \cdot Span_{S2} = 2.726 \cdot kip$

Steel Stringer, $DC_{S.G} := DC_S \cdot N_S \cdot Span_{S2} = 3.473 \cdot kip$

Steel Floor Beam, $DC_{FB.G} := DC_{FB} \cdot \frac{S}{2} = 0.741 \cdot kip$

Cross Bracing & Gussets, $DC_{brace.G} = 0.017 \cdot klf$

$$DC_G := DC_{curb.G} + DC_{Deck.G} + DC_{H.G} + \frac{DC_{S.G}}{2} + DC_{FB.G} = 14.46 \cdot kip$$

Floor Beam Loads on Girder:

$$DC_{G.FB.1} := DC_G = 14.46 \cdot kip$$

Wearing Surface Dead Load, DW:

Asphalt Wearing Surface, $DW_{ws.G1} := DW_{ws} \cdot Wr \cdot Span_S = 0.000 \cdot kip$

$DW_{ws.G2} := DW_{ws} \cdot Wr \cdot Span_{S2} = 0.000 \cdot kip$

LIVE LOADS

Add Dynamic Load Allowance per {6A.4.4.3} $IM_G := 0.33$ Applies only to truck loads

AASHTO LRFD 3.6.1.2.1 Specifies the **HL-93** vehicular live loading shall consist of the maximum of a design truck or design tandem in combination with a 64 psf lane load over a 10' wide design lane. The design truck and design tandem must include the dynamic load allowance, but the design lane load need not include the dynamic load allowance.

LIVE LOAD DISTRIBUTION FACTORS:

Lane Live Load distribution per [3.6.1.1.2]. The controlling distribution factor is used in the load rating.

Distribution Factor for Exterior Girders:

Lever Rule: Moment & Shear

x_O= Distance from wheel line 2' off rail face to exterior girder per [3.6.1.3.1]

$x_O := -4.6666 \cdot ft$ (negative number indicates wheel on interior of girder)

$$DF_{Ext} := \left[\frac{S + x_O}{S} + \frac{S - (6 \cdot ft - x_O)}{S}\right] \cdot 0.5 \cdot m_{1adjusted}$$

Distribution by Lever Rule with 6' axle spacing

$DF_{Ext} = 0.58$

Final Distribution Factors:

$DF_M := DF_{Ext} = 0.58$

$DF_V := DF_{Ext} = 0.58$

BRASS POINTS OF INTEREST

The design is investigated at the 10th points along the span, at any changes in bottom plate conditions, and at either side of hinge locations. Locations are span fractions as designated in BRASS (e.g. 105.00 = Mid-span)

At Tenth Points:

$POI_{0.0} = 100.00$ $POI_{0.1} = 101.00$ $POI_{0.2} = 102.00$ $POI_{0.3} = 103.00$ $POI_{0.4} = 104.00$ $POI_{0.5} = 105.00$

(etc.)

BRASS Girder Transverse Stiffeners

Symmetric About Centerline Bridge

Stiffener Group	Spacing (ft)	Support	Start Distance (ft)	Length (ft)	End Distance (ft)
L5x3-1/2x3/8	5.0833	1	0	10.1666	10.1666
L5x3-1/2x3/8	5.2083	1	10.1666	31.25	41.4166
L5x3-1/2x3/8	5.1667	1	41.4166	15.5	56.9166
L5x3-1/2x3/8	5.2083	1	56.9166	31.25	88.1666
L5x3-1/2x3/8	5.1667	1	88.1666	20.6667	108.8333

SUMMARY OF RATING FACTORS

Rating Factors calculated using BRASS are shown for the stringer below.

STRENGTH I Limit State results are:

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load Combination No.	Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I	0.82	29.66
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	105.0000	STRENGTH I	0.97	24.36
Crit	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I	0.82	29.66

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I-O	1.07	38.51
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	105.0000	STRENGTH I-O	1.26	31.62
Crit	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I-O	1.07	38.51

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load							
3	TYPE3	(TRK)	25.00	105.0000	STRENGTH I	2.22	55.42
4	TYPE3S2	(TRK)	36.00	105.0000	STRENGTH I	1.79	64.59
5	TYPE3-3	(TRK)	40.00	105.0000	STRENGTH I	1.76	70.33
6	SU4	(TRK)	27.00	105.0000	STRENGTH I	2.00	54.04
7	SU5	(TRK)	31.00	105.0000	STRENGTH I	1.78	55.21
8	SU6	(TRK)	34.75	105.0000	STRENGTH I	1.59	55.34
9	SU7	(TRK)	38.75	105.0000	STRENGTH I	1.45	56.08
10	NRL	(TRK)	40.00	105.0000	STRENGTH I	1.39	55.64
Crit	NRL	(TRK)	40.00	105.0000	STRENGTH I	1.39	55.64

SERVICE II Limit State results are:

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load Combination No.	Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	SERVICE II	0.30	10.63
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	105.0000	SERVICE II	0.35	8.71
Crit	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	SERVICE II	0.30	10.63

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	SERVICE II-O	0.38	13.81
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	105.0000	SERVICE II-O	0.45	11.32
Crit	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	SERVICE II-O	0.38	13.81

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load							
3	TYPE3	(TRK)	25.00	105.0000	SERVICE II	0.59	14.66
4	TYPE3S2	(TRK)	36.00	105.0000	SERVICE II	0.48	17.19
5	TYPE3-3	(TRK)	40.00	105.0000	SERVICE II	0.47	18.62
6	SU4	(TRK)	27.00	105.0000	SERVICE II	0.53	14.30
7	SU5	(TRK)	31.00	105.0000	SERVICE II	0.47	14.62
8	SU6	(TRK)	34.75	105.0000	SERVICE II	0.42	14.68
9	SU7	(TRK)	38.75	105.0000	SERVICE II	0.38	14.85
10	NRL	(TRK)	40.00	105.0000	SERVICE II	0.37	14.75
Crit	NRL	(TRK)	40.00	105.0000	SERVICE II	0.37	14.75

** Full electronic copy of BRASS output can be found in the Regional Bridge Engineer's files **

BRIDGE RATING FACTOR SUMMARY:

A summary of the rating factors for each superstructure element evaluated is shown below. The safe load capacity is given in tons. If the vehicle rating factor is greater than 1.0, then the vehicle weight rating is GVW*RF. If that condition is not satisfied, safe posting loads are calculated using equation {6A.8.3-1} from the Manual for Bridge Evaluation.{6A.8.3}

Vehicle	Deck			Steel Stringer	
	STRENGTH I			STRENGTH I & SERVICE II	
	+ M	- M	- OH	M	V
HL-93 I	1.06	0.51	0.87	1.36	-
HL-93 O	1.38	0.65	1.13	1.76	-
Type 3	2.69	1.28	2.20	2.88	-
Type 3S2	2.95	1.40	2.41	3.16	-
Type 3-3	2.86	1.36	2.34	3.50	-
SU4	2.69	1.28	2.20	2.47	-
SU5	2.69	1.28	2.20	2.34	-
SU6	2.69	1.28	2.20	2.22	-
SU7	2.69	1.28	2.20	2.22	-
NRL	2.69	1.28	2.20	2.22	-

Vehicle	Steel Floor Beam		Steel Plate Girder	
	STRENGTH I & SERVICE II		STRENGTH I & SERVICE II	
	M	V	M	V
HL-93 I	1.90	-	**0.30**	-
HL-93 O	2.46	-	**0.38**	-
Type 3	3.25	-	**0.59**	-
Type 3S2	3.50	-	**0.48**	-
Type 3-3	3.98	-	**0.47**	-
SU4	2.79	-	**0.53**	-
SU5	2.60	-	**0.47**	-
SU6	2.38	-	**0.42**	-
SU7	2.27	-	**0.38**	-
NRL	2.15	-	**0.37**	-

Summary

Vehicle	RF
HL-93 I	0.30
HL-93 O	0.38
Type 3	0.59
Type 3S2	0.48
Type 3-3	0.47
SU4	0.53
SU5	0.47
SU6	0.42
SU7	0.38
NRL	0.37

GVW (tons)	Safe Load Capacity
36	-
25	-
25	10.4
36	9.3
40	9.7
27	8.9
31	7.5
34.75	6.0
38.75	4.4
40	4.0

Safe Load Capacity: {6A.8.3-1}

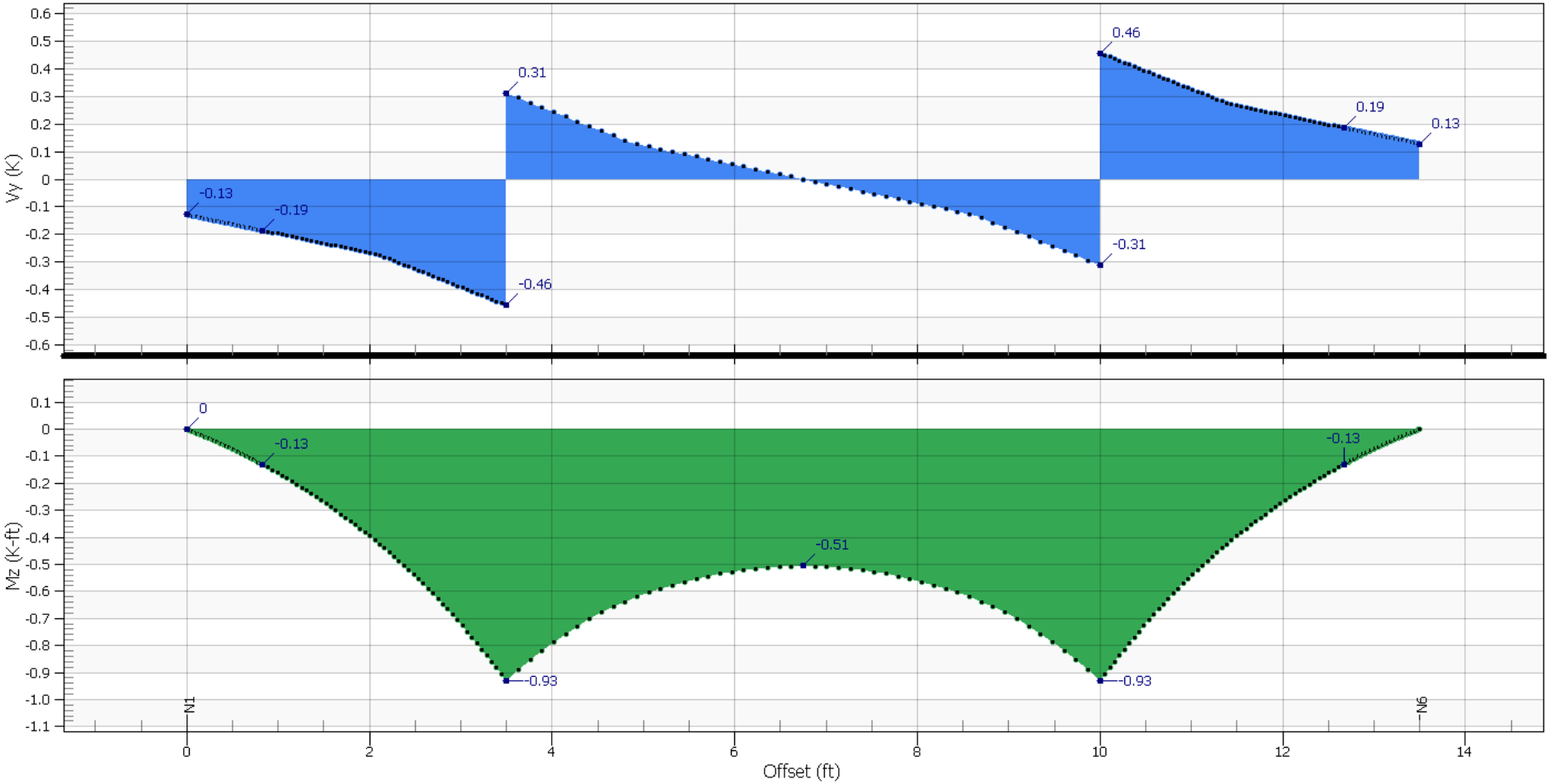
$$RF \cdot GVW \quad \text{if} \quad RF \geq 1.0$$

$$\frac{GVW}{0.7} \cdot (RF - 0.3) \quad \text{if} \quad RF < 1.0$$

Visual Analysis Results – Concrete Deck

Concrete Deck - 35-1-4.78
DJ & A, P.C.
Member: M1...M5
Load Case: DC

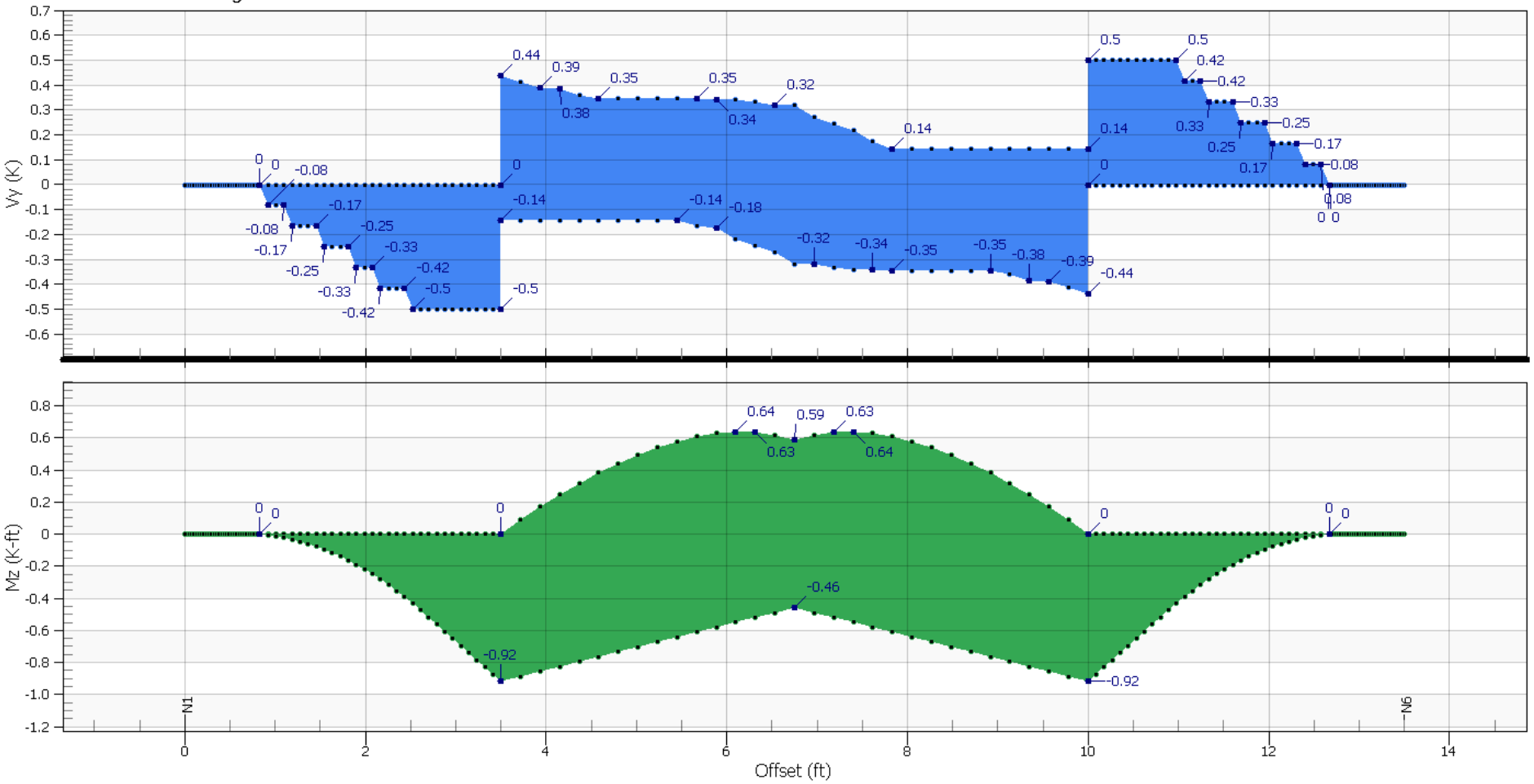
4/30/2019 - 9:32 AM
Ammon Groesbeck



VisualAnalysis 18.0
www.iesweb.com

Concrete Deck - 35-1-4.78
DJ & A, P.C.
Member: M1...M5
Load Case: Unit Truck High Extreme

4/30/2019 - 9:32 AM
Ammon Groesbeck



VisualAnalysis 18.0
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BRASS Input – Steel Stringer

BRASS-GIRDER™ Input Parameters

Version Information

Girder UI:	8.0.0.3001
Girder XML:	8.0.0.3001
BRASS™ XML:	1.8.0.3001

Administration

Project ID:	6856
Project Title:	R8 Bridge Load Ratings 2018
Bridge ID:	35-1-4.78
Bridge Name:	Citico Creek
Route Name:	35-1
Reference Marker:	4.78
Title 1:	Stringer
Title 2:	
Date:	2019 4 30
Agency:	USDA Forest Service
Designer/Rater:	Ammon Groesbeck
Reviewer:	Brad Miller
Comments:	

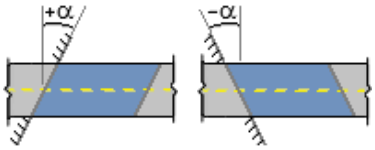
Bridge Notes

No bridge notes have been defined.

Control

Structure

Structure Type:	GirderSystem
Define Deck Cross Section:	Yes
Number of Members:	2
Skew Angle:	34 °
Analysis Model Type:	Beam
Number of Top Spans:	1



Spans

Span	Length

1	20.667 ft

Structure Material: Steel
Beam Type: Builtup
Composite Structure: No
Number of Stages: 1
Bracing Definition Type: PerBay
Deck Material: Concrete

Analysis

Unit System: US
Analysis Method: LRFD
Analysis Type: Rating
Member of Interest: 1
Model Element Type: Stepped
Point of Interest Generation Control: User
Live-load Distribution Factor Application: AnalysisPoint
Interpolate Reinforcement: No
Calculate Effective Width: No

Input

Symmetry

Component	Symmetric
Bracing (Bay)	Yes
Beam Profile	Yes
Deck Profile	Yes
Shear Connectors	Yes
Transverse Stiffeners	Yes
Bearing Stiffeners	Yes
Longitudinal Stiffeners	Yes
Bracing (Member)	No
Lateral Support	Yes
Cb Factors (LRFD)	Yes
Beam Distribution Factors (LRFD)	Yes
Reaction Distribution Factors (LRFD)	Yes

Merge Beam/Deck Profile Schedules: Yes

Distribution

Perform Dead Load Distribution: Yes
Calculate LRFD Live Load Distribution Factors: Yes

Dead Load Distribution Methods

Stage	Method
1	Tributary area

Live Load Distribution (LRFD)

Distribution Method:	AASHTO LRFD
Cross Section Code:	a1
Max. Number of Lanes Loaded:	Computed
Consider Rigid Method:	Yes
Slab Thickness Type:	Structural
Set eg = 0 for Non-composite:	No
Apply Skew to Lever Rule Override:	Yes
Apply Skew to Ridgid Rule Override:	Yes
Use Constants from Table 4.6.2.2.1-2:	No

Libraries

Section Library: N:\BRASS\Libraries\BRASS-Sections.BLS
Vehicle Library: N:\BRASS\Libraries\BRASS-Vehicles.BLV

Output

Primary Output

Action Output Level: DL+LL
Action Locations: 10thPoints

General

Member Properties:	Yes
Load Combinations:	Yes
Load and Resistance Factors:	Yes
Warnings:	Yes
Camber:	No
Critical Design Ratios / Rating Factors:	Condensed

Live Load

Truck Positions:	No
Variable Axle Spacing:	No
Live Load Settings:	Yes
Live Load Combinations:	Yes
Live Load Details:	Yes
Impact (LFD):	No

Stage

Stage	Output
1	Yes

Dead Load

Member Self Load:	Yes
Distributed Dead Loads:	Yes
Concentrated Dead Loads:	Yes
Temperature Change:	No
Settlements:	No

Load Distribution

Dead Load Distribution:	Yes
Live Load Distribution:	Yes

Intermediate Output

Intermediate Output Level: Full
Effective Width: No
Floorbeam Lane Position: No

Points of Interest

Specification Checks: Yes

Load Factoring/Combinations: Yes

Load Distribution

Dead Load: No
Live Load: Yes

Limit State Output (LRFD)

Limit State	Specification Check	Load Combination
Strength I	Yes	Yes
Strength II	No	No
Strength IV	No	No
Service I	No	No
Service II	Yes	Yes
Fatigue I	No	No
Fatigue II	No	No

Intermediate Output (cont.)

Steel

Transverse Stiffeners: No
Bearing Stiffeners: No
Longitudinal Stiffeners: No

Results Tables

X-Y Plot Action Tables: No
Specification Check Results Tables: No
Mesh Plot Files: No

BRASS-PAD™ Data Transfer File: No

Influence

Output influence lines for: None
Ordinate Divisor: 1

Factors

Load Factors (LRFD)

Limit State	DC		DW		DU		TU	
	max	min	max	min	max	min	max	min
Strength I	1.25	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Strength II	1.25	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Strength IV	1.5	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Service I	1	1	1	1	1	1	1.2	1
Service II	1	1	1	1	1	1	1.2	1
Fatigue I	0	0	0	0	0	0	0	0
Fatigue II	0	0	0	0	0	0	0	0

Load Factors (LRFD) (continued)

Limit State	LL			SE	PS	DS
	Design	Legal	Permit			

	Inventory	Operating			max	min	max	min	max	min
Strength I	1.75	1.35	1.3	0	1	1	1	1	1.25	0.9
Strength II	1.35		0	0	1	1	1	1	1.25	0.9
Strength IV	0		0	0	0	0	1	1	1.5	0.9
Service I	1		0	1	1	1	1	1	1	1
Service II	1.3	1	1.3	1	0	0	1	1	1	1
Fatigue I	1.5		0	0	0	0	1	1	0	0
Fatigue II	0.75		0	0	0	0	1	1	0	0

Load Modifiers (LRFD)

Limit State	Ductility	Redundancy	Importance	Combined Product	
				max	min
Strength I	1	1	1	-	-
Strength II	1	1	1	-	-
Strength IV	1	1	1	-	-
Service I	1	1	1	-	-
Service II	1	1	1	-	-
Fatigue I	1	1	1	-	-
Fatigue II	1	1	1	-	-

Resistance Factors (LRFD)

Resistance Factors

Type	Value
φ Flexure	1
φ Shear	1
φ Bearing	1
φ Compression	0.95
φ Shear Connectors	0.85
φ Fatigue	1

System/Total Modifiers

Limit State	Resistance Type	System	Total
Strength	Flexure	0.85	-
Strength	Shear	1	-
Strength	Bearing	1	-
Strength	Compression	1	-
Strength	Shear Connectors	1	-
Strength	Longitudinal Reinforcement	1	-
Service	Flexure	1	-
Fatigue	Fatigue	1	-

Condition Modifiers

Limit State	Condition
Strength	0.85

Service	1
Fatigue	1

Materials

Steel

ID	Name	Yield Stress	Tensile Strength	Modulus of Elasticity	Density	Thermal Expansion Coefficient
1	Grade 50	50 ksi	65 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
2	Grade 50W	50 ksi	70 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
3	Grade 36	36 ksi	58 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
4	Grade HPS 70W	70 ksi	85 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
5	Grade 30	30 ksi	60 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}

Concrete

ID	Name	28 Day Compressive Strength	Modulus of Elasticity	Density	Modulus of Rupture	Modulus of Rupture (VCI Method)	Thermal Expansion Coefficient
1	Deck Concrete	3.6 ksi	-	0.15 kcf	-	-	6E-06 °F^{-1}

Dead Load Groups

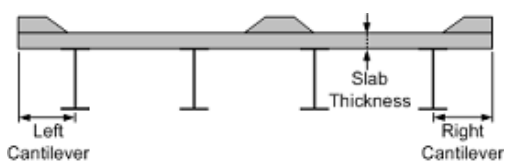
Groups

No dead load groups have been defined.

Deck Geometry

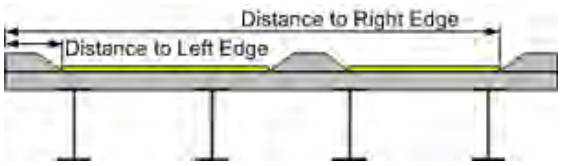
Deck

Deck Thickness: 5.5 in.
Left Cantilever Length: 3.5 ft
Right Cantilever Length: 3.5 ft
Equal Member Spacing: Yes



Travelway Locations

Distance to Left Edge: 0.833 ft
Distance to Right Edge: 12.667 ft

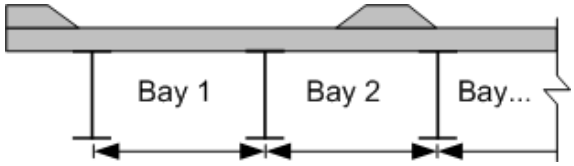


Sacrificial Topping

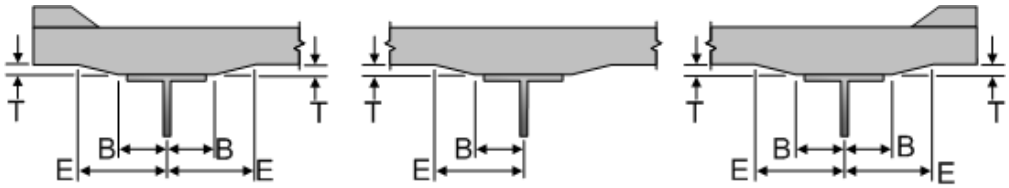
Thickness: -
Dead Load Type: DC

Member Spacing

Bay #	Spacing
1	6.5 ft

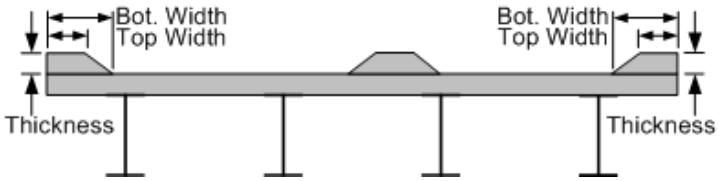


Soffits



Location	Side	Thickness	Taper Begin	Taper End
Left Exterior	Left	5 in.	11.25 in.	22.25 in.
	Right	5 in.	11.25 in.	22.25 in.
Right Exterior	Left	2 in.	11.25 in.	22.25 in.
	Right	2 in.	11.25 in.	22.25 in.

Appurtenances



Appurtenance Type	Bottom Width	Top Width	Thickness	Location
Left Curb	10 in.	10 in.	12.3 in.	N/A
Right Curb	10 in.	10 in.	12.3 in.	N/A

Deck Loads

Materials/Stages

Deck Material: **Deck Concrete**
Curb & Median Material: **Deck Concrete**
Wearing Surface Weight: -

Stages

Apply to Entire Structure: Yes
Deck Stage: 1
Curbs Stage: 1
Median Stage: Not Assigned
Wearing Surface Stage: Not Assigned

Line Loads

No line loads have been defined.

Uniform Loads

No uniform loads have been defined.

Live Loads

Live Load Control

Direction Control:	Up+Down
Standard Live Loads:	None
Wheel Advancement Denominator:	100
ADTT:	999
ADTT for Single Lane:	999
Multiple Presence Adjustment:	95 %
% of Dynamic Load Allowance (Impact):	100 %

Dynamic Load Allowance (LRFD)

Design/Rating Procedure	Truck	Lane	Fatigue
Design	33 %	0 %	15 %
Legal	33 %	0 %	0 %
Permit	33 %	0 %	0 %

Special Vehicles

Axle Vehicles

No axle vehicles have been defined.

Lane Vehicles

No lane vehicles have been defined.

Definitions (LRFD)

Definition 1

Code:	HL-93-TRUCK
Type:	GeneralTruck
Design Rating:	Design
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 2

Code:	HL-93-TANDEM
Type:	GeneralTruck
Design Rating:	Design
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 3

Code:	HL-93-LANE
Type:	GeneralLane

Live Load Factor Overrides

Design Rating:	Design
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 4

Code:	TYPE3
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 5

Code:	TYPE3S2
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 6

Code:	TYPE3-3
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 7

Code:	SU4
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-

Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 8

Code:	SU5
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 9

Code:	SU6
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 10

Code:	SU7
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 11

Code:	NRL
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	Yes
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-

Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

General Combinations (LRFD)

Standard Combo	Truck	Lane	Combination Factors	
			Truck	Lane
No	HL-93-TRUCK	HL-93-LANE	1	1
No	HL-93-TANDEM	HL-93-LANE	1	1

Deflection Combinations (LRFD)

No Deflection Combinations (LRFD) have been defined.

Component Groups

Bracing Groups

No bracing groups have been defined.

Transverse Stiffeners

No transverse stiffener groups have been defined.

Bearing Stiffeners

No bearing stiffener groups have been defined.

Longitudinal Stiffeners

No longitudinal stiffener groups have been defined.

Specification Control

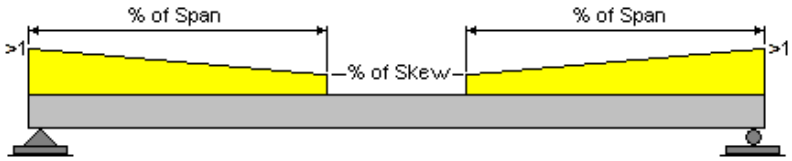
General

Lane Geometry

Design Vehicle Lane Width: 12 ft
Vehicle Width: 10 ft
Wheel Spacing: 6 ft
Encroachment Distance: -

Load Factors Control (LRFD): Use load factors per analysis type (Review = max/min; Rating = max only)

Skew Factors



Span #	% of Span	% of Skew
1	-	-

Steel

Use Appendix A6 (LRFD): No
Allow Plastic Analysis: Yes
Override Longitudinal Stiffeners: No
Slab thickness for longitudinal shear force: Structural
Slab thickness for minimum negative flexure concrete deck reinforcement: Structural

Fatigue

AASHTO LRFD Table 6.6.1.2.5-2

% of Span: 10
Span Length: 40 ft

Stress Range in Longitudinal Reinforcement Over the Piers: 10 ksi

Detail Categories (LRFD)

Detail Category	Constant, A x 10^8	Constant Amplitude Fatigue Threshold
A	250 kip^3	24 ksi
B	120 kip^3	16 ksi
B'	61 kip^3	12 ksi
C	44 kip^3	10 ksi
C'	44 kip^3	12 ksi
D	22 kip^3	7 ksi
E	11 kip^3	4.5 ksi
E'	3.9 kip^3	2.6 ksi

Limit State Map

Limit State Maps (LRFD)

Limit State	Design Review			Rating		
	Design Load	Legal Load	Permit Load	Design Load	Legal Load	Permit Load
Strength I	Yes	Yes	No	Inventory/Operating	Yes	No
Strength II	Yes	Yes	Yes	Exclude	No	Yes
Strength IV	No	No	No	Exclude	No	No
Service I	No	No	No	Exclude	No	No
Service II	Yes	Yes	No	Inventory/Operating	Yes	Yes
Service III	No	No	No	Exclude	No	No
Fatigue I	Yes	Yes	No	Inventory	No	No
Fatigue II	Yes	Yes	No	Inventory	No	No

Spec. Check Map (Strength)

LRFD Specification Check Maps

Design Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Legal Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Permit Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Design Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	Yes	No	No
Shear	Yes	No	No
Bearing	Yes	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Legal Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	Yes	No	No
Shear	Yes	No	No
Bearing	Yes	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Permit Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Spec. Check Map (Service)

LRFD Specification Check Maps

Design Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Legal Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Permit Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Design Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	Yes
Live Load Deflection	No	No

Legal Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	Yes
Live Load Deflection	No	No

Permit Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Spec. Check Map (Fatigue)

LRFD Specification Check Maps

Design Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No

Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Legal Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Permit Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Design Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Legal Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Permit Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Bracing Schedules

No bracing schedules have been defined.

Member 1

Member Notes

No member notes have been defined.

Member Materials

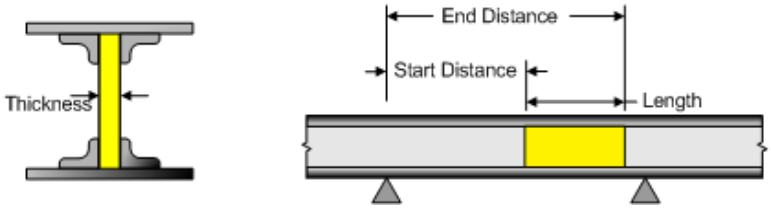
Beam

Beam Material: **Grade 30**

Beam Profile

Web

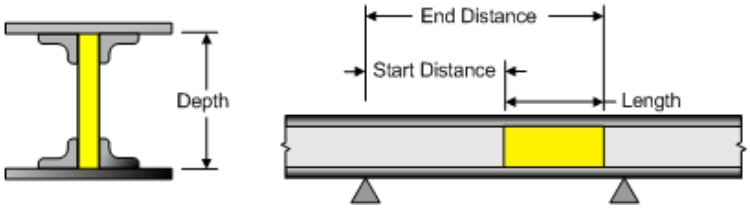
Apply to Entire Structure: Yes
Web Angle: -



Thickness	Material	Support Number	Start Distance	Length
0.5 in.	**Grade 30**	1	0 ft	10.333 ft

Web Depth

Apply to Entire Structure: Yes



Start Depth	Web Variation	End Depth	Support Number	Start Distance	Length
27 in.	Linear	27 in.	1	0 ft	10.333 ft

Top Cover Plate

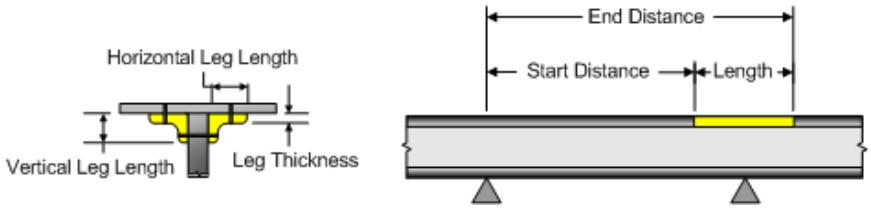
No top cover plate schedules have been defined.

Bottom Cover Plate

No bottom cover plate schedules have been defined.

Top Angles

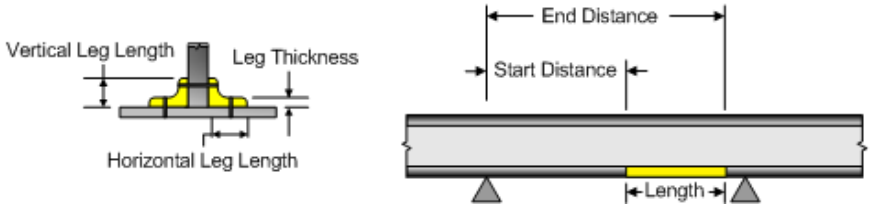
Apply to Entire Structure: Yes



Vertical Leg Length	Horizontal Leg Length	Leg Thickness	Material	Support Number	Start Distance	Length
5 in.	5 in.	0.5 in.	**Grade 30**	1	0 ft	10.333 ft

Bottom Angles

Apply to Entire Structure: Yes



Vertical Leg Length	Horizontal Leg Length	Leg Thickness	Material	Support Number	Start Distance	Length
5 in.	5 in.	0.5 in.	**Grade 30**	1	0 ft	10.333 ft

Hinges

No hinges have been defined.

Special Locations

No special locations have been defined.

Splice Locations

No splice locations have been defined.

Supports

Support Conditions

Support	Support Restraint		
	Horizontal	Vertical	Rotational
1	Restrained	Restrained	Free
2	Free	Restrained	Free

Spring Constants

Support	Spring Constants

	Horizontal	Vertical	Rotational
1	-	-	-
2	-	-	-

Schedules

Transverse Stiffeners

No transverse stiffener schedules have been defined.

Bearing Stiffeners

Apply to Entire Structure: No

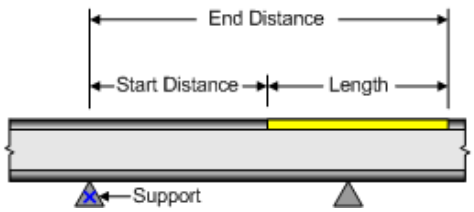
Support	Stiffener Group
1	Not Assigned

Longitudinal Stiffeners

No longitudinal stiffener schedules have been defined.

Lateral Support

Apply to Entire Structure: Yes



Support	Start Distance	Length
1	0 ft	10.333 ft

Cb Factors (Standard)

No Cb factors (LRFD) have been defined.

Cb Factors (LRFD)

No Cb factors (LRFD) have been defined.

Fatigue Stress (Standard)

No fatigue stress (standard) schedules have been defined.

Member Control

Steel

Flexural Resistance

Span	Ignore Eq. 6.10.7.1.2-3 (LRFD)
1	No

End Panel Distances

Top Span

Left of Top Span: -
Right of Top Span: -

Flange Local Buckling Resistance Adjustment

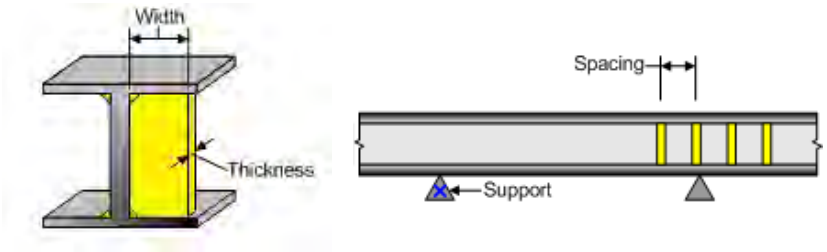
Standard Specifications: -
LRFD Specifications: -

Points of Interest

Points

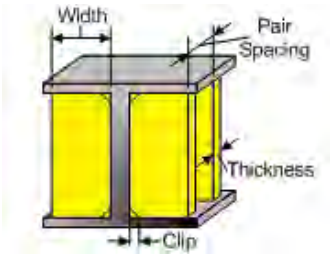
Point of Interest	Output Specification Checks	Output Load Combinations
100	Yes	Yes
101	Yes	Yes
102	Yes	Yes
103	Yes	Yes
104	Yes	Yes
104.5	Yes	Yes
105	Yes	Yes

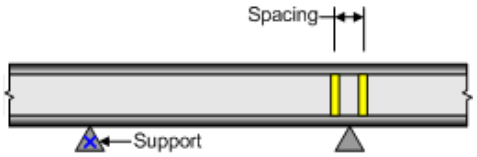
Transverse Stiffeners



Point of Interest	Override	Width	Thickness	Spacing	Type	Type Factor	Material
100	No	-	-	-	-	-	-
101	No	-	-	-	-	-	-
102	No	-	-	-	-	-	-
103	No	-	-	-	-	-	-
104	No	-	-	-	-	-	-
104.5	No	-	-	-	-	-	-
105	No	-	-	-	-	-	-

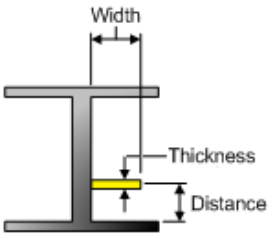
Bearing Stiffeners





Point of Interest	Override	Width	Thickness	Clip	Number of Pairs	Pair Spacing	Attachment	Material
100	No	-	-	-	-	-	-	-
101	No	-	-	-	-	-	-	-
102	No	-	-	-	-	-	-	-
103	No	-	-	-	-	-	-	-
104	No	-	-	-	-	-	-	-
104.5	No	-	-	-	-	-	-	-
105	No	-	-	-	-	-	-	-

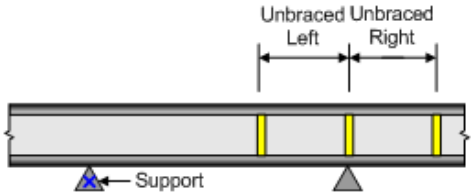
Longitudinal Stiffeners



Point of Interest	Main Stiffener					
	Override	Width	Thickness	Distance	Web Reference	Material
100	No	-	-	-	-	-
101	No	-	-	-	-	-
102	No	-	-	-	-	-
103	No	-	-	-	-	-
104	No	-	-	-	-	-
104.5	No	-	-	-	-	-
105	No	-	-	-	-	-

Point of Interest	Second Stiffener					
	Override	Width	Thickness	Distance	Web Reference	Material
100	No	-	-	-	-	-
101	No	-	-	-	-	-
102	No	-	-	-	-	-
103	No	-	-	-	-	-
104	No	-	-	-	-	-
104.5	No	-	-	-	-	-
105	No	-	-	-	-	-

Bracing



Point of Interest	Override	Lateral Support	Point Braced	Unbraced Length	
				Left	Right
100	No	-	-	-	-
101	No	-	-	-	-
102	No	-	-	-	-
103	No	-	-	-	-
104	No	-	-	-	-
104.5	No	-	-	-	-
105	No	-	-	-	-

Cb Factors

LRFD

Point of Interest	Override	Cb Method	Cb Factor	
			Top Flange	Bottom Flange
100	No	-	-	-
101	No	-	-	-
102	No	-	-	-
103	No	-	-	-
104	No	-	-	-
104.5	No	-	-	-
105	No	-	-	-

Fatigue

No fatigue detail categories have been defined.

Point of Interest	N Cycles	Zr (LRFD)
100	-	-
101	-	-
102	-	-
103	-	-
104	-	-
104.5	-	-
105	-	-

Point of Interest	r/h (Top Reinf.)	r/h (Bottom Reinf.)
100	-	-
101	-	-
102	-	-
103	-	-
104	-	-
104.5	-	-
105	-	-

Output

Point of Interest	Flexure	Shear	Bearing	Flexural Stress in Longitudinal Stiffener	Crack Control	Flexural Stress in Flanges
100	Yes	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes	Yes

Point of Interest	Live Load Deflection	Fatigue of Reinforcement	Fatigue of Shear Connectors	Fatigue Shear Range of Shear Connectors	Fatigue of Special Points	Fatigue Shear
100	Yes	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes	Yes

Point of Interest	Details	Compactness and Bracing	Transverse Stiffeners	Bearing Stiffeners	Longitudinal Stiffeners
100	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes

Dead Loads

Uniform

No uniform dead loads have been defined.

Additional Self-weight

No additional self-weight dead loads have been defined.

Distributed

No distributed dead loads have been defined.

Concentrated

No concentrated dead loads have been defined.

Temperature

No temperature dead loads have been defined.

Settlement

Stage: 1

No settlement loads have been defined.

Pedestrian Load

Pedestrian Load: -

Member 2

Identical to: **Member 1**

BRASS Results – Steel Stringer

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**********************************************************************************************
**                                                                                          **
**                            WYOMING DEPARTMENT OF TRANSPORTATION                          **
**                       BRIDGE RATING AND ANALYSIS OF STRUCTURAL SYSTEMS                   **
**                                                                                          **
**                                                                                          **
**             BBBBBBBBBB   RRRRRRRRRR    AAAAAAAAAA    SSSSSSSSSS    SSSSSSSSSS            **
**             BBBBBBBBBBB  RRRRRRRRRRR  AAAAAAAAAAAA  SSSSSSSSSSS  SSSSSSSSSSS            **
**             BB        BB  RR        RR  AA        AA  SS        SS  SS        SS            **
**             BB        BB  RR        RR  AA        AA  SS            SS                    **
**             BB       BB   RR        RR  AA        AA  SSS           SSS                   **
**             BBBBBBBBBB    RRRRRRRRRRR  AAAAAAAAAAAA   SSSSSSSSS     SSSSSSSSS             **
**             BBBBBBBBBB    RRRRRRRRRR   AAAAAAAAAAAA    SSSSSSSS     SSSSSSSS              **
**             BB       BB   RR    RR      AA        AA           SSS           SSS           **
**             BB        BB  RR      RR    AA        AA            SS            SS           **
**             BB        BB  RR       RR   AA        AA  SS        SS  SS        SS           **
**             BBBBBBBBBBBB  RR        RR  AA        AA  SSSSSSSSSSS  SSSSSSSSSSS            **
**             BBBBBBBBBB   RR        RR  AA        AA   SSSSSSSSSS    SSSSSSSSSS            **
**                                                                                          **
**                                                                                          **
**        GGGGGGGGGG   IIIIIIIIIIII  RRRRRRRRRRR   DDDDDDDD      EEEEEEEEEEEE  RRRRRRRRRRR    **
**       GGGGGGGGGGGG  IIIIIIIIIIII  RRRRRRRRRRRR  DDDDDDDDD     EEEEEEEEEEEE  RRRRRRRRRRRR   **
**       GG        GG       II       RR        RR  DD      DD    EE            RR        RR   **
**       GG                 II       RR        RR  DD       DD   EE            RR        RR   **
**       GG                 II       RR        RR  DD        DD  EE            RR        RR   **
**       GG    GGGGGG       II       RRRRRRRRRRRR  DD        DD  EEEEEEEEEE    RRRRRRRRRRRR   **
**       GG    GGGGGG       II       RRRRRRRRRRR   DD        DD  EEEEEEEEEE    RRRRRRRRRRR    **
**       GG        GG       II       RR    RR      DD        DD  EE            RR    RR       **
**       GG        GG       II       RR     RR     DD       DD   EE            RR     RR      **
**       GG        GG       II       RR      RR    DD      DD    EE            RR      RR     **
**       GGGGGGGGGGGG  IIIIIIIIIIII  RR       RR   DDDDDDDDD     EEEEEEEEEEEE  RR       RR    **
**        GGGGGGGGGG   IIIIIIIIIIII  RR        RR  DDDDDDDD      EEEEEEEEEEEE  RR        RR   **
**                                                                                          **
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**                                                                                          **
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**                                                                                          **
**                        For user assistance and system information contact:               **
**                                      Phone: (307) 777-4489                               **
**                                 E-mail: BRASSTechSupport@wyo.gov                         **
**                                                                                          **
**     The source version is maintained by BridgeTech, Inc.                                 **
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**                                                                                          **
**     AASHTO LRFD Specifications:                                                          **
**                                                                                          **
**        BRASS-GIRDER™ is current with the AASHTO LRFD Bridge Design Specifications, 8th   **
**        Edition, 2017.  Load and Resistance Factor Ratings are current with the AASHTO    **
**        Manual for Bridge Evaluation, 3rd Edition, 2017.                                  **
**                                                                                          **
**     AASHTO Standard Specifications (LFD):                                                **
**                                                                                          **
**        BRASS-GIRDER is current with the AASHTO Standard Specifications for Highway       **
**        Bridges, 17th Edition, 2002.  Load Factor Ratings are current with the AASHTO     **
**        Manual for Bridge Evaluation, 3rd Edition, 2017.                                  **
**                                                                                          **
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DECK GEOMETRY AND LOAD SUMMARY REPORT

No. Girders: 2

Girder Spacing, in

Bay No.	Spacing
1	78.000

Cantilevers:
Left = 42.000 in
Right = 42.000 in

Deck Width = 162.000 in

Slab Thickness = 5.500 in

Left Curb:
Thickness = 12.300 in
Width (top) = 10.000 in
Width (bot) = 10.000 in

Right Curb:
Thickness = 12.300 in
Width (top) = 10.000 in
Width (bot) = 10.000 in

DECK GEOMETRY AND LOAD SUMMARY REPORT (continued)

Left Exterior Soffit:

	Left Side, in	Right Side, in
Thickness	5.000	5.000
Distance (beg)	11.250	11.250
Distance (end)	22.250	22.250

Right Exterior Soffit:

	Left Side, in	Right Side, in
Thickness	2.000	2.000
Distance (beg)	11.250	11.250
Distance (end)	22.250	22.250

Travel Way Locations:
Left Edge = 10.000 in
Right Edge = 152.000 in

Material Weights:
Concrete (deck) = 0.1500 k/ft^3
Concrete (other) = 0.1500 k/ft^3

MEMBER LOADS SUMMARY REPORT (Deck Dead Load Distribution Only)

Units: Loads are in k/ft.

Member Loads Due to Deck Components:

Member No.	Stage	Slab DC	Soffit DC	Curbs DC	Median DC	Topping DC	Wearing Surface DW
=> 1	1	0.464	0.174	0.128	0.000	0.000	0.000
2	1	0.464	0.070	0.128	0.000	0.000	0.000

MEMBER LOADS SUMMARY REPORT (Deck Dead Load Distribution Only)(continued)

Units: Loads are in k/ft.

Member of Interest: 1

Total Loads Due to Load Groups:

Load Group	1	2	3	4	5	6	7	8	9	10
Member No.										
=> 1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Total Loads:

Member No.	Stage	Dead Load
=> 1	1	0.000
2	1	0.000

Member No.	Total Dead Load
=> 1	0.000
2	0.000

** STRUCTURE/ANALYSIS SUMMARY **

Structure Type : Beam
Material Type : Steel
Number of Stages: 1
Element Type : Stepped
Analysis Type : Rating

Span No.	Length (ft)	Angle (deg)
1	20.6667	N/A

Supports:

Support No.	Fixity: Horizontal	Fixity: Vertical	Fixity: Rotational	Spring Constants: Horizontal (k/ft)	Spring Constants: Vertical (k/ft)	Spring Constants: Rotational (ft-k/rad)
1	Restrained	Restrained	Free	Infinity	Infinity	N/A
2	Free	Restrained	Free	N/A	Infinity	N/A

Beam Material Properties:
Unit Weight : 0.490 k/ft^3
Modulus of Elasticity (E) : 29000.000 ksi
Thermal Expansion Coefficient : 0.0000065 / deg. F

** OUTPUT CONTROL SUMMARY **

Action Output Locations	Actions at tenth points
Dead Load Actions	YES
Live Load Actions	YES
Concurrent Actions	NO
Girder Properties	YES
Truck Position	NO
Variable Axle Spacing	NO
Live Load Settings	YES
Live Load Combinations	YES
Live Load Details	YES
Load Combinations	YES
Load and Resistance Factors	YES
Warnings	YES
Member Self-Load	YES
Distributed Dead Loads	YES
Concentrated Dead Loads	YES
Temperature Change	NO
Settlements	NO
Camber Summary	NO
Influence Summary	NO
Critical Design Ratios or Rating Factors	YES (Condensed)
Dyn. Load Allowance Summary	NO
Intermediate Output Level	Expanded
Stage 1	YES

Limit State	Intermediate Output	Load Combinations
STRENGTH I	YES	YES
STRENGTH I-O	YES	YES
STRENGTH II	NO	NO
STRENGTH IV	NO	NO
SERVICE I	NO	NO
SERVICE II	YES	YES
SERVICE II-O	YES	YES
SERVICE III	NO	NO
FATIGUE I	NO	NO
FATIGUE II	NO	NO

Dead Load Distribution (Intermediate)	NO
Dead Load Distribution (Standard)	YES
Live Load Distribution (Intermediate)	YES
Live Load Distribution (Standard)	YES
Transverse Stiffeners (Intermediate)	NO
Bearing Stiffeners (Intermediate)	NO
Longitudinal Stiffeners (Intermediate)	NO
Shear Connectors (Intermediate)	NO
Shear Connectors (Standard)	NO
Floorbeam (Intermediate)	NO
Effective Width (Intermediate)	NO
Action X-Y Plot Tables	NO
Specification Check Results Tables	NO
Mesh Plot Files	NO

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 1 Span Length = 20.667 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Input Dimensions and Cross-Section Geometry: (in)

Point No.	Dist (ft)	Web Depth	Web Width top	Web Width bot	Flange Thickness top	Flange Thickness bot	Flange Width top	Flange Width bot
1-0.000	0.000	27.00	0.500	0.500	0.500	0.500	10.50	10.50
1-0.100	2.067	27.00	0.500	0.500	0.500	0.500	10.50	10.50
1-0.200	4.133	27.00	0.500	0.500	0.500	0.500	10.50	10.50
1-0.300	6.200	27.00	0.500	0.500	0.500	0.500	10.50	10.50
1-0.400	8.267	27.00	0.500	0.500	0.500	0.500	10.50	10.50
1-0.450	9.300	27.00	0.500	0.500	0.500	0.500	10.50	10.50
1-0.500	10.333	27.00	0.500	0.500	0.500	0.500	10.50	10.50
1-0.600	12.400	27.00	0.500	0.500	0.500	0.500	10.50	10.50
1-0.700	14.467	27.00	0.500	0.500	0.500	0.500	10.50	10.50
1-0.800	16.533	27.00	0.500	0.500	0.500	0.500	10.50	10.50
1-0.900	18.600	27.00	0.500	0.500	0.500	0.500	10.50	10.50
1-1.000	20.667	27.00	0.500	0.500	0.500	0.500	10.50	10.50

Calculated Properties:

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)	Standard Section Name
1-0.000	0.000	33.00	3967.3	14.00	-
1-0.100	2.067	33.00	3967.3	14.00	-
1-0.200	4.133	33.00	3967.3	14.00	-
1-0.300	6.200	33.00	3967.3	14.00	-
1-0.400	8.267	33.00	3967.3	14.00	-
1-0.450	9.300	33.00	3967.3	14.00	-
1-0.500	10.333	33.00	3967.3	14.00	-
1-0.600	12.400	33.00	3967.3	14.00	-
1-0.700	14.467	33.00	3967.3	14.00	-
1-0.800	16.533	33.00	3967.3	14.00	-
1-0.900	18.600	33.00	3967.3	14.00	-
1-1.000	20.667	33.00	3967.3	14.00	-

Note: The calculated properties reported above are based on the entire cross section geometry, which may include the slab if it was input. These properties are used only for the structural analysis to obtain moments, shears, etc. When specification and stress checks are performed, BRASS calculates the section properties for both positive and negative bending, and uses them in accordance with the sign of the factored moments. The section properties used for the section analysis are tabulated in a later report.

Note: The distance to the centroid (X-bar) references the bottom of the bottom flange.

Self-Load Summary:

Span No.	Beginning of Load Distance, ft	Beginning of Load Magnitude, k/ft	End of Load Distance, ft	End of Load Magnitude, k/ft
1	0.000	0.1123	20.667	0.1123

Load Groups:

Distributed Dead Load Summary:
No loads are present.

Deck Loads and Schedules Summary:

Element	Stage	Load, k/ft
Deck	1	0.6385
Curbs	1	0.1281

Element	Stage	Span No.	Start Distance, ft	Length, ft
Deck	1	*	0.000	20.667
Curbs	1	*	0.000	20.667

Note: A span number denoted as "*" indicates the distances reference the left end of the bridge and the load may extend over one or more spans.

Concentrated Dead Load Summary:
No loads are present.

** LIVE LOAD DISTRIBUTION FACTORS SUMMARY **

** Warning! - The Lever Rule Override was invoked because one or more the ranges of applicability are not satisfied for the AASHTO LRFD distribution factor formulas. See the .DST intermediate output file for details.

Beam Distribution Factor Schedule: Shear

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	10.333	0.731 (RG-O)	0.000 (1,LR-O)
1	10.333	20.667	0.731 (RG-O)	0.000 (1,LR-O)

Beam Distribution Factor Schedule: Moment

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	20.667	0.731 (RG-O)	0.000 (1,LR-O)

Beam Distribution Factor Schedule: Deflection

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	20.667	0.570 (LRFD)	0.570 (1,LRFD)

Reaction Distribution Factors: Shear

Support No.	mg(1-lane)	mg(M-lanes)
1	0.731 (RG-O)	0.000 (1,LR-O)
2	0.731 (RG-O)	0.000 (1,LR-O)

Reaction Distribution Factors: Moment

Support No.	mg(1-lane)	mg(M-lanes)
1	0.731 (RG-O)	0.000 (1,LR-O)
2	0.731 (RG-O)	0.000 (1,LR-O)

Reaction Distribution Factors: Deflection

Support No.	mg(1-lane)	mg(M-lanes)
1	0.570 (LRFD)	0.570 (1,LRFD)
2	0.570 (LRFD)	0.570 (1,LRFD)

Notes:
=> The controlling method is included in parenthesis next to each distribution factor.
USER = User Input LR-T = Lever Rule Specified in AASHTO LRFD Table
LRFD = AASHTO LRFD Formulas LR-O = Lever Rule Override
LR = Lever Rule Method RG-O = Rigid Method Override
=> Additionally, for multiple-lanes loaded, the number of lanes loaded is shown. An 'M' is used with the USER and LRFD methods because the number of multiple lanes is unknown.
=> The Lever Rule Override is invoked when the ranges of applicability are not satisfied for the AASHTO LRFD distribution factor formulas.

LIVE LOAD SETTINGS SUMMARY:

Direction Control : Up & Down Reference Marker
Pedestrian Load : 0.000 k/ft
Wheel Advancement Denominator: 100
ADTT : 999
ADTT (Single Lane) : 999
Multiple Presence Adjustment : 95.000 %

Design/Rating Procedure	Dynamic Load Allowance (%) Truck	Lane	Fatigue
Design Load	33.00	0.00	15.00
Legal Load	33.00	0.00	0.00
Permit Load	33.00	0.00	0.00

No.	Name	Description	Scale Factor	Percent Impact	Fixed Impact	Live Load Type	Rating Procedure	Lanes Loaded
1	HL-93-TRUCK	AASHTO LRFD HL-93 Design Truck (US)	1.000	100.000	0.33	TRK	Design Load	Critical
2	HL-93-TANDEM	AASHTO LRFD HL-93 Design Tandem (US)	1.000	100.000	0.33	TRK	Design Load	Critical
3	HL-93-LANE	AASHTO LRFD HL-93 Design Lane (US)	1.000	100.000	0.00	LAN	Design Load	Critical
4	TYPE3	AASHTO Type 3 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
5	TYPE3S2	AASHTO Type 3S2 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
6	TYPE3-3	AASHTO Type 3-3 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
7	SU4	AASHTO Specialized Hauling Vehicle SU4	1.000	100.000	0.33	TRK	Legal Load	Critical
8	SU5	AASHTO Specialized Hauling Vehicle SU5	1.000	100.000	0.33	TRK	Legal Load	Critical
9	SU6	AASHTO Specialized Hauling Vehicle SU6	1.000	100.000	0.33	TRK	Legal Load	Critical
10	SU7	AASHTO Specialized Hauling Vehicle SU7	1.000	100.000	0.33	TRK	Legal Load	Critical
11	NRL	AASHTO Notional Rating Load	1.000	100.000	0.33	TRK	Legal Load	Critical

LIVE LOAD COMBINATIONS SUMMARY:

Comb. No.	Name	Description	Truck No.	Lane No.	Combination Factors Truck	Lane
1	HL-93-TRUCK	HL-93-TRUCK + HL-93-LANE	1	3	1.000	1.000
2	HL-93-TANDEM	HL-93-TANDEM + HL-93-LANE	2	3	1.000	1.000
3	TYPE3	TYPE3	4	N/A	1.000	N/A
4	TYPE3S2	TYPE3S2	5	N/A	1.000	N/A
5	TYPE3-3	TYPE3-3	6	N/A	1.000	N/A
6	SU4	SU4	7	N/A	1.000	N/A
7	SU5	SU5	8	N/A	1.000	N/A
8	SU6	SU6	9	N/A	1.000	N/A
9	SU7	SU7	10	N/A	1.000	N/A
10	NRL	NRL	11	N/A	1.000	N/A

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Moment (kips)	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 1: HL-93-TRUCK : AASHTO LRFD HL-93 Design Truck (US)												
0.000	0.000	0.000	72.000	1	8.000	0.000	2	32.000	14.000	3	32.000	14.000
Live Load 2: HL-93-TANDEM: AASHTO LRFD HL-93 Design Tandem (US)												
0.000	0.000	0.000	50.000	1	25.000	0.000	2	25.000	4.000			
Live Load 3: HL-93-LANE : AASHTO LRFD HL-93 Design Lane (US)												
0.640	0.000	0.000	36.000									
Live Load 4: TYPE3 : AASHTO Type 3 Rating Truck (US)												
0.000	0.000	0.000	50.000	1	16.000	0.000	2	17.000	15.000	3	17.000	4.000
Live Load 5: TYPE3S2 : AASHTO Type 3S2 Rating Truck (US)												
0.000	0.000	0.000	72.000	1	10.000	0.000	2	15.500	11.000	3	15.500	4.000
				4	15.500	22.000	5	15.500	4.000			

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Concentrated Loads Moment (kips)	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 6: TYPE3-3 : AASHTO Type 3-3 Rating Truck (US)												
0.000	0.000	0.000	80.000	1	12.000	0.000	2	12.000	15.000	3	12.000	4.000
				4	16.000	15.000	5	14.000	16.000	6	14.000	4.000
Live Load 7: SU4 : AASHTO Specialized Hauling Vehicle SU4												
0.000	0.000	0.000	54.000	1	12.000	0.000	2	8.000	10.000	3	17.000	4.000
				4	17.000	4.000						
Live Load 8: SU5 : AASHTO Specialized Hauling Vehicle SU5												
0.000	0.000	0.000	62.000	1	12.000	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000			
Live Load 9: SU6 : AASHTO Specialized Hauling Vehicle SU6												
0.000	0.000	0.000	69.500	1	11.500	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
Live Load 10: SU7 : AASHTO Specialized Hauling Vehicle SU7												
0.000	0.000	0.000	77.500	1	11.500	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
				7	8.000	4.000						

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Concentrated Loads Moment (kips)	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 11: NRL : AASHTO Notional Rating Load												
0.000	0.000	0.000	80.000	1	6.000	0.000	2	8.000	6.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
				7	8.000	4.000	8	8.000	4.000			

LOAD FACTORS SUMMARY:

Limit State	eta D	eta R	eta I	eta T MAX	eta T MIN
STRENGTH I	1.00	1.00	1.00	1.00	1.00
STRENGTH II	1.00	1.00	1.00	1.00	1.00
STRENGTH IV	1.00	1.00	1.00	1.00	1.00
SERVICE I	1.00	1.00	1.00	1.00	1.00
SERVICE II	1.00	1.00	1.00	1.00	1.00
SERVICE III	1.00	1.00	1.00	1.00	1.00
FATIGUE I	1.00	1.00	1.00	1.00	1.00
FATIGUE II	1.00	1.00	1.00	1.00	1.00

Limit State	DC		DW		DU		LL (Design)		LL	LL
	MAX	MIN	MAX	MIN	MAX	MIN	Inventory	Operating	Legal	Permit
STRENGTH I	1.25	1.25	1.50	1.50	1.50	1.50	1.75	1.35	1.30	0.00
STRENGTH II	1.25	1.25	1.50	1.50	1.50	1.50	1.35	0.00	0.00	0.00
STRENGTH IV	1.50	1.50	1.50	1.50	1.50	1.50	0.00	0.00	0.00	0.00
SERVICE I	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00
SERVICE II	1.00	1.00	1.00	1.00	1.00	1.00	1.30	1.00	1.30	1.00
SERVICE III	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.00	1.00	0.00
FATIGUE I	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	0.00	0.00
FATIGUE II	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00

Limit State	TU		SE		PS		DS	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
STRENGTH I	1.20	1.20	1.00	1.00	1.00	1.00	1.25	1.25
STRENGTH II	1.20	1.20	1.00	1.00	1.00	1.00	1.25	1.25
STRENGTH IV	1.20	1.20	0.00	0.00	1.00	1.00	1.50	1.50
SERVICE I	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
SERVICE II	1.20	1.20	0.00	0.00	1.00	1.00	1.00	1.00
SERVICE III	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
FATIGUE I	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
FATIGUE II	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00

Notes:
=> DU = Utilities
=> PS = Prestress
=> DS = Differential Deck Shrinkage

RESISTANCE FACTORS SUMMARY:

Limit State	phi C
STRENGTH	0.85
SERVICE	1.00
FATIGUE	1.00

Resistance Type	phi* (Base)	STRENGTH phi S	STRENGTH phi T	SERVICE phi S	SERVICE phi T	FATIGUE phi S	FATIGUE phi T
Flexure	1.00	0.85	0.85	1.00	1.00	1.00	1.00
Shear	1.00	1.00	0.85	1.00	1.00	1.00	1.00
Bearing	1.00	1.00	0.85	1.00	1.00	1.00	1.00
Shear Connectors	0.85	1.00	0.85	1.00	1.00	1.00	1.00
Compression	0.95	1.00	0.85	1.00	1.00	1.00	1.00
Fatigue	1.00	1.00	0.85	1.00	1.00	1.00	1.00

* Base phi factors are not adjusted by phi C * phi S.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR GIRDER WEIGHT
Length of Span No. 1 = 20.667 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	0.0	0.0	1.2	1.2	0.00	0.00
1-0.100	2.2	0.0	0.9		0.00	0.00
1-0.200	3.8	0.0	0.7		0.00	0.00
1-0.300	5.0	0.0	0.5		0.00	0.00
1-0.400	5.8	0.0	0.2		0.00	0.00
1-0.500	6.0	0.0	0.0		0.00	0.00
1-0.600	5.8	0.0	-0.2		0.00	0.00
1-0.700	5.0	0.0	-0.5		0.00	0.00
1-0.800	3.8	0.0	-0.7		0.00	0.00
1-0.900	2.2	0.0	-0.9		0.00	0.00
1-1.000	-0.0	0.0	-1.2	1.2	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000052 rad Right End = -0.000052 rad

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD FROM DECK LOADS **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR SUPERIMPOSED UNIFORM DEAD LOAD (DC) ON TOP SPANS
Length of Span No. 1 = 20.667 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	0.0	0.0	7.9	7.9	0.00	0.00
1-0.100	14.7	0.0	6.3		0.00	0.01
1-0.200	26.2	0.0	4.8		0.00	0.02
1-0.300	34.4	0.0	3.2		0.00	0.02
1-0.400	39.3	0.0	1.6		0.00	0.03
1-0.500	40.9	0.0	0.0		0.00	0.03
1-0.600	39.3	0.0	-1.6		0.00	0.03
1-0.700	34.4	0.0	-3.2		0.00	0.02
1-0.800	26.2	0.0	-4.8		0.00	0.02
1-0.900	14.7	0.0	-6.3		0.00	0.01
1-1.000	0.0	0.0	-7.9	7.9	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000353 rad Right End = -0.000353 rad

** COMBINED UNFACTORED DEAD LOAD ACTIONS **
** CONSTRUCTION STAGE 1 **

Length of Span No. 1 = 20.667 ft

POINT NO.	Dead Loads of Structural Components (DC) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)	Dead Loads of Wearing Surfaces (DW) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
1-0.000	0.0	0.0	9.1	9.1	0.00	0.0	0.0	0.0	0.0	0.00
1-0.100	16.9	0.0	7.3		0.01	0.0	0.0	0.0		0.00
1-0.200	30.0	0.0	5.4		0.02	0.0	0.0	0.0		0.00
1-0.300	39.4	0.0	3.6		0.03	0.0	0.0	0.0		0.00
1-0.400	45.0	0.0	1.8		0.03	0.0	0.0	0.0		0.00
1-0.500	46.9	0.0	0.0		0.03	0.0	0.0	0.0		0.00
1-0.600	45.0	0.0	-1.8		0.03	0.0	0.0	0.0		0.00
1-0.700	39.4	0.0	-3.6		0.03	0.0	0.0	0.0		0.00
1-0.800	30.0	0.0	-5.4		0.02	0.0	0.0	0.0		0.00
1-0.900	16.9	0.0	-7.3		0.01	0.0	0.0	0.0		0.00
1-1.000	-0.0	0.0	-9.1	9.1	0.00	0.0	0.0	0.0	0.0	0.00

Rotations (DC): Left End = 0.000405 rad
(+) Clockwise Right End = -0.000405 rad

Rotations (DW): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

POINT NO.	Dead Loads of Utilities (DU) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
1-0.000	0.0	0.0	0.0	0.0	0.00
1-0.100	0.0	0.0	0.0		0.00
1-0.200	0.0	0.0	0.0		0.00
1-0.300	0.0	0.0	0.0		0.00
1-0.400	0.0	0.0	0.0		0.00
1-0.500	0.0	0.0	0.0		0.00
1-0.600	0.0	0.0	0.0		0.00
1-0.700	0.0	0.0	0.0		0.00
1-0.800	0.0	0.0	0.0		0.00
1-0.900	0.0	0.0	0.0		0.00
1-1.000	0.0	0.0	0.0	0.0	0.00

Rotations (DU): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 1: AASHTO LRFD HL-93 Design Truck (US) (TRK)
Length of Span No. 1 = 20.667 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	41.1	0.0	41.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	71.9	0.0	0.0	0.0	34.9	-2.8			0.00	0.00	0.02	0.00		
1-0.200	117.9	0.0	0.0	0.0	28.6	-6.0			0.00	0.00	0.04	0.00		
1-0.300	138.1	0.0	0.0	0.0	22.3	-9.1			0.00	0.00	0.05	0.00		
1-0.400	153.1	0.0	0.0	0.0	18.5	-12.3			0.00	0.00	0.06	0.00		
1-0.500	159.1	0.0	0.0	0.0	15.4	-15.4			0.00	0.00	0.07	0.00		
1-0.600	153.1	0.0	0.0	0.0	12.3	-18.5			0.00	0.00	0.06	0.00		
1-0.700	138.1	0.0	0.0	0.0	9.1	-22.3			0.00	0.00	0.05	0.00		
1-0.800	117.9	0.0	0.0	0.0	6.0	-28.6			0.00	0.00	0.04	0.00		
1-0.900	71.9	0.0	0.0	0.0	2.8	-34.9			0.00	0.00	0.02	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-41.1	41.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000884 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 22.013 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000883 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 21.449 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 2: AASHTO LRFD HL-93 Design Tandem (US) (TRK)
Length of Span No. 1 = 20.667 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	43.9	0.0	43.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	80.6	0.0	0.0	0.0	39.0	-2.2			0.00	0.00	0.03	0.00		
1-0.200	140.8	0.0	0.0	0.0	34.1	-4.7			0.00	0.00	0.06	0.00		
1-0.300	180.8	0.0	0.0	0.0	29.2	-9.6			0.00	0.00	0.08	0.00		
1-0.400	201.4	0.0	0.0	0.0	24.3	-14.5			0.00	0.00	0.09	0.00		
1-0.500	202.5	0.0	0.0	0.0	19.4	-19.4			0.00	0.00	0.10	0.00		
1-0.600	201.6	0.0	0.0	0.0	14.5	-24.3			0.00	0.00	0.09	0.00		
1-0.700	180.8	0.0	0.0	0.0	9.6	-29.2			0.00	0.00	0.08	0.00		
1-0.800	140.8	0.0	0.0	0.0	4.7	-34.1			0.00	0.00	0.06	0.00		
1-0.900	80.6	0.0	0.0	0.0	2.2	-39.0			0.00	0.00	0.03	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-43.9	43.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001245 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 21.251 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001245 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 20.454 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 3: AASHTO LRFD HL-93 Design Lane (US) (LAN)
Length of Span No. 1 = 20.667 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	4.8	0.0	4.8	0.0	0.00	0.00	0.00	0.00	0.00	0.00
1-0.100	9.0	0.0	0.0	0.0	3.9	-0.0			0.00	0.00	0.00	0.00		
1-0.200	16.0	0.0	0.0	0.0	3.1	-0.2			0.00	0.00	0.01	0.00		
1-0.300	21.0	0.0	0.0	0.0	2.4	-0.4			0.00	0.00	0.01	0.00		
1-0.400	24.0	0.0	0.0	0.0	1.7	-0.8			0.00	0.00	0.01	0.00		
1-0.500	25.0	0.0	0.0	0.0	1.2	-1.2			0.00	0.00	0.01	0.00		
1-0.600	24.0	0.0	0.0	0.0	0.8	-1.7			0.00	0.00	0.01	0.00		
1-0.700	21.0	0.0	0.0	0.0	0.4	-2.4			0.00	0.00	0.01	0.00		
1-0.800	16.0	0.0	0.0	0.0	0.2	-3.1			0.00	0.00	0.01	0.00		
1-0.900	9.0	0.0	0.0	0.0	0.0	-3.9			0.00	0.00	0.00	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-4.8	4.8	0.0	0.00	0.00	0.00	0.00	0.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000168 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 4.833 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000168 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 4.833 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 4: AASHTO Type 3 Rating Truck (US) (TRK)
Length of Span No. 1 = 20.667 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	30.6	0.0	30.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	54.7	0.0	0.0	0.0	26.5	-1.5			0.00	0.00	0.02	0.00		
1-0.200	95.8	0.0	0.0	0.0	23.2	-3.2			0.00	0.00	0.04	0.00		
1-0.300	123.0	0.0	0.0	0.0	19.9	-6.5			0.00	0.00	0.05	0.00		
1-0.400	137.0	0.0	0.0	0.0	16.5	-9.8			0.00	0.00	0.06	0.00		
1-0.500	137.7	0.0	0.0	0.0	13.2	-13.2			0.00	0.00	0.07	0.00		
1-0.600	137.0	0.0	0.0	0.0	9.8	-16.5			0.00	0.00	0.06	0.00		
1-0.700	122.9	0.0	0.0	0.0	6.5	-19.9			0.00	0.00	0.05	0.00		
1-0.800	95.8	0.0	0.0	0.0	3.2	-23.2			0.00	0.00	0.04	0.00		
1-0.900	54.7	0.0	0.0	0.0	1.5	-26.5			0.00	0.00	0.02	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-30.6	30.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000846 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 14.415 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000847 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 13.945 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 5: AASHTO Type 3S2 Rating Truck (US) (TRK)
Length of Span No. 1 = 20.667 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	29.8	0.0	29.8	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	53.3	0.0	0.0	0.0	25.8	-1.4			0.00	0.00	0.02	0.00		
1-0.200	90.0	0.0	0.0	0.0	21.8	-2.9			0.00	0.00	0.04	0.00		
1-0.300	112.0	0.0	0.0	0.0	18.1	-6.0			0.00	0.00	0.05	0.00		
1-0.400	124.9	0.0	0.0	0.0	15.1	-9.0			0.00	0.00	0.06	0.00		
1-0.500	125.5	0.0	0.0	0.0	12.1	-12.1			0.00	0.00	0.06	0.00		
1-0.600	124.8	0.0	0.0	0.0	9.0	-15.1			0.00	0.00	0.06	0.00		
1-0.700	112.0	0.0	0.0	0.0	6.0	-18.1			0.00	0.00	0.05	0.00		
1-0.800	90.0	0.0	0.0	0.0	2.9	-21.8			0.00	0.00	0.04	0.00		
1-0.900	53.3	0.0	0.0	0.0	1.4	-25.8			0.00	0.00	0.02	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-29.8	27.0	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000772 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 13.106 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000772 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 12.752 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 6: AASHTO Type 3-3 Rating Truck (US) (TRK)
Length of Span No. 1 = 20.667 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	24.9	0.0	24.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	44.9	0.0	0.0	0.0	21.9	-1.2			0.00	0.00	0.02	0.00		
1-0.200	78.5	0.0	0.0	0.0	19.1	-2.6			0.00	0.00	0.03	0.00		
1-0.300	101.1	0.0	0.0	0.0	16.4	-5.4			0.00	0.00	0.04	0.00		
1-0.400	112.7	0.0	0.0	0.0	13.7	-8.2			0.00	0.00	0.05	0.00		
1-0.500	113.4	0.0	0.0	0.0	10.9	-10.9			0.00	0.00	0.06	0.00		
1-0.600	112.6	0.0	0.0	0.0	8.2	-13.7			0.00	0.00	0.05	0.00		
1-0.700	101.1	0.0	0.0	0.0	5.4	-16.4			0.00	0.00	0.04	0.00		
1-0.800	78.5	0.0	0.0	0.0	2.6	-19.1			0.00	0.00	0.03	0.00		
1-0.900	44.9	0.0	0.0	0.0	1.2	-21.9			0.00	0.00	0.02	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-24.9	24.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000697 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 11.801 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000697 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 11.347 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 7: AASHTO Specialized Hauling Vehicle SU4 (TRK)
Length of Span No. 1 = 20.667 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	35.7	0.0	35.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	63.2	0.0	0.0	0.0	30.9	-1.5			0.00	0.00	0.02	0.00		
1-0.200	108.7	0.0	0.0	0.0	26.4	-3.2			0.00	0.00	0.05	0.00		
1-0.300	137.8	0.0	0.0	0.0	22.3	-6.5			0.00	0.00	0.06	0.00		
1-0.400	156.4	0.0	0.0	0.0	18.2	-9.9			0.00	0.00	0.07	0.00		
1-0.500	161.8	0.0	0.0	0.0	14.1	-14.1			0.00	0.00	0.08	0.00		
1-0.600	156.5	0.0	0.0	0.0	9.9	-18.2			0.00	0.00	0.07	0.00		
1-0.700	137.9	0.0	0.0	0.0	6.5	-22.3			0.00	0.00	0.06	0.00		
1-0.800	108.7	0.0	0.0	0.0	3.2	-26.4			0.00	0.00	0.05	0.00		
1-0.900	63.2	0.0	0.0	0.0	1.5	-30.9			0.00	0.00	0.02	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-35.7	35.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000995 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 17.414 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000995 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 16.794 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 8: AASHTO Specialized Hauling Vehicle SU5 (TRK)
Length of Span No. 1 = 20.667 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	37.6	0.0	37.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	67.5	0.0	0.0	0.0	33.1	-1.5			0.00	0.00	0.03	0.00		
1-0.200	115.7	0.0	0.0	0.0	28.2	-3.2			0.00	0.00	0.05	0.00		
1-0.300	144.0	0.0	0.0	0.0	23.3	-6.5			0.00	0.00	0.07	0.00		
1-0.400	163.5	0.0	0.0	0.0	18.4	-10.0			0.00	0.00	0.08	0.00		
1-0.500	170.5	0.0	0.0	0.0	14.1	-14.1			0.00	0.00	0.08	0.00		
1-0.600	163.3	0.0	0.0	0.0	10.0	-18.4			0.00	0.00	0.08	0.00		
1-0.700	144.0	0.0	0.0	0.0	6.5	-23.3			0.00	0.00	0.07	0.00		
1-0.800	115.7	0.0	0.0	0.0	3.2	-28.2			0.00	0.00	0.05	0.00		
1-0.900	67.5	0.0	0.0	0.0	1.5	-33.1			0.00	0.00	0.03	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-37.6	37.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001077 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 20.131 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001077 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 19.393 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 9: AASHTO Specialized Hauling Vehicle SU6 (TRK)
Length of Span No. 1 = 20.667 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	37.6	0.0	37.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	67.5	0.0	0.0	0.0	33.1	-1.0			0.00	0.00	0.03	0.00		
1-0.200	116.6	0.0	0.0	0.0	28.1	-2.1			0.00	0.00	0.05	0.00		
1-0.300	155.6	0.0	0.0	0.0	22.5	-3.8			0.00	0.00	0.07	0.00		
1-0.400	171.9	0.0	0.0	0.0	16.8	-6.8			0.00	0.00	0.09	0.00		
1-0.500	179.8	0.0	0.0	0.0	11.7	-11.7			0.00	0.00	0.09	0.00		
1-0.600	171.9	0.0	0.0	0.0	6.8	-16.8			0.00	0.00	0.09	0.00		
1-0.700	155.6	0.0	0.0	0.0	3.8	-22.5			0.00	0.00	0.07	0.00		
1-0.800	116.6	0.0	0.0	0.0	2.1	-28.1			0.00	0.00	0.05	0.00		
1-0.900	67.5	0.0	0.0	0.0	1.0	-33.1			0.00	0.00	0.03	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-37.6	37.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001155 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 22.776 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001156 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 21.920 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 10: AASHTO Specialized Hauling Vehicle SU7 (TRK)
Length of Span No. 1 = 20.667 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	37.8	0.0	37.8	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	67.9	0.0	0.0	0.0	33.1	-1.0			0.00	0.00	0.03	0.00		
1-0.200	116.9	0.0	0.0	0.0	28.1	-2.1			0.00	0.00	0.05	0.00		
1-0.300	155.6	0.0	0.0	0.0	22.5	-3.3			0.00	0.00	0.07	0.00		
1-0.400	172.7	0.0	0.0	0.0	16.7	-5.1			0.00	0.00	0.09	0.00		
1-0.500	179.8	0.0	0.0	0.0	10.8	-10.8			0.00	0.00	0.09	0.00		
1-0.600	172.7	0.0	0.0	0.0	5.1	-16.7			0.00	0.00	0.09	0.00		
1-0.700	155.6	0.0	0.0	0.0	3.3	-22.5			0.00	0.00	0.07	0.00		
1-0.800	116.9	0.0	0.0	0.0	2.1	-28.1			0.00	0.00	0.05	0.00		
1-0.900	67.9	0.0	0.0	0.0	1.0	-33.1			0.00	0.00	0.03	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-37.8	37.8	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001155 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 22.776 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001156 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 22.085 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 11: AASHTO Notional Rating Load (TRK)
Length of Span No. 1 = 20.667 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	39.6	0.0	39.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	70.1	0.0	0.0	0.0	33.9	-1.5			0.00	0.00	0.03	0.00		
1-0.200	117.8	0.0	0.0	0.0	28.2	-3.2			0.00	0.00	0.05	0.00		
1-0.300	155.7	0.0	0.0	0.0	23.2	-6.5			0.00	0.00	0.07	0.00		
1-0.400	172.7	0.0	0.0	0.0	18.3	-9.9			0.00	0.00	0.09	0.00		
1-0.500	180.0	0.0	0.0	0.0	14.1	-14.1			0.00	0.00	0.09	0.00		
1-0.600	172.7	0.0	0.0	0.0	9.9	-18.3			0.00	0.00	0.09	0.00		
1-0.700	155.7	0.0	0.0	0.0	6.5	-23.2			0.00	0.00	0.07	0.00		
1-0.800	117.8	0.0	0.0	0.0	3.2	-28.2			0.00	0.00	0.05	0.00		
1-0.900	70.1	0.0	0.0	0.0	1.5	-33.9			0.00	0.00	0.03	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-39.6	39.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001156 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 22.707 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001155 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 21.726 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I
Length of Span No. 1 = 20.667 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	-0.0	0.0	0.0	96.6	11.4	96.6	11.4	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	177.8	21.1	0.0	0.0	84.3	4.1			0.07	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	312.0	37.5	0.0	0.0	72.0	-4.0			0.14	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	402.3	49.3	0.0	0.0	59.8	-13.0			0.19	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.400	450.7	56.3	0.0	0.0	47.8	-24.4			0.22	0.04
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.500	456.7	58.7	0.0	0.0	36.0	-36.0			0.24	0.04
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	451.0	56.3	0.0	0.0	24.4	-47.8			0.22	0.04
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	402.4	49.3	0.0	0.0	13.0	-59.8			0.19	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	312.0	37.5	0.0	0.0	4.0	-72.0			0.14	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	177.8	21.1	0.0	0.0	-4.1	-84.3			0.07	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-11.4	-96.6	96.6	11.4	0.00	0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I-O
Length of Span No. 1 = 20.667 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	-0.0	0.0	0.0	77.1	11.4	77.1	11.4	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	142.0	21.1	0.0	0.0	67.1	5.2			0.06	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	249.3	37.5	0.0	0.0	57.1	-1.5			0.11	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	321.6	49.3	0.0	0.0	47.2	-9.0			0.15	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.400	360.5	56.3	0.0	0.0	37.4	-18.3			0.18	0.04
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.500	365.7	58.7	0.0	0.0	27.8	-27.8			0.19	0.04
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	360.8	56.3	0.0	0.0	18.3	-37.4			0.18	0.04
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	321.7	49.3	0.0	0.0	9.0	-47.2			0.15	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	249.3	37.5	0.0	0.0	1.5	-57.1			0.11	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	142.0	21.1	0.0	0.0	-5.2	-67.1			0.06	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-11.4	-77.1	77.1	11.4	0.00	0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II
Length of Span No. 1 = 20.667 ft

POINT NO.	MOMENT (ft-kips)		AXIAL (kips)		SHEAR (kips)		REACTION (kips)		Y DEFLECTION (in)	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1-0.000	0.0	-0.0	0.0	0.0	72.4	9.1	72.4	9.1	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	133.3	16.9	0.0	0.0	63.1	3.5			0.05	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	233.9	30.0	0.0	0.0	53.9	-2.6			0.10	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	301.7	39.4	0.0	0.0	44.7	-9.4			0.14	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.400	338.0	45.0	0.0	0.0	35.7	-18.0			0.17	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.500	342.6	46.9	0.0	0.0	26.8	-26.8			0.18	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	338.2	45.0	0.0	0.0	18.0	-35.7			0.17	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	301.8	39.4	0.0	0.0	9.4	-44.7			0.14	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	233.9	30.0	0.0	0.0	2.6	-53.9			0.10	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	133.3	16.9	0.0	0.0	-3.5	-63.1			0.05	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-9.1	-72.4	72.4	9.1	0.00	0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II-O
Length of Span No. 1 = 20.667 ft

POINT NO.	MOMENT (ft-kips) MAX	MOMENT (ft-kips) MIN	AXIAL (kips) MAX	AXIAL (kips) MIN	SHEAR (kips) MAX	SHEAR (kips) MIN	REACTION (kips) MAX	REACTION (kips) MIN	Y DEFLECTION (in) MAX	Y DEFLECTION (in) MIN
1-0.000	0.0	-0.0	0.0	0.0	57.8	9.1	57.8	9.1	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	106.4	16.9	0.0	0.0	50.2	4.4			0.04	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	186.9	30.0	0.0	0.0	42.7	-0.7			0.08	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	241.1	39.4	0.0	0.0	35.2	-6.4			0.12	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.400	270.4	45.0	0.0	0.0	27.9	-13.4			0.14	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.500	274.4	46.9	0.0	0.0	20.6	-20.6			0.14	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	270.6	45.0	0.0	0.0	13.4	-27.9			0.14	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	241.2	39.4	0.0	0.0	6.4	-35.2			0.12	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	186.9	30.0	0.0	0.0	0.7	-42.7			0.08	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	106.4	16.9	0.0	0.0	-4.4	-50.2			0.04	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-9.1	-57.8	57.8	9.1	0.00	0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

LIMIT STATE LEGEND:

BRASS	Specifications
STRENGTH I	Strength I Inventory
STRENGTH I-O	Strength I Operating
STRENGTH II	Strength II
STRENGTH IV	Strength IV
SERVICE I	Service I
SERVICE II	Service II Inventory
SERVICE II-O	Service II Operating
FATIGUE I	Fatigue I
FATIGUE II	Fatigue II

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 1 Span Length = 20.667 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Calculated Properties: Section Analysis (Positive Bending)

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)
1-0.000	0.000	33.00	3967.3	14.00
1-0.100	2.067	33.00	3967.3	14.00
1-0.200	4.133	33.00	3967.3	14.00
1-0.300	6.200	33.00	3967.3	14.00
1-0.400	8.267	33.00	3967.3	14.00
1-0.450	9.300	33.00	3967.3	14.00
1-0.500	10.333	33.00	3967.3	14.00
1-0.600	12.400	*	*	*
1-0.700	14.467	*	*	*
1-0.800	16.533	*	*	*
1-0.900	18.600	*	*	*
1-1.000	20.667	*	*	*

* Note: Section properties for section analysis are only calculated at
points of interest either specified by the user or generated by BRASS.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 100.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.0000			
Top Flange Thickness	=	0.5000	Top Flange Width	=	10.5000
Web Depth	=	27.0000	Web Thickness	=	0.5000
Bottom Flange Thickness	=	0.5000	Bottom Flange Width	=	10.5000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 0.000 ft
Maximum distance to Right Brace Point = 20.667 ft
Is analysis point braced? YES

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	11.4	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Live Load Effect	80.4	0.0	62.0	0.0	62.0	0.0	0.0	0.0
Total Load Effect	91.7	11.4	73.4	11.4	73.4	11.4	13.6	13.6
Resistance - Dead	188.3	188.3	188.3	188.3	188.3	188.3	186.0	186.0
Design Ratio	2.18	17.59	2.72	17.59	(2.72)	(17.59)	(14.66)	(14.66)
Rating Factor	2.34	N/A	3.04	N/A	(3.04)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	11.4	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Live Load Effect	85.3	0.0	65.8	0.0	65.8	0.0	0.0	0.0
Total Load Effect	96.6	11.4	77.1	11.4	77.1	11.4	13.6	13.6
Resistance - Dead	188.3	188.3	188.3	188.3	188.3	188.3	186.0	186.0
Design Ratio	2.07	17.59	2.59	17.59	(2.59)	(17.59)	(14.66)	(14.66)
Rating Factor	2.21	N/A	2.86	N/A	(2.86)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	11.4	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Live Load Effect	39.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	51.2	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Resistance - Dead	188.3	188.3	188.3	188.3	188.3	188.3	186.0	186.0
Design Ratio	3.90	17.59	17.59	17.59	(17.59)	(17.59)	(14.66)	(14.66)
Rating Factor	4.73	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	11.4	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Live Load Effect	38.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	50.1	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Resistance - Dead	188.3	188.3	188.3	188.3	188.3	188.3	186.0	186.0
Design Ratio	3.98	17.59	17.59	17.59	(17.59)	(17.59)	(14.66)	(14.66)
Rating Factor	4.86	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	11.4	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Live Load Effect	32.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	43.8	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Resistance - Dead	188.3	188.3	188.3	188.3	188.3	188.3	186.0	186.0
Design Ratio	4.56	17.59	17.59	17.59	(17.59)	(17.59)	(14.66)	(14.66)
Rating Factor	5.81	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	11.4	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Live Load Effect	46.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	57.8	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Resistance - Dead	188.3	188.3	188.3	188.3	188.3	188.3	186.0	186.0
Design Ratio	3.46	17.59	17.59	17.59	(17.59)	(17.59)	(14.66)	(14.66)
Rating Factor	4.06	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	11.4	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Live Load Effect	48.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	60.2	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Resistance - Dead	188.3	188.3	188.3	188.3	188.3	188.3	186.0	186.0
Design Ratio	3.32	17.59	17.59	17.59	(17.59)	(17.59)	(14.66)	(14.66)
Rating Factor	3.86	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	11.4	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Live Load Effect	48.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	60.2	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Resistance - Dead	188.3	188.3	188.3	188.3	188.3	188.3	186.0	186.0
Design Ratio	3.32	17.59	17.59	17.59	(17.59)	(17.59)	(14.66)	(14.66)
Rating Factor	3.86	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	11.4	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Live Load Effect	49.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	60.4	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Resistance - Dead	188.3	188.3	188.3	188.3	188.3	188.3	186.0	186.0
Design Ratio	3.30	17.59	17.59	17.59	(17.59)	(17.59)	(14.66)	(14.66)
Rating Factor	3.84	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	11.4	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Live Load Effect	51.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	62.8	11.4	11.4	11.4	11.4	11.4	13.6	13.6
Resistance - Dead	188.3	188.3	188.3	188.3	188.3	188.3	186.0	186.0
Design Ratio	3.18	17.59	17.59	17.59	(17.59)	(17.59)	(14.66)	(14.66)
Rating Factor	3.66	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 101.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.0000			
Top Flange Thickness	=	0.5000	Top Flange Width	=	10.5000
Web Depth	=	27.0000	Web Thickness	=	0.5000
Bottom Flange Thickness	=	0.5000	Bottom Flange Width	=	10.5000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 2.067 ft
Maximum distance to Right Brace Point = 18.600 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	0.9	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Live Load Effect	6.0	0.0	4.6	0.0	4.6	0.0	0.0	0.0
Total Load Effect	6.9	0.0	5.5	0.0	5.5	0.0	1.1	0.0
Resistance - Dead	24.6	0.0	24.6	0.0	24.6	0.0	24.4	0.0
Design Ratio	3.70	N/A	4.62	N/A	(4.62)	(N/A)	(23.76)	(N/A)
Rating Factor	4.10	N/A	5.32	N/A	(5.32)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	9.1	9.1	9.1	9.1	9.1	9.1	10.9	10.9
Live Load Effect	68.0	-5.0	52.4	-3.9	52.4	-3.9	0.0	0.0
Total Load Effect	77.1	4.1	61.5	5.2	61.5	5.2	10.9	10.9
Resistance - Dead	190.6	190.6	190.6	190.6	190.6	190.6	188.8	188.8
Design Ratio	2.59	49.22	3.25	38.36	(3.25)	(38.36)	(18.32)	(18.32)
Rating Factor	2.80	N/A	3.63	N/A	(3.63)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-4.46	4.46	0.00	0.00	-3.43	3.43	0.00	0.00
Total Load Effect	-5.17	5.17	0.00	0.00	-4.14	4.14	0.00	0.00
Resistance - Dead	-23.28	23.28	0.00	0.00	-23.28	23.28	0.00	0.00
Design Ratio	4.64	4.64	N/A	N/A	5.79	5.79	N/A	N/A
Rating Factor	5.23	5.23	N/A	N/A	6.79	6.79	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-4.46	4.46	0.00	0.00	-3.43	3.43	0.00	0.00
Total Load Effect	-5.17	5.17	0.00	0.00	-4.14	4.14	0.00	0.00
Resistance - Dead	-29.28	N/A	0.00	0.00	-29.28	N/A	0.00	0.00
Design Ratio	5.80	N/A	N/A	N/A	7.24	N/A	N/A	N/A
Rating Factor	6.57	N/A	N/A	N/A	8.55	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	0.9	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Live Load Effect	6.6	0.0	5.1	0.0	5.1	0.0	0.0	0.0
Total Load Effect	7.5	0.0	6.0	0.0	6.0	0.0	1.1	0.0
Resistance - Dead	24.6	0.0	24.6	0.0	24.6	0.0	24.4	0.0
Design Ratio	3.39	N/A	4.24	N/A	(4.24)	(N/A)	(23.76)	(N/A)
Rating Factor	3.71	N/A	4.81	N/A	(4.81)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	9.1	9.1	9.1	9.1	9.1	9.1	10.9	10.9
Live Load Effect	75.2	-3.9	58.0	-3.0	58.0	-3.0	0.0	0.0
Total Load Effect	84.3	5.1	67.1	6.0	67.1	6.0	10.9	10.9
Resistance - Dead	190.6	190.6	190.6	190.6	190.6	190.6	188.8	188.8
Design Ratio	2.37	38.85	2.98	33.05	(2.98)	(33.05)	(18.32)	(18.32)
Rating Factor	2.53	N/A	3.29	N/A	(3.29)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-4.93	4.93	0.00	0.00	-3.79	3.79	0.00	0.00
Total Load Effect	-5.65	5.65	0.00	0.00	-4.51	4.51	0.00	0.00
Resistance - Dead	-23.28	23.28	0.00	0.00	-23.28	23.28	0.00	0.00
Design Ratio	4.25	4.25	N/A	N/A	5.32	5.32	N/A	N/A
Rating Factor	4.72	4.72	N/A	N/A	6.14	6.14	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-4.93	4.93	0.00	0.00	-3.79	3.79	0.00	0.00
Total Load Effect	-5.65	5.65	0.00	0.00	-4.51	4.51	0.00	0.00
Resistance - Dead	-29.28	N/A	0.00	0.00	-29.28	N/A	0.00	0.00
Design Ratio	5.31	N/A	N/A	N/A	6.66	N/A	N/A	N/A
Rating Factor	5.94	N/A	N/A	N/A	7.72	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	0.9	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Live Load Effect	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	3.9	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Resistance - Dead	24.6	0.0	24.6	0.0	24.6	0.0	24.4	0.0
Design Ratio	6.53	N/A	28.52	N/A	(28.52)	(N/A)	(23.76)	(N/A)
Rating Factor	8.16	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	9.1	9.1	9.1	9.1	9.1	9.1	10.9	10.9
Live Load Effect	34.5	-2.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	43.5	7.1	9.1	9.1	9.1	9.1	10.9	10.9
Resistance - Dead	190.6	190.6	190.6	190.6	190.6	190.6	188.8	188.8
Design Ratio	4.58	28.00	21.98	21.98	(21.98)	(21.98)	(18.32)	(18.32)
Rating Factor	5.53	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-3.01	3.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.73	3.73	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-23.28	23.28	0.00	0.00	24.72	23.28	0.00	0.00
Design Ratio	6.44	6.44	N/A	N/A	N/A	33.55	N/A	N/A
Rating Factor	7.73	7.73	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-3.01	3.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.73	3.73	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-29.28	N/A	0.00	0.00	-29.28	N/A	0.00	0.00
Design Ratio	8.04	N/A	N/A	N/A	41.94	N/A	N/A	N/A
Rating Factor	9.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	0.9	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Live Load Effect	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	3.8	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Resistance - Dead	24.6	0.0	24.6	0.0	24.6	0.0	24.4	0.0
Design Ratio	6.66	N/A	28.52	N/A	(28.52)	(N/A)	(23.76)	(N/A)
Rating Factor	8.38	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	9.1	9.1	9.1	9.1	9.1	9.1	10.9	10.9
Live Load Effect	33.5	-1.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	42.6	7.3	9.1	9.1	9.1	9.1	10.9	10.9
Resistance - Dead	190.6	190.6	190.6	190.6	190.6	190.6	188.8	188.8
Design Ratio	4.69	27.34	21.98	21.98	(21.98)	(21.98)	(18.32)	(18.32)
Rating Factor	5.68	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-2.93	2.93	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.65	3.65	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-23.28	23.28	0.00	0.00	24.72	23.28	0.00	0.00
Design Ratio	6.58	6.58	N/A	N/A	N/A	33.55	N/A	N/A
Rating Factor	7.93	7.93	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-2.93	2.93	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.65	3.65	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-29.28	N/A	0.00	0.00	-29.28	N/A	0.00	0.00
Design Ratio	8.22	N/A	N/A	N/A	41.94	N/A	N/A	N/A
Rating Factor	9.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	0.9	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Live Load Effect	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	3.4	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Resistance - Dead	24.6	0.0	24.6	0.0	24.6	0.0	24.4	0.0
Design Ratio	7.57	N/A	28.52	N/A	(28.52)	(N/A)	(23.76)	(N/A)
Rating Factor	9.95	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	9.1	9.1	9.1	9.1	9.1	9.1	10.9	10.9
Live Load Effect	28.5	-1.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	37.5	7.5	9.1	9.1	9.1	9.1	10.9	10.9
Resistance - Dead	190.6	190.6	190.6	190.6	190.6	190.6	188.8	188.8
Design Ratio	5.32	26.51	21.98	21.98	(21.98)	(21.98)	(18.32)	(18.32)
Rating Factor	6.69	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-2.47	2.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.19	3.19	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-23.28	23.28	0.00	0.00	24.72	23.28	0.00	0.00
Design Ratio	7.53	7.53	N/A	N/A	N/A	33.55	N/A	N/A
Rating Factor	9.41	9.41	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-2.47	2.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.19	3.19	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-29.28	N/A	0.00	0.00	-29.28	N/A	0.00	0.00
Design Ratio	9.41	N/A	N/A	N/A	41.94	N/A	N/A	N/A
Rating Factor	11.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	0.9	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Live Load Effect	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.4	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Resistance - Dead	24.6	0.0	24.6	0.0	24.6	0.0	24.4	0.0
Design Ratio	5.83	N/A	28.52	N/A	(28.52)	(N/A)	(23.76)	(N/A)
Rating Factor	7.07	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	9.1	9.1	9.1	9.1	9.1	9.1	10.9	10.9
Live Load Effect	40.2	-2.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	49.3	7.1	9.1	9.1	9.1	9.1	10.9	10.9
Resistance - Dead	190.6	190.6	190.6	190.6	190.6	190.6	188.8	188.8
Design Ratio	4.05	28.00	21.98	21.98	(21.98)	(21.98)	(18.32)	(18.32)
Rating Factor	4.74	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-3.48	3.48	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.20	4.20	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-23.28	23.28	0.00	0.00	24.72	23.28	0.00	0.00
Design Ratio	5.72	5.72	N/A	N/A	N/A	33.55	N/A	N/A
Rating Factor	6.69	6.69	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-3.48	3.48	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.20	4.20	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-29.28	N/A	0.00	0.00	-29.28	N/A	0.00	0.00
Design Ratio	7.15	N/A	N/A	N/A	41.94	N/A	N/A	N/A
Rating Factor	8.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	0.9	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Live Load Effect	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.6	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Resistance - Dead	24.6	0.0	24.6	0.0	24.6	0.0	24.4	0.0
Design Ratio	5.53	N/A	28.52	N/A	(28.52)	(N/A)	(23.76)	(N/A)
Rating Factor	6.62	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	9.1	9.1	9.1	9.1	9.1	9.1	10.9	10.9
Live Load Effect	43.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	52.1	7.1	9.1	9.1	9.1	9.1	10.9	10.9
Resistance - Dead	190.6	190.6	190.6	190.6	190.6	190.6	188.8	188.8
Design Ratio	3.83	28.00	21.98	21.98	(21.98)	(21.98)	(18.32)	(18.32)
Rating Factor	4.43	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-3.72	3.72	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.43	4.43	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-23.28	23.28	0.00	0.00	24.72	23.28	0.00	0.00
Design Ratio	5.42	5.42	N/A	N/A	N/A	33.55	N/A	N/A
Rating Factor	6.27	6.27	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-3.72	3.72	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.43	4.43	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-29.28	N/A	0.00	0.00	-29.28	N/A	0.00	0.00
Design Ratio	6.77	N/A	N/A	N/A	41.94	N/A	N/A	N/A
Rating Factor	7.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	0.9	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Live Load Effect	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.6	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Resistance - Dead	24.6	0.0	24.6	0.0	24.6	0.0	24.4	0.0
Design Ratio	5.53	N/A	28.52	N/A	(28.52)	(N/A)	(23.76)	(N/A)
Rating Factor	6.62	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	9.1	9.1	9.1	9.1	9.1	9.1	10.9	10.9
Live Load Effect	43.0	-1.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	52.1	7.8	9.1	9.1	9.1	9.1	10.9	10.9
Resistance - Dead	190.6	190.6	190.6	190.6	190.6	190.6	188.8	188.8
Design Ratio	3.83	25.72	21.98	21.98	(21.98)	(21.98)	(18.32)	(18.32)
Rating Factor	4.43	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-3.72	3.72	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.43	4.43	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-23.28	23.28	0.00	0.00	24.72	23.28	0.00	0.00
Design Ratio	5.42	5.42	N/A	N/A	N/A	33.55	N/A	N/A
Rating Factor	6.27	6.27	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-3.72	3.72	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.43	4.43	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-29.28	N/A	0.00	0.00	-29.28	N/A	0.00	0.00
Design Ratio	6.77	N/A	N/A	N/A	41.94	N/A	N/A	N/A
Rating Factor	7.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	0.9	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Live Load Effect	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.6	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Resistance - Dead	24.6	0.0	24.6	0.0	24.6	0.0	24.4	0.0
Design Ratio	5.51	N/A	28.52	N/A	(28.52)	(N/A)	(23.76)	(N/A)
Rating Factor	6.58	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	9.1	9.1	9.1	9.1	9.1	9.1	10.9	10.9
Live Load Effect	43.0	-1.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	52.1	7.8	9.1	9.1	9.1	9.1	10.9	10.9
Resistance - Dead	190.6	190.6	190.6	190.6	190.6	190.6	188.8	188.8
Design Ratio	3.83	25.72	21.98	21.98	(21.98)	(21.98)	(18.32)	(18.32)
Rating Factor	4.43	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.45	4.45	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-23.28	23.28	0.00	0.00	24.72	23.28	0.00	0.00
Design Ratio	5.39	5.39	N/A	N/A	N/A	33.55	N/A	N/A
Rating Factor	6.23	6.23	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.45	4.45	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-29.28	N/A	0.00	0.00	-29.28	N/A	0.00	0.00
Design Ratio	6.74	N/A	N/A	N/A	41.94	N/A	N/A	N/A
Rating Factor	7.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	0.9	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Live Load Effect	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.8	0.0	0.9	0.0	0.9	0.0	1.1	0.0
Resistance - Dead	24.6	0.0	24.6	0.0	24.6	0.0	24.4	0.0
Design Ratio	5.37	N/A	28.52	N/A	(28.52)	(N/A)	(23.76)	(N/A)
Rating Factor	6.38	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	9.1	9.1	9.1	9.1	9.1	9.1	10.9	10.9
Live Load Effect	44.1	-2.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	53.1	7.1	9.1	9.1	9.1	9.1	10.9	10.9
Resistance - Dead	190.6	190.6	190.6	190.6	190.6	190.6	188.8	188.8
Design Ratio	3.76	28.00	21.98	21.98	(21.98)	(21.98)	(18.32)	(18.32)
Rating Factor	4.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-3.86	3.86	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.57	4.57	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-23.28	23.28	0.00	0.00	24.72	23.28	0.00	0.00
Design Ratio	5.25	5.25	N/A	N/A	N/A	33.55	N/A	N/A
Rating Factor	6.04	6.04	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.72	0.72	0.00	0.00	-0.72	0.72	0.00	0.00
Live Load Effect	-3.86	3.86	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.57	4.57	0.00	0.00	-0.72	0.72	0.00	0.00
Resistance - Dead	-29.28	N/A	0.00	0.00	-29.28	N/A	0.00	0.00
Design Ratio	6.56	N/A	N/A	N/A	41.94	N/A	N/A	N/A
Rating Factor	7.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 102.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.0000			
Top Flange Thickness	=	0.5000	Top Flange Width	=	10.5000
Web Depth	=	27.0000	Web Thickness	=	0.5000
Bottom Flange Thickness	=	0.5000	Bottom Flange Width	=	10.5000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 4.133 ft
Maximum distance to Right Brace Point = 16.533 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	1.6	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Live Load Effect	9.9	0.0	7.7	0.0	7.7	0.0	0.0	0.0
Total Load Effect	11.5	0.0	9.2	0.0	9.2	0.0	1.9	0.0
Resistance - Dead	23.9	0.0	23.9	0.0	23.9	0.0	23.6	0.0
Design Ratio	2.22	N/A	2.76	N/A	(2.76)	(N/A)	(13.37)	(N/A)
Rating Factor	2.41	N/A	3.12	N/A	(3.12)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	-199.7	199.7	-199.7	199.7	199.7
Dead Load Effect	6.8	6.8	6.8	6.8	6.8	6.8	8.2	8.2
Live Load Effect	55.5	-10.8	42.8	-8.3	42.8	-8.3	0.0	0.0
Total Load Effect	62.3	-4.0	49.6	-1.5	49.6	-1.5	8.2	8.2
Resistance - Dead	192.9	-206.5	192.9	-206.5	192.9	-206.5	191.5	191.5
Design Ratio	3.20	50.40	4.02	133.18	(4.02)	(133.18)	(24.43)	(24.43)
Rating Factor	3.47	19.16	4.50	24.84	(4.50)	(24.84)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-7.37	7.37	0.00	0.00	-5.67	5.67	0.00	0.00
Total Load Effect	-8.64	8.64	0.00	0.00	-6.94	6.94	0.00	0.00
Resistance - Dead	-22.73	22.73	0.00	0.00	-22.73	22.73	0.00	0.00
Design Ratio	2.78	2.78	N/A	N/A	3.46	3.46	N/A	N/A
Rating Factor	3.08	3.08	N/A	N/A	4.01	4.01	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-7.37	7.37	0.00	0.00	-5.67	5.67	0.00	0.00
Total Load Effect	-8.64	8.64	0.00	0.00	-6.94	6.94	0.00	0.00
Resistance - Dead	-28.73	N/A	0.00	0.00	-28.73	N/A	0.00	0.00
Design Ratio	3.47	N/A	N/A	N/A	4.32	N/A	N/A	N/A
Rating Factor	3.90	N/A	N/A	N/A	5.07	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	1.6	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Live Load Effect	11.6	0.0	9.0	0.0	9.0	0.0	0.0	0.0
Total Load Effect	13.2	0.0	10.6	0.0	10.6	0.0	1.9	0.0
Resistance - Dead	23.9	0.0	23.9	0.0	23.9	0.0	23.6	0.0
Design Ratio	1.93	N/A	2.42	N/A	(2.42)	(N/A)	(13.37)	(N/A)
Rating Factor	2.06	N/A	2.67	N/A	(2.67)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	6.8	6.8	6.8	6.8	6.8	6.8	8.2	8.2
Live Load Effect	65.2	-8.5	50.3	-6.5	50.3	-6.5	0.0	0.0
Total Load Effect	72.0	-1.7	57.1	0.3	57.1	0.3	8.2	8.2
Resistance - Dead	192.9	-206.5	192.9	192.9	192.9	192.9	191.5	191.5
Design Ratio	2.77	119.07	3.50	757.82	(3.50)	(757.82)	(24.43)	(24.43)
Rating Factor	2.96	24.32	3.84	N/A	(3.84)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-8.63	8.63	0.00	0.00	-6.64	6.64	0.00	0.00
Total Load Effect	-9.90	9.90	0.00	0.00	-7.91	7.91	0.00	0.00
Resistance - Dead	-22.73	22.73	0.00	0.00	-22.73	22.73	0.00	0.00
Design Ratio	2.42	2.42	N/A	N/A	3.03	3.03	N/A	N/A
Rating Factor	2.63	2.63	N/A	N/A	3.42	3.42	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-8.63	8.63	0.00	0.00	-6.64	6.64	0.00	0.00
Total Load Effect	-9.90	9.90	0.00	0.00	-7.91	7.91	0.00	0.00
Resistance - Dead	-28.73	N/A	0.00	0.00	-28.73	N/A	0.00	0.00
Design Ratio	3.03	N/A	N/A	N/A	3.79	N/A	N/A	N/A
Rating Factor	3.33	N/A	N/A	N/A	4.33	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	1.6	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Live Load Effect	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	6.9	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Resistance - Dead	23.9	0.0	23.9	0.0	23.9	0.0	23.6	0.0
Design Ratio	3.72	N/A	16.04	N/A	(16.04)	(N/A)	(13.37)	(N/A)
Rating Factor	4.54	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	6.8	6.8	6.8	6.8	6.8	6.8	8.2	8.2
Live Load Effect	30.1	-4.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	36.9	2.7	6.8	6.8	6.8	6.8	8.2	8.2
Resistance - Dead	192.9	192.9	192.9	192.9	192.9	192.9	191.5	191.5
Design Ratio	5.41	74.24	29.31	29.31	(29.31)	(29.31)	(24.43)	(24.43)
Rating Factor	6.40	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-5.27	5.27	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.54	6.54	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-22.73	22.73	0.00	0.00	25.27	22.73	0.00	0.00
Design Ratio	3.67	3.67	N/A	N/A	N/A	18.87	N/A	N/A
Rating Factor	4.31	4.31	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-5.27	5.27	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.54	6.54	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-28.73	N/A	0.00	0.00	-28.73	N/A	0.00	0.00
Design Ratio	4.59	N/A	N/A	N/A	23.59	N/A	N/A	N/A
Rating Factor	5.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	1.6	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Live Load Effect	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	6.5	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Resistance - Dead	23.9	0.0	23.9	0.0	23.9	0.0	23.6	0.0
Design Ratio	3.90	N/A	16.04	N/A	(16.04)	(N/A)	(13.37)	(N/A)
Rating Factor	4.83	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	6.8	6.8	6.8	6.8	6.8	6.8	8.2	8.2
Live Load Effect	28.3	-3.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	35.1	3.0	6.8	6.8	6.8	6.8	8.2	8.2
Resistance - Dead	192.9	192.9	192.9	192.9	192.9	192.9	191.5	191.5
Design Ratio	5.69	66.44	29.31	29.31	(29.31)	(29.31)	(24.43)	(24.43)
Rating Factor	6.81	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-4.95	4.95	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.23	6.23	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-22.73	22.73	0.00	0.00	25.27	22.73	0.00	0.00
Design Ratio	3.86	3.86	N/A	N/A	N/A	18.87	N/A	N/A
Rating Factor	4.59	4.59	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-4.95	4.95	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.23	6.23	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-28.73	N/A	0.00	0.00	-28.73	N/A	0.00	0.00
Design Ratio	4.82	N/A	N/A	N/A	23.59	N/A	N/A	N/A
Rating Factor	5.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	1.6	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Live Load Effect	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	5.9	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Resistance - Dead	23.9	0.0	23.9	0.0	23.9	0.0	23.6	0.0
Design Ratio	4.31	N/A	16.04	N/A	(16.04)	(N/A)	(13.37)	(N/A)
Rating Factor	5.53	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	6.8	6.8	6.8	6.8	6.8	6.8	8.2	8.2
Live Load Effect	24.9	-3.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	31.7	3.5	6.8	6.8	6.8	6.8	8.2	8.2
Resistance - Dead	192.9	192.9	192.9	192.9	192.9	192.9	191.5	191.5
Design Ratio	6.30	57.47	29.31	29.31	(29.31)	(29.31)	(24.43)	(24.43)
Rating Factor	7.75	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-4.32	4.32	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.59	5.59	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-22.73	22.73	0.00	0.00	25.27	22.73	0.00	0.00
Design Ratio	4.29	4.29	N/A	N/A	N/A	18.87	N/A	N/A
Rating Factor	5.26	5.26	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-4.32	4.32	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.59	5.59	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-28.73	N/A	0.00	0.00	-28.73	N/A	0.00	0.00
Design Ratio	5.36	N/A	N/A	N/A	23.59	N/A	N/A	N/A
Rating Factor	6.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	1.6	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Live Load Effect	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	7.6	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Resistance - Dead	23.9	0.0	23.9	0.0	23.9	0.0	23.6	0.0
Design Ratio	3.37	N/A	16.04	N/A	(16.04)	(N/A)	(13.37)	(N/A)
Rating Factor	3.99	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	6.8	6.8	6.8	6.8	6.8	6.8	8.2	8.2
Live Load Effect	34.3	-4.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	41.2	2.7	6.8	6.8	6.8	6.8	8.2	8.2
Resistance - Dead	192.9	192.9	192.9	192.9	192.9	192.9	191.5	191.5
Design Ratio	4.85	74.63	29.31	29.31	(29.31)	(29.31)	(24.43)	(24.43)
Rating Factor	5.61	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-5.99	5.99	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.26	7.26	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-22.73	22.73	0.00	0.00	25.27	22.73	0.00	0.00
Design Ratio	3.31	3.31	N/A	N/A	N/A	18.87	N/A	N/A
Rating Factor	3.80	3.80	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-5.99	5.99	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.26	7.26	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-28.73	N/A	0.00	0.00	-28.73	N/A	0.00	0.00
Design Ratio	4.13	N/A	N/A	N/A	23.59	N/A	N/A	N/A
Rating Factor	4.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	1.6	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Live Load Effect	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	8.0	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Resistance - Dead	23.9	0.0	23.9	0.0	23.9	0.0	23.6	0.0
Design Ratio	3.20	N/A	16.04	N/A	(16.04)	(N/A)	(13.37)	(N/A)
Rating Factor	3.75	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	6.8	6.8	6.8	6.8	6.8	6.8	8.2	8.2
Live Load Effect	36.6	-4.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	43.4	2.6	6.8	6.8	6.8	6.8	8.2	8.2
Resistance - Dead	192.9	192.9	192.9	192.9	192.9	192.9	191.5	191.5
Design Ratio	4.60	75.62	29.31	29.31	(29.31)	(29.31)	(24.43)	(24.43)
Rating Factor	5.26	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-6.37	6.37	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.64	7.64	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-22.73	22.73	0.00	0.00	25.27	22.73	0.00	0.00
Design Ratio	3.14	3.14	N/A	N/A	N/A	18.87	N/A	N/A
Rating Factor	3.57	3.57	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-6.37	6.37	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.64	7.64	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-28.73	N/A	0.00	0.00	-28.73	N/A	0.00	0.00
Design Ratio	3.93	N/A	N/A	N/A	23.59	N/A	N/A	N/A
Rating Factor	4.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	1.6	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Live Load Effect	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	8.0	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Resistance - Dead	23.9	0.0	23.9	0.0	23.9	0.0	23.6	0.0
Design Ratio	3.18	N/A	16.04	N/A	(16.04)	(N/A)	(13.37)	(N/A)
Rating Factor	3.72	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	6.8	6.8	6.8	6.8	6.8	6.8	8.2	8.2
Live Load Effect	36.6	-2.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	43.4	4.0	6.8	6.8	6.8	6.8	8.2	8.2
Resistance - Dead	192.9	192.9	192.9	192.9	192.9	192.9	191.5	191.5
Design Ratio	4.60	49.63	29.31	29.31	(29.31)	(29.31)	(24.43)	(24.43)
Rating Factor	5.27	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-6.42	6.42	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.69	7.69	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-22.73	22.73	0.00	0.00	25.27	22.73	0.00	0.00
Design Ratio	3.12	3.12	N/A	N/A	N/A	18.87	N/A	N/A
Rating Factor	3.54	3.54	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-6.42	6.42	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.69	7.69	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-28.73	N/A	0.00	0.00	-28.73	N/A	0.00	0.00
Design Ratio	3.90	N/A	N/A	N/A	23.59	N/A	N/A	N/A
Rating Factor	4.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	1.6	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Live Load Effect	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	8.0	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Resistance - Dead	23.9	0.0	23.9	0.0	23.9	0.0	23.6	0.0
Design Ratio	3.18	N/A	16.04	N/A	(16.04)	(N/A)	(13.37)	(N/A)
Rating Factor	3.72	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	6.8	6.8	6.8	6.8	6.8	6.8	8.2	8.2
Live Load Effect	36.6	-2.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	43.4	4.0	6.8	6.8	6.8	6.8	8.2	8.2
Resistance - Dead	192.9	192.9	192.9	192.9	192.9	192.9	191.5	191.5
Design Ratio	4.60	49.63	29.31	29.31	(29.31)	(29.31)	(24.43)	(24.43)
Rating Factor	5.27	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-6.43	6.43	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.71	7.71	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-22.73	22.73	0.00	0.00	25.27	22.73	0.00	0.00
Design Ratio	3.11	3.11	N/A	N/A	N/A	18.87	N/A	N/A
Rating Factor	3.53	3.53	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-6.43	6.43	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.71	7.71	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-28.73	N/A	0.00	0.00	-28.73	N/A	0.00	0.00
Design Ratio	3.89	N/A	N/A	N/A	23.59	N/A	N/A	N/A
Rating Factor	4.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	1.6	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Live Load Effect	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	8.1	0.0	1.6	0.0	1.6	0.0	1.9	0.0
Resistance - Dead	23.9	0.0	23.9	0.0	23.9	0.0	23.6	0.0
Design Ratio	3.16	N/A	16.04	N/A	(16.04)	(N/A)	(13.37)	(N/A)
Rating Factor	3.69	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	6.8	6.8	6.8	6.8	6.8	6.8	8.2	8.2
Live Load Effect	36.7	-4.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	43.5	2.7	6.8	6.8	6.8	6.8	8.2	8.2
Resistance - Dead	192.9	192.9	192.9	192.9	192.9	192.9	191.5	191.5
Design Ratio	4.59	74.63	29.31	29.31	(29.31)	(29.31)	(24.43)	(24.43)
Rating Factor	5.26	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.75	7.75	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-22.73	22.73	0.00	0.00	25.27	22.73	0.00	0.00
Design Ratio	3.10	3.10	N/A	N/A	N/A	18.87	N/A	N/A
Rating Factor	3.51	3.51	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.27	1.27	0.00	0.00	-1.27	1.27	0.00	0.00
Live Load Effect	-6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.75	7.75	0.00	0.00	-1.27	1.27	0.00	0.00
Resistance - Dead	-28.73	N/A	0.00	0.00	-28.73	N/A	0.00	0.00
Design Ratio	3.87	N/A	N/A	N/A	23.59	N/A	N/A	N/A
Rating Factor	4.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 103.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.0000			
Top Flange Thickness	=	0.5000	Top Flange Width	=	10.5000
Web Depth	=	27.0000	Web Thickness	=	0.5000
Bottom Flange Thickness	=	0.5000	Bottom Flange Width	=	10.5000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 6.200 ft
Maximum distance to Right Brace Point = 14.467 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.1	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Live Load Effect	11.8	0.0	9.1	0.0	9.1	0.0	0.0	0.0
Total Load Effect	13.9	0.0	11.2	0.0	11.2	0.0	2.5	0.0
Resistance - Dead	23.4	0.0	23.4	0.0	23.4	0.0	23.0	0.0
Design Ratio	1.84	N/A	2.28	N/A	(2.28)	(N/A)	(10.18)	(N/A)
Rating Factor	1.99	N/A	2.58	N/A	(2.58)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	-199.7	199.7	-199.7	199.7	199.7
Dead Load Effect	4.5	4.5	4.5	4.5	4.5	4.5	5.4	5.4
Live Load Effect	43.2	-16.7	33.4	-12.9	33.4	-12.9	0.0	0.0
Total Load Effect	47.8	-12.2	37.9	-8.3	37.9	-8.3	5.4	5.4
Resistance - Dead	195.1	-204.2	195.1	-204.2	195.1	-204.2	194.2	194.2
Design Ratio	4.18	16.43	5.27	23.95	(5.27)	(23.95)	(36.64)	(36.64)
Rating Factor	4.51	12.23	5.85	15.86	(5.85)	(15.86)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-8.76	8.76	0.00	0.00	-6.74	6.74	0.00	0.00
Total Load Effect	-10.43	10.43	0.00	0.00	-8.40	8.40	0.00	0.00
Resistance - Dead	-22.33	22.33	0.00	0.00	-22.33	22.33	0.00	0.00
Design Ratio	2.30	2.30	N/A	N/A	2.86	2.86	N/A	N/A
Rating Factor	2.55	2.55	N/A	N/A	3.32	3.32	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-8.76	8.76	0.00	0.00	-6.74	6.74	0.00	0.00
Total Load Effect	-10.43	10.43	0.00	0.00	-8.40	8.40	0.00	0.00
Resistance - Dead	-28.33	N/A	0.00	0.00	-28.33	N/A	0.00	0.00
Design Ratio	2.88	N/A	N/A	N/A	3.57	N/A	N/A	N/A
Rating Factor	3.24	N/A	N/A	N/A	4.21	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.1	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Live Load Effect	14.9	0.0	11.5	0.0	11.5	0.0	0.0	0.0
Total Load Effect	17.0	0.0	13.6	0.0	13.6	0.0	2.5	0.0
Resistance - Dead	23.4	0.0	23.4	0.0	23.4	0.0	23.0	0.0
Design Ratio	1.50	N/A	1.87	N/A	(1.87)	(N/A)	(10.18)	(N/A)
Rating Factor	1.57	N/A	2.03	N/A	(2.03)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	-199.7	199.7	-199.7	199.7	199.7
Dead Load Effect	4.5	4.5	4.5	4.5	4.5	4.5	5.4	5.4
Live Load Effect	55.3	-17.5	42.6	-13.5	42.6	-13.5	0.0	0.0
Total Load Effect	59.8	-13.0	47.2	-9.0	47.2	-9.0	5.4	5.4
Resistance - Dead	195.1	-204.2	195.1	-204.2	195.1	-204.2	194.2	194.2
Design Ratio	3.34	15.41	4.23	22.28	(4.23)	(22.28)	(36.64)	(36.64)
Rating Factor	3.53	11.67	4.58	15.12	(4.58)	(15.12)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-11.10	11.10	0.00	0.00	-8.54	8.54	0.00	0.00
Total Load Effect	-12.77	12.77	0.00	0.00	-10.21	10.21	0.00	0.00
Resistance - Dead	-22.33	22.33	0.00	0.00	-22.33	22.33	0.00	0.00
Design Ratio	1.88	1.88	N/A	N/A	2.35	2.35	N/A	N/A
Rating Factor	2.01	2.01	N/A	N/A	2.61	2.61	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-11.10	11.10	0.00	0.00	-8.54	8.54	0.00	0.00
Total Load Effect	-12.77	12.77	0.00	0.00	-10.21	10.21	0.00	0.00
Resistance - Dead	-28.33	N/A	0.00	0.00	-28.33	N/A	0.00	0.00
Design Ratio	2.35	N/A	N/A	N/A	2.94	N/A	N/A	N/A
Rating Factor	2.55	N/A	N/A	N/A	3.32	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.1	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Live Load Effect	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	8.9	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Resistance - Dead	23.4	0.0	23.4	0.0	23.4	0.0	23.0	0.0
Design Ratio	2.88	N/A	12.22	N/A	(12.22)	(N/A)	(10.18)	(N/A)
Rating Factor	3.46	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	4.5	4.5	4.5	4.5	4.5	4.5	5.4	5.4
Live Load Effect	25.8	-8.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	30.4	-3.9	4.5	4.5	4.5	4.5	5.4	5.4
Resistance - Dead	195.1	-204.2	195.1	195.1	195.1	195.1	194.2	194.2
Design Ratio	6.58	50.98	43.97	43.97	(43.97)	(43.97)	(36.64)	(36.64)
Rating Factor	7.56	24.14	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-6.77	6.77	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.44	8.44	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-22.33	22.33	0.00	0.00	25.67	22.33	0.00	0.00
Design Ratio	2.84	2.84	N/A	N/A	N/A	14.38	N/A	N/A
Rating Factor	3.30	3.30	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-6.77	6.77	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.44	8.44	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-28.33	N/A	0.00	0.00	-28.33	N/A	0.00	0.00
Design Ratio	3.56	N/A	N/A	N/A	17.97	N/A	N/A	N/A
Rating Factor	4.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.1	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Live Load Effect	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	8.3	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Resistance - Dead	23.4	0.0	23.4	0.0	23.4	0.0	23.0	0.0
Design Ratio	3.09	N/A	12.22	N/A	(12.22)	(N/A)	(10.18)	(N/A)
Rating Factor	3.80	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	4.5	4.5	4.5	4.5	4.5	4.5	5.4	5.4
Live Load Effect	23.6	-7.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	28.1	-3.2	4.5	4.5	4.5	4.5	5.4	5.4
Resistance - Dead	195.1	-204.2	195.1	195.1	195.1	195.1	194.2	194.2
Design Ratio	7.10	61.97	43.97	43.97	(43.97)	(43.97)	(36.64)	(36.64)
Rating Factor	8.27	26.30	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-6.17	6.17	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.83	7.83	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-22.33	22.33	0.00	0.00	25.67	22.33	0.00	0.00
Design Ratio	3.06	3.06	N/A	N/A	N/A	14.38	N/A	N/A
Rating Factor	3.62	3.62	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-6.17	6.17	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.83	7.83	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-28.33	N/A	0.00	0.00	-28.33	N/A	0.00	0.00
Design Ratio	3.83	N/A	N/A	N/A	17.97	N/A	N/A	N/A
Rating Factor	4.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.1	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Live Load Effect	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	7.7	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Resistance - Dead	23.4	0.0	23.4	0.0	23.4	0.0	23.0	0.0
Design Ratio	3.33	N/A	12.22	N/A	(12.22)	(N/A)	(10.18)	(N/A)
Rating Factor	4.21	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	4.5	4.5	4.5	4.5	4.5	4.5	5.4	5.4
Live Load Effect	21.3	-7.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	25.9	-2.5	4.5	4.5	4.5	4.5	5.4	5.4
Resistance - Dead	195.1	-204.2	195.1	195.1	195.1	195.1	194.2	194.2
Design Ratio	7.72	80.36	43.97	43.97	(43.97)	(43.97)	(36.64)	(36.64)
Rating Factor	9.15	29.06	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-5.56	5.56	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.23	7.23	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-22.33	22.33	0.00	0.00	25.67	22.33	0.00	0.00
Design Ratio	3.32	3.32	N/A	N/A	N/A	14.38	N/A	N/A
Rating Factor	4.01	4.01	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-5.56	5.56	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.23	7.23	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-28.33	N/A	0.00	0.00	-28.33	N/A	0.00	0.00
Design Ratio	4.15	N/A	N/A	N/A	17.97	N/A	N/A	N/A
Rating Factor	5.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.1	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Live Load Effect	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	9.7	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Resistance - Dead	23.4	0.0	23.4	0.0	23.4	0.0	23.0	0.0
Design Ratio	2.64	N/A	12.22	N/A	(12.22)	(N/A)	(10.18)	(N/A)
Rating Factor	3.09	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	4.5	4.5	4.5	4.5	4.5	4.5	5.4	5.4
Live Load Effect	29.0	-8.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	33.5	-3.9	4.5	4.5	4.5	4.5	5.4	5.4
Resistance - Dead	195.1	-204.2	195.1	195.1	195.1	195.1	194.2	194.2
Design Ratio	5.95	50.75	43.97	43.97	(43.97)	(43.97)	(36.64)	(36.64)
Rating Factor	6.73	24.09	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-7.59	7.59	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.26	9.26	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-22.33	22.33	0.00	0.00	25.67	22.33	0.00	0.00
Design Ratio	2.59	2.59	N/A	N/A	N/A	14.38	N/A	N/A
Rating Factor	2.94	2.94	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-7.59	7.59	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.26	9.26	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-28.33	N/A	0.00	0.00	-28.33	N/A	0.00	0.00
Design Ratio	3.24	N/A	N/A	N/A	17.97	N/A	N/A	N/A
Rating Factor	3.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.1	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Live Load Effect	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	10.0	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Resistance - Dead	23.4	0.0	23.4	0.0	23.4	0.0	23.0	0.0
Design Ratio	2.55	N/A	12.22	N/A	(12.22)	(N/A)	(10.18)	(N/A)
Rating Factor	2.95	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	4.5	4.5	4.5	4.5	4.5	4.5	5.4	5.4
Live Load Effect	30.3	-8.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	34.8	-4.0	4.5	4.5	4.5	4.5	5.4	5.4
Resistance - Dead	195.1	-204.2	195.1	195.1	195.1	195.1	194.2	194.2
Design Ratio	5.74	50.30	43.97	43.97	(43.97)	(43.97)	(36.64)	(36.64)
Rating Factor	6.45	23.99	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-7.93	7.93	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.60	9.60	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-22.33	22.33	0.00	0.00	25.67	22.33	0.00	0.00
Design Ratio	2.50	2.50	N/A	N/A	N/A	14.38	N/A	N/A
Rating Factor	2.82	2.82	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-7.93	7.93	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.60	9.60	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-28.33	N/A	0.00	0.00	-28.33	N/A	0.00	0.00
Design Ratio	3.13	N/A	N/A	N/A	17.97	N/A	N/A	N/A
Rating Factor	3.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.1	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Live Load Effect	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	10.7	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Resistance - Dead	23.4	0.0	23.4	0.0	23.4	0.0	23.0	0.0
Design Ratio	2.39	N/A	12.22	N/A	(12.22)	(N/A)	(10.18)	(N/A)
Rating Factor	2.73	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	4.5	4.5	4.5	4.5	4.5	4.5	5.4	5.4
Live Load Effect	29.2	-5.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	33.7	-0.4	4.5	4.5	4.5	4.5	5.4	5.4
Resistance - Dead	195.1	-204.2	195.1	195.1	195.1	195.1	194.2	194.2
Design Ratio	5.92	486.17	43.97	43.97	(43.97)	(43.97)	(36.64)	(36.64)
Rating Factor	6.69	41.24	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-8.57	8.57	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.24	10.24	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-22.33	22.33	0.00	0.00	25.67	22.33	0.00	0.00
Design Ratio	2.34	2.34	N/A	N/A	N/A	14.38	N/A	N/A
Rating Factor	2.61	2.61	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-8.57	8.57	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.24	10.24	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-28.33	N/A	0.00	0.00	-28.33	N/A	0.00	0.00
Design Ratio	2.93	N/A	N/A	N/A	17.97	N/A	N/A	N/A
Rating Factor	3.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.1	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Live Load Effect	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	10.7	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Resistance - Dead	23.4	0.0	23.4	0.0	23.4	0.0	23.0	0.0
Design Ratio	2.39	N/A	12.22	N/A	(12.22)	(N/A)	(10.18)	(N/A)
Rating Factor	2.73	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	4.5	4.5	4.5	4.5	4.5	4.5	5.4	5.4
Live Load Effect	29.2	-4.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	33.7	0.3	4.5	4.5	4.5	4.5	5.4	5.4
Resistance - Dead	195.1	195.1	195.1	195.1	195.1	195.1	194.2	194.2
Design Ratio	5.92	700.75	43.97	43.97	(43.97)	(43.97)	(36.64)	(36.64)
Rating Factor	6.69	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-8.57	8.57	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.24	10.24	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-22.33	22.33	0.00	0.00	25.67	22.33	0.00	0.00
Design Ratio	2.34	2.34	N/A	N/A	N/A	14.38	N/A	N/A
Rating Factor	2.61	2.61	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-8.57	8.57	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.24	10.24	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-28.33	N/A	0.00	0.00	-28.33	N/A	0.00	0.00
Design Ratio	2.93	N/A	N/A	N/A	17.97	N/A	N/A	N/A
Rating Factor	3.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.1	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Live Load Effect	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	10.7	0.0	2.1	0.0	2.1	0.0	2.5	0.0
Resistance - Dead	23.4	0.0	23.4	0.0	23.4	0.0	23.0	0.0
Design Ratio	2.39	N/A	12.22	N/A	(12.22)	(N/A)	(10.18)	(N/A)
Rating Factor	2.73	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	4.5	4.5	4.5	4.5	4.5	4.5	5.4	5.4
Live Load Effect	30.2	-8.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	34.7	-3.9	4.5	4.5	4.5	4.5	5.4	5.4
Resistance - Dead	195.1	-204.2	195.1	195.1	195.1	195.1	194.2	194.2
Design Ratio	5.75	50.75	43.97	43.97	(43.97)	(43.97)	(36.64)	(36.64)
Rating Factor	6.46	24.09	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-8.57	8.57	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.24	10.24	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-22.33	22.33	0.00	0.00	25.67	22.33	0.00	0.00
Design Ratio	2.34	2.34	N/A	N/A	N/A	14.38	N/A	N/A
Rating Factor	2.61	2.61	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.67	1.67	0.00	0.00	-1.67	1.67	0.00	0.00
Live Load Effect	-8.57	8.57	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.24	10.24	0.00	0.00	-1.67	1.67	0.00	0.00
Resistance - Dead	-28.33	N/A	0.00	0.00	-28.33	N/A	0.00	0.00
Design Ratio	2.93	N/A	N/A	N/A	17.97	N/A	N/A	N/A
Rating Factor	3.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 104.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.0000			
Top Flange Thickness	=	0.5000	Top Flange Width	=	10.5000
Web Depth	=	27.0000	Web Thickness	=	0.5000
Bottom Flange Thickness	=	0.5000	Bottom Flange Width	=	10.5000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 8.267 ft
Maximum distance to Right Brace Point = 12.400 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.4	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Live Load Effect	13.1	0.0	10.1	0.0	10.1	0.0	0.0	0.0
Total Load Effect	15.5	0.0	12.5	0.0	12.5	0.0	2.9	0.0
Resistance - Dead	23.1	0.0	23.1	0.0	23.1	0.0	22.6	0.0
Design Ratio	1.64	N/A	2.04	N/A	(2.04)	(N/A)	(8.91)	(N/A)
Rating Factor	1.76	N/A	2.28	N/A	(2.28)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	-199.7	199.7	-199.7	199.7	199.7
Dead Load Effect	2.3	2.3	2.3	2.3	2.3	2.3	2.7	2.7
Live Load Effect	35.5	-22.8	27.4	-17.6	27.4	-17.6	0.0	0.0
Total Load Effect	37.8	-20.5	29.6	-15.3	29.6	-15.3	2.7	2.7
Resistance - Dead	197.4	-201.9	197.4	-201.9	197.4	-201.9	196.9	196.9
Design Ratio	5.29	9.73	6.73	13.04	(6.73)	(13.04)	(73.28)	(73.28)
Rating Factor	5.56	8.86	7.21	11.49	(7.21)	(11.49)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-9.75	9.75	0.00	0.00	-7.50	7.50	0.00	0.00
Total Load Effect	-11.66	11.66	0.00	0.00	-9.41	9.41	0.00	0.00
Resistance - Dead	-22.09	22.09	0.00	0.00	-22.09	22.09	0.00	0.00
Design Ratio	2.06	2.06	N/A	N/A	2.55	2.55	N/A	N/A
Rating Factor	2.27	2.27	N/A	N/A	2.95	2.95	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-9.75	9.75	0.00	0.00	-7.50	7.50	0.00	0.00
Total Load Effect	-11.66	11.66	0.00	0.00	-9.41	9.41	0.00	0.00
Resistance - Dead	-28.09	N/A	0.00	0.00	-28.09	N/A	0.00	0.00
Design Ratio	2.57	N/A	N/A	N/A	3.19	N/A	N/A	N/A
Rating Factor	2.88	N/A	N/A	N/A	3.75	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.4	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Live Load Effect	16.7	0.0	12.9	0.0	12.9	0.0	0.0	0.0
Total Load Effect	19.1	0.0	15.3	0.0	15.3	0.0	2.9	0.0
Resistance - Dead	23.1	0.0	23.1	0.0	23.1	0.0	22.6	0.0
Design Ratio	1.34	N/A	1.67	N/A	(1.67)	(N/A)	(8.91)	(N/A)
Rating Factor	1.38	N/A	1.79	N/A	(1.79)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	-199.7	199.7	-199.7	199.7	199.7
Dead Load Effect	2.3	2.3	2.3	2.3	2.3	2.3	2.7	2.7
Live Load Effect	45.6	-26.7	35.2	-20.6	35.2	-20.6	0.0	0.0
Total Load Effect	47.8	-24.4	37.4	-18.3	37.4	-18.3	2.7	2.7
Resistance - Dead	197.4	-201.9	197.4	-201.9	197.4	-201.9	196.9	196.9
Design Ratio	4.17	8.18	5.33	10.90	(5.33)	(10.90)	(73.28)	(73.28)
Rating Factor	4.33	7.57	5.61	9.81	(5.61)	(9.81)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-12.41	12.41	0.00	0.00	-9.54	9.54	0.00	0.00
Total Load Effect	-14.31	14.31	0.00	0.00	-11.45	11.45	0.00	0.00
Resistance - Dead	-22.09	22.09	0.00	0.00	-22.09	22.09	0.00	0.00
Design Ratio	1.68	1.68	N/A	N/A	2.10	2.10	N/A	N/A
Rating Factor	1.78	1.78	N/A	N/A	2.32	2.32	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-12.41	12.41	0.00	0.00	-9.54	9.54	0.00	0.00
Total Load Effect	-14.31	14.31	0.00	0.00	-11.45	11.45	0.00	0.00
Resistance - Dead	-28.09	N/A	0.00	0.00	-28.09	N/A	0.00	0.00
Design Ratio	2.10	N/A	N/A	N/A	2.62	N/A	N/A	N/A
Rating Factor	2.26	N/A	N/A	N/A	2.94	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.4	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Live Load Effect	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	9.9	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Resistance - Dead	23.1	0.0	23.1	0.0	23.1	0.0	22.6	0.0
Design Ratio	2.57	N/A	10.69	N/A	(10.69)	(N/A)	(8.91)	(N/A)
Rating Factor	3.06	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	2.3	2.3	2.3	2.3	2.3	2.3	2.7	2.7
Live Load Effect	21.5	-12.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	23.7	-10.5	2.3	2.3	2.3	2.3	2.7	2.7
Resistance - Dead	197.4	-201.9	197.4	197.4	197.4	197.4	196.9	196.9
Design Ratio	8.41	18.97	87.93	87.93	(87.93)	(87.93)	(73.28)	(73.28)
Rating Factor	9.19	15.78	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-7.54	7.54	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.45	9.45	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-22.09	22.09	0.00	0.00	25.91	22.09	0.00	0.00
Design Ratio	2.54	2.54	N/A	N/A	N/A	12.58	N/A	N/A
Rating Factor	2.93	2.93	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-7.54	7.54	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.45	9.45	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-28.09	N/A	0.00	0.00	-28.09	N/A	0.00	0.00
Design Ratio	3.17	N/A	N/A	N/A	15.73	N/A	N/A	N/A
Rating Factor	3.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.4	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Live Load Effect	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	9.3	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Resistance - Dead	23.1	0.0	23.1	0.0	23.1	0.0	22.6	0.0
Design Ratio	2.75	N/A	10.69	N/A	(10.69)	(N/A)	(8.91)	(N/A)
Rating Factor	3.36	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	2.3	2.3	2.3	2.3	2.3	2.3	2.7	2.7
Live Load Effect	19.6	-11.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	21.9	-9.4	2.3	2.3	2.3	2.3	2.7	2.7
Resistance - Dead	197.4	-201.9	197.4	197.4	197.4	197.4	196.9	196.9
Design Ratio	9.12	21.13	87.93	87.93	(87.93)	(87.93)	(73.28)	(73.28)
Rating Factor	10.05	17.23	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-6.87	6.87	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.78	8.78	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-22.09	22.09	0.00	0.00	25.91	22.09	0.00	0.00
Design Ratio	2.73	2.73	N/A	N/A	N/A	12.58	N/A	N/A
Rating Factor	3.21	3.21	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-6.87	6.87	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.78	8.78	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-28.09	N/A	0.00	0.00	-28.09	N/A	0.00	0.00
Design Ratio	3.42	N/A	N/A	N/A	15.73	N/A	N/A	N/A
Rating Factor	4.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.4	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Live Load Effect	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	8.6	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Resistance - Dead	23.1	0.0	23.1	0.0	23.1	0.0	22.6	0.0
Design Ratio	2.97	N/A	10.69	N/A	(10.69)	(N/A)	(8.91)	(N/A)
Rating Factor	3.73	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	2.3	2.3	2.3	2.3	2.3	2.3	2.7	2.7
Live Load Effect	17.7	-10.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	20.0	-8.3	2.3	2.3	2.3	2.3	2.7	2.7
Resistance - Dead	197.4	-201.9	197.4	197.4	197.4	197.4	196.9	196.9
Design Ratio	9.97	23.97	87.93	87.93	(87.93)	(87.93)	(73.28)	(73.28)
Rating Factor	11.12	19.05	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-6.20	6.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.11	8.11	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-22.09	22.09	0.00	0.00	25.91	22.09	0.00	0.00
Design Ratio	2.96	2.96	N/A	N/A	N/A	12.58	N/A	N/A
Rating Factor	3.56	3.56	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-6.20	6.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.11	8.11	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-28.09	N/A	0.00	0.00	-28.09	N/A	0.00	0.00
Design Ratio	3.70	N/A	N/A	N/A	15.73	N/A	N/A	N/A
Rating Factor	4.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.4	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Live Load Effect	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	11.0	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Resistance - Dead	23.1	0.0	23.1	0.0	23.1	0.0	22.6	0.0
Design Ratio	2.32	N/A	10.69	N/A	(10.69)	(N/A)	(8.91)	(N/A)
Rating Factor	2.68	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	2.3	2.3	2.3	2.3	2.3	2.3	2.7	2.7
Live Load Effect	23.6	-12.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	25.9	-10.6	2.3	2.3	2.3	2.3	2.7	2.7
Resistance - Dead	197.4	-201.9	197.4	197.4	197.4	197.4	196.9	196.9
Design Ratio	7.71	18.77	87.93	87.93	(87.93)	(87.93)	(73.28)	(73.28)
Rating Factor	8.35	15.64	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-8.61	8.61	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.52	10.52	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-22.09	22.09	0.00	0.00	25.91	22.09	0.00	0.00
Design Ratio	2.28	2.28	N/A	N/A	N/A	12.58	N/A	N/A
Rating Factor	2.57	2.57	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-8.61	8.61	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.52	10.52	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-28.09	N/A	0.00	0.00	-28.09	N/A	0.00	0.00
Design Ratio	2.85	N/A	N/A	N/A	15.73	N/A	N/A	N/A
Rating Factor	3.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.4	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Live Load Effect	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	11.4	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Resistance - Dead	23.1	0.0	23.1	0.0	23.1	0.0	22.6	0.0
Design Ratio	2.24	N/A	10.69	N/A	(10.69)	(N/A)	(8.91)	(N/A)
Rating Factor	2.57	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	2.3	2.3	2.3	2.3	2.3	2.3	2.7	2.7
Live Load Effect	23.9	-13.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	26.1	-10.7	2.3	2.3	2.3	2.3	2.7	2.7
Resistance - Dead	197.4	-201.9	197.4	197.4	197.4	197.4	196.9	196.9
Design Ratio	7.64	18.68	87.93	87.93	(87.93)	(87.93)	(73.28)	(73.28)
Rating Factor	8.27	15.58	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-9.00	9.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.91	10.91	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-22.09	22.09	0.00	0.00	25.91	22.09	0.00	0.00
Design Ratio	2.20	2.20	N/A	N/A	N/A	12.58	N/A	N/A
Rating Factor	2.45	2.45	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-9.00	9.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.91	10.91	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-28.09	N/A	0.00	0.00	-28.09	N/A	0.00	0.00
Design Ratio	2.75	N/A	N/A	N/A	15.73	N/A	N/A	N/A
Rating Factor	3.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.4	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Live Load Effect	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	11.8	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Resistance - Dead	23.1	0.0	23.1	0.0	23.1	0.0	22.6	0.0
Design Ratio	2.15	N/A	10.69	N/A	(10.69)	(N/A)	(8.91)	(N/A)
Rating Factor	2.44	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	2.3	2.3	2.3	2.3	2.3	2.3	2.7	2.7
Live Load Effect	21.8	-8.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	24.1	-6.6	2.3	2.3	2.3	2.3	2.7	2.7
Resistance - Dead	197.4	-201.9	197.4	197.4	197.4	197.4	196.9	196.9
Design Ratio	8.30	30.44	87.93	87.93	(87.93)	(87.93)	(73.28)	(73.28)
Rating Factor	9.06	22.87	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-9.47	9.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.37	11.37	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-22.09	22.09	0.00	0.00	25.91	22.09	0.00	0.00
Design Ratio	2.11	2.11	N/A	N/A	N/A	12.58	N/A	N/A
Rating Factor	2.33	2.33	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-9.47	9.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.37	11.37	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-28.09	N/A	0.00	0.00	-28.09	N/A	0.00	0.00
Design Ratio	2.64	N/A	N/A	N/A	15.73	N/A	N/A	N/A
Rating Factor	2.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.4	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Live Load Effect	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	11.9	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Resistance - Dead	23.1	0.0	23.1	0.0	23.1	0.0	22.6	0.0
Design Ratio	2.14	N/A	10.69	N/A	(10.69)	(N/A)	(8.91)	(N/A)
Rating Factor	2.43	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	2.3	2.3	2.3	2.3	2.3	2.3	2.7	2.7
Live Load Effect	21.7	-6.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	23.9	-4.4	2.3	2.3	2.3	2.3	2.7	2.7
Resistance - Dead	197.4	-201.9	197.4	197.4	197.4	197.4	196.9	196.9
Design Ratio	8.35	45.54	87.93	87.93	(87.93)	(87.93)	(73.28)	(73.28)
Rating Factor	9.12	30.34	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-9.51	9.51	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.42	11.42	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-22.09	22.09	0.00	0.00	25.91	22.09	0.00	0.00
Design Ratio	2.10	2.10	N/A	N/A	N/A	12.58	N/A	N/A
Rating Factor	2.32	2.32	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-9.51	9.51	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.42	11.42	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-28.09	N/A	0.00	0.00	-28.09	N/A	0.00	0.00
Design Ratio	2.63	N/A	N/A	N/A	15.73	N/A	N/A	N/A
Rating Factor	2.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.4	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Live Load Effect	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	11.9	0.0	2.4	0.0	2.4	0.0	2.9	0.0
Resistance - Dead	23.1	0.0	23.1	0.0	23.1	0.0	22.6	0.0
Design Ratio	2.14	N/A	10.69	N/A	(10.69)	(N/A)	(8.91)	(N/A)
Rating Factor	2.43	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	2.3	2.3	2.3	2.3	2.3	2.3	2.7	2.7
Live Load Effect	23.8	-12.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	26.1	-10.6	2.3	2.3	2.3	2.3	2.7	2.7
Resistance - Dead	197.4	-201.9	197.4	197.4	197.4	197.4	196.9	196.9
Design Ratio	7.66	18.77	87.93	87.93	(87.93)	(87.93)	(73.28)	(73.28)
Rating Factor	8.29	15.64	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-9.51	9.51	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.42	11.42	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-22.09	22.09	0.00	0.00	25.91	22.09	0.00	0.00
Design Ratio	2.10	2.10	N/A	N/A	N/A	12.58	N/A	N/A
Rating Factor	2.32	2.32	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.91	1.91	0.00	0.00	-1.91	1.91	0.00	0.00
Live Load Effect	-9.51	9.51	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.42	11.42	0.00	0.00	-1.91	1.91	0.00	0.00
Resistance - Dead	-28.09	N/A	0.00	0.00	-28.09	N/A	0.00	0.00
Design Ratio	2.63	N/A	N/A	N/A	15.73	N/A	N/A	N/A
Rating Factor	2.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 104.500
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.0000			
Top Flange Thickness	=	0.5000	Top Flange Width	=	10.5000
Web Depth	=	27.0000	Web Thickness	=	0.5000
Bottom Flange Thickness	=	0.5000	Bottom Flange Width	=	10.5000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 9.300 ft
Maximum distance to Right Brace Point = 11.367 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	13.5	0.0	10.4	0.0	10.4	0.0	0.0	0.0
Total Load Effect	16.0	0.0	12.9	0.0	12.9	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	1.60	N/A	1.98	N/A	(1.98)	(N/A)	(8.64)	(N/A)
Rating Factor	1.70	N/A	2.21	N/A	(2.21)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	-199.7	199.7	-199.7	199.7	199.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.4	1.4
Live Load Effect	32.3	-25.9	24.9	-20.0	24.9	-20.0	0.0	0.0
Total Load Effect	33.4	-24.8	26.0	-18.8	26.0	-18.8	1.4	1.4
Resistance - Dead	198.5	-200.8	198.5	-200.8	198.5	-200.8	198.3	198.3
Design Ratio	5.98	8.06	7.68	10.60	(7.68)	(10.60)	(146.56)	(146.56)
Rating Factor	6.16	7.75	7.98	10.05	(7.98)	(10.05)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-10.04	10.04	0.00	0.00	-7.73	7.73	0.00	0.00
Total Load Effect	-12.01	12.01	0.00	0.00	-9.69	9.69	0.00	0.00
Resistance - Dead	-22.03	22.03	0.00	0.00	-22.03	22.03	0.00	0.00
Design Ratio	2.00	2.00	N/A	N/A	2.48	2.48	N/A	N/A
Rating Factor	2.19	2.19	N/A	N/A	2.85	2.85	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-10.04	10.04	0.00	0.00	-7.73	7.73	0.00	0.00
Total Load Effect	-12.01	12.01	0.00	0.00	-9.69	9.69	0.00	0.00
Resistance - Dead	-28.03	N/A	0.00	0.00	-28.03	N/A	0.00	0.00
Design Ratio	2.50	N/A	N/A	N/A	3.10	N/A	N/A	N/A
Rating Factor	2.79	N/A	N/A	N/A	3.63	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	17.0	0.0	13.1	0.0	13.1	0.0	0.0	0.0
Total Load Effect	19.4	0.0	15.6	0.0	15.6	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	1.31	N/A	1.64	N/A	(1.64)	(N/A)	(8.64)	(N/A)
Rating Factor	1.36	N/A	1.76	N/A	(1.76)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	-199.7	199.7	-199.7	199.7	199.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.4	1.4
Live Load Effect	40.8	-31.3	31.5	-24.2	31.5	-24.2	0.0	0.0
Total Load Effect	41.9	-30.2	32.6	-23.0	32.6	-23.0	1.4	1.4
Resistance - Dead	198.5	-200.8	198.5	-200.8	198.5	-200.8	198.3	198.3
Design Ratio	4.76	6.61	6.12	8.66	(6.12)	(8.66)	(146.56)	(146.56)
Rating Factor	4.87	6.41	6.31	8.30	(6.31)	(8.30)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-12.62	12.62	0.00	0.00	-9.71	9.71	0.00	0.00
Total Load Effect	-14.58	14.58	0.00	0.00	-11.67	11.67	0.00	0.00
Resistance - Dead	-22.03	22.03	0.00	0.00	-22.03	22.03	0.00	0.00
Design Ratio	1.65	1.65	N/A	N/A	2.06	2.06	N/A	N/A
Rating Factor	1.75	1.75	N/A	N/A	2.27	2.27	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-12.62	12.62	0.00	0.00	-9.71	9.71	0.00	0.00
Total Load Effect	-14.58	14.58	0.00	0.00	-11.67	11.67	0.00	0.00
Resistance - Dead	-28.03	N/A	0.00	0.00	-28.03	N/A	0.00	0.00
Design Ratio	2.06	N/A	N/A	N/A	2.57	N/A	N/A	N/A
Rating Factor	2.22	N/A	N/A	N/A	2.89	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	10.1	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.52	N/A	10.37	N/A	(10.37)	(N/A)	(8.64)	(N/A)
Rating Factor	3.01	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.4	1.4
Live Load Effect	19.3	-15.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	20.4	-13.8	1.1	1.1	1.1	1.1	1.4	1.4
Resistance - Dead	198.5	-200.8	198.5	198.5	198.5	198.5	198.3	198.3
Design Ratio	9.77	14.44	175.87	175.87	(175.87)	(175.87)	(146.56)	(146.56)
Rating Factor	10.28	13.42	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-7.66	7.66	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.62	9.62	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-22.03	22.03	0.00	0.00	25.97	22.03	0.00	0.00
Design Ratio	2.49	2.49	N/A	N/A	N/A	12.20	N/A	N/A
Rating Factor	2.88	2.88	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-7.66	7.66	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.62	9.62	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-28.03	N/A	0.00	0.00	-28.03	N/A	0.00	0.00
Design Ratio	3.12	N/A	N/A	N/A	15.25	N/A	N/A	N/A
Rating Factor	3.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	9.4	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.70	N/A	10.37	N/A	(10.37)	(N/A)	(8.64)	(N/A)
Rating Factor	3.30	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.4	1.4
Live Load Effect	17.7	-13.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	18.8	-12.6	1.1	1.1	1.1	1.1	1.4	1.4
Resistance - Dead	198.5	-200.8	198.5	198.5	198.5	198.5	198.3	198.3
Design Ratio	10.63	15.89	175.87	175.87	(175.87)	(175.87)	(146.56)	(146.56)
Rating Factor	11.25	14.66	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-6.97	6.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.94	8.94	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-22.03	22.03	0.00	0.00	25.97	22.03	0.00	0.00
Design Ratio	2.68	2.68	N/A	N/A	N/A	12.20	N/A	N/A
Rating Factor	3.16	3.16	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-6.97	6.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.94	8.94	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-28.03	N/A	0.00	0.00	-28.03	N/A	0.00	0.00
Design Ratio	3.36	N/A	N/A	N/A	15.25	N/A	N/A	N/A
Rating Factor	4.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	8.8	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.91	N/A	10.37	N/A	(10.37)	(N/A)	(8.64)	(N/A)
Rating Factor	3.66	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.4	1.4
Live Load Effect	16.0	-12.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	17.1	-11.3	1.1	1.1	1.1	1.1	1.4	1.4
Resistance - Dead	198.5	-200.8	198.5	198.5	198.5	198.5	198.3	198.3
Design Ratio	11.68	17.75	175.87	175.87	(175.87)	(175.87)	(146.56)	(146.56)
Rating Factor	12.44	16.21	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-6.30	6.30	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.26	8.26	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-22.03	22.03	0.00	0.00	25.97	22.03	0.00	0.00
Design Ratio	2.90	2.90	N/A	N/A	N/A	12.20	N/A	N/A
Rating Factor	3.50	3.50	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-6.30	6.30	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.26	8.26	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-28.03	N/A	0.00	0.00	-28.03	N/A	0.00	0.00
Design Ratio	3.63	N/A	N/A	N/A	15.25	N/A	N/A	N/A
Rating Factor	4.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	11.3	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.25	N/A	10.37	N/A	(10.37)	(N/A)	(8.64)	(N/A)
Rating Factor	2.60	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.4	1.4
Live Load Effect	20.9	-15.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	22.1	-14.5	1.1	1.1	1.1	1.1	1.4	1.4
Resistance - Dead	198.5	-200.8	198.5	198.5	198.5	198.5	198.3	198.3
Design Ratio	9.04	13.82	175.87	175.87	(175.87)	(175.87)	(146.56)	(146.56)
Rating Factor	9.48	12.88	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-8.88	8.88	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.84	10.84	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-22.03	22.03	0.00	0.00	25.97	22.03	0.00	0.00
Design Ratio	2.21	2.21	N/A	N/A	N/A	12.20	N/A	N/A
Rating Factor	2.48	2.48	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-8.88	8.88	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.84	10.84	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-28.03	N/A	0.00	0.00	-28.03	N/A	0.00	0.00
Design Ratio	2.77	N/A	N/A	N/A	15.25	N/A	N/A	N/A
Rating Factor	3.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	11.8	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.16	N/A	10.37	N/A	(10.37)	(N/A)	(8.64)	(N/A)
Rating Factor	2.47	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.4	1.4
Live Load Effect	21.0	-15.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	22.1	-14.5	1.1	1.1	1.1	1.1	1.4	1.4
Resistance - Dead	198.5	-200.8	198.5	198.5	198.5	198.5	198.3	198.3
Design Ratio	9.02	13.77	175.87	175.87	(175.87)	(175.87)	(146.56)	(146.56)
Rating Factor	9.45	12.84	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-9.33	9.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.30	11.30	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-22.03	22.03	0.00	0.00	25.97	22.03	0.00	0.00
Design Ratio	2.12	2.12	N/A	N/A	N/A	12.20	N/A	N/A
Rating Factor	2.36	2.36	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-9.33	9.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.30	11.30	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-28.03	N/A	0.00	0.00	-28.03	N/A	0.00	0.00
Design Ratio	2.65	N/A	N/A	N/A	15.25	N/A	N/A	N/A
Rating Factor	3.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	12.3	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.08	N/A	10.37	N/A	(10.37)	(N/A)	(8.64)	(N/A)
Rating Factor	2.34	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.4	1.4
Live Load Effect	18.4	-12.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	19.5	-10.9	1.1	1.1	1.1	1.1	1.4	1.4
Resistance - Dead	198.5	-200.8	198.5	198.5	198.5	198.5	198.3	198.3
Design Ratio	10.22	18.34	175.87	175.87	(175.87)	(175.87)	(146.56)	(146.56)
Rating Factor	10.79	16.71	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-9.83	9.83	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.79	11.79	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-22.03	22.03	0.00	0.00	25.97	22.03	0.00	0.00
Design Ratio	2.04	2.04	N/A	N/A	N/A	12.20	N/A	N/A
Rating Factor	2.24	2.24	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-9.83	9.83	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.79	11.79	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-28.03	N/A	0.00	0.00	-28.03	N/A	0.00	0.00
Design Ratio	2.54	N/A	N/A	N/A	15.25	N/A	N/A	N/A
Rating Factor	2.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	12.3	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.08	N/A	10.37	N/A	(10.37)	(N/A)	(8.64)	(N/A)
Rating Factor	2.35	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.4	1.4
Live Load Effect	17.8	-10.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	18.9	-9.2	1.1	1.1	1.1	1.1	1.4	1.4
Resistance - Dead	198.5	-200.8	198.5	198.5	198.5	198.5	198.3	198.3
Design Ratio	10.57	21.65	175.87	175.87	(175.87)	(175.87)	(146.56)	(146.56)
Rating Factor	11.18	19.39	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-9.82	9.82	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.79	11.79	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-22.03	22.03	0.00	0.00	25.97	22.03	0.00	0.00
Design Ratio	2.04	2.04	N/A	N/A	N/A	12.20	N/A	N/A
Rating Factor	2.24	2.24	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-9.82	9.82	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.79	11.79	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-28.03	N/A	0.00	0.00	-28.03	N/A	0.00	0.00
Design Ratio	2.54	N/A	N/A	N/A	15.25	N/A	N/A	N/A
Rating Factor	2.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	12.3	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.08	N/A	10.37	N/A	(10.37)	(N/A)	(8.64)	(N/A)
Rating Factor	2.35	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.4	1.4
Live Load Effect	20.9	-15.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	22.1	-14.5	1.1	1.1	1.1	1.1	1.4	1.4
Resistance - Dead	198.5	-200.8	198.5	198.5	198.5	198.5	198.3	198.3
Design Ratio	9.04	13.82	175.87	175.87	(175.87)	(175.87)	(146.56)	(146.56)
Rating Factor	9.48	12.88	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-9.82	9.82	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.79	11.79	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-22.03	22.03	0.00	0.00	25.97	22.03	0.00	0.00
Design Ratio	2.04	2.04	N/A	N/A	N/A	12.20	N/A	N/A
Rating Factor	2.24	2.24	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.97	1.97	0.00	0.00	-1.97	1.97	0.00	0.00
Live Load Effect	-9.82	9.82	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.79	11.79	0.00	0.00	-1.97	1.97	0.00	0.00
Resistance - Dead	-28.03	N/A	0.00	0.00	-28.03	N/A	0.00	0.00
Design Ratio	2.54	N/A	N/A	N/A	15.25	N/A	N/A	N/A
Rating Factor	2.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 105.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.0000			
Top Flange Thickness	=	0.5000	Top Flange Width	=	10.5000
Web Depth	=	27.0000	Web Thickness	=	0.5000
Bottom Flange Thickness	=	0.5000	Bottom Flange Width	=	10.5000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 10.333 ft
Maximum distance to Right Brace Point = 10.333 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	13.6	0.0	10.5	0.0	10.5	0.0	0.0	0.0
Total Load Effect	16.1	0.0	13.0	0.0	13.0	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	1.58	N/A	1.96	N/A	(1.96)	(N/A)	(8.55)	(N/A)
Rating Factor	1.69	N/A	2.19	N/A	(2.19)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	-199.7	199.7	-199.7	199.7	199.7
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	29.1	-29.1	22.4	-22.4	22.4	-22.4	0.0	0.0
Total Load Effect	29.1	-29.1	22.4	-22.4	22.4	-22.4	0.0	0.0
Resistance - Dead	199.7	-199.7	199.7	-199.7	199.7	-199.7	199.7	199.7
Design Ratio	6.87	6.87	8.91	8.91	(8.91)	(8.91)	(N/A)	(N/A)
Rating Factor	6.87	6.87	8.91	8.91	(8.91)	(8.91)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-10.13	10.13	0.00	0.00	-7.79	7.79	0.00	0.00
Total Load Effect	-12.12	12.12	0.00	0.00	-9.78	9.78	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	-22.01	22.01	0.00	0.00
Design Ratio	1.98	1.98	N/A	N/A	2.45	2.45	N/A	N/A
Rating Factor	2.17	2.17	N/A	N/A	2.82	2.82	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-10.13	10.13	0.00	0.00	-7.79	7.79	0.00	0.00
Total Load Effect	-12.12	12.12	0.00	0.00	-9.78	9.78	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.48	N/A	N/A	N/A	3.07	N/A	N/A	N/A
Rating Factor	2.77	N/A	N/A	N/A	3.59	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	16.9	0.0	13.0	0.0	13.0	0.0	0.0	0.0
Total Load Effect	19.3	0.0	15.5	0.0	15.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	1.32	N/A	1.65	N/A	(1.65)	(N/A)	(8.55)	(N/A)
Rating Factor	1.37	N/A	1.77	N/A	(1.77)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	-199.7	199.7	-199.7	199.7	199.7
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	36.0	-36.0	27.8	-27.8	27.8	-27.8	0.0	0.0
Total Load Effect	36.0	-36.0	27.8	-27.8	27.8	-27.8	0.0	0.0
Resistance - Dead	199.7	-199.7	199.7	-199.7	199.7	-199.7	199.7	199.7
Design Ratio	5.54	5.54	7.18	7.18	(7.18)	(7.18)	(N/A)	(N/A)
Rating Factor	5.54	5.54	7.18	7.18	(7.18)	(7.18)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-12.52	12.52	0.00	0.00	-9.63	9.63	0.00	0.00
Total Load Effect	-14.51	14.51	0.00	0.00	-11.62	11.62	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	-22.01	22.01	0.00	0.00
Design Ratio	1.65	1.65	N/A	N/A	2.07	2.07	N/A	N/A
Rating Factor	1.76	1.76	N/A	N/A	2.29	2.29	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-12.52	12.52	0.00	0.00	-9.63	9.63	0.00	0.00
Total Load Effect	-14.51	14.51	0.00	0.00	-11.62	11.62	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.07	N/A	N/A	N/A	2.58	N/A	N/A	N/A
Rating Factor	2.24	N/A	N/A	N/A	2.91	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	10.1	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.53	N/A	10.27	N/A	(10.27)	(N/A)	(8.55)	(N/A)
Rating Factor	3.04	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	17.1	-17.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	17.1	-17.1	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Design Ratio	11.65	11.65	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	11.65	11.65	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-7.58	7.58	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.57	9.57	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	2.51	2.51	N/A	N/A	N/A	12.08	N/A	N/A
Rating Factor	2.90	2.90	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-7.58	7.58	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.57	9.57	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	3.14	N/A	N/A	N/A	15.10	N/A	N/A	N/A
Rating Factor	3.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	9.4	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.71	N/A	10.27	N/A	(10.27)	(N/A)	(8.55)	(N/A)
Rating Factor	3.33	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	15.7	-15.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	15.7	-15.7	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Design Ratio	12.74	12.74	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	12.74	12.74	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-6.91	6.91	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.90	8.90	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	2.70	2.70	N/A	N/A	N/A	12.08	N/A	N/A
Rating Factor	3.19	3.19	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-6.91	6.91	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.90	8.90	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	3.37	N/A	N/A	N/A	15.10	N/A	N/A	N/A
Rating Factor	4.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	8.7	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.92	N/A	10.27	N/A	(10.27)	(N/A)	(8.55)	(N/A)
Rating Factor	3.69	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	14.2	-14.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	14.2	-14.2	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Design Ratio	14.09	14.09	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	14.09	14.09	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-6.24	6.24	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.23	8.23	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	2.92	2.92	N/A	N/A	N/A	12.08	N/A	N/A
Rating Factor	3.53	3.53	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-6.24	6.24	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.23	8.23	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	3.65	N/A	N/A	N/A	15.10	N/A	N/A	N/A
Rating Factor	4.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	11.4	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.24	N/A	10.27	N/A	(10.27)	(N/A)	(8.55)	(N/A)
Rating Factor	2.58	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	18.3	-18.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	18.3	-18.3	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Design Ratio	10.93	10.93	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	10.93	10.93	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-8.91	8.91	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.90	10.90	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	2.20	2.20	N/A	N/A	N/A	12.08	N/A	N/A
Rating Factor	2.47	2.47	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-8.91	8.91	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.90	10.90	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.75	N/A	N/A	N/A	15.10	N/A	N/A	N/A
Rating Factor	3.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	11.9	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.15	N/A	10.27	N/A	(10.27)	(N/A)	(8.55)	(N/A)
Rating Factor	2.45	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	18.3	-18.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	18.3	-18.3	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Design Ratio	10.90	10.90	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	10.90	10.90	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-9.39	9.39	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.38	11.38	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	2.11	2.11	N/A	N/A	N/A	12.08	N/A	N/A
Rating Factor	2.34	2.34	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-9.39	9.39	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.38	11.38	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.64	N/A	N/A	N/A	15.10	N/A	N/A	N/A
Rating Factor	2.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	12.4	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.06	N/A	10.27	N/A	(10.27)	(N/A)	(8.55)	(N/A)
Rating Factor	2.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	15.2	-15.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	15.2	-15.2	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Design Ratio	13.13	13.13	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	13.13	13.13	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-9.90	9.90	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.89	11.89	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	2.02	2.02	N/A	N/A	N/A	12.08	N/A	N/A
Rating Factor	2.22	2.22	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-9.90	9.90	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.89	11.89	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.52	N/A	N/A	N/A	15.10	N/A	N/A	N/A
Rating Factor	2.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	12.4	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.06	N/A	10.27	N/A	(10.27)	(N/A)	(8.55)	(N/A)
Rating Factor	2.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	14.1	-14.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	14.1	-14.1	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Design Ratio	14.20	14.20	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	14.20	14.20	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-9.90	9.90	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.89	11.89	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	2.02	2.02	N/A	N/A	N/A	12.08	N/A	N/A
Rating Factor	2.22	2.22	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-9.90	9.90	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.89	11.89	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.52	N/A	N/A	N/A	15.10	N/A	N/A	N/A
Rating Factor	2.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	2.5	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Live Load Effect	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	12.4	0.0	2.5	0.0	2.5	0.0	3.0	0.0
Resistance - Dead	23.0	0.0	23.0	0.0	23.0	0.0	22.5	0.0
Design Ratio	2.06	N/A	10.27	N/A	(10.27)	(N/A)	(8.55)	(N/A)
Rating Factor	2.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	18.3	-18.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	18.3	-18.3	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	199.7	-199.7	199.7	199.7	199.7	199.7	199.7	199.7
Design Ratio	10.93	10.93	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	10.93	10.93	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-9.91	9.91	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.90	11.90	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	2.02	2.02	N/A	N/A	N/A	12.08	N/A	N/A
Rating Factor	2.22	2.22	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-9.91	9.91	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.90	11.90	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.52	N/A	N/A	N/A	15.10	N/A	N/A	N/A
Rating Factor	2.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

RATING FACTOR SUMMARY: Design Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.34	N/A	3.04	N/A	3.04	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.21	N/A	2.86	N/A	2.86	N/A	N/A	N/A
Critical	2.21	N/A	2.86	N/A	(2.86)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A		N/A		N/A		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	4.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.66	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	4.10	N/A	5.32	N/A	5.32	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.71	N/A	4.81	N/A	4.81	N/A	N/A	N/A
Critical	3.71	N/A	4.81	N/A	(4.81) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.80	N/A	3.63	N/A	3.63	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.53	N/A	3.29	N/A	3.29	N/A	N/A	N/A
Critical	2.53	N/A	3.29	N/A	(3.29) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	5.23	5.23	N/A	N/A	6.79	6.79	N/A	N/A
2 - HL-93-TANDEM (TRK)	4.72	4.72	N/A	N/A	6.14	6.14	N/A	N/A
Critical	4.72		N/A		6.14		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	6.57	N/A	N/A	N/A	8.55	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	5.94	N/A	N/A	N/A	7.72	N/A	N/A	N/A
Critical	5.94		N/A		7.72		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	8.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	8.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	9.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	7.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	6.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	6.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	6.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	6.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		6.38	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	5.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	7.73	7.73	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	7.93	7.93	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	9.41	9.41	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	6.69	6.69	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	6.27	6.27	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	6.27	6.27	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	6.23	6.23	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	6.04	6.04	N/A	N/A	N/A	N/A	N/A	N/A
Critical		6.04		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	9.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	9.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	11.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	8.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	7.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	7.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	7.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	7.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		7.59		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.41	N/A	3.12	N/A	3.12	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.06	N/A	2.67	N/A	2.67	N/A	N/A	N/A
Critical	2.06	N/A	2.67	N/A	(2.67)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.47	19.16	4.50	24.84	4.50	24.84	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.96	24.32	3.84	N/A	3.84	N/A	N/A	N/A
Critical	2.96	19.16	3.84	24.84	(3.84)	(24.84)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.08	3.08	N/A	N/A	4.01	4.01	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.63	2.63	N/A	N/A	3.42	3.42	N/A	N/A
Critical	2.63		N/A		3.42		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.90	N/A	N/A	N/A	5.07	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.33	N/A	N/A	N/A	4.33	N/A	N/A	N/A
Critical	3.33		N/A		4.33		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	4.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.99	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.69	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	6.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	6.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	7.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	5.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	5.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	5.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	5.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		5.26	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	4.31	4.31	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.59	4.59	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.26	5.26	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.80	3.80	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.57	3.57	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.54	3.54	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.53	3.53	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.51	3.51	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.51		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	5.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.43		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.99	N/A	2.58	N/A	2.58	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.57	N/A	2.03	N/A	2.03	N/A	N/A	N/A
Critical	1.57	N/A	2.03	N/A	(2.03)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	4.51	12.23	5.85	15.86	5.85	15.86	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.53	11.67	4.58	15.12	4.58	15.12	N/A	N/A
Critical	3.53	11.67	4.58	15.12	(4.58)	(15.12)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.55	2.55	N/A	N/A	3.32	3.32	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.01	2.01	N/A	N/A	2.61	2.61	N/A	N/A
Critical	2.01		N/A		2.61		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.24	N/A	N/A	N/A	4.21	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.55	N/A	N/A	N/A	3.32	N/A	N/A	N/A
Critical	2.55		N/A		3.32		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	3.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	3.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.73	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	7.56	24.14	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	8.27	26.30	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	9.15	29.06	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	6.73	24.09	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	6.45	23.99	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	6.69	41.24	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	6.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	6.46	24.09	N/A	N/A	N/A	N/A	N/A	N/A
Critical		6.45	23.99	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	3.30	3.30	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	3.62	3.62	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.01	4.01	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.94	2.94	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.82	2.82	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.61	2.61	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.61	2.61	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.61	2.61	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.61		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	4.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.31		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.76	N/A	2.28	N/A	2.28	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.38	N/A	1.79	N/A	1.79	N/A	N/A	N/A
Critical	1.38	N/A	1.79	N/A	(1.79) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	5.56	8.86	7.21	11.49	7.21	11.49	N/A	N/A
2 - HL-93-TANDEM (TRK)	4.33	7.57	5.61	9.81	5.61	9.81	N/A	N/A
Critical	4.33	7.57	5.61	9.81	(5.61) (	9.81) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.27	2.27	N/A	N/A	2.95	2.95	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.78	1.78	N/A	N/A	2.32	2.32	N/A	N/A
Critical	1.78		N/A		2.32		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.88	N/A	N/A	N/A	3.75	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.26	N/A	N/A	N/A	2.94	N/A	N/A	N/A
Critical	2.26		N/A		2.94		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	3.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	3.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	3.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.43	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	9.19	15.78	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	10.05	17.23	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	11.12	19.05	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	8.35	15.64	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	8.27	15.58	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	9.06	22.87	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	9.12	30.34	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	8.29	15.64	N/A	N/A	N/A	N/A	N/A	N/A
Critical		8.27	15.58	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	2.93	2.93	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	3.21	3.21	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	3.56	3.56	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.57	2.57	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.45	2.45	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.33	2.33	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.32	2.32	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.32	2.32	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.32		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	3.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.95		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.70	N/A	2.21	N/A	2.21	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.36	N/A	1.76	N/A	1.76	N/A	N/A	N/A
Critical	1.36	N/A	1.76	N/A	(1.76)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	6.16	7.75	7.98	10.05	7.98	10.05	N/A	N/A
2 - HL-93-TANDEM (TRK)	4.87	6.41	6.31	8.30	6.31	8.30	N/A	N/A
Critical	4.87	6.41	6.31	8.30	(6.31)	(8.30)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.19	2.19	N/A	N/A	2.85	2.85	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.75	1.75	N/A	N/A	2.27	2.27	N/A	N/A
Critical	1.75		N/A		2.27		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.79	N/A	N/A	N/A	3.63	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.22	N/A	N/A	N/A	2.89	N/A	N/A	N/A
Critical	2.22		N/A		2.89		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	3.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	3.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	3.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.34	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	10.28	13.42	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	11.25	14.66	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	12.44	16.21	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	9.48	12.88	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	9.45	12.84	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	10.79	16.71	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	11.18	19.39	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	9.48	12.88	N/A	N/A	N/A	N/A	N/A	N/A
Critical		9.45	12.84	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	2.88	2.88	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	3.16	3.16	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	3.50	3.50	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.48	2.48	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.36	2.36	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.24	2.24	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.24	2.24	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.24	2.24	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.24		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	3.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.85		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.69	N/A	2.19	N/A	2.19	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.37	N/A	1.77	N/A	1.77	N/A	N/A	N/A
Critical	1.37	N/A	1.77	N/A	(1.77) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	6.87	6.87	8.91	8.91	8.91	8.91	N/A	N/A
2 - HL-93-TANDEM (TRK)	5.54	5.54	7.18	7.18	7.18	7.18	N/A	N/A
Critical	5.54	5.54	7.18	7.18	(7.18) (	7.18) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.17	2.17	N/A	N/A	2.82	2.82	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.76	1.76	N/A	N/A	2.29	2.29	N/A	N/A
Critical	1.76		N/A		2.29		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.77	N/A	N/A	N/A	3.59	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.24	N/A	N/A	N/A	2.91	N/A	N/A	N/A
Critical	2.24		N/A		2.91		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	3.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	3.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	3.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	11.65	11.65	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	12.74	12.74	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	14.09	14.09	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	10.93	10.93	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	10.90	10.90	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	13.13	13.13	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	14.20	14.20	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	10.93	10.93	N/A	N/A	N/A	N/A	N/A	N/A
Critical		10.90	10.90	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	2.90	2.90	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	3.19	3.19	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	3.53	3.53	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.47	2.47	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.34	2.34	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.22	2.22	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.22	2.22	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.22	2.22	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.22		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	3.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.83		N/A		N/A		N/A	

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load Combination No.	Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I	1.69	60.76
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I	1.36	33.92
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I	1.36	33.92

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I-O	2.19	78.76
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I-O	1.76	43.96
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I-O	1.76	43.96

CRITICAL RATING FACTOR SUMMARY: Legal Load

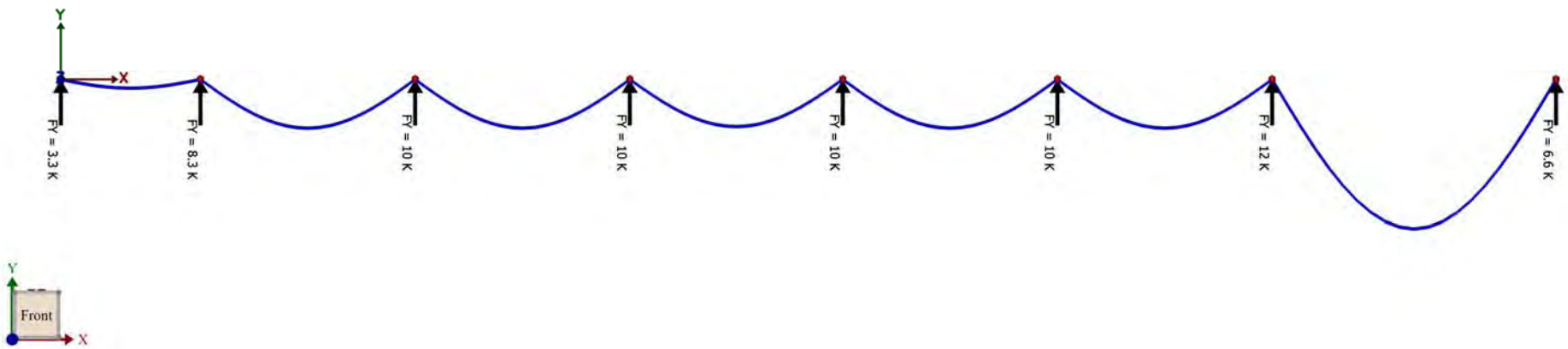
Legal Load							
3	TYPE3	(TRK)	25.00	104.5000	SERVICE II	2.88	71.94
4	TYPE3S2	(TRK)	36.00	104.5000	SERVICE II	3.16	113.72
5	TYPE3-3	(TRK)	40.00	104.5000	SERVICE II	3.50	139.99
6	SU4	(TRK)	27.00	105.0000	SERVICE II	2.47	66.71
7	SU5	(TRK)	31.00	105.0000	SERVICE II	2.34	72.68
8	SU6	(TRK)	34.75	105.0000	SERVICE II	2.22	77.27
9	SU7	(TRK)	38.75	105.0000	SERVICE II	2.22	86.16
10	NRL	(TRK)	40.00	105.0000	SERVICE II	2.22	88.87
Crit	NRL	(TRK)	40.00	105.0000	SERVICE II	2.22	88.87

LIMIT STATE LEGEND:

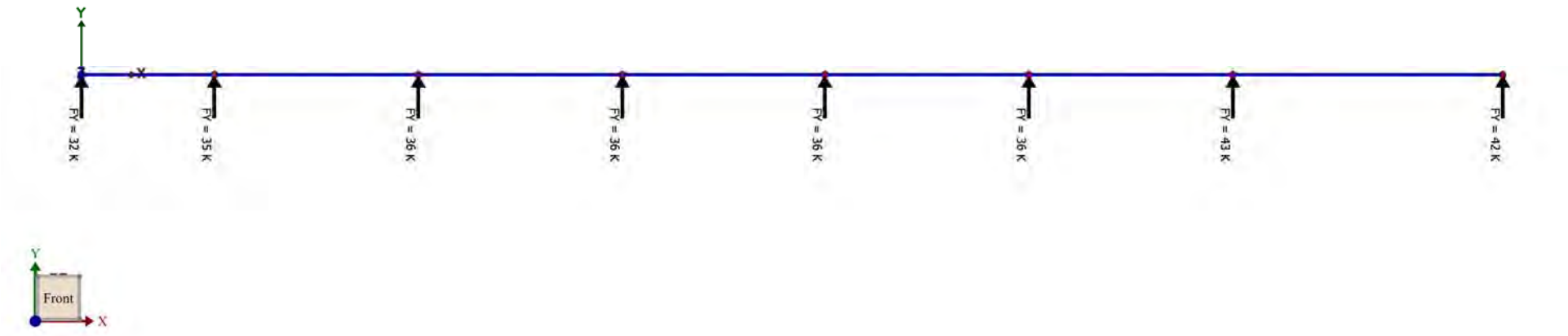
BRASS	Specifications
STRENGTH I	Strength I Inventory
STRENGTH I-O	Strength I Operating
STRENGTH II	Strength II
STRENGTH IV	Strength IV
SERVICE I	Service I
SERVICE II	Service II Inventory
SERVICE II-O	Service II Operating
FATIGUE I	Fatigue I
FATIGUE II	Fatigue II

Visual Analysis Results – Floor Beam

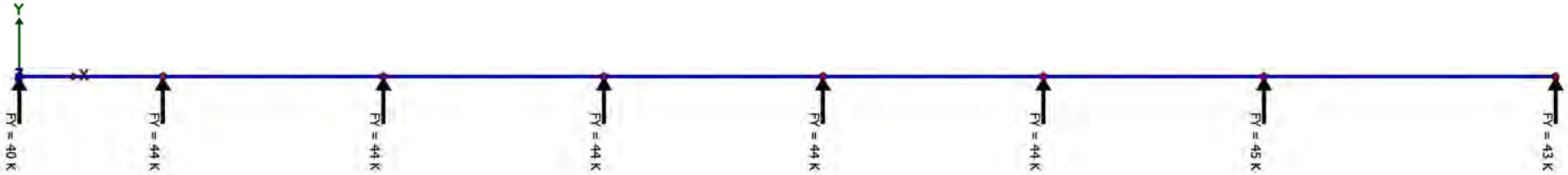
Floor Beam Loads - 35-1-4.78.vap
Result Case: Lane
IES VisualAnalysis 18.00.0008
Tuesday, April 30, 2019



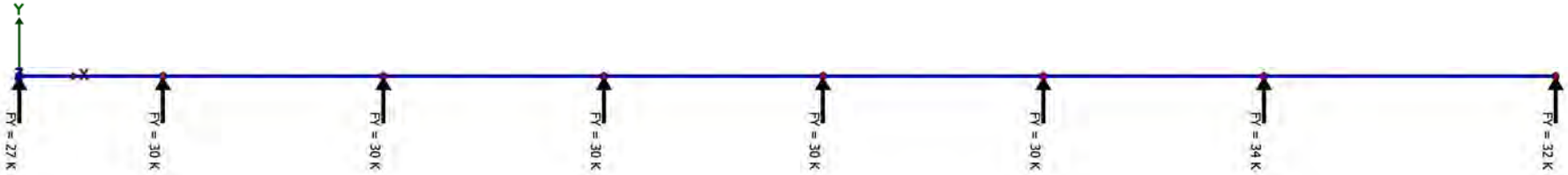
Floor Beam Loads - 35-1-4.78.vap
Result Case: HL-93 High Extreme
IES VisualAnalysis 18.00.0008
Tuesday, April 30, 2019



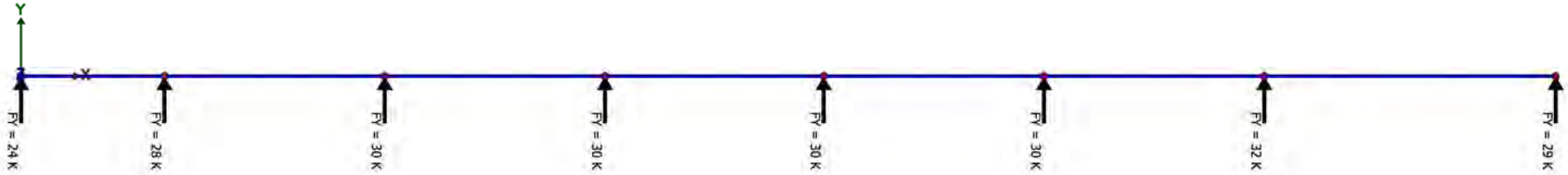
Floor Beam Loads - 35-1-4.78.vap
Result Case: Tandem High Extreme
IES VisualAnalysis 18.00.0008
Tuesday, April 30, 2019



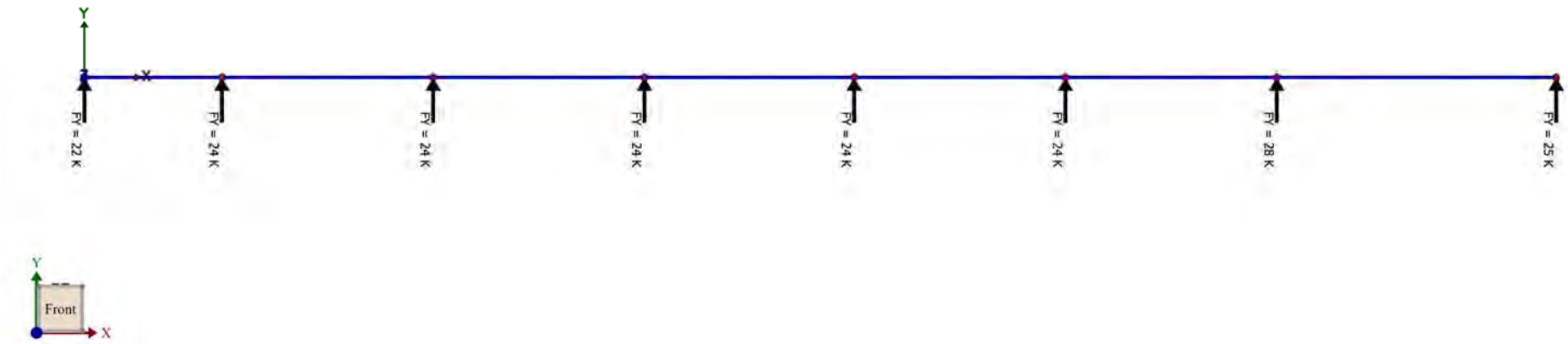
Floor Beam Loads - 35-1-4.78.vap
Result Case: Type 3 High Extreme
IES VisualAnalysis 18.00.0008
Tuesday, April 30, 2019



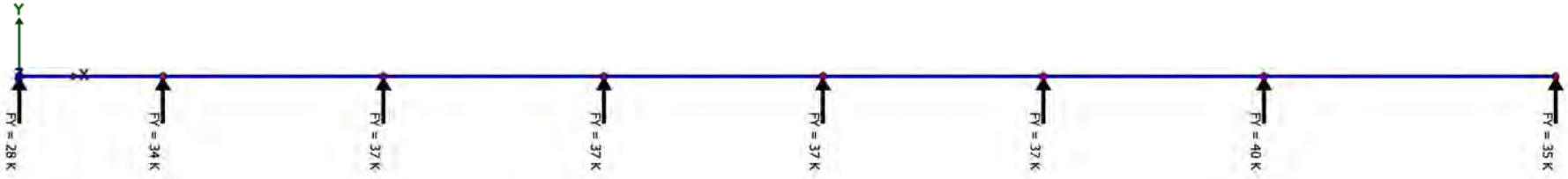
Floor Beam Loads - 35-1-4.78.vap
Result Case: Type 3S2 High Extreme
IES VisualAnalysis 18.00.0008
Tuesday, April 30, 2019



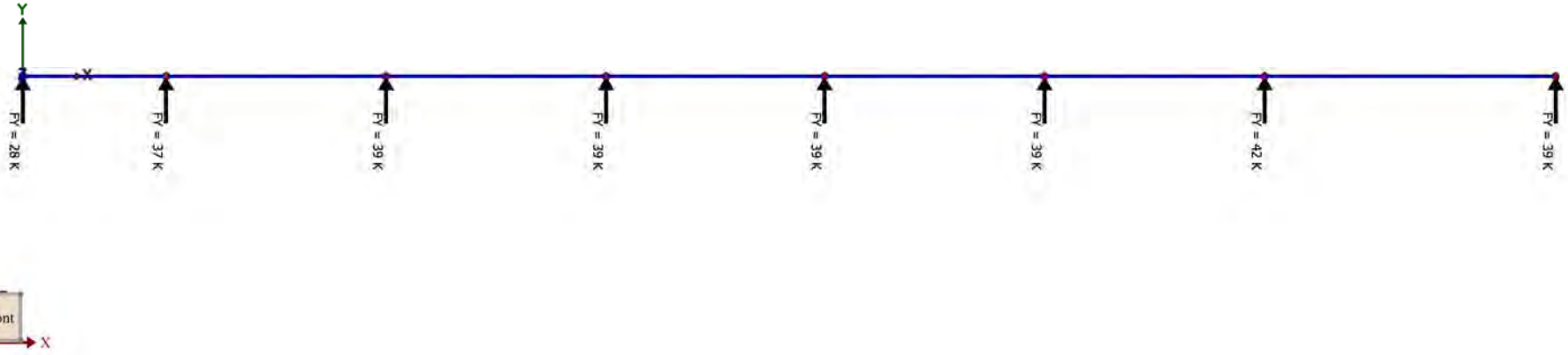
Floor Beam Loads - 35-1-4.78.vap
Result Case: Type 3-3 High Extreme
IES VisualAnalysis 18.00.0008
Tuesday, April 30, 2019



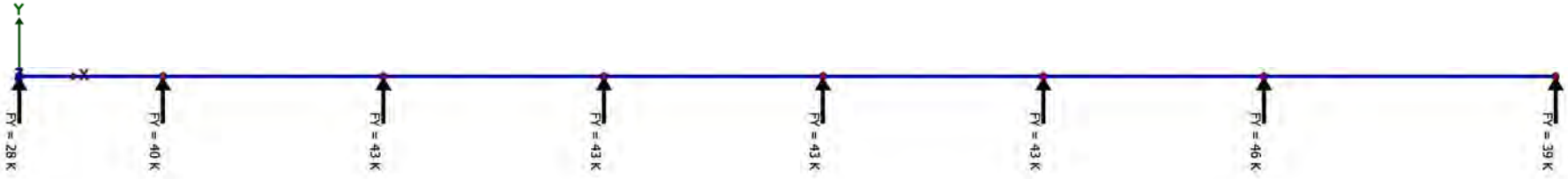
Floor Beam Loads - 35-1-4.78.vap
Result Case: SU4 High Extreme
IES VisualAnalysis 18.00.0008
Tuesday, April 30, 2019



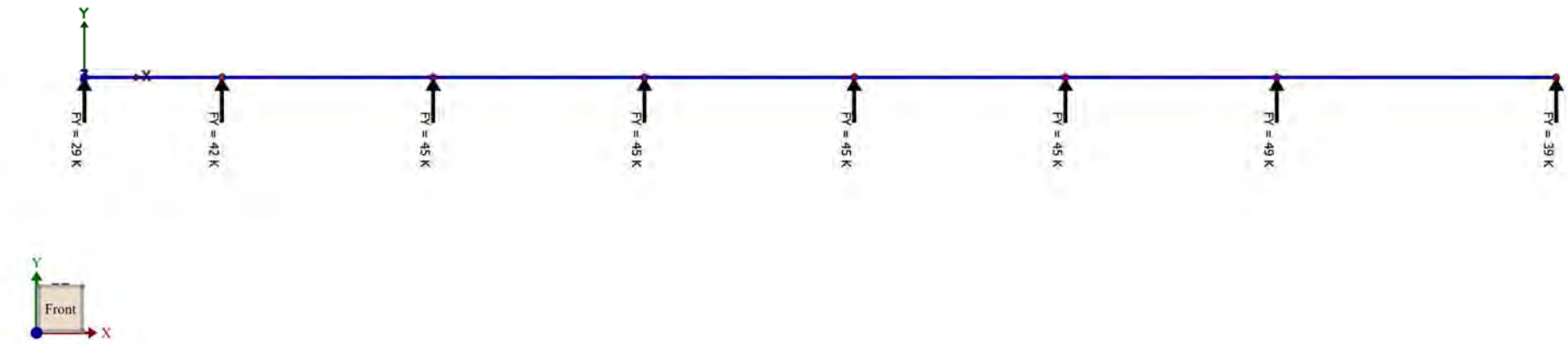
Floor Beam Loads - 35-1-4.78.vap
Result Case: SU5 High Extreme
IES VisualAnalysis 18.00.0008
Tuesday, April 30, 2019



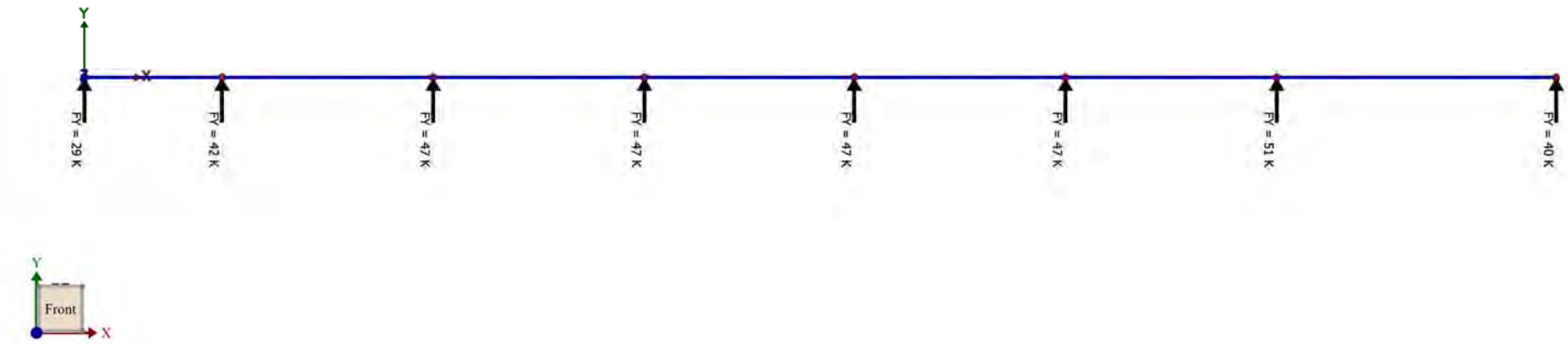
Floor Beam Loads - 35-1-4.78.vap
Result Case: SU6 High Extreme
IES VisualAnalysis 18.00.0008
Tuesday, April 30, 2019



Floor Beam Loads - 35-1-4.78.vap
Result Case: SU7 High Extreme
IES VisualAnalysis 18.00.0008
Tuesday, April 30, 2019



Floor Beam Loads - 35-1-4.78.vap
Result Case: NRL High Extreme
IES VisualAnalysis 18.00.0008
Tuesday, April 30, 2019



BRASS Input – Steel Floor Beam

Wyoming Department of Transportation

BRASS-GIRDER™ Input Parameters

Version Information

Girder UI:	8.0.0.3001
Girder XML:	8.0.0.3001
BRASS™ XML:	1.8.0.3001

Administration

Project ID:	6856
Project Title:	R8 Bridge Load Ratings 2018
Bridge ID:	35-1-4.78
Bridge Name:	Citico Creek
Route Name:	35-1
Reference Marker:	4.78
Title 1:	Floor Beam
Title 2:	
Date:	2019 4 30
Agency:	USDA Forest Service
Designer/Rater:	Ammon Groesbeck
Reviewer:	Brad Miller
Comments:	

Bridge Notes

No bridge notes have been defined.

Control

Structure

Structure Type:	FloorbeamLine
Define Deck Cross Section:	No
Analysis Model Type:	Beam
Number of Top Spans:	1

Spans

Span	Length
1	15.5 ft

Structure Material:	Steel
Beam Type:	Builtup
Composite Structure:	No

Number of Stages: 1

Analysis

Unit System: US
Analysis Method: LRFD
Analysis Type: Rating
Member of Interest: 1
Model Element Type: Stepped
Point of Interest Generation Control: User
Live-load Distribution Factor Application: AnalysisPoint
Interpolate Reinforcement: No
Calculate Effective Width: No

Input

Symmetry

Component	Symmetric
Beam Profile	Yes
Deck Profile	Yes
Shear Connectors	Yes
Transverse Stiffeners	Yes
Bearing Stiffeners	Yes
Longitudinal Stiffeners	Yes
Bracing (Member)	No
Lateral Support	No
Cb Factors (LRFD)	Yes

Merge Beam/Deck Profile Schedules: Yes

Libraries

Section Library: N:\BRASS\Libraries\BRASS-Sections.BLS
Vehicle Library: N:\BRASS\Libraries\BRASS-Vehicles.BLV

Output

Primary Output

Action Output Level: DL+LL
Action Locations: 10th+SpecialPoints

General

Member Properties: Yes
Load Combinations: Yes
Load and Resistance Factors: Yes
Warnings: Yes
Camber: No
Critical Design Ratios / Rating Factors: Condensed

Live Load

Truck Positions: No
Variable Axle Spacing: No
Live Load Settings: Yes
Live Load Combinations: Yes
Live Load Details: Yes
Impact (LFD): No

Stage

Stage	Output
1	Yes

Dead Load

Member Self Load: Yes
Distributed Dead Loads: Yes
Concentrated Dead Loads: Yes
Temperature Change: No
Settlements: No

Intermediate Output

Intermediate Output Level: Full
Effective Width: No
Floorbeam Lane Position: No

Points of Interest

Specification Checks: Yes
Load Factoring/Combinations: Yes

Limit State Output (LRFD)

Limit State	Specification Check	Load Combination
Strength I	Yes	Yes
Strength II	No	No
Strength IV	No	No
Service I	No	No
Service II	Yes	Yes
Fatigue I	No	No
Fatigue II	No	No

Intermediate Output (cont.)

Steel

Transverse Stiffeners: No
Bearing Stiffeners: No
Longitudinal Stiffeners: No

Results Tables

X-Y Plot Action Tables: No
Specification Check Results Tables: No
Mesh Plot Files: No

BRASS-PAD™ Data Transfer File: No

Influence

Output influence lines for: None
Ordinate Divisor: 1

Factors

Load Factors (LRFD)

Limit State	DC		DW		DU		TU	
	max	min	max	min	max	min	max	min

Strength I	1.25	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Strength II	1.25	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Strength IV	1.5	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Service I	1	1	1	1	1	1	1.2	1
Service II	1	1	1	1	1	1	1.2	1
Fatigue I	0	0	0	0	0	0	0	0
Fatigue II	0	0	0	0	0	0	0	0

Load Factors (LRFD) (continued)

Limit State	LL				SE		PS		DS	
	Design		Legal	Permit						
	Inventory	Operating			max	min	max	min	max	min
Strength I	1.75	1.35	1.3	0	1	1	1	1	1.25	0.9
Strength II	1.35		0	0	1	1	1	1	1.25	0.9
Strength IV	0		0	0	0	0	1	1	1.5	0.9
Service I	1		0	1	1	1	1	1	1	1
Service II	1.3	1	1.3	1	0	0	1	1	1	1
Fatigue I	1.75		0	0	0	0	1	1	0	0
Fatigue II	0.8		0	0	0	0	1	1	0	0

Load Modifiers (LRFD)

Limit State	Ductility	Redundancy	Importance	Combined Product	
				max	min
Strength I	1	1	1	-	-
Strength II	1	1	1	-	-
Strength IV	1	1	1	-	-
Service I	1	1	1	-	-
Service II	1	1	1	-	-
Fatigue I	1	1	1	-	-
Fatigue II	1	1	1	-	-

Resistance Factors (LRFD)

Resistance Factors

Type	Value
φ Flexure	1
φ Shear	1
φ Bearing	1
φ Compression	0.95
φ Shear Connectors	0.85
φ Fatigue	1

System/Total Modifiers

Limit State	Resistance Type	System	Total
Strength	Flexure	1	-

Strength	Shear	1	-
Strength	Bearing	1	-
Strength	Compression	1	-
Strength	Shear Connectors	1	-
Strength	Longitudinal Reinforcement	1	-
Service	Flexure	1	-
Fatigue	Fatigue	1	-

Condition Modifiers

Limit State	Condition
Strength	1
Service	1
Fatigue	1

Materials

Steel

ID	Name	Yield Stress	Tensile Strength	Modulus of Elasticity	Density	Thermal Expansion Coefficient
1	Grade 50	50 ksi	65 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
2	Grade 50W	50 ksi	70 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
3	Grade 36	36 ksi	58 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
4	Grade HPS 70W	70 ksi	85 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
5	Grade 30	30 ksi	60 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}

Dead Load Groups

Groups

No dead load groups have been defined.

Live Loads

Live Load Control

Traffic Lane Increment:	12 in.
Design Lane Increment:	12 in.
Unit Load Advancement Denominator:	100
ADTT:	999
ADTT for Single Lane:	999
Multiple Presence Adjustment:	95 %
% of Dynamic Load Allowance (Impact):	100 %
Fixed Impact (STD):	-

Dynamic Load Allowance (LRFD)

Design/Rating Procedure	Truck	Lane	Fatigue
Design	33 %	0 %	15 %

Legal	33 %	0 %	0 %
Permit	33 %	0 %	0 %

Travelways

Start Distance	Travelway Width
1.833 ft	11.833 ft

Definitions (LRFD)

Vehicle 1

Name: HL-93
Description: HL-93 + LANE
Type: Truck+Lane
% Load from Truck: 78.79 %
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	27.35 kip	0 ft
2	27.35 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 2

Name: TANDEM
Description: TANDEM + LANE
Type: Truck+Lane
% Load from Truck: 79.58 %
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	28.4 kip	0 ft
2	28.4 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-

Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 3

Name: TYPE 3
Description: TYPE 3
Type: Truck
% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	16.95 kip	0 ft
2	16.95 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 4

Name: TYPE 3S2
Description: TYPE 3S2
Type: Truck
% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	15.75 kip	0 ft
2	15.75 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-

Fatigue I	-	-
Fatigue II	-	-

Vehicle 5

Name: TYPE 3-3
Description: TYPE 3-3
Type: Truck
% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	13.85 kip	0 ft
2	13.85 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 6

Name: SU4
Description: SU4
Type: Truck
% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	19.8 kip	0 ft
2	19.8 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 7

Name: SU5
Description: SU5
Type: Truck
% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	21.25 kip	0 ft
2	21.25 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 8

Name: SU6
Description: SU6
Type: Truck
% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	23.2 kip	0 ft
2	23.2 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 9

Name: SU7
Description: SU7
Type: Truck

% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	24.25 kip	0 ft
2	24.25 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 10

Name: NRL
Description: NRL
Type: Truck
% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	25.7 kip	0 ft
2	25.7 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Combinations (Standard)

No standard live load combinations have been defined.

Combinations (LRFD)

Primary Vehicle	Procedure	Primary Vehicle Weight	Multiple-Presence Vehicle	Maximum Number of Lanes	Fixed Axle Positions
HL-93	Design	72 kip	**HL-93**	-	*None defined.*

TANDEM	Design	50 kip	**TANDEM**	-	*None defined.*
TYPE 3	Legal	50 kip	**TYPE 3**	-	*None defined.*
TYPE 3S2	Legal	72 kip	**TYPE 3S2**	-	*None defined.*
TYPE 3-3	Legal	80 kip	**TYPE 3-3**	-	*None defined.*
SU4	Legal	54 kip	**SU4**	-	*None defined.*
SU5	Legal	62 kip	**SU5**	-	*None defined.*
SU6	Legal	69.5 kip	**SU6**	-	*None defined.*
SU7	Legal	77.5 kip	**SU7**	-	*None defined.*
NRL	Legal	80 kip	**NRL**	-	*None defined.*

Component Groups

Transverse Stiffeners

No transverse stiffener groups have been defined.

Bearing Stiffeners

No bearing stiffener groups have been defined.

Longitudinal Stiffeners

No longitudinal stiffener groups have been defined.

Specification Control

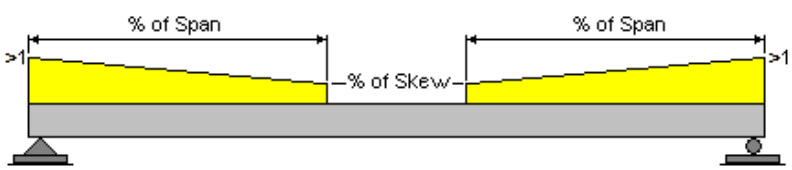
General

Lane Geometry

Design Vehicle Lane Width: 12 ft
Vehicle Width: 10 ft
Wheel Spacing: 6 ft
Encroachment Distance: -

Load Factors Control (LRFD): Use load factors per analysis type (Review = max/min; Rating = max only)

Skew Factors



Span #	% of Span	% of Skew
1	-	-

Steel

Use Appendix A6 (LRFD): Yes
Allow Plastic Analysis: Yes
Override Longitudinal Stiffeners: No
Slab thickness for longitudinal shear force: Structural
Slab thickness for minimum negative flexure concrete deck reinforcement: Structural

Fatigue

AASHTO LRFD Table 6.6.1.2.5-2

% of Span: 10
Span Length: 40 ft

Stress Range in Longitudinal Reinforcement Over the Piers: 10 ksi

Detail Categories (LRFD)

Detail Category	Constant, A x 10^8	Constant Amplitude Fatigue Threshold
A	250 kip^3	24 ksi
B	120 kip^3	16 ksi
B'	61 kip^3	12 ksi
C	44 kip^3	10 ksi
C'	44 kip^3	12 ksi
D	22 kip^3	7 ksi
E	11 kip^3	4.5 ksi
E'	3.9 kip^3	2.6 ksi

Limit State Map

Limit State Maps (LRFD)

Limit State	Design Review			Rating		
	Design Load	Legal Load	Permit Load	Design Load	Legal Load	Permit Load
Strength I	No	No	No	Inventory/Operating	Yes	No
Strength II	No	No	No	Exclude	No	No
Strength IV	No	No	No	Exclude	No	No
Service I	No	No	No	Exclude	No	No
Service II	No	No	No	Inventory/Operating	Yes	No
Service III	No	No	No	Exclude	No	No
Fatigue I	No	No	No	Inventory	No	No
Fatigue II	No	No	No	Inventory	No	No

Spec. Check Map (Strength)

LRFD Specification Check Maps

Design Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Legal Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Permit Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Design Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	Yes	No	No
Shear	Yes	No	No
Bearing	Yes	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Legal Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	Yes	No	No
Shear	Yes	No	No
Bearing	Yes	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Permit Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Spec. Check Map (Service)

LRFD Specification Check Maps

Design Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Legal Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Permit Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Design Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	Yes
Live Load Deflection	No	No

Legal Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	Yes
Live Load Deflection	No	No

Permit Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Spec. Check Map (Fatigue)

LRFD Specification Check Maps

Design Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No

Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Legal Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Permit Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Design Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Legal Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Permit Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Member

Member Notes

No member notes have been defined.

Member Materials

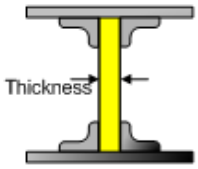
Beam

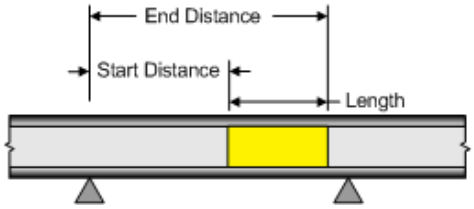
Beam Material: **Grade 30**

Beam Profile

Web

Apply to Entire Structure: Yes
Web Angle: -

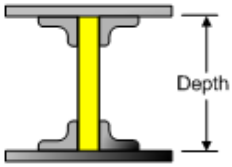


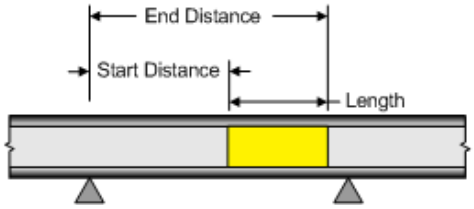


Thickness	Material	Support Number	Start Distance	Length
0.375 in.	**Grade 30**	1	0 ft	7.75 ft

Web Depth

Apply to Entire Structure: Yes





Start Depth	Web Variation	End Depth	Support Number	Start Distance	Length
36 in.	Linear	36 in.	1	0 ft	7.75 ft

Top Cover Plate

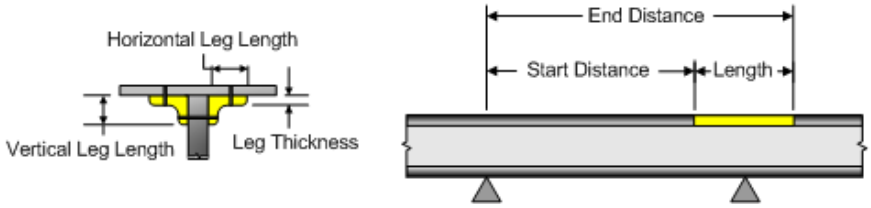
No top cover plate schedules have been defined.

Bottom Cover Plate

No bottom cover plate schedules have been defined.

Top Angles

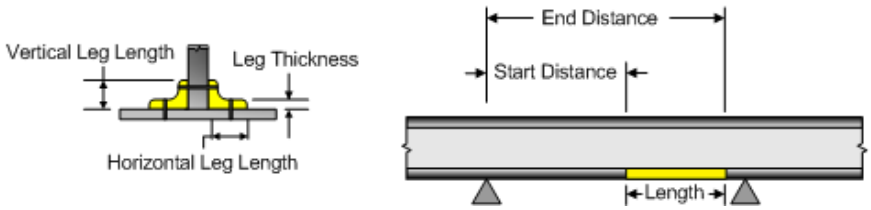
Apply to Entire Structure: Yes



Vertical Leg Length	Horizontal Leg Length	Leg Thickness	Material	Support Number	Start Distance	Length
5 in.	5 in.	0.375 in.	**Grade 30**	1	0 ft	7.75 ft

Bottom Angles

Apply to Entire Structure: Yes



Vertical Leg Length	Horizontal Leg Length	Leg Thickness	Material	Support Number	Start Distance	Length
5 in.	5 in.	0.375 in.	**Grade 30**	1	0 ft	7.75 ft

Hinges

No hinges have been defined.

Special Locations

No special locations have been defined.

Splice Locations

No splice locations have been defined.

Supports

Support Conditions

Support	Support Restraint		
	Horizontal	Vertical	Rotational
1	Restrained	Restrained	Free
2	Free	Restrained	Free

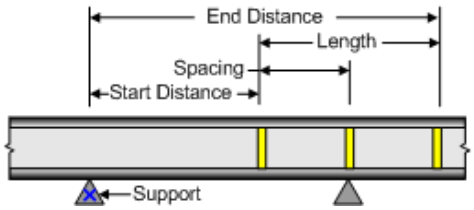
Spring Constants

Support	Spring Constants		
	Horizontal	Vertical	Rotational
1	-	-	-
2	-	-	-

Schedules

Bracing

Apply to Entire Structure: No



Spacing	Support	Start Distance	Length
4.5 ft	1	0 ft	4.5 ft
6.5 ft	1	4.5 ft	6.5 ft
4.5 ft	1	11 ft	4.5 ft

Transverse Stiffeners

No transverse stiffener schedules have been defined.

Bearing Stiffeners

Apply to Entire Structure: No

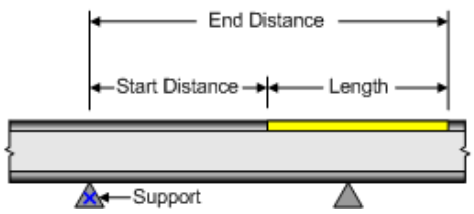
Support	Stiffener Group
1	Not Assigned

Longitudinal Stiffeners

No longitudinal stiffener schedules have been defined.

Lateral Support

Apply to Entire Structure: Yes



Support	Start Distance	Length
1	0 ft	15.5 ft

Cb Factors (Standard)

No Cb factors (LRFD) have been defined.

Cb Factors (LRFD)

No Cb factors (LRFD) have been defined.

Fatigue Stress (Standard)

No fatigue stress (standard) schedules have been defined.

Member Control

Steel

Flexural Resistance

Span	Ignore Eq. 6.10.7.1.2-3 (LRFD)

1	No

End Panel Distances

Top Span

Left of Top Span: -
Right of Top Span: -

Flange Local Buckling Resistance Adjustment

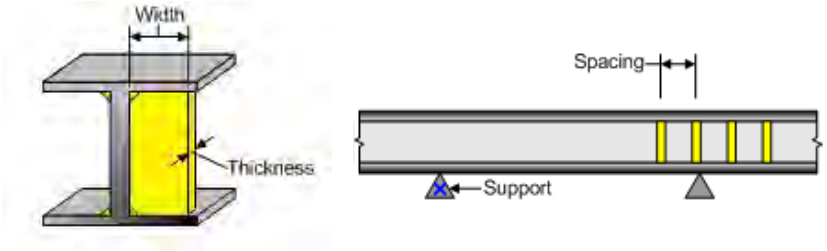
Standard Specifications: -
LRFD Specifications: -

Points of Interest

Points

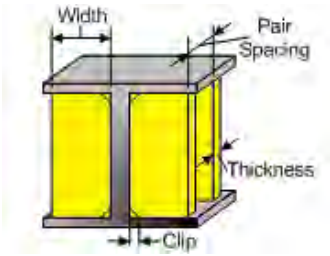
Point of Interest	Output Specification Checks	Output Load Combinations
100	Yes	Yes
101	Yes	Yes
102	Yes	Yes
103	Yes	Yes
104	Yes	Yes
104.5	Yes	Yes
105	Yes	Yes

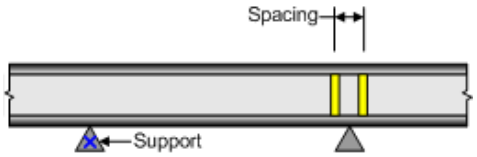
Transverse Stiffeners



Point of Interest	Override	Width	Thickness	Spacing	Type	Type Factor	Material
100	No	-	-	-	-	-	-
101	No	-	-	-	-	-	-
102	No	-	-	-	-	-	-
103	No	-	-	-	-	-	-
104	No	-	-	-	-	-	-
104.5	No	-	-	-	-	-	-
105	No	-	-	-	-	-	-

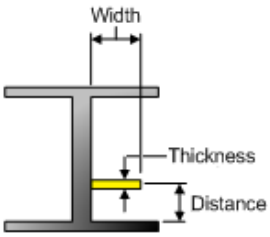
Bearing Stiffeners





Point of Interest	Override	Width	Thickness	Clip	Number of Pairs	Pair Spacing	Attachment	Material
100	No	-	-	-	-	-	-	-
101	No	-	-	-	-	-	-	-
102	No	-	-	-	-	-	-	-
103	No	-	-	-	-	-	-	-
104	No	-	-	-	-	-	-	-
104.5	No	-	-	-	-	-	-	-
105	No	-	-	-	-	-	-	-

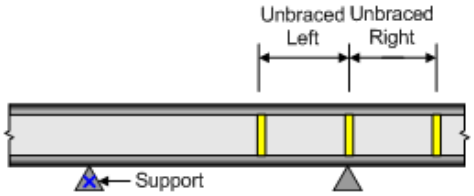
Longitudinal Stiffeners



Point of Interest	Main Stiffener					
	Override	Width	Thickness	Distance	Web Reference	Material
100	No	-	-	-	-	-
101	No	-	-	-	-	-
102	No	-	-	-	-	-
103	No	-	-	-	-	-
104	No	-	-	-	-	-
104.5	No	-	-	-	-	-
105	No	-	-	-	-	-

Point of Interest	Second Stiffener					
	Override	Width	Thickness	Distance	Web Reference	Material
100	No	-	-	-	-	-
101	No	-	-	-	-	-
102	No	-	-	-	-	-
103	No	-	-	-	-	-
104	No	-	-	-	-	-
104.5	No	-	-	-	-	-
105	No	-	-	-	-	-

Bracing



Point of Interest	Override	Lateral Support	Point Braced	Unbraced Length	
				Left	Right
100	No	-	-	-	-
101	No	-	-	-	-
102	No	-	-	-	-
103	No	-	-	-	-
104	No	-	-	-	-
104.5	No	-	-	-	-
105	No	-	-	-	-

Cb Factors

LRFD

Point of Interest	Override	Cb Method	Cb Factor	
			Top Flange	Bottom Flange
100	No	-	-	-
101	No	-	-	-
102	No	-	-	-
103	No	-	-	-
104	No	-	-	-
104.5	No	-	-	-
105	No	-	-	-

Fatigue

No fatigue detail categories have been defined.

Point of Interest	N Cycles	Zr (LRFD)
100	-	-
101	-	-
102	-	-
103	-	-
104	-	-
104.5	-	-
105	-	-

Point of Interest	r/h (Top Reinf.)	r/h (Bottom Reinf.)
100	-	-
101	-	-
102	-	-
103	-	-
104	-	-
104.5	-	-
105	-	-

Output

Point of Interest	Flexure	Shear	Bearing	Flexural Stress in Longitudinal Stiffener	Crack Control	Flexural Stress in Flanges
100	Yes	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes	Yes

Point of Interest	Live Load Deflection	Fatigue of Reinforcement	Fatigue of Shear Connectors	Fatigue Shear Range of Shear Connectors	Fatigue of Special Points	Fatigue Shear
100	Yes	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes	Yes

Point of Interest	Details	Compactness and Bracing	Transverse Stiffeners	Bearing Stiffeners	Longitudinal Stiffeners
100	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes

Dead Loads

Uniform

Dead Load Type	Stage	Uniform Load
DC	1	2.059 kip / ft

Additional Self-weight

No additional self-weight dead loads have been defined.

Distributed

No distributed dead loads have been defined.

Concentrated

No concentrated dead loads have been defined.

Temperature

No temperature dead loads have been defined.

Settlement

Stage: 1

No settlement loads have been defined.

Pedestrian Load

Pedestrian Load: -

Distribution Factors (LRFD)

Moment

No moment distribution factors have been defined.

Shear

No shear distribution factors have been defined.

Deflection

No deflection distribution factors have been defined.

Reaction

Apply to entire structure: No

Support	mg Single-Lane			mg Multi-Lane		
	Moment	Shear	Deflection	Moment	Shear	Deflection
1	-	-	-	-	-	-

2	-	-	-	-	-	-

BRASS Results – Steel Floor Beam

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**                                                                                          **
**                            WYOMING DEPARTMENT OF TRANSPORTATION                          **
**                       BRIDGE RATING AND ANALYSIS OF STRUCTURAL SYSTEMS                   **
**                                                                                          **
**                                                                                          **
**             BBBBBBBBBB   RRRRRRRRRRR    AAAAAAAAAA    SSSSSSSSSS    SSSSSSSSSS          **
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**             BB        BB  RR        RR  AA        AA  SS            SS                  **
**             BB       BB   RR        RR  AA        AA  SSS           SSS                 **
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**             BB        BB  RR     RR     AA        AA            SS            SS         **
**             BB        BB  RR      RR    AA        AA  SS        SS  SS        SS          **
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**                                                                                          **
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**                                                                                          **
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**                           Version  8   Release  0   Service Pack  0                      **
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**                                 Release Date: Oct. 05, 2017                              **
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**                                 E-mail: BRASSTechSupport@wyo.gov                         **
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**                                                                                          **
**     AASHTO LRFD Specifications:                                                          **
**                                                                                          **
**        BRASS-GIRDER™ is current with the AASHTO LRFD Bridge Design Specifications, 8th   **
**        Edition, 2017.  Load and Resistance Factor Ratings are current with the AASHTO    **
**        Manual for Bridge Evaluation, 3rd Edition, 2017.                                  **
**                                                                                          **
**     AASHTO Standard Specifications (LFD):                                                **
**                                                                                          **
**        BRASS-GIRDER is current with the AASHTO Standard Specifications for Highway       **
**        Bridges, 17th Edition, 2002.  Load Factor Ratings are current with the AASHTO     **
**        Manual for Bridge Evaluation, 3rd Edition, 2017.                                  **
**                                                                                          **
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** STRUCTURE/ANALYSIS SUMMARY **

Structure Type : Beam
Material Type : Steel
Number of Stages: 1
Element Type : Stepped
Analysis Type : Rating

Span No.	Length (ft)	Angle (deg)
1	15.5000	N/A

Supports:

Support No.	Fixity: Horizontal	Fixity: Vertical	Fixity: Rotational	Spring Constants: Horizontal (k/ft)	Spring Constants: Vertical (k/ft)	Spring Constants: Rotational (ft-k/rad)
1	Restrained	Restrained	Free	Infinity	Infinity	N/A
2	Free	Restrained	Free	N/A	Infinity	N/A

Beam Material Properties:
Unit Weight : 0.490 k/ft^3
Modulus of Elasticity (E) : 29000.000 ksi
Thermal Expansion Coefficient : 0.0000065 / deg. F

** OUTPUT CONTROL SUMMARY **

Action Output Locations	Actions at tenth points and special analysis points
Dead Load Actions	YES
Live Load Actions	YES
Concurrent Actions	NO
Girder Properties	YES
Truck Position	NO
Variable Axle Spacing	NO
Live Load Settings	YES
Live Load Combinations	YES
Live Load Details	YES
Load Combinations	YES
Load and Resistance Factors	YES
Warnings	YES
Member Self-Load	YES
Distributed Dead Loads	YES
Concentrated Dead Loads	YES
Temperature Change	NO
Settlements	NO
Camber Summary	NO
Influence Summary	NO
Critical Design Ratios or Rating Factors	YES (Condensed)
Dyn. Load Allowance Summary	NO
Intermediate Output Level	Expanded
Stage 1	YES

Limit State	Intermediate Output	Load Combinations
STRENGTH I	YES	YES
STRENGTH I-O	YES	YES
STRENGTH II	NO	NO
STRENGTH IV	NO	NO
SERVICE I	NO	NO
SERVICE II	YES	YES
SERVICE II-O	YES	YES
SERVICE III	NO	NO
FATIGUE I	NO	NO
FATIGUE II	NO	NO

Dead Load Distribution (Intermediate)	NO
Dead Load Distribution (Standard)	YES
Live Load Distribution (Intermediate)	NO
Live Load Distribution (Standard)	YES
Transverse Stiffeners (Intermediate)	NO
Bearing Stiffeners (Intermediate)	NO
Longitudinal Stiffeners (Intermediate)	NO
Shear Connectors (Intermediate)	NO
Shear Connectors (Standard)	NO
Floorbeam (Intermediate)	NO
Effective Width (Intermediate)	NO
Action X-Y Plot Tables	NO
Specification Check Results Tables	NO
Mesh Plot Files	NO

Floor Beam

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 1 Span Length = 15.500 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Input Dimensions and Cross-Section Geometry: (in)

Point No.	Dist (ft)	Web Depth	Web Width top	Web Width bot	Flange Thickness top	Flange Thickness bot	Flange Width top	Flange Width bot
1-0.000	0.000	36.00	0.375	0.375	0.375	0.375	10.38	10.38
1-0.100	1.550	36.00	0.375	0.375	0.375	0.375	10.38	10.38
1-0.200	3.100	36.00	0.375	0.375	0.375	0.375	10.38	10.38
1-0.290	4.500	36.00	0.375	0.375	0.375	0.375	10.38	10.38
1-0.300	4.650	36.00	0.375	0.375	0.375	0.375	10.38	10.38
1-0.400	6.200	36.00	0.375	0.375	0.375	0.375	10.38	10.38
1-0.450	6.975	36.00	0.375	0.375	0.375	0.375	10.38	10.38
1-0.500	7.750	36.00	0.375	0.375	0.375	0.375	10.38	10.38
1-0.600	9.300	36.00	0.375	0.375	0.375	0.375	10.38	10.38
1-0.700	10.850	36.00	0.375	0.375	0.375	0.375	10.38	10.38
1-0.710	11.000	36.00	0.375	0.375	0.375	0.375	10.38	10.38
1-0.800	12.400	36.00	0.375	0.375	0.375	0.375	10.38	10.38
1-0.900	13.950	36.00	0.375	0.375	0.375	0.375	10.38	10.38
1-1.000	15.500	36.00	0.375	0.375	0.375	0.375	10.38	10.38

Calculated Properties:

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)	Standard Section Name
1-0.000	0.000	28.22	5757.9	18.38	-
1-0.100	1.550	28.22	5757.9	18.38	-
1-0.200	3.100	28.22	5757.9	18.38	-
1-0.290	4.500	28.22	5757.9	18.38	-
1-0.300	4.650	28.22	5757.9	18.38	-
1-0.400	6.200	28.22	5757.9	18.38	-
1-0.450	6.975	28.22	5757.9	18.38	-
1-0.500	7.750	28.22	5757.9	18.38	-
1-0.600	9.300	28.22	5757.9	18.38	-
1-0.700	10.850	28.22	5757.9	18.38	-
1-0.710	11.000	28.22	5757.9	18.38	-
1-0.800	12.400	28.22	5757.9	18.38	-
1-0.900	13.950	28.22	5757.9	18.38	-
1-1.000	15.500	28.22	5757.9	18.38	-

Note: The calculated properties reported above are based on the entire cross section geometry, which may include the slab if it was input. These properties are used only for the structural analysis to obtain moments, shears, etc. When specification and stress checks are performed, BRASS calculates the section properties for both positive and negative bending, and uses them in accordance with the sign of the factored moments. The section properties used for the section analysis are tabulated in a later report.

Note: The distance to the centroid (X-bar) references the bottom of the bottom flange.

Self-Load Summary:

Span No.	Beginning of Load Distance, ft	Beginning of Load Magnitude, k/ft	End of Load Distance, ft	End of Load Magnitude, k/ft
1	0.000	0.0960	15.500	0.0960

Load Groups:

Distributed Dead Load Summary:

Load Group	Span No.	Beginning of Load Distance, ft	Beginning of Load Magnitude, k/ft	End of Load Distance, ft	End of Load Magnitude, k/ft
DC 1	All		2.0590		2.0590

Note: A span number denoted as "*" indicates the distances reference the left end of the bridge and the load may extend over one or more spans.
Note: A span number denoted as "All" indicates all TOP spans.

Deck Loads and Schedules Summary:
No loads are present.

Concentrated Dead Load Summary:
No loads are present.

** LIVE LOAD DISTRIBUTION FACTORS SUMMARY **

Beam Distribution Factor Schedule: Shear

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	15.500	1.000 (USER)	1.000 (M,USER)

Beam Distribution Factor Schedule: Moment

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	15.500	1.000 (USER)	1.000 (M,USER)

Beam Distribution Factor Schedule: Deflection

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	15.500	1.000 (USER)	1.000 (M,USER)

Reaction Distribution Factors: Shear

Support No.	mg(1-lane)	mg(M-lanes)
1	1.000 (USER)	1.000 (M,USER)
2	1.000 (USER)	1.000 (M,USER)

Reaction Distribution Factors: Moment

Support No.	mg(1-lane)	mg(M-lanes)
1	1.000 (USER)	1.000 (M,USER)
2	1.000 (USER)	1.000 (M,USER)

Reaction Distribution Factors: Deflection

Support No.	mg(1-lane)	mg(M-lanes)
1	1.000 (USER)	1.000 (M,USER)
2	1.000 (USER)	1.000 (M,USER)

Notes:
=> The controlling method is included in parenthesis next to each distribution factor.
USER = User Input LR-T = Lever Rule Specified in AASHTO LRFD Table
LRFD = AASHTO LRFD Formulas LR-O = Lever Rule Override
LR = Lever Rule Method RG-O = Rigid Method Override
=> Additionally, for multiple-lanes loaded, the number of lanes loaded is shown. An 'M' is used with the USER and LRFD methods because the number of multiple lanes is unknown.
=> The Lever Rule Override is invoked when the ranges of applicability are not satisfied for the AASHTO LRFD distribution factor formulas.

LIVE LOAD SETTINGS SUMMARY:

No.	Name	Description	Lane Widths, ft Design	Lane Widths, ft Traffic	Axle Wt. (kips)
1	HL-93	HL-93 + LANE	10.000	10.000	54.700
2	TANDEM	TANDEM + LANE	10.000	10.000	56.800
3	TYPE 3	TYPE 3	10.000	10.000	33.900
4	TYPE 3S2	TYPE 3S2	10.000	10.000	31.500
5	TYPE 3-3	TYPE 3-3	10.000	10.000	27.700
6	SU4	SU4	10.000	10.000	39.600
7	SU5	SU5	10.000	10.000	42.500
8	SU6	SU6	10.000	10.000	46.400
9	SU7	SU7	10.000	10.000	48.500
10	NRL	NRL	10.000	10.000	51.400

LIVE LOAD COMBINATIONS SUMMARY:

Comb. No.	Name	Description	Live Load Numbers Primary	Mult.	Pres.	Max No. Lanes	Percent Impact	Fixed Impact	Rating Procedure
1	HL-93	HL-93 + HL-93	1	1		1	100.000	0.33	Design Load
2	TANDEM	TANDEM + TANDEM	2	2		1	100.000	0.33	Design Load
3	TYPE 3	TYPE 3 + TYPE 3	3	3		1	100.000	0.33	Legal Load
4	TYPE 3S2	TYPE 3S2 + TYPE 3S2	4	4		1	100.000	0.33	Legal Load
5	TYPE 3-3	TYPE 3-3 + TYPE 3-3	5	5		1	100.000	0.33	Legal Load
6	SU4	SU4 + SU4	6	6		1	100.000	0.33	Legal Load
7	SU5	SU5 + SU5	7	7		1	100.000	0.33	Legal Load
8	SU6	SU6 + SU6	8	8		1	100.000	0.33	Legal Load
9	SU7	SU7 + SU7	9	9		1	100.000	0.33	Legal Load
10	NRL	NRL + NRL	10	10		1	100.000	0.33	Legal Load

LIVE LOAD DETAILS SUMMARY:

Wheel Line No.	Weight (kips)	Gage (ft)	Wheel Line No.	Weight (kips)	Gage (ft)	Wheel Line No.	Weight (kips)	Gage (ft)	Wheel Line No.	Weight (kips)	Gage (ft)
Live Load 1: HL-93			: HL-93 + LANE								
1	27.350	0.000	2	27.350	6.000						
Live Load 2: TANDEM			: TANDEM + LANE								
1	28.400	0.000	2	28.400	6.000						
Live Load 3: TYPE 3			: TYPE 3								
1	16.950	0.000	2	16.950	6.000						
Live Load 4: TYPE 3S2			: TYPE 3S2								
1	15.750	0.000	2	15.750	6.000						
Live Load 5: TYPE 3-3			: TYPE 3-3								
1	13.850	0.000	2	13.850	6.000						

LIVE LOAD DETAILS SUMMARY:

Wheel Line No.	Weight (kips)	Gage (ft)	Wheel Line No.	Weight (kips)	Gage (ft)	Wheel Line No.	Weight (kips)	Gage (ft)	Wheel Line No.	Weight (kips)	Gage (ft)
Live Load 6: SU4			: SU4								
1	19.800	0.000	2	19.800	6.000						
Live Load 7: SU5			: SU5								
1	21.250	0.000	2	21.250	6.000						
Live Load 8: SU6			: SU6								
1	23.200	0.000	2	23.200	6.000						
Live Load 9: SU7			: SU7								
1	24.250	0.000	2	24.250	6.000						
Live Load 10: NRL			: NRL								
1	25.700	0.000	2	25.700	6.000						

LOAD FACTORS SUMMARY:

Limit State	eta D	eta R	eta I	eta T MAX	eta T MIN
STRENGTH I	1.00	1.00	1.00	1.00	1.00
STRENGTH II	1.00	1.00	1.00	1.00	1.00
STRENGTH IV	1.00	1.00	1.00	1.00	1.00
SERVICE I	1.00	1.00	1.00	1.00	1.00
SERVICE II	1.00	1.00	1.00	1.00	1.00
SERVICE III	1.00	1.00	1.00	1.00	1.00
FATIGUE I	1.00	1.00	1.00	1.00	1.00
FATIGUE II	1.00	1.00	1.00	1.00	1.00

Limit State	DC		DW		DU		LL (Design)		LL	LL
	MAX	MIN	MAX	MIN	MAX	MIN	Inventory	Operating	Legal	Permit
STRENGTH I	1.25	1.25	1.50	1.50	1.50	1.50	1.75	1.35	1.30	0.00
STRENGTH II	1.25	1.25	1.50	1.50	1.50	1.50	1.35	0.00	0.00	0.00
STRENGTH IV	1.50	1.50	1.50	1.50	1.50	1.50	0.00	0.00	0.00	0.00
SERVICE I	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00
SERVICE II	1.00	1.00	1.00	1.00	1.00	1.00	1.30	1.00	1.30	1.00
SERVICE III	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.00	1.00	0.00
FATIGUE I	0.00	0.00	0.00	0.00	0.00	0.00	1.75	0.00	0.00	0.00
FATIGUE II	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00

Limit State	TU		SE		PS		DS	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
STRENGTH I	1.20	1.20	1.00	1.00	1.00	1.00	1.25	1.25
STRENGTH II	1.20	1.20	1.00	1.00	1.00	1.00	1.25	1.25
STRENGTH IV	1.20	1.20	0.00	0.00	1.00	1.00	1.50	1.50
SERVICE I	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
SERVICE II	1.20	1.20	0.00	0.00	1.00	1.00	1.00	1.00
SERVICE III	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
FATIGUE I	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
FATIGUE II	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00

Notes:
=> DU = Utilities
=> PS = Prestress
=> DS = Differential Deck Shrinkage

RESISTANCE FACTORS SUMMARY:

Limit State	phi C
STRENGTH	1.00
SERVICE	1.00
FATIGUE	1.00

Resistance Type	phi* (Base)	STRENGTH phi S	STRENGTH phi T	SERVICE phi S	SERVICE phi T	FATIGUE phi S	FATIGUE phi T
Flexure	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shear	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Bearing	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shear Connectors	0.85	1.00	1.00	1.00	1.00	1.00	1.00
Compression	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fatigue	1.00	1.00	1.00	1.00	1.00	1.00	1.00

* Base phi factors are not adjusted by phi C * phi S.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR GIRDER WEIGHT
Length of Span No. 1 = 15.500 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	0.0	0.0	0.7	0.7	0.00	0.00
1-0.100	1.0	0.0	0.6		0.00	0.00
1-0.200	1.8	0.0	0.4		0.00	0.00
1-0.300	2.4	0.0	0.3		0.00	0.00
1-0.400	2.8	0.0	0.1		0.00	0.00
1-0.450	2.9	0.0	0.1		0.00	0.00
1-0.500	2.9	0.0	0.0		0.00	0.00
1-0.600	2.8	0.0	-0.1		0.00	0.00
1-0.700	2.4	0.0	-0.3		0.00	0.00
1-0.800	1.8	0.0	-0.4		0.00	0.00
1-0.900	1.0	0.0	-0.6		0.00	0.00
1-1.000	-0.0	0.0	-0.7	0.7	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000013 rad Right End = -0.000013 rad

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD OF 2.059000 k/ft **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR SUPERIMPOSED UNIFORM DEAD LOAD (DC) ON TOP SPANS
Length of Span No. 1 = 15.500 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	0.0	0.0	16.0	16.0	0.00	0.00
1-0.100	22.3	0.0	12.8		0.00	0.01
1-0.200	39.6	0.0	9.6		0.00	0.01
1-0.300	51.9	0.0	6.4		0.00	0.01
1-0.400	59.4	0.0	3.2		0.00	0.02
1-0.450	61.2	0.0	1.6		0.00	0.02
1-0.500	61.8	0.0	0.0		0.00	0.02
1-0.600	59.4	0.0	-3.2		0.00	0.02
1-0.700	51.9	0.0	-6.4		0.00	0.01
1-0.800	39.6	0.0	-9.6		0.00	0.01
1-0.900	22.3	0.0	-12.8		0.00	0.01
1-1.000	-0.0	0.0	-16.0	16.0	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000276 rad Right End = -0.000276 rad

Floor Beam

** COMBINED UNFACTORED DEAD LOAD ACTIONS **
** CONSTRUCTION STAGE 1 **

Length of Span No. 1 = 15.500 ft

POINT NO.	Dead Loads of Structural Components (DC) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)	Dead Loads of Wearing Surfaces (DW) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
1-0.000	0.0	0.0	16.7	16.7	0.00	0.0	0.0	0.0	0.0	0.00
1-0.100	23.3	0.0	13.4		0.01	0.0	0.0	0.0		0.00
1-0.200	41.4	0.0	10.0		0.01	0.0	0.0	0.0		0.00
1-0.300	54.4	0.0	6.7		0.01	0.0	0.0	0.0		0.00
1-0.400	62.1	0.0	3.3		0.02	0.0	0.0	0.0		0.00
1-0.450	64.1	0.0	1.7		0.02	0.0	0.0	0.0		0.00
1-0.500	64.7	0.0	0.0		0.02	0.0	0.0	0.0		0.00
1-0.600	62.1	0.0	-3.3		0.02	0.0	0.0	0.0		0.00
1-0.700	54.4	0.0	-6.7		0.01	0.0	0.0	0.0		0.00
1-0.800	41.4	0.0	-10.0		0.01	0.0	0.0	0.0		0.00
1-0.900	23.3	0.0	-13.4		0.01	0.0	0.0	0.0		0.00
1-1.000	-0.0	0.0	-16.7	16.7	0.00	0.0	0.0	0.0	0.0	0.00

Rotations (DC): Left End = 0.000288 rad
(+) Clockwise Right End = -0.000288 rad

Rotations (DW): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

POINT NO.	Dead Loads of Utilities (DU) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
1-0.000	0.0	0.0	0.0	0.0	0.00
1-0.100	0.0	0.0	0.0		0.00
1-0.200	0.0	0.0	0.0		0.00
1-0.300	0.0	0.0	0.0		0.00
1-0.400	0.0	0.0	0.0		0.00
1-0.450	0.0	0.0	0.0		0.00
1-0.500	0.0	0.0	0.0		0.00
1-0.600	0.0	0.0	0.0		0.00
1-0.700	0.0	0.0	0.0		0.00
1-0.800	0.0	0.0	0.0		0.00
1-0.900	0.0	0.0	0.0		0.00
1-1.000	0.0	0.0	0.0	0.0	0.00

Rotations (DU): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 1: HL-93 + HL-93
Length of Span No. 1 = 15.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	46.2	0.0	46.2	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	71.7	0.0	0.0	0.0	46.2	0.0			0.00	0.00	0.02	0.00		
1-0.200	143.4	0.0	0.0	0.0	46.2	0.0			0.00	0.00	0.03	0.00		
1-0.300	193.5	0.0	0.0	0.0	41.7	0.0			0.00	0.00	0.04	0.00		
1-0.400	204.0	0.0	0.0	0.0	4.9	-4.9			0.00	0.00	0.05	0.00		
1-0.450	200.2	0.0	0.0	0.0	4.9	-4.9			0.00	0.00	0.05	0.00		
1-0.500	196.4	0.0	0.0	0.0	4.9	-4.9			0.00	0.00	0.05	0.00		
1-0.600	204.0	0.0	0.0	0.0	4.9	-4.9			0.00	0.00	0.05	0.00		
1-0.700	193.5	0.0	0.0	0.0	0.0	-41.7			0.00	0.00	0.04	0.00		
1-0.800	143.4	0.0	0.0	0.0	0.0	-46.2			0.00	0.00	0.03	0.00		
1-0.900	71.7	0.0	0.0	0.0	0.0	-46.2			0.00	0.00	0.02	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-46.2	46.2	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000918 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 34.770 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000918 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 34.771 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 2: TANDEM + TANDEM
Length of Span No. 1 = 15.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	48.1	0.0	48.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	74.6	0.0	0.0	0.0	48.1	0.0			0.00	0.00	0.02	0.00		
1-0.200	149.2	0.0	0.0	0.0	48.1	0.0			0.00	0.00	0.03	0.00		
1-0.300	201.3	0.0	0.0	0.0	43.4	0.0			0.00	0.00	0.05	0.00		
1-0.400	212.3	0.0	0.0	0.0	5.1	-5.1			0.00	0.00	0.05	0.00		
1-0.450	208.3	0.0	0.0	0.0	5.1	-5.1			0.00	0.00	0.05	0.00		
1-0.500	204.4	0.0	0.0	0.0	5.1	-5.1			0.00	0.00	0.06	0.00		
1-0.600	212.3	0.0	0.0	0.0	5.1	-5.1			0.00	0.00	0.05	0.00		
1-0.700	201.3	0.0	0.0	0.0	0.0	-43.4			0.00	0.00	0.05	0.00		
1-0.800	149.2	0.0	0.0	0.0	0.0	-48.1			0.00	0.00	0.03	0.00		
1-0.900	74.6	0.0	0.0	0.0	0.0	-48.1			0.00	0.00	0.02	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-48.1	48.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000955 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 36.180 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000955 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 36.180 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 3: TYPE 3 + TYPE 3
Length of Span No. 1 = 15.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	30.3	0.0	30.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	46.9	0.0	0.0	0.0	30.3	0.0			0.00	0.00	0.01	0.00		
1-0.200	93.8	0.0	0.0	0.0	30.3	0.0			0.00	0.00	0.02	0.00		
1-0.300	126.6	0.0	0.0	0.0	27.3	0.0			0.00	0.00	0.03	0.00		
1-0.400	133.5	0.0	0.0	0.0	3.2	-3.2			0.00	0.00	0.03	0.00		
1-0.450	131.0	0.0	0.0	0.0	3.2	-3.2			0.00	0.00	0.03	0.00		
1-0.500	128.5	0.0	0.0	0.0	3.2	-3.2			0.00	0.00	0.03	0.00		
1-0.600	133.5	0.0	0.0	0.0	3.2	-3.2			0.00	0.00	0.03	0.00		
1-0.700	126.6	0.0	0.0	0.0	0.0	-27.3			0.00	0.00	0.03	0.00		
1-0.800	93.8	0.0	0.0	0.0	0.0	-30.3			0.00	0.00	0.02	0.00		
1-0.900	46.9	0.0	0.0	0.0	0.0	-30.3			0.00	0.00	0.01	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-30.3	30.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000601 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 22.746 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000601 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 22.746 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 4: TYPE 3S2 + TYPE 3S2
Length of Span No. 1 = 15.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	28.1	0.0	28.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	43.6	0.0	0.0	0.0	28.1	0.0			0.00	0.00	0.01	0.00		
1-0.200	87.1	0.0	0.0	0.0	28.1	0.0			0.00	0.00	0.02	0.00		
1-0.300	117.6	0.0	0.0	0.0	25.4	0.0			0.00	0.00	0.03	0.00		
1-0.400	124.0	0.0	0.0	0.0	3.0	-3.0			0.00	0.00	0.03	0.00		
1-0.450	121.7	0.0	0.0	0.0	3.0	-3.0			0.00	0.00	0.03	0.00		
1-0.500	119.4	0.0	0.0	0.0	3.0	-3.0			0.00	0.00	0.03	0.00		
1-0.600	124.0	0.0	0.0	0.0	3.0	-3.0			0.00	0.00	0.03	0.00		
1-0.700	117.6	0.0	0.0	0.0	0.0	-25.4			0.00	0.00	0.03	0.00		
1-0.800	87.1	0.0	0.0	0.0	0.0	-28.1			0.00	0.00	0.02	0.00		
1-0.900	43.6	0.0	0.0	0.0	0.0	-28.1			0.00	0.00	0.01	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-28.1	28.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000558 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 21.135 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000558 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 21.136 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 5: TYPE 3-3 + TYPE 3-3
Length of Span No. 1 = 15.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	24.7	0.0	24.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	38.3	0.0	0.0	0.0	24.7	0.0			0.00	0.00	0.01	0.00		
1-0.200	76.6	0.0	0.0	0.0	24.7	0.0			0.00	0.00	0.02	0.00		
1-0.300	103.4	0.0	0.0	0.0	22.3	0.0			0.00	0.00	0.02	0.00		
1-0.400	109.0	0.0	0.0	0.0	2.6	-2.6			0.00	0.00	0.03	0.00		
1-0.450	107.0	0.0	0.0	0.0	2.6	-2.6			0.00	0.00	0.03	0.00		
1-0.500	105.0	0.0	0.0	0.0	2.6	-2.6			0.00	0.00	0.03	0.00		
1-0.600	109.0	0.0	0.0	0.0	2.6	-2.6			0.00	0.00	0.03	0.00		
1-0.700	103.4	0.0	0.0	0.0	0.0	-22.3			0.00	0.00	0.02	0.00		
1-0.800	76.6	0.0	0.0	0.0	0.0	-24.7			0.00	0.00	0.02	0.00		
1-0.900	38.3	0.0	0.0	0.0	0.0	-24.7			0.00	0.00	0.01	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-24.7	24.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000491 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 18.586 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000491 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 18.586 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 6: SU4 + SU4
Length of Span No. 1 = 15.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	0.0	0.0	0.0	35.3	0.0	35.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	54.8	0.0	0.0	0.0	35.3	0.0			0.00	0.00	0.01	0.00		
1-0.200	109.5	0.0	0.0	0.0	35.3	0.0			0.00	0.00	0.02	0.00		
1-0.300	147.9	0.0	0.0	0.0	31.9	0.0			0.00	0.00	0.03	0.00		
1-0.400	155.9	0.0	0.0	0.0	3.7	-3.7			0.00	0.00	0.04	0.00		
1-0.450	153.0	0.0	0.0	0.0	3.7	-3.7			0.00	0.00	0.04	0.00		
1-0.500	150.1	0.0	0.0	0.0	3.7	-3.7			0.00	0.00	0.04	0.00		
1-0.600	155.9	0.0	0.0	0.0	3.7	-3.7			0.00	0.00	0.04	0.00		
1-0.700	147.9	0.0	0.0	0.0	0.0	-31.9			0.00	0.00	0.03	0.00		
1-0.800	109.5	0.0	0.0	0.0	0.0	-35.3			0.00	0.00	0.02	0.00		
1-0.900	54.8	0.0	0.0	0.0	0.0	-35.3			0.00	0.00	0.01	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-35.3	35.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000702 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 26.570 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000702 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 26.570 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 7: SU5 + SU5
Length of Span No. 1 = 15.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	0.0	0.0	0.0	37.9	0.0	37.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	58.8	0.0	0.0	0.0	37.9	0.0			0.00	0.00	0.01	0.00		
1-0.200	117.6	0.0	0.0	0.0	37.9	0.0			0.00	0.00	0.03	0.00		
1-0.300	158.7	0.0	0.0	0.0	34.2	0.0			0.00	0.00	0.04	0.00		
1-0.400	167.3	0.0	0.0	0.0	4.0	-4.0			0.00	0.00	0.04	0.00		
1-0.450	164.2	0.0	0.0	0.0	4.0	-4.0			0.00	0.00	0.04	0.00		
1-0.500	161.1	0.0	0.0	0.0	4.0	-4.0			0.00	0.00	0.04	0.00		
1-0.600	167.3	0.0	0.0	0.0	4.0	-4.0			0.00	0.00	0.04	0.00		
1-0.700	158.7	0.0	0.0	0.0	0.0	-34.2			0.00	0.00	0.04	0.00		
1-0.800	117.6	0.0	0.0	0.0	0.0	-37.9			0.00	0.00	0.03	0.00		
1-0.900	58.8	0.0	0.0	0.0	0.0	-37.9			0.00	0.00	0.01	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-37.9	37.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000753 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 28.516 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000753 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 28.516 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 8: SU6 + SU6
Length of Span No. 1 = 15.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	41.4	0.0	41.4	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	64.2	0.0	0.0	0.0	41.4	0.0			0.00	0.00	0.02	0.00		
1-0.200	128.4	0.0	0.0	0.0	41.4	0.0			0.00	0.00	0.03	0.00		
1-0.300	173.2	0.0	0.0	0.0	37.4	0.0			0.00	0.00	0.04	0.00		
1-0.400	182.7	0.0	0.0	0.0	4.4	-4.4			0.00	0.00	0.05	0.00		
1-0.450	179.3	0.0	0.0	0.0	4.4	-4.4			0.00	0.00	0.05	0.00		
1-0.500	175.9	0.0	0.0	0.0	4.4	-4.4			0.00	0.00	0.05	0.00		
1-0.600	182.7	0.0	0.0	0.0	4.4	-4.4			0.00	0.00	0.05	0.00		
1-0.700	173.2	0.0	0.0	0.0	0.0	-37.4			0.00	0.00	0.04	0.00		
1-0.800	128.4	0.0	0.0	0.0	0.0	-41.4			0.00	0.00	0.03	0.00		
1-0.900	64.2	0.0	0.0	0.0	0.0	-41.4			0.00	0.00	0.02	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-41.4	41.4	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000822 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 31.133 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000822 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 31.133 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 9: SU7 + SU7
Length of Span No. 1 = 15.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	43.3	0.0	43.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	67.1	0.0	0.0	0.0	43.3	0.0			0.00	0.00	0.02	0.00		
1-0.200	134.2	0.0	0.0	0.0	43.3	0.0			0.00	0.00	0.03	0.00		
1-0.300	181.1	0.0	0.0	0.0	39.0	0.0			0.00	0.00	0.04	0.00		
1-0.400	190.9	0.0	0.0	0.0	4.6	-4.6			0.00	0.00	0.05	0.00		
1-0.450	187.4	0.0	0.0	0.0	4.6	-4.6			0.00	0.00	0.05	0.00		
1-0.500	183.8	0.0	0.0	0.0	4.6	-4.6			0.00	0.00	0.05	0.00		
1-0.600	190.9	0.0	0.0	0.0	4.6	-4.6			0.00	0.00	0.05	0.00		
1-0.700	181.1	0.0	0.0	0.0	0.0	-39.0			0.00	0.00	0.04	0.00		
1-0.800	134.2	0.0	0.0	0.0	0.0	-43.3			0.00	0.00	0.03	0.00		
1-0.900	67.1	0.0	0.0	0.0	0.0	-43.3			0.00	0.00	0.02	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-43.3	43.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000859 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 32.542 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000859 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 32.542 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 10: NRL + NRL
Length of Span No. 1 = 15.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	0.0	0.0	0.0	45.9	0.0	45.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	71.1	0.0	0.0	0.0	45.9	0.0			0.00	0.00	0.02	0.00		
1-0.200	142.2	0.0	0.0	0.0	45.9	0.0			0.00	0.00	0.03	0.00		
1-0.300	191.9	0.0	0.0	0.0	41.4	0.0			0.00	0.00	0.04	0.00		
1-0.400	202.4	0.0	0.0	0.0	4.9	-4.9			0.00	0.00	0.05	0.00		
1-0.450	198.6	0.0	0.0	0.0	4.9	-4.9			0.00	0.00	0.05	0.00		
1-0.500	194.8	0.0	0.0	0.0	4.9	-4.9			0.00	0.00	0.05	0.00		
1-0.600	202.4	0.0	0.0	0.0	4.9	-4.9			0.00	0.00	0.05	0.00		
1-0.700	191.9	0.0	0.0	0.0	0.0	-41.4			0.00	0.00	0.04	0.00		
1-0.800	142.2	0.0	0.0	0.0	0.0	-45.9			0.00	0.00	0.03	0.00		
1-0.900	71.1	0.0	0.0	0.0	0.0	-45.9			0.00	0.00	0.02	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-45.9	45.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000911 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 34.488 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000911 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 34.488 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I
Length of Span No. 1 = 15.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	0.0	0.0	0.0	105.1	20.9	105.1	20.9	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	159.6	29.1	0.0	0.0	100.9	16.7			0.04	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	312.8	51.8	0.0	0.0	96.7	12.5			0.07	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	420.3	68.0	0.0	0.0	84.3	8.4			0.10	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.400	449.2	77.7	0.0	0.0	13.1	-4.7			0.11	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.450	444.7	80.1	0.0	0.0	11.0	-6.8			0.12	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.500	438.6	80.9	0.0	0.0	8.9	-8.9			0.12	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	449.2	77.7	0.0	0.0	4.7	-13.1			0.11	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	420.3	68.0	0.0	0.0	-8.4	-84.3			0.10	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	312.8	51.8	0.0	0.0	-12.5	-96.7			0.07	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	159.6	29.1	0.0	0.0	-16.7	-100.9			0.04	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-20.9	-105.1	105.1	20.9	0.00	0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

Floor Beam

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I-O
Length of Span No. 1 = 15.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	0.0	0.0	0.0	85.8	20.9	85.8	20.9	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	129.8	29.1	0.0	0.0	81.7	16.7			0.03	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	253.2	51.8	0.0	0.0	77.5	12.5			0.06	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	339.7	68.0	0.0	0.0	67.0	8.4			0.08	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.400	364.2	77.7	0.0	0.0	11.0	-2.7			0.09	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.450	361.3	80.1	0.0	0.0	9.0	-4.8			0.09	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.500	356.8	80.9	0.0	0.0	6.9	-6.9			0.10	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	364.2	77.7	0.0	0.0	2.7	-11.0			0.09	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	339.7	68.0	0.0	0.0	-8.4	-67.0			0.08	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	253.2	51.8	0.0	0.0	-12.5	-77.5			0.06	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	129.8	29.1	0.0	0.0	-16.7	-81.7			0.03	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-20.9	-85.8	85.8	20.9	0.00	0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

Floor Beam

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II
Length of Span No. 1 = 15.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	0.0	0.0	0.0	79.3	16.7	79.3	16.7	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	120.3	23.3	0.0	0.0	75.9	13.4			0.03	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	235.3	41.4	0.0	0.0	72.6	10.0			0.05	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	316.1	54.4	0.0	0.0	63.1	6.7			0.07	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.400	338.1	62.1	0.0	0.0	10.0	-3.3			0.08	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.450	334.9	64.1	0.0	0.0	8.3	-4.9			0.09	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.500	330.4	64.7	0.0	0.0	6.6	-6.6			0.09	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	338.1	62.1	0.0	0.0	3.3	-10.0			0.08	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	316.1	54.4	0.0	0.0	-6.7	-63.1			0.07	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	235.3	41.4	0.0	0.0	-10.0	-72.6			0.05	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	120.3	23.3	0.0	0.0	-13.4	-75.9			0.03	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-16.7	-79.3	79.3	16.7	0.00	0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

Floor Beam

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II-O
Length of Span No. 1 = 15.500 ft

POINT NO.	MOMENT (ft-kips)		AXIAL (kips)		SHEAR (kips)		REACTION (kips)		Y DEFLECTION (in)	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1-0.000	0.0	0.0	0.0	0.0	64.8	16.7	64.8	16.7	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	97.9	23.3	0.0	0.0	61.5	13.4			0.02	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	190.6	41.4	0.0	0.0	58.1	10.0			0.04	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	255.7	54.4	0.0	0.0	50.1	6.7			0.06	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.400	274.4	62.1	0.0	0.0	8.4	-1.7			0.07	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.450	272.4	64.1	0.0	0.0	6.8	-3.4			0.07	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.500	269.1	64.7	0.0	0.0	5.1	-5.1			0.07	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	274.4	62.1	0.0	0.0	1.7	-8.4			0.07	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	255.7	54.4	0.0	0.0	-6.7	-50.1			0.06	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	190.6	41.4	0.0	0.0	-10.0	-58.1			0.04	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	97.9	23.3	0.0	0.0	-13.4	-61.5			0.02	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-16.7	-64.8	64.8	16.7	0.00	0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
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=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

LIMIT STATE LEGEND:

BRASS	Specifications
STRENGTH I	Strength I Inventory
STRENGTH I-O	Strength I Operating
STRENGTH II	Strength II
STRENGTH IV	Strength IV
SERVICE I	Service I
SERVICE II	Service II Inventory
SERVICE II-O	Service II Operating
FATIGUE I	Fatigue I
FATIGUE II	Fatigue II

Floor Beam

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 1 Span Length = 15.500 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Calculated Properties: Section Analysis (Positive Bending)

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)
1-0.000	0.000	28.22	5757.9	18.38
1-0.100	1.550	28.22	5757.9	18.38
1-0.200	3.100	28.22	5757.9	18.38
1-0.290	4.500	*	*	*
1-0.300	4.650	28.22	5757.9	18.38
1-0.400	6.200	28.22	5757.9	18.38
1-0.450	6.975	28.22	5757.9	18.38
1-0.500	7.750	28.22	5757.9	18.38
1-0.600	9.300	*	*	*
1-0.700	10.850	*	*	*
1-0.710	11.000	*	*	*
1-0.800	12.400	*	*	*
1-0.900	13.950	*	*	*
1-1.000	15.500	*	*	*

* Note: Section properties for section analysis are only calculated at
points of interest either specified by the user or generated by BRASS.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 100.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	36.7500			
Top Flange Thickness	=	0.3750	Top Flange Width	=	10.3750
Web Depth	=	36.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 0.000 ft
Maximum distance to Right Brace Point = 4.500 ft
Is analysis point braced? YES

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93	+ HL-93			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - TANDEM	+ TANDEM			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE 3	+ TYPE 3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE 3S2	+ TYPE 3S2			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE 3-3	+ TYPE 3-3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4	+ SU4			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5	+ SU5			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6	+ SU6			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7	+ SU7			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo	10 - NRL	+ NRL			(TRK)				
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	20.9	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Live Load Effect	80.9	0.0	62.4	0.0	62.4	0.0	0.0	0.0
Total Load Effect	101.8	20.9	83.3	20.9	83.3	20.9	25.1	25.1
Resistance - Dead	169.6	169.6	169.6	169.6	169.6	169.6	165.5	165.5
Design Ratio	1.87	9.13	2.29	9.13	(2.29)	(9.13)	(7.61)	(7.61)
Rating Factor	2.10	N/A	2.72	N/A	(2.72)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	20.9	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Live Load Effect	84.2	0.0	65.0	0.0	65.0	0.0	0.0	0.0
Total Load Effect	105.1	20.9	85.8	20.9	85.8	20.9	25.1	25.1
Resistance - Dead	169.6	169.6	169.6	169.6	169.6	169.6	165.5	165.5
Design Ratio	1.81	9.13	2.22	9.13	(2.22)	(9.13)	(7.61)	(7.61)
Rating Factor	2.01	N/A	2.61	N/A	(2.61)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	20.9	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Live Load Effect	39.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	60.2	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Resistance - Dead	169.6	169.6	169.6	169.6	169.6	169.6	165.5	165.5
Design Ratio	3.16	9.13	9.13	9.13	(9.13)	(9.13)	(7.61)	(7.61)
Rating Factor	4.31	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	20.9	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Live Load Effect	36.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	57.4	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Resistance - Dead	169.6	169.6	169.6	169.6	169.6	169.6	165.5	165.5
Design Ratio	3.32	9.13	9.13	9.13	(9.13)	(9.13)	(7.61)	(7.61)
Rating Factor	4.64	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	20.9	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Live Load Effect	32.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	53.0	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Resistance - Dead	169.6	169.6	169.6	169.6	169.6	169.6	165.5	165.5
Design Ratio	3.59	9.13	9.13	9.13	(9.13)	(9.13)	(7.61)	(7.61)
Rating Factor	5.28	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	20.9	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Live Load Effect	45.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	66.8	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Resistance - Dead	169.6	169.6	169.6	169.6	169.6	169.6	165.5	165.5
Design Ratio	2.85	9.13	9.13	9.13	(9.13)	(9.13)	(7.61)	(7.61)
Rating Factor	3.69	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	20.9	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Live Load Effect	49.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	70.2	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Resistance - Dead	169.6	169.6	169.6	169.6	169.6	169.6	165.5	165.5
Design Ratio	2.71	9.13	9.13	9.13	(9.13)	(9.13)	(7.61)	(7.61)
Rating Factor	3.44	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	20.9	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Live Load Effect	53.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	74.7	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Resistance - Dead	169.6	169.6	169.6	169.6	169.6	169.6	165.5	165.5
Design Ratio	2.55	9.13	9.13	9.13	(9.13)	(9.13)	(7.61)	(7.61)
Rating Factor	3.15	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	20.9	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Live Load Effect	56.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	77.1	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Resistance - Dead	169.6	169.6	169.6	169.6	169.6	169.6	165.5	165.5
Design Ratio	2.47	9.13	9.13	9.13	(9.13)	(9.13)	(7.61)	(7.61)
Rating Factor	3.02	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	20.9	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Live Load Effect	59.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	80.5	20.9	20.9	20.9	20.9	20.9	25.1	25.1
Resistance - Dead	169.6	169.6	169.6	169.6	169.6	169.6	165.5	165.5
Design Ratio	2.37	9.13	9.13	9.13	(9.13)	(9.13)	(7.61)	(7.61)
Rating Factor	2.85	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 101.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	36.7500			
Top Flange Thickness	=	0.3750	Top Flange Width	=	10.3750
Web Depth	=	36.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 1.550 ft
Maximum distance to Right Brace Point = 2.950 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93	+ HL-93			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - TANDEM	+ TANDEM			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE 3	+ TYPE 3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE 3S2	+ TYPE 3S2			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE 3-3	+ TYPE 3-3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4	+ SU4			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5	+ SU5			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6	+ SU6			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7	+ SU7			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo	10 - NRL	+ NRL			(TRK)				
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	29.1	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Live Load Effect	125.4	0.0	96.8	0.0	96.8	0.0	0.0	0.0
Total Load Effect	154.6	0.0	125.9	0.0	125.9	0.0	34.9	0.0
Resistance - Dead	754.3	0.0	754.3	0.0	754.3	0.0	748.4	0.0
Design Ratio	5.07	N/A	6.22	N/A	(6.22)	(N/A)	(22.42)	(N/A)
Rating Factor	6.01	N/A	7.79	N/A	(7.79)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	16.7	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Live Load Effect	80.9	0.0	62.4	0.0	62.4	0.0	0.0	0.0
Total Load Effect	97.6	16.7	79.1	16.7	79.1	16.7	20.0	20.0
Resistance - Dead	173.8	173.8	173.8	173.8	173.8	173.8	170.5	170.5
Design Ratio	1.95	11.41	2.41	11.41	(2.41)	(11.41)	(9.51)	(9.51)
Rating Factor	2.15	N/A	2.78	N/A	(2.78)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-3.57	3.57	0.00	0.00	-2.74	2.74	0.00	0.00
Total Load Effect	-4.46	4.46	0.00	0.00	-3.64	3.64	0.00	0.00
Resistance - Dead	-23.11	23.11	0.00	0.00	-23.11	23.11	0.00	0.00
Design Ratio	5.38	5.38	N/A	N/A	6.60	6.60	N/A	N/A
Rating Factor	6.48	6.48	N/A	N/A	8.42	8.42	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-3.57	3.57	0.00	0.00	-2.74	2.74	0.00	0.00
Total Load Effect	-4.46	4.46	0.00	0.00	-3.64	3.64	0.00	0.00
Resistance - Dead	-29.11	N/A	0.00	0.00	-29.11	N/A	0.00	0.00
Design Ratio	6.73	N/A	N/A	N/A	8.25	N/A	N/A	N/A
Rating Factor	8.16	N/A	N/A	N/A	10.60	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	29.1	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Live Load Effect	130.5	0.0	100.7	0.0	100.7	0.0	0.0	0.0
Total Load Effect	159.6	0.0	129.8	0.0	129.8	0.0	34.9	0.0
Resistance - Dead	754.3	0.0	754.3	0.0	754.3	0.0	748.4	0.0
Design Ratio	4.91	N/A	6.03	N/A	(6.03)	(N/A)	(22.42)	(N/A)
Rating Factor	5.78	N/A	7.49	N/A	(7.49)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	16.7	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Live Load Effect	84.2	0.0	65.0	0.0	65.0	0.0	0.0	0.0
Total Load Effect	100.9	16.7	81.7	16.7	81.7	16.7	20.0	20.0
Resistance - Dead	173.8	173.8	173.8	173.8	173.8	173.8	170.5	170.5
Design Ratio	1.89	11.41	2.33	11.41	(2.33)	(11.41)	(9.51)	(9.51)
Rating Factor	2.06	N/A	2.68	N/A	(2.68)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-3.71	3.71	0.00	0.00	-2.86	2.86	0.00	0.00
Total Load Effect	-4.61	4.61	0.00	0.00	-3.75	3.75	0.00	0.00
Resistance - Dead	-23.11	23.11	0.00	0.00	-23.11	23.11	0.00	0.00
Design Ratio	5.21	5.21	N/A	N/A	6.40	6.40	N/A	N/A
Rating Factor	6.22	6.22	N/A	N/A	8.09	8.09	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-3.71	3.71	0.00	0.00	-2.86	2.86	0.00	0.00
Total Load Effect	-4.61	4.61	0.00	0.00	-3.75	3.75	0.00	0.00
Resistance - Dead	-29.11	N/A	0.00	0.00	-29.11	N/A	0.00	0.00
Design Ratio	6.51	N/A	N/A	N/A	8.00	N/A	N/A	N/A
Rating Factor	7.84	N/A	N/A	N/A	10.19	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	29.1	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Live Load Effect	61.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	90.1	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Resistance - Dead	754.3	0.0	754.3	0.0	754.3	0.0	748.4	0.0
Design Ratio	8.70	N/A	26.90	N/A	(26.90)	(N/A)	(22.42)	(N/A)
Rating Factor	12.37	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	16.7	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Live Load Effect	39.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	56.0	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Resistance - Dead	173.8	173.8	173.8	173.8	173.8	173.8	170.5	170.5
Design Ratio	3.40	11.41	11.41	11.41	(11.41)	(11.41)	(9.51)	(9.51)
Rating Factor	4.42	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-2.33	2.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.23	3.23	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-23.11	23.11	0.00	0.00	24.89	23.11	0.00	0.00
Design Ratio	7.44	7.44	N/A	N/A	N/A	26.90	N/A	N/A
Rating Factor	9.90	9.90	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-2.33	2.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.23	3.23	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-29.11	N/A	0.00	0.00	-29.11	N/A	0.00	0.00
Design Ratio	9.30	N/A	N/A	N/A	33.62	N/A	N/A	N/A
Rating Factor	12.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	29.1	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Live Load Effect	56.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	85.8	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Resistance - Dead	754.3	0.0	754.3	0.0	754.3	0.0	748.4	0.0
Design Ratio	9.13	N/A	26.90	N/A	(26.90)	(N/A)	(22.42)	(N/A)
Rating Factor	13.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	16.7	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Live Load Effect	36.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	53.2	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Resistance - Dead	173.8	173.8	173.8	173.8	173.8	173.8	170.5	170.5
Design Ratio	3.58	11.41	11.41	11.41	(11.41)	(11.41)	(9.51)	(9.51)
Rating Factor	4.76	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-2.17	2.17	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.06	3.06	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-23.11	23.11	0.00	0.00	24.89	23.11	0.00	0.00
Design Ratio	7.84	7.84	N/A	N/A	N/A	26.90	N/A	N/A
Rating Factor	10.65	10.65	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-2.17	2.17	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.06	3.06	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-29.11	N/A	0.00	0.00	-29.11	N/A	0.00	0.00
Design Ratio	9.80	N/A	N/A	N/A	33.62	N/A	N/A	N/A
Rating Factor	13.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	29.1	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Live Load Effect	49.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	78.9	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Resistance - Dead	754.3	0.0	754.3	0.0	754.3	0.0	748.4	0.0
Design Ratio	9.92	N/A	26.90	N/A	(26.90)	(N/A)	(22.42)	(N/A)
Rating Factor	15.14	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	16.7	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Live Load Effect	32.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	48.8	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Resistance - Dead	173.8	173.8	173.8	173.8	173.8	173.8	170.5	170.5
Design Ratio	3.90	11.41	11.41	11.41	(11.41)	(11.41)	(9.51)	(9.51)
Rating Factor	5.41	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-1.91	1.91	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-2.80	2.80	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-23.11	23.11	0.00	0.00	24.89	23.11	0.00	0.00
Design Ratio	8.57	8.57	N/A	N/A	N/A	26.90	N/A	N/A
Rating Factor	12.11	12.11	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-1.91	1.91	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-2.80	2.80	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-29.11	N/A	0.00	0.00	-29.11	N/A	0.00	0.00
Design Ratio	10.72	N/A	N/A	N/A	33.62	N/A	N/A	N/A
Rating Factor	15.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	29.1	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Live Load Effect	71.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	100.3	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Resistance - Dead	754.3	0.0	754.3	0.0	754.3	0.0	748.4	0.0
Design Ratio	7.81	N/A	26.90	N/A	(26.90)	(N/A)	(22.42)	(N/A)
Rating Factor	10.59	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	16.7	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Live Load Effect	45.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	62.6	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Resistance - Dead	173.8	173.8	173.8	173.8	173.8	173.8	170.5	170.5
Design Ratio	3.04	11.41	11.41	11.41	(11.41)	(11.41)	(9.51)	(9.51)
Rating Factor	3.78	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-2.73	2.73	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.62	3.62	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-23.11	23.11	0.00	0.00	24.89	23.11	0.00	0.00
Design Ratio	6.63	6.63	N/A	N/A	N/A	26.90	N/A	N/A
Rating Factor	8.47	8.47	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-2.73	2.73	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.62	3.62	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-29.11	N/A	0.00	0.00	-29.11	N/A	0.00	0.00
Design Ratio	8.29	N/A	N/A	N/A	33.62	N/A	N/A	N/A
Rating Factor	10.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	29.1	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Live Load Effect	76.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	105.5	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Resistance - Dead	754.3	0.0	754.3	0.0	754.3	0.0	748.4	0.0
Design Ratio	7.42	N/A	26.90	N/A	(26.90)	(N/A)	(22.42)	(N/A)
Rating Factor	9.87	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	16.7	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Live Load Effect	49.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	66.0	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Resistance - Dead	173.8	173.8	173.8	173.8	173.8	173.8	170.5	170.5
Design Ratio	2.89	11.41	11.41	11.41	(11.41)	(11.41)	(9.51)	(9.51)
Rating Factor	3.53	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-2.93	2.93	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.82	3.82	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-23.11	23.11	0.00	0.00	24.89	23.11	0.00	0.00
Design Ratio	6.28	6.28	N/A	N/A	N/A	26.90	N/A	N/A
Rating Factor	7.90	7.90	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-2.93	2.93	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.82	3.82	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-29.11	N/A	0.00	0.00	-29.11	N/A	0.00	0.00
Design Ratio	7.86	N/A	N/A	N/A	33.62	N/A	N/A	N/A
Rating Factor	9.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	29.1	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Live Load Effect	83.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	112.6	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Resistance - Dead	754.3	0.0	754.3	0.0	754.3	0.0	748.4	0.0
Design Ratio	6.96	N/A	26.90	N/A	(26.90)	(N/A)	(22.42)	(N/A)
Rating Factor	9.04	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	16.7	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Live Load Effect	53.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	70.5	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Resistance - Dead	173.8	173.8	173.8	173.8	173.8	173.8	170.5	170.5
Design Ratio	2.70	11.41	11.41	11.41	(11.41)	(11.41)	(9.51)	(9.51)
Rating Factor	3.23	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-3.20	3.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.09	4.09	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-23.11	23.11	0.00	0.00	24.89	23.11	0.00	0.00
Design Ratio	5.87	5.87	N/A	N/A	N/A	26.90	N/A	N/A
Rating Factor	7.23	7.23	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-3.20	3.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.09	4.09	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-29.11	N/A	0.00	0.00	-29.11	N/A	0.00	0.00
Design Ratio	7.34	N/A	N/A	N/A	33.62	N/A	N/A	N/A
Rating Factor	9.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	29.1	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Live Load Effect	87.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	116.3	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Resistance - Dead	754.3	0.0	754.3	0.0	754.3	0.0	748.4	0.0
Design Ratio	6.73	N/A	26.90	N/A	(26.90)	(N/A)	(22.42)	(N/A)
Rating Factor	8.65	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	16.7	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Live Load Effect	56.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	73.0	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Resistance - Dead	173.8	173.8	173.8	173.8	173.8	173.8	170.5	170.5
Design Ratio	2.61	11.41	11.41	11.41	(11.41)	(11.41)	(9.51)	(9.51)
Rating Factor	3.09	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-3.34	3.34	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.23	4.23	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-23.11	23.11	0.00	0.00	24.89	23.11	0.00	0.00
Design Ratio	5.67	5.67	N/A	N/A	N/A	26.90	N/A	N/A
Rating Factor	6.92	6.92	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-3.34	3.34	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.23	4.23	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-29.11	N/A	0.00	0.00	-29.11	N/A	0.00	0.00
Design Ratio	7.09	N/A	N/A	N/A	33.62	N/A	N/A	N/A
Rating Factor	8.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	29.1	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Live Load Effect	92.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	121.5	0.0	29.1	0.0	29.1	0.0	34.9	0.0
Resistance - Dead	754.3	0.0	754.3	0.0	754.3	0.0	748.4	0.0
Design Ratio	6.45	N/A	26.90	N/A	(26.90)	(N/A)	(22.42)	(N/A)
Rating Factor	8.16	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	16.7	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Live Load Effect	59.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	76.3	16.7	16.7	16.7	16.7	16.7	20.0	20.0
Resistance - Dead	173.8	173.8	173.8	173.8	173.8	173.8	170.5	170.5
Design Ratio	2.50	11.41	11.41	11.41	(11.41)	(11.41)	(9.51)	(9.51)
Rating Factor	2.92	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-3.54	3.54	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.43	4.43	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-23.11	23.11	0.00	0.00	24.89	23.11	0.00	0.00
Design Ratio	5.42	5.42	N/A	N/A	N/A	26.90	N/A	N/A
Rating Factor	6.53	6.53	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.89	0.89	0.00	0.00	-0.89	0.89	0.00	0.00
Live Load Effect	-3.54	3.54	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.43	4.43	0.00	0.00	-0.89	0.89	0.00	0.00
Resistance - Dead	-29.11	N/A	0.00	0.00	-29.11	N/A	0.00	0.00
Design Ratio	6.77	N/A	N/A	N/A	33.62	N/A	N/A	N/A
Rating Factor	8.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 102.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	36.7500			
Top Flange Thickness	=	0.3750	Top Flange Width	=	10.3750
Web Depth	=	36.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 3.100 ft
Maximum distance to Right Brace Point = 1.400 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93	+ HL-93			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - TANDEM	+ TANDEM			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE 3	+ TYPE 3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE 3S2	+ TYPE 3S2			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE 3-3	+ TYPE 3-3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4	+ SU4			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5	+ SU5			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6	+ SU6			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7	+ SU7			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo	10 - NRL	+ NRL			(TRK)				
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	51.8	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Live Load Effect	250.9	0.0	193.5	0.0	193.5	0.0	0.0	0.0
Total Load Effect	302.7	0.0	245.3	0.0	245.3	0.0	62.1	0.0
Resistance - Dead	731.6	0.0	731.6	0.0	731.6	0.0	721.3	0.0
Design Ratio	2.59	N/A	3.19	N/A	(3.19)	(N/A)	(12.61)	(N/A)
Rating Factor	2.92	N/A	3.78	N/A	(3.78)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	80.9	0.0	62.4	0.0	62.4	0.0	0.0	0.0
Total Load Effect	93.5	12.5	75.0	12.5	75.0	12.5	15.0	15.0
Resistance - Dead	178.0	178.0	178.0	178.0	178.0	178.0	175.5	175.5
Design Ratio	2.04	15.21	2.54	15.21	(2.54)	(15.21)	(12.68)	(12.68)
Rating Factor	2.20	N/A	2.85	N/A	(2.85)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-7.14	7.14	0.00	0.00	-5.49	5.49	0.00	0.00
Total Load Effect	-8.72	8.72	0.00	0.00	-7.08	7.08	0.00	0.00
Resistance - Dead	-22.41	22.41	0.00	0.00	-22.41	22.41	0.00	0.00
Design Ratio	2.75	2.75	N/A	N/A	3.39	3.39	N/A	N/A
Rating Factor	3.14	3.14	N/A	N/A	4.08	4.08	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-7.14	7.14	0.00	0.00	-5.49	5.49	0.00	0.00
Total Load Effect	-8.72	8.72	0.00	0.00	-7.08	7.08	0.00	0.00
Resistance - Dead	-28.41	N/A	0.00	0.00	-28.41	N/A	0.00	0.00
Design Ratio	3.44	N/A	N/A	N/A	4.24	N/A	N/A	N/A
Rating Factor	3.98	N/A	N/A	N/A	5.18	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	51.8	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Live Load Effect	261.0	0.0	201.4	0.0	201.4	0.0	0.0	0.0
Total Load Effect	312.8	0.0	253.2	0.0	253.2	0.0	62.1	0.0
Resistance - Dead	731.6	0.0	731.6	0.0	731.6	0.0	721.3	0.0
Design Ratio	2.50	N/A	3.09	N/A	(3.09)	(N/A)	(12.61)	(N/A)
Rating Factor	2.80	N/A	3.63	N/A	(3.63)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	84.2	0.0	65.0	0.0	65.0	0.0	0.0	0.0
Total Load Effect	96.7	12.5	77.5	12.5	77.5	12.5	15.0	15.0
Resistance - Dead	178.0	178.0	178.0	178.0	178.0	178.0	175.5	175.5
Design Ratio	1.97	15.21	2.46	15.21	(2.46)	(15.21)	(12.68)	(12.68)
Rating Factor	2.11	N/A	2.74	N/A	(2.74)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-7.43	7.43	0.00	0.00	-5.71	5.71	0.00	0.00
Total Load Effect	-9.01	9.01	0.00	0.00	-7.30	7.30	0.00	0.00
Resistance - Dead	-22.41	22.41	0.00	0.00	-22.41	22.41	0.00	0.00
Design Ratio	2.66	2.66	N/A	N/A	3.29	3.29	N/A	N/A
Rating Factor	3.02	3.02	N/A	N/A	3.92	3.92	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-7.43	7.43	0.00	0.00	-5.71	5.71	0.00	0.00
Total Load Effect	-9.01	9.01	0.00	0.00	-7.30	7.30	0.00	0.00
Resistance - Dead	-28.41	N/A	0.00	0.00	-28.41	N/A	0.00	0.00
Design Ratio	3.33	N/A	N/A	N/A	4.11	N/A	N/A	N/A
Rating Factor	3.83	N/A	N/A	N/A	4.97	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	51.8	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Live Load Effect	121.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	173.7	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Resistance - Dead	731.6	0.0	731.6	0.0	731.6	0.0	721.3	0.0
Design Ratio	4.51	N/A	15.13	N/A	(15.13)	(N/A)	(12.61)	(N/A)
Rating Factor	6.00	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	39.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	51.9	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	178.0	178.0	178.0	178.0	178.0	178.0	175.5	175.5
Design Ratio	3.67	15.21	15.21	15.21	(15.21)	(15.21)	(12.68)	(12.68)
Rating Factor	4.53	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-4.67	4.67	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.25	6.25	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-22.41	22.41	0.00	0.00	25.59	22.41	0.00	0.00
Design Ratio	3.84	3.84	N/A	N/A	N/A	15.13	N/A	N/A
Rating Factor	4.80	4.80	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-4.67	4.67	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.25	6.25	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-28.41	N/A	0.00	0.00	-28.41	N/A	0.00	0.00
Design Ratio	4.80	N/A	N/A	N/A	18.91	N/A	N/A	N/A
Rating Factor	6.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	51.8	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Live Load Effect	113.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	165.1	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Resistance - Dead	731.6	0.0	731.6	0.0	731.6	0.0	721.3	0.0
Design Ratio	4.75	N/A	15.13	N/A	(15.13)	(N/A)	(12.61)	(N/A)
Rating Factor	6.46	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	36.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	49.1	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	178.0	178.0	178.0	178.0	178.0	178.0	175.5	175.5
Design Ratio	3.88	15.21	15.21	15.21	(15.21)	(15.21)	(12.68)	(12.68)
Rating Factor	4.87	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-4.34	4.34	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.92	5.92	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-22.41	22.41	0.00	0.00	25.59	22.41	0.00	0.00
Design Ratio	4.05	4.05	N/A	N/A	N/A	15.13	N/A	N/A
Rating Factor	5.17	5.17	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-4.34	4.34	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.92	5.92	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-28.41	N/A	0.00	0.00	-28.41	N/A	0.00	0.00
Design Ratio	5.06	N/A	N/A	N/A	18.91	N/A	N/A	N/A
Rating Factor	6.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	51.8	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Live Load Effect	99.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	151.4	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Resistance - Dead	731.6	0.0	731.6	0.0	731.6	0.0	721.3	0.0
Design Ratio	5.17	N/A	15.13	N/A	(15.13)	(N/A)	(12.61)	(N/A)
Rating Factor	7.34	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	32.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	44.7	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	178.0	178.0	178.0	178.0	178.0	178.0	175.5	175.5
Design Ratio	4.27	15.21	15.21	15.21	(15.21)	(15.21)	(12.68)	(12.68)
Rating Factor	5.54	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-3.81	3.81	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.40	5.40	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-22.41	22.41	0.00	0.00	25.59	22.41	0.00	0.00
Design Ratio	4.44	4.44	N/A	N/A	N/A	15.13	N/A	N/A
Rating Factor	5.88	5.88	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-3.81	3.81	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.40	5.40	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-28.41	N/A	0.00	0.00	-28.41	N/A	0.00	0.00
Design Ratio	5.55	N/A	N/A	N/A	18.91	N/A	N/A	N/A
Rating Factor	7.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	51.8	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Live Load Effect	142.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	194.2	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Resistance - Dead	731.6	0.0	731.6	0.0	731.6	0.0	721.3	0.0
Design Ratio	4.03	N/A	15.13	N/A	(15.13)	(N/A)	(12.61)	(N/A)
Rating Factor	5.14	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	45.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	58.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	178.0	178.0	178.0	178.0	178.0	178.0	175.5	175.5
Design Ratio	3.26	15.21	15.21	15.21	(15.21)	(15.21)	(12.68)	(12.68)
Rating Factor	3.87	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-5.45	5.45	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.04	7.04	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-22.41	22.41	0.00	0.00	25.59	22.41	0.00	0.00
Design Ratio	3.41	3.41	N/A	N/A	N/A	15.13	N/A	N/A
Rating Factor	4.11	4.11	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-5.45	5.45	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.04	7.04	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-28.41	N/A	0.00	0.00	-28.41	N/A	0.00	0.00
Design Ratio	4.26	N/A	N/A	N/A	18.91	N/A	N/A	N/A
Rating Factor	5.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	51.8	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Live Load Effect	152.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	204.6	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Resistance - Dead	731.6	0.0	731.6	0.0	731.6	0.0	721.3	0.0
Design Ratio	3.83	N/A	15.13	N/A	(15.13)	(N/A)	(12.61)	(N/A)
Rating Factor	4.79	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	49.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	61.8	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	178.0	178.0	178.0	178.0	178.0	178.0	175.5	175.5
Design Ratio	3.08	15.21	15.21	15.21	(15.21)	(15.21)	(12.68)	(12.68)
Rating Factor	3.61	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-5.85	5.85	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.44	7.44	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-22.41	22.41	0.00	0.00	25.59	22.41	0.00	0.00
Design Ratio	3.23	3.23	N/A	N/A	N/A	15.13	N/A	N/A
Rating Factor	3.83	3.83	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-5.85	5.85	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.44	7.44	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-28.41	N/A	0.00	0.00	-28.41	N/A	0.00	0.00
Design Ratio	4.03	N/A	N/A	N/A	18.91	N/A	N/A	N/A
Rating Factor	4.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	51.8	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Live Load Effect	166.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	218.6	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Resistance - Dead	731.6	0.0	731.6	0.0	731.6	0.0	721.3	0.0
Design Ratio	3.58	N/A	15.13	N/A	(15.13)	(N/A)	(12.61)	(N/A)
Rating Factor	4.38	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	53.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	66.4	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	178.0	178.0	178.0	178.0	178.0	178.0	175.5	175.5
Design Ratio	2.87	15.21	15.21	15.21	(15.21)	(15.21)	(12.68)	(12.68)
Rating Factor	3.31	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-6.39	6.39	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.98	7.98	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-22.41	22.41	0.00	0.00	25.59	22.41	0.00	0.00
Design Ratio	3.01	3.01	N/A	N/A	N/A	15.13	N/A	N/A
Rating Factor	3.51	3.51	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-6.39	6.39	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.98	7.98	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-28.41	N/A	0.00	0.00	-28.41	N/A	0.00	0.00
Design Ratio	3.76	N/A	N/A	N/A	18.91	N/A	N/A	N/A
Rating Factor	4.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	51.8	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Live Load Effect	174.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	226.2	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Resistance - Dead	731.6	0.0	731.6	0.0	731.6	0.0	721.3	0.0
Design Ratio	3.46	N/A	15.13	N/A	(15.13)	(N/A)	(12.61)	(N/A)
Rating Factor	4.19	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	56.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	68.8	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	178.0	178.0	178.0	178.0	178.0	178.0	175.5	175.5
Design Ratio	2.77	15.21	15.21	15.21	(15.21)	(15.21)	(12.68)	(12.68)
Rating Factor	3.16	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-6.68	6.68	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.27	8.27	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-22.41	22.41	0.00	0.00	25.59	22.41	0.00	0.00
Design Ratio	2.90	2.90	N/A	N/A	N/A	15.13	N/A	N/A
Rating Factor	3.36	3.36	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-6.68	6.68	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.27	8.27	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-28.41	N/A	0.00	0.00	-28.41	N/A	0.00	0.00
Design Ratio	3.63	N/A	N/A	N/A	18.91	N/A	N/A	N/A
Rating Factor	4.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	51.8	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Live Load Effect	184.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	236.6	0.0	51.8	0.0	51.8	0.0	62.1	0.0
Resistance - Dead	731.6	0.0	731.6	0.0	731.6	0.0	721.3	0.0
Design Ratio	3.31	N/A	15.13	N/A	(15.13)	(N/A)	(12.61)	(N/A)
Rating Factor	3.96	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	59.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	72.2	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	178.0	178.0	178.0	178.0	178.0	178.0	175.5	175.5
Design Ratio	2.64	15.21	15.21	15.21	(15.21)	(15.21)	(12.68)	(12.68)
Rating Factor	2.99	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-7.08	7.08	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.67	8.67	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-22.41	22.41	0.00	0.00	25.59	22.41	0.00	0.00
Design Ratio	2.77	2.77	N/A	N/A	N/A	15.13	N/A	N/A
Rating Factor	3.17	3.17	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.59	1.59	0.00	0.00	-1.59	1.59	0.00	0.00
Live Load Effect	-7.08	7.08	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.67	8.67	0.00	0.00	-1.59	1.59	0.00	0.00
Resistance - Dead	-28.41	N/A	0.00	0.00	-28.41	N/A	0.00	0.00
Design Ratio	3.46	N/A	N/A	N/A	18.91	N/A	N/A	N/A
Rating Factor	4.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 103.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	36.7500			
Top Flange Thickness	=	0.3750	Top Flange Width	=	10.3750
Web Depth	=	36.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 0.150 ft
Maximum distance to Right Brace Point = 6.350 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

Floor Beam

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93	+ HL-93			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - TANDEM	+ TANDEM			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE 3	+ TYPE 3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE 3S2	+ TYPE 3S2			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE 3-3	+ TYPE 3-3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4	+ SU4			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5	+ SU5			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6	+ SU6			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7	+ SU7			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo	10 - NRL	+ NRL			(TRK)				
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	68.0	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Live Load Effect	338.6	0.0	261.2	0.0	261.2	0.0	0.0	0.0
Total Load Effect	406.5	0.0	329.2	0.0	329.2	0.0	81.5	0.0
Resistance - Dead	715.4	0.0	715.4	0.0	715.4	0.0	701.8	0.0
Design Ratio	1.93	N/A	2.38	N/A	(2.38)	(N/A)	(9.61)	(N/A)
Rating Factor	2.11	N/A	2.74	N/A	(2.74)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	8.4	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Live Load Effect	73.0	0.0	56.3	0.0	56.3	0.0	0.0	0.0
Total Load Effect	81.4	8.4	64.7	8.4	64.7	8.4	10.0	10.0
Resistance - Dead	182.2	182.2	182.2	182.2	182.2	182.2	180.5	180.5
Design Ratio	2.34	22.82	2.95	22.82	(2.95)	(22.82)	(19.01)	(19.01)
Rating Factor	2.50	N/A	3.23	N/A	(3.23)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-9.63	9.63	0.00	0.00	-7.41	7.41	0.00	0.00
Total Load Effect	-11.71	11.71	0.00	0.00	-9.49	9.49	0.00	0.00
Resistance - Dead	-21.92	21.92	0.00	0.00	-21.92	21.92	0.00	0.00
Design Ratio	2.05	2.05	N/A	N/A	2.53	2.53	N/A	N/A
Rating Factor	2.28	2.28	N/A	N/A	2.96	2.96	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-9.63	9.63	0.00	0.00	-7.41	7.41	0.00	0.00
Total Load Effect	-11.71	11.71	0.00	0.00	-9.49	9.49	0.00	0.00
Resistance - Dead	-27.92	N/A	0.00	0.00	-27.92	N/A	0.00	0.00
Design Ratio	2.56	N/A	N/A	N/A	3.16	N/A	N/A	N/A
Rating Factor	2.90	N/A	N/A	N/A	3.77	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	68.0	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Live Load Effect	352.3	0.0	271.8	0.0	271.8	0.0	0.0	0.0
Total Load Effect	420.3	0.0	339.7	0.0	339.7	0.0	81.5	0.0
Resistance - Dead	715.4	0.0	715.4	0.0	715.4	0.0	701.8	0.0
Design Ratio	1.86	N/A	2.31	N/A	(2.31)	(N/A)	(9.61)	(N/A)
Rating Factor	2.03	N/A	2.63	N/A	(2.63)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	8.4	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Live Load Effect	76.0	0.0	58.6	0.0	58.6	0.0	0.0	0.0
Total Load Effect	84.3	8.4	67.0	8.4	67.0	8.4	10.0	10.0
Resistance - Dead	182.2	182.2	182.2	182.2	182.2	182.2	180.5	180.5
Design Ratio	2.26	22.82	2.85	22.82	(2.85)	(22.82)	(19.01)	(19.01)
Rating Factor	2.40	N/A	3.11	N/A	(3.11)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-10.02	10.02	0.00	0.00	-7.71	7.71	0.00	0.00
Total Load Effect	-12.10	12.10	0.00	0.00	-9.79	9.79	0.00	0.00
Resistance - Dead	-21.92	21.92	0.00	0.00	-21.92	21.92	0.00	0.00
Design Ratio	1.98	1.98	N/A	N/A	2.45	2.45	N/A	N/A
Rating Factor	2.19	2.19	N/A	N/A	2.84	2.84	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-10.02	10.02	0.00	0.00	-7.71	7.71	0.00	0.00
Total Load Effect	-12.10	12.10	0.00	0.00	-9.79	9.79	0.00	0.00
Resistance - Dead	-27.92	N/A	0.00	0.00	-27.92	N/A	0.00	0.00
Design Ratio	2.48	N/A	N/A	N/A	3.06	N/A	N/A	N/A
Rating Factor	2.79	N/A	N/A	N/A	3.62	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	68.0	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Live Load Effect	164.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	232.5	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Resistance - Dead	715.4	0.0	715.4	0.0	715.4	0.0	701.8	0.0
Design Ratio	3.37	N/A	11.53	N/A	(11.53)	(N/A)	(9.61)	(N/A)
Rating Factor	4.35	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	8.4	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Live Load Effect	35.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	43.8	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Resistance - Dead	182.2	182.2	182.2	182.2	182.2	182.2	180.5	180.5
Design Ratio	4.35	22.82	22.82	22.82	(22.82)	(22.82)	(19.01)	(19.01)
Rating Factor	5.13	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-6.30	6.30	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.38	8.38	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-21.92	21.92	0.00	0.00	26.08	21.92	0.00	0.00
Design Ratio	2.86	2.86	N/A	N/A	N/A	11.53	N/A	N/A
Rating Factor	3.48	3.48	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-6.30	6.30	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.38	8.38	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-27.92	N/A	0.00	0.00	-27.92	N/A	0.00	0.00
Design Ratio	3.58	N/A	N/A	N/A	14.41	N/A	N/A	N/A
Rating Factor	4.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	68.0	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Live Load Effect	152.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	220.8	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Resistance - Dead	715.4	0.0	715.4	0.0	715.4	0.0	701.8	0.0
Design Ratio	3.55	N/A	11.53	N/A	(11.53)	(N/A)	(9.61)	(N/A)
Rating Factor	4.68	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	8.4	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Live Load Effect	33.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	41.3	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Resistance - Dead	182.2	182.2	182.2	182.2	182.2	182.2	180.5	180.5
Design Ratio	4.61	22.82	22.82	22.82	(22.82)	(22.82)	(19.01)	(19.01)
Rating Factor	5.53	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-5.86	5.86	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.94	7.94	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-21.92	21.92	0.00	0.00	26.08	21.92	0.00	0.00
Design Ratio	3.02	3.02	N/A	N/A	N/A	11.53	N/A	N/A
Rating Factor	3.74	3.74	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-5.86	5.86	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.94	7.94	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-27.92	N/A	0.00	0.00	-27.92	N/A	0.00	0.00
Design Ratio	3.78	N/A	N/A	N/A	14.41	N/A	N/A	N/A
Rating Factor	4.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	68.0	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Live Load Effect	134.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	202.4	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Resistance - Dead	715.4	0.0	715.4	0.0	715.4	0.0	701.8	0.0
Design Ratio	3.87	N/A	11.53	N/A	(11.53)	(N/A)	(9.61)	(N/A)
Rating Factor	5.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	8.4	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Live Load Effect	29.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	37.3	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Resistance - Dead	182.2	182.2	182.2	182.2	182.2	182.2	180.5	180.5
Design Ratio	5.10	22.82	22.82	22.82	(22.82)	(22.82)	(19.01)	(19.01)
Rating Factor	6.28	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-5.15	5.15	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.23	7.23	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-21.92	21.92	0.00	0.00	26.08	21.92	0.00	0.00
Design Ratio	3.32	3.32	N/A	N/A	N/A	11.53	N/A	N/A
Rating Factor	4.26	4.26	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-5.15	5.15	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.23	7.23	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-27.92	N/A	0.00	0.00	-27.92	N/A	0.00	0.00
Design Ratio	4.15	N/A	N/A	N/A	14.41	N/A	N/A	N/A
Rating Factor	5.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	68.0	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Live Load Effect	192.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	260.2	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Resistance - Dead	715.4	0.0	715.4	0.0	715.4	0.0	701.8	0.0
Design Ratio	3.01	N/A	11.53	N/A	(11.53)	(N/A)	(9.61)	(N/A)
Rating Factor	3.72	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	8.4	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Live Load Effect	41.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	49.8	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Resistance - Dead	182.2	182.2	182.2	182.2	182.2	182.2	180.5	180.5
Design Ratio	3.83	22.82	22.82	22.82	(22.82)	(22.82)	(19.01)	(19.01)
Rating Factor	4.40	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-7.36	7.36	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.44	9.44	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-21.92	21.92	0.00	0.00	26.08	21.92	0.00	0.00
Design Ratio	2.54	2.54	N/A	N/A	N/A	11.53	N/A	N/A
Rating Factor	2.98	2.98	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-7.36	7.36	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.44	9.44	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-27.92	N/A	0.00	0.00	-27.92	N/A	0.00	0.00
Design Ratio	3.18	N/A	N/A	N/A	14.41	N/A	N/A	N/A
Rating Factor	3.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	68.0	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Live Load Effect	206.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	274.2	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Resistance - Dead	715.4	0.0	715.4	0.0	715.4	0.0	701.8	0.0
Design Ratio	2.86	N/A	11.53	N/A	(11.53)	(N/A)	(9.61)	(N/A)
Rating Factor	3.47	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	8.4	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Live Load Effect	44.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	52.8	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Resistance - Dead	182.2	182.2	182.2	182.2	182.2	182.2	180.5	180.5
Design Ratio	3.61	22.82	22.82	22.82	(22.82)	(22.82)	(19.01)	(19.01)
Rating Factor	4.10	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-7.90	7.90	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.98	9.98	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-21.92	21.92	0.00	0.00	26.08	21.92	0.00	0.00
Design Ratio	2.40	2.40	N/A	N/A	N/A	11.53	N/A	N/A
Rating Factor	2.77	2.77	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-7.90	7.90	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.98	9.98	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-27.92	N/A	0.00	0.00	-27.92	N/A	0.00	0.00
Design Ratio	3.01	N/A	N/A	N/A	14.41	N/A	N/A	N/A
Rating Factor	3.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	68.0	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Live Load Effect	225.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	293.2	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Resistance - Dead	715.4	0.0	715.4	0.0	715.4	0.0	701.8	0.0
Design Ratio	2.67	N/A	11.53	N/A	(11.53)	(N/A)	(9.61)	(N/A)
Rating Factor	3.18	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	8.4	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Live Load Effect	48.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	56.9	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Resistance - Dead	182.2	182.2	182.2	182.2	182.2	182.2	180.5	180.5
Design Ratio	3.35	22.82	22.82	22.82	(22.82)	(22.82)	(19.01)	(19.01)
Rating Factor	3.75	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-8.62	8.62	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.71	10.71	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-21.92	21.92	0.00	0.00	26.08	21.92	0.00	0.00
Design Ratio	2.24	2.24	N/A	N/A	N/A	11.53	N/A	N/A
Rating Factor	2.54	2.54	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-8.62	8.62	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.71	10.71	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-27.92	N/A	0.00	0.00	-27.92	N/A	0.00	0.00
Design Ratio	2.80	N/A	N/A	N/A	14.41	N/A	N/A	N/A
Rating Factor	3.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	68.0	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Live Load Effect	235.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	303.4	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Resistance - Dead	715.4	0.0	715.4	0.0	715.4	0.0	701.8	0.0
Design Ratio	2.58	N/A	11.53	N/A	(11.53)	(N/A)	(9.61)	(N/A)
Rating Factor	3.04	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	8.4	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Live Load Effect	50.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	59.1	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Resistance - Dead	182.2	182.2	182.2	182.2	182.2	182.2	180.5	180.5
Design Ratio	3.22	22.82	22.82	22.82	(22.82)	(22.82)	(19.01)	(19.01)
Rating Factor	3.59	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-9.02	9.02	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.10	11.10	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-21.92	21.92	0.00	0.00	26.08	21.92	0.00	0.00
Design Ratio	2.16	2.16	N/A	N/A	N/A	11.53	N/A	N/A
Rating Factor	2.43	2.43	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-9.02	9.02	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.10	11.10	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-27.92	N/A	0.00	0.00	-27.92	N/A	0.00	0.00
Design Ratio	2.70	N/A	N/A	N/A	14.41	N/A	N/A	N/A
Rating Factor	3.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	68.0	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Live Load Effect	249.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	317.4	0.0	68.0	0.0	68.0	0.0	81.5	0.0
Resistance - Dead	715.4	0.0	715.4	0.0	715.4	0.0	701.8	0.0
Design Ratio	2.47	N/A	11.53	N/A	(11.53)	(N/A)	(9.61)	(N/A)
Rating Factor	2.87	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	8.4	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Live Load Effect	53.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	62.1	8.4	8.4	8.4	8.4	8.4	10.0	10.0
Resistance - Dead	182.2	182.2	182.2	182.2	182.2	182.2	180.5	180.5
Design Ratio	3.07	22.82	22.82	22.82	(22.82)	(22.82)	(19.01)	(19.01)
Rating Factor	3.39	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-9.55	9.55	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.64	11.64	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-21.92	21.92	0.00	0.00	26.08	21.92	0.00	0.00
Design Ratio	2.06	2.06	N/A	N/A	N/A	11.53	N/A	N/A
Rating Factor	2.29	2.29	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.08	2.08	0.00	0.00	-2.08	2.08	0.00	0.00
Live Load Effect	-9.55	9.55	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.64	11.64	0.00	0.00	-2.08	2.08	0.00	0.00
Resistance - Dead	-27.92	N/A	0.00	0.00	-27.92	N/A	0.00	0.00
Design Ratio	2.58	N/A	N/A	N/A	14.41	N/A	N/A	N/A
Rating Factor	2.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 104.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	36.7500			
Top Flange Thickness	=	0.3750	Top Flange Width	=	10.3750
Web Depth	=	36.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 1.700 ft
Maximum distance to Right Brace Point = 4.800 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

Floor Beam

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93	+ HL-93			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - TANDEM	+ TANDEM			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE 3	+ TYPE 3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE 3S2	+ TYPE 3S2			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE 3-3	+ TYPE 3-3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4	+ SU4			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5	+ SU5			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6	+ SU6			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7	+ SU7			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo	10 - NRL + NRL			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	77.7	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Live Load Effect	357.0	0.0	275.4	0.0	275.4	0.0	0.0	0.0
Total Load Effect	434.7	0.0	353.1	0.0	353.1	0.0	93.2	0.0
Resistance - Dead	705.7	0.0	705.7	0.0	705.7	0.0	690.2	0.0
Design Ratio	1.80	N/A	2.22	N/A	(2.22)	(N/A)	(8.41)	(N/A)
Rating Factor	1.98	N/A	2.56	N/A	(2.56)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	-190.5	190.5	-190.5	190.5	190.5
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	8.6	-8.6	6.6	-6.6	6.6	-6.6	0.0	0.0
Total Load Effect	12.7	-4.4	10.8	-2.4	10.8	-2.4	5.0	5.0
Resistance - Dead	186.4	-194.7	186.4	-194.7	186.4	-194.7	185.5	185.5
Design Ratio	14.96	43.45	17.68	78.47	(17.68)	(78.47)	(38.03)	(38.03)
Rating Factor	21.77	22.75	28.22	29.48	(28.22)	(29.48)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-10.16	10.16	0.00	0.00	-7.81	7.81	0.00	0.00
Total Load Effect	-12.54	12.54	0.00	0.00	-10.19	10.19	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	-21.62	21.62	0.00	0.00
Design Ratio	1.91	1.91	N/A	N/A	2.35	2.35	N/A	N/A
Rating Factor	2.13	2.13	N/A	N/A	2.77	2.77	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-10.16	10.16	0.00	0.00	-7.81	7.81	0.00	0.00
Total Load Effect	-12.54	12.54	0.00	0.00	-10.19	10.19	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	2.39	N/A	N/A	N/A	2.94	N/A	N/A	N/A
Rating Factor	2.72	N/A	N/A	N/A	3.54	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	77.7	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Live Load Effect	371.5	0.0	286.6	0.0	286.6	0.0	0.0	0.0
Total Load Effect	449.2	0.0	364.2	0.0	364.2	0.0	93.2	0.0
Resistance - Dead	705.7	0.0	705.7	0.0	705.7	0.0	690.2	0.0
Design Ratio	1.74	N/A	2.15	N/A	(2.15)	(N/A)	(8.41)	(N/A)
Rating Factor	1.90	N/A	2.46	N/A	(2.46)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	-190.5	190.5	-190.5	190.5	190.5
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	8.9	-8.9	6.9	-6.9	6.9	-6.9	0.0	0.0
Total Load Effect	13.1	-4.7	11.0	-2.7	11.0	-2.7	5.0	5.0
Resistance - Dead	186.4	-194.7	186.4	-194.7	186.4	-194.7	185.5	185.5
Design Ratio	14.56	40.27	17.25	70.68	(17.25)	(70.68)	(38.03)	(38.03)
Rating Factor	20.92	21.86	27.12	28.34	(27.12)	(28.34)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-10.57	10.57	0.00	0.00	-8.13	8.13	0.00	0.00
Total Load Effect	-12.95	12.95	0.00	0.00	-10.51	10.51	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	-21.62	21.62	0.00	0.00
Design Ratio	1.85	1.85	N/A	N/A	2.28	2.28	N/A	N/A
Rating Factor	2.05	2.05	N/A	N/A	2.66	2.66	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-10.57	10.57	0.00	0.00	-8.13	8.13	0.00	0.00
Total Load Effect	-12.95	12.95	0.00	0.00	-10.51	10.51	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	2.32	N/A	N/A	N/A	2.85	N/A	N/A	N/A
Rating Factor	2.61	N/A	N/A	N/A	3.40	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	77.7	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Live Load Effect	173.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	251.2	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Resistance - Dead	705.7	0.0	705.7	0.0	705.7	0.0	690.2	0.0
Design Ratio	3.12	N/A	10.09	N/A	(10.09)	(N/A)	(8.41)	(N/A)
Rating Factor	4.07	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	4.2	-4.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	8.3	0.0	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	186.4	186.4	186.4	186.4	186.4	186.4	185.5	185.5
Design Ratio	22.86	N/A	45.63	45.63	(45.63)	(45.63)	(38.03)	(38.03)
Rating Factor	44.80	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-6.64	6.64	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.02	9.02	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	2.66	2.66	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	3.25	3.25	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-6.64	6.64	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.02	9.02	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	3.32	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	4.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	77.7	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Live Load Effect	161.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	238.9	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Resistance - Dead	705.7	0.0	705.7	0.0	705.7	0.0	690.2	0.0
Design Ratio	3.28	N/A	10.09	N/A	(10.09)	(N/A)	(8.41)	(N/A)
Rating Factor	4.38	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	3.9	-3.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	8.0	0.3	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	186.4	186.4	186.4	186.4	186.4	186.4	185.5	185.5
Design Ratio	23.70	614.40	45.63	45.63	(45.63)	(45.63)	(38.03)	(38.03)
Rating Factor	48.22	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-6.17	6.17	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.55	8.55	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	2.81	2.81	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	3.50	3.50	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-6.17	6.17	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.55	8.55	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	3.51	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	4.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	77.7	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Live Load Effect	141.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	219.4	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Resistance - Dead	705.7	0.0	705.7	0.0	705.7	0.0	690.2	0.0
Design Ratio	3.57	N/A	10.09	N/A	(10.09)	(N/A)	(8.41)	(N/A)
Rating Factor	4.98	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	3.4	-3.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	7.6	0.8	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	186.4	186.4	186.4	186.4	186.4	186.4	185.5	185.5
Design Ratio	25.16	245.40	45.63	45.63	(45.63)	(45.63)	(38.03)	(38.03)
Rating Factor	54.83	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-5.43	5.43	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.81	7.81	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	3.07	3.07	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	3.98	3.98	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-5.43	5.43	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.81	7.81	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	3.84	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	5.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	77.7	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Live Load Effect	202.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	280.3	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Resistance - Dead	705.7	0.0	705.7	0.0	705.7	0.0	690.2	0.0
Design Ratio	2.79	N/A	10.09	N/A	(10.09)	(N/A)	(8.41)	(N/A)
Rating Factor	3.48	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	4.9	-4.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	9.0	-0.7	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	186.4	-194.7	186.4	186.4	186.4	186.4	185.5	185.5
Design Ratio	21.09	278.62	45.63	45.63	(45.63)	(45.63)	(38.03)	(38.03)
Rating Factor	38.35	40.07	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-7.76	7.76	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.14	10.14	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	2.37	2.37	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	2.79	2.79	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-7.76	7.76	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.14	10.14	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	2.96	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	3.56	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	77.7	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Live Load Effect	217.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	295.2	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Resistance - Dead	705.7	0.0	705.7	0.0	705.7	0.0	690.2	0.0
Design Ratio	2.65	N/A	10.09	N/A	(10.09)	(N/A)	(8.41)	(N/A)
Rating Factor	3.24	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	5.2	-5.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	9.4	-1.0	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	186.4	-194.7	186.4	186.4	186.4	186.4	185.5	185.5
Design Ratio	20.29	183.26	45.63	45.63	(45.63)	(45.63)	(38.03)	(38.03)
Rating Factor	35.74	37.33	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-8.33	8.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.71	10.71	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	2.24	2.24	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	2.60	2.60	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-8.33	8.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.71	10.71	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	2.80	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	3.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	77.7	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Live Load Effect	237.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	315.1	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Resistance - Dead	705.7	0.0	705.7	0.0	705.7	0.0	690.2	0.0
Design Ratio	2.49	N/A	10.09	N/A	(10.09)	(N/A)	(8.41)	(N/A)
Rating Factor	2.97	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	5.7	-5.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	9.9	-1.5	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	186.4	-194.7	186.4	186.4	186.4	186.4	185.5	185.5
Design Ratio	19.31	125.49	45.63	45.63	(45.63)	(45.63)	(38.03)	(38.03)
Rating Factor	32.73	34.20	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-9.09	9.09	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.47	11.47	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	2.09	2.09	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	2.38	2.38	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-9.09	9.09	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.47	11.47	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	2.61	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	3.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	77.7	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Live Load Effect	248.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	325.9	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Resistance - Dead	705.7	0.0	705.7	0.0	705.7	0.0	690.2	0.0
Design Ratio	2.40	N/A	10.09	N/A	(10.09)	(N/A)	(8.41)	(N/A)
Rating Factor	2.84	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	6.0	-6.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	10.1	-1.8	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	186.4	-194.7	186.4	186.4	186.4	186.4	185.5	185.5
Design Ratio	18.82	107.28	45.63	45.63	(45.63)	(45.63)	(38.03)	(38.03)
Rating Factor	31.32	32.72	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-9.51	9.51	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.88	11.88	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	2.02	2.02	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	2.27	2.27	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-9.51	9.51	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.88	11.88	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	2.52	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	2.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	77.7	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Live Load Effect	263.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	340.7	0.0	77.7	0.0	77.7	0.0	93.2	0.0
Resistance - Dead	705.7	0.0	705.7	0.0	705.7	0.0	690.2	0.0
Design Ratio	2.30	N/A	10.09	N/A	(10.09)	(N/A)	(8.41)	(N/A)
Rating Factor	2.68	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	6.3	-6.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	10.5	-2.1	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	186.4	-194.7	186.4	186.4	186.4	186.4	185.5	185.5
Design Ratio	18.18	89.37	45.63	45.63	(45.63)	(45.63)	(38.03)	(38.03)
Rating Factor	29.55	30.87	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-10.07	10.07	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.45	12.45	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	1.93	1.93	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	2.15	2.15	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-10.07	10.07	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.45	12.45	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	2.41	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	2.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 104.500
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	36.7500			
Top Flange Thickness	=	0.3750	Top Flange Width	=	10.3750
Web Depth	=	36.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 2.475 ft
Maximum distance to Right Brace Point = 4.025 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93	+ HL-93			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - TANDEM	+ TANDEM			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE 3	+ TYPE 3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE 3S2	+ TYPE 3S2			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE 3-3	+ TYPE 3-3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4	+ SU4			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5	+ SU5			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6	+ SU6			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7	+ SU7			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo	10 - NRL	+ NRL			(TRK)				
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.1	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Live Load Effect	350.4	0.0	270.3	0.0	270.3	0.0	0.0	0.0
Total Load Effect	430.5	0.0	350.4	0.0	350.4	0.0	96.1	0.0
Resistance - Dead	703.3	0.0	703.3	0.0	703.3	0.0	687.3	0.0
Design Ratio	1.82	N/A	2.24	N/A	(2.24)	(N/A)	(8.15)	(N/A)
Rating Factor	2.01	N/A	2.60	N/A	(2.60)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	-190.5	190.5	-190.5	190.5	190.5
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	8.6	-8.6	6.6	-6.6	6.6	-6.6	0.0	0.0
Total Load Effect	10.6	-6.5	8.7	-4.5	8.7	-4.5	2.5	2.5
Resistance - Dead	188.4	-192.6	188.4	-192.6	188.4	-192.6	188.0	188.0
Design Ratio	17.90	29.44	21.92	42.19	(21.92)	(42.19)	(76.05)	(76.05)
Rating Factor	22.02	22.50	28.54	29.17	(28.54)	(29.17)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-9.97	9.97	0.00	0.00	-7.67	7.67	0.00	0.00
Total Load Effect	-12.42	12.42	0.00	0.00	-10.12	10.12	0.00	0.00
Resistance - Dead	-21.55	21.55	0.00	0.00	-21.55	21.55	0.00	0.00
Design Ratio	1.93	1.93	N/A	N/A	2.37	2.37	N/A	N/A
Rating Factor	2.16	2.16	N/A	N/A	2.81	2.81	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-9.97	9.97	0.00	0.00	-7.67	7.67	0.00	0.00
Total Load Effect	-12.42	12.42	0.00	0.00	-10.12	10.12	0.00	0.00
Resistance - Dead	-27.55	N/A	0.00	0.00	-27.55	N/A	0.00	0.00
Design Ratio	2.42	N/A	N/A	N/A	2.96	N/A	N/A	N/A
Rating Factor	2.76	N/A	N/A	N/A	3.59	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.1	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Live Load Effect	364.6	0.0	281.3	0.0	281.3	0.0	0.0	0.0
Total Load Effect	444.7	0.0	361.3	0.0	361.3	0.0	96.1	0.0
Resistance - Dead	703.3	0.0	703.3	0.0	703.3	0.0	687.3	0.0
Design Ratio	1.76	N/A	2.17	N/A	(2.17)	(N/A)	(8.15)	(N/A)
Rating Factor	1.93	N/A	2.50	N/A	(2.50)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	-190.5	190.5	-190.5	190.5	190.5
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	8.9	-8.9	6.9	-6.9	6.9	-6.9	0.0	0.0
Total Load Effect	11.0	-6.8	9.0	-4.8	9.0	-4.8	2.5	2.5
Resistance - Dead	188.4	-192.6	188.4	-192.6	188.4	-192.6	188.0	188.0
Design Ratio	17.33	27.94	21.27	39.83	(21.27)	(39.83)	(76.05)	(76.05)
Rating Factor	21.16	21.63	27.43	28.03	(27.43)	(28.03)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-10.37	10.37	0.00	0.00	-7.98	7.98	0.00	0.00
Total Load Effect	-12.83	12.83	0.00	0.00	-10.43	10.43	0.00	0.00
Resistance - Dead	-21.55	21.55	0.00	0.00	-21.55	21.55	0.00	0.00
Design Ratio	1.87	1.87	N/A	N/A	2.30	2.30	N/A	N/A
Rating Factor	2.08	2.08	N/A	N/A	2.70	2.70	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-10.37	10.37	0.00	0.00	-7.98	7.98	0.00	0.00
Total Load Effect	-12.83	12.83	0.00	0.00	-10.43	10.43	0.00	0.00
Resistance - Dead	-27.55	N/A	0.00	0.00	-27.55	N/A	0.00	0.00
Design Ratio	2.34	N/A	N/A	N/A	2.88	N/A	N/A	N/A
Rating Factor	2.66	N/A	N/A	N/A	3.45	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.1	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Live Load Effect	170.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	250.4	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Resistance - Dead	703.3	0.0	703.3	0.0	703.3	0.0	687.3	0.0
Design Ratio	3.13	N/A	9.78	N/A	(9.78)	(N/A)	(8.15)	(N/A)
Rating Factor	4.13	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	4.2	-4.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	6.2	-2.1	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	188.4	-192.6	188.4	188.4	188.4	188.4	188.0	188.0
Design Ratio	30.50	91.95	91.26	91.26	(91.26)	(91.26)	(76.05)	(76.05)
Rating Factor	45.30	46.30	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-6.52	6.52	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.97	8.97	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-21.55	21.55	0.00	0.00	26.45	21.55	0.00	0.00
Design Ratio	2.67	2.67	N/A	N/A	N/A	9.78	N/A	N/A
Rating Factor	3.30	3.30	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-6.52	6.52	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.97	8.97	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-27.55	N/A	0.00	0.00	-27.55	N/A	0.00	0.00
Design Ratio	3.34	N/A	N/A	N/A	12.23	N/A	N/A	N/A
Rating Factor	4.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.1	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Live Load Effect	158.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	238.3	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Resistance - Dead	703.3	0.0	703.3	0.0	703.3	0.0	687.3	0.0
Design Ratio	3.29	N/A	9.78	N/A	(9.78)	(N/A)	(8.15)	(N/A)
Rating Factor	4.45	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	3.9	-3.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	6.0	-1.8	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	188.4	-192.6	188.4	188.4	188.4	188.4	188.0	188.0
Design Ratio	32.01	107.18	91.26	91.26	(91.26)	(91.26)	(76.05)	(76.05)
Rating Factor	48.76	49.83	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-6.06	6.06	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.51	8.51	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-21.55	21.55	0.00	0.00	26.45	21.55	0.00	0.00
Design Ratio	2.82	2.82	N/A	N/A	N/A	9.78	N/A	N/A
Rating Factor	3.56	3.56	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-6.06	6.06	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.51	8.51	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-27.55	N/A	0.00	0.00	-27.55	N/A	0.00	0.00
Design Ratio	3.52	N/A	N/A	N/A	12.23	N/A	N/A	N/A
Rating Factor	4.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.1	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Live Load Effect	139.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	219.2	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Resistance - Dead	703.3	0.0	703.3	0.0	703.3	0.0	687.3	0.0
Design Ratio	3.57	N/A	9.78	N/A	(9.78)	(N/A)	(8.15)	(N/A)
Rating Factor	5.05	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	3.4	-3.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	5.5	-1.3	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	188.4	-192.6	188.4	188.4	188.4	188.4	188.0	188.0
Design Ratio	34.73	145.30	91.26	91.26	(91.26)	(91.26)	(76.05)	(76.05)
Rating Factor	55.44	56.67	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-5.33	5.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.78	7.78	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-21.55	21.55	0.00	0.00	26.45	21.55	0.00	0.00
Design Ratio	3.08	3.08	N/A	N/A	N/A	9.78	N/A	N/A
Rating Factor	4.04	4.04	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-5.33	5.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.78	7.78	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-27.55	N/A	0.00	0.00	-27.55	N/A	0.00	0.00
Design Ratio	3.86	N/A	N/A	N/A	12.23	N/A	N/A	N/A
Rating Factor	5.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.1	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Live Load Effect	198.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	279.0	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Resistance - Dead	703.3	0.0	703.3	0.0	703.3	0.0	687.3	0.0
Design Ratio	2.81	N/A	9.78	N/A	(9.78)	(N/A)	(8.15)	(N/A)
Rating Factor	3.54	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	4.9	-4.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	6.9	-2.8	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	188.4	-192.6	188.4	188.4	188.4	188.4	188.0	188.0
Design Ratio	27.43	68.74	91.26	91.26	(91.26)	(91.26)	(76.05)	(76.05)
Rating Factor	38.78	39.64	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-7.62	7.62	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.07	10.07	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-21.55	21.55	0.00	0.00	26.45	21.55	0.00	0.00
Design Ratio	2.38	2.38	N/A	N/A	N/A	9.78	N/A	N/A
Rating Factor	2.83	2.83	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-7.62	7.62	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.07	10.07	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-27.55	N/A	0.00	0.00	-27.55	N/A	0.00	0.00
Design Ratio	2.98	N/A	N/A	N/A	12.23	N/A	N/A	N/A
Rating Factor	3.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.1	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Live Load Effect	213.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	293.6	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Resistance - Dead	703.3	0.0	703.3	0.0	703.3	0.0	687.3	0.0
Design Ratio	2.67	N/A	9.78	N/A	(9.78)	(N/A)	(8.15)	(N/A)
Rating Factor	3.29	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	5.2	-5.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	7.3	-3.1	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	188.4	-192.6	188.4	188.4	188.4	188.4	188.0	188.0
Design Ratio	26.09	60.92	91.26	91.26	(91.26)	(91.26)	(76.05)	(76.05)
Rating Factor	36.14	36.93	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-8.17	8.17	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.63	10.63	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-21.55	21.55	0.00	0.00	26.45	21.55	0.00	0.00
Design Ratio	2.26	2.26	N/A	N/A	N/A	9.78	N/A	N/A
Rating Factor	2.64	2.64	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-8.17	8.17	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.63	10.63	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-27.55	N/A	0.00	0.00	-27.55	N/A	0.00	0.00
Design Ratio	2.82	N/A	N/A	N/A	12.23	N/A	N/A	N/A
Rating Factor	3.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.1	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Live Load Effect	233.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	313.1	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Resistance - Dead	703.3	0.0	703.3	0.0	703.3	0.0	687.3	0.0
Design Ratio	2.50	N/A	9.78	N/A	(9.78)	(N/A)	(8.15)	(N/A)
Rating Factor	3.02	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	5.7	-5.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	7.8	-3.6	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	188.4	-192.6	188.4	188.4	188.4	188.4	188.0	188.0
Design Ratio	24.49	52.84	91.26	91.26	(91.26)	(91.26)	(76.05)	(76.05)
Rating Factor	33.10	33.83	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-8.92	8.92	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.38	11.38	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-21.55	21.55	0.00	0.00	26.45	21.55	0.00	0.00
Design Ratio	2.11	2.11	N/A	N/A	N/A	9.78	N/A	N/A
Rating Factor	2.41	2.41	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-8.92	8.92	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.38	11.38	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-27.55	N/A	0.00	0.00	-27.55	N/A	0.00	0.00
Design Ratio	2.64	N/A	N/A	N/A	12.23	N/A	N/A	N/A
Rating Factor	3.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.1	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Live Load Effect	243.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	323.7	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Resistance - Dead	703.3	0.0	703.3	0.0	703.3	0.0	687.3	0.0
Design Ratio	2.42	N/A	9.78	N/A	(9.78)	(N/A)	(8.15)	(N/A)
Rating Factor	2.89	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	6.0	-6.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	8.0	-3.9	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	188.4	-192.6	188.4	188.4	188.4	188.4	188.0	188.0
Design Ratio	23.70	49.31	91.26	91.26	(91.26)	(91.26)	(76.05)	(76.05)
Rating Factor	31.67	32.37	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-9.33	9.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.78	11.78	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-21.55	21.55	0.00	0.00	26.45	21.55	0.00	0.00
Design Ratio	2.04	2.04	N/A	N/A	N/A	9.78	N/A	N/A
Rating Factor	2.31	2.31	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-9.33	9.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.78	11.78	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-27.55	N/A	0.00	0.00	-27.55	N/A	0.00	0.00
Design Ratio	2.55	N/A	N/A	N/A	12.23	N/A	N/A	N/A
Rating Factor	2.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.1	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Live Load Effect	258.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	338.3	0.0	80.1	0.0	80.1	0.0	96.1	0.0
Resistance - Dead	703.3	0.0	703.3	0.0	703.3	0.0	687.3	0.0
Design Ratio	2.32	N/A	9.78	N/A	(9.78)	(N/A)	(8.15)	(N/A)
Rating Factor	2.72	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	6.3	-6.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	8.4	-4.2	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	188.4	-192.6	188.4	188.4	188.4	188.4	188.0	188.0
Design Ratio	22.70	45.15	91.26	91.26	(91.26)	(91.26)	(76.05)	(76.05)
Rating Factor	29.88	30.54	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-9.89	9.89	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.34	12.34	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-21.55	21.55	0.00	0.00	26.45	21.55	0.00	0.00
Design Ratio	1.94	1.94	N/A	N/A	N/A	9.78	N/A	N/A
Rating Factor	2.18	2.18	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.45	2.45	0.00	0.00	-2.45	2.45	0.00	0.00
Live Load Effect	-9.89	9.89	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.34	12.34	0.00	0.00	-2.45	2.45	0.00	0.00
Resistance - Dead	-27.55	N/A	0.00	0.00	-27.55	N/A	0.00	0.00
Design Ratio	2.43	N/A	N/A	N/A	12.23	N/A	N/A	N/A
Rating Factor	2.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 105.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	36.7500			
Top Flange Thickness	=	0.3750	Top Flange Width	=	10.3750
Web Depth	=	36.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 3.250 ft
Maximum distance to Right Brace Point = 3.250 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93	+ HL-93			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - TANDEM	+ TANDEM			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE 3	+ TYPE 3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE 3S2	+ TYPE 3S2			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE 3-3	+ TYPE 3-3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4	+ SU4			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5	+ SU5			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6	+ SU6			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7	+ SU7			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo	10 - NRL	+ NRL			(TRK)				
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.9	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Live Load Effect	343.8	0.0	265.2	0.0	265.2	0.0	0.0	0.0
Total Load Effect	424.6	0.0	346.1	0.0	346.1	0.0	97.1	0.0
Resistance - Dead	702.5	0.0	702.5	0.0	702.5	0.0	686.3	0.0
Design Ratio	1.84	N/A	2.26	N/A	(2.26)	(N/A)	(8.07)	(N/A)
Rating Factor	2.04	N/A	2.65	N/A	(2.65)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	-190.5	190.5	-190.5	190.5	190.5
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	8.6	-8.6	6.6	-6.6	6.6	-6.6	0.0	0.0
Total Load Effect	8.6	-8.6	6.6	-6.6	6.6	-6.6	0.0	0.0
Resistance - Dead	190.5	-190.5	190.5	-190.5	190.5	-190.5	190.5	190.5
Design Ratio	22.26	22.26	28.86	28.85	(28.86)	(28.85)	(N/A)	(N/A)
Rating Factor	22.26	22.26	28.86	28.85	(28.86)	(28.85)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-9.78	9.78	0.00	0.00	-7.52	7.52	0.00	0.00
Total Load Effect	-12.26	12.26	0.00	0.00	-10.00	10.00	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	-21.52	21.52	0.00	0.00
Design Ratio	1.96	1.96	N/A	N/A	2.40	2.40	N/A	N/A
Rating Factor	2.20	2.20	N/A	N/A	2.86	2.86	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-9.78	9.78	0.00	0.00	-7.52	7.52	0.00	0.00
Total Load Effect	-12.26	12.26	0.00	0.00	-10.00	10.00	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	2.45	N/A	N/A	N/A	3.00	N/A	N/A	N/A
Rating Factor	2.81	N/A	N/A	N/A	3.66	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.9	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Live Load Effect	357.7	0.0	275.9	0.0	275.9	0.0	0.0	0.0
Total Load Effect	438.6	0.0	356.8	0.0	356.8	0.0	97.1	0.0
Resistance - Dead	702.5	0.0	702.5	0.0	702.5	0.0	686.3	0.0
Design Ratio	1.79	N/A	2.20	N/A	(2.20)	(N/A)	(8.07)	(N/A)
Rating Factor	1.96	N/A	2.55	N/A	(2.55)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	-190.5	190.5	-190.5	190.5	190.5
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	8.9	-8.9	6.9	-6.9	6.9	-6.9	0.0	0.0
Total Load Effect	8.9	-8.9	6.9	-6.9	6.9	-6.9	0.0	0.0
Resistance - Dead	190.5	-190.5	190.5	-190.5	190.5	-190.5	190.5	190.5
Design Ratio	21.39	21.39	27.73	27.73	(27.73)	(27.73)	(N/A)	(N/A)
Rating Factor	21.39	21.39	27.73	27.73	(27.73)	(27.73)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-10.18	10.18	0.00	0.00	-7.83	7.83	0.00	0.00
Total Load Effect	-12.65	12.65	0.00	0.00	-10.31	10.31	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	-21.52	21.52	0.00	0.00
Design Ratio	1.90	1.90	N/A	N/A	2.33	2.33	N/A	N/A
Rating Factor	2.12	2.12	N/A	N/A	2.75	2.75	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-10.18	10.18	0.00	0.00	-7.83	7.83	0.00	0.00
Total Load Effect	-12.65	12.65	0.00	0.00	-10.31	10.31	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	2.37	N/A	N/A	N/A	2.91	N/A	N/A	N/A
Rating Factor	2.70	N/A	N/A	N/A	3.52	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.9	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Live Load Effect	167.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	247.9	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Resistance - Dead	702.5	0.0	702.5	0.0	702.5	0.0	686.3	0.0
Design Ratio	3.16	N/A	9.68	N/A	(9.68)	(N/A)	(8.07)	(N/A)
Rating Factor	4.21	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	4.2	-4.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.2	-4.2	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Design Ratio	45.81	45.80	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	45.81	45.80	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.88	8.88	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	2.70	2.70	N/A	N/A	N/A	9.68	N/A	N/A
Rating Factor	3.36	3.36	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.88	8.88	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	3.38	N/A	N/A	N/A	12.10	N/A	N/A	N/A
Rating Factor	4.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.9	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Live Load Effect	155.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	236.1	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Resistance - Dead	702.5	0.0	702.5	0.0	702.5	0.0	686.3	0.0
Design Ratio	3.32	N/A	9.68	N/A	(9.68)	(N/A)	(8.07)	(N/A)
Rating Factor	4.53	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	3.9	-3.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	3.9	-3.9	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Design Ratio	49.30	49.29	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	49.30	49.29	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-5.94	5.94	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.42	8.42	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	2.85	2.85	N/A	N/A	N/A	9.68	N/A	N/A
Rating Factor	3.62	3.62	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-5.94	5.94	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.42	8.42	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	3.56	N/A	N/A	N/A	12.10	N/A	N/A	N/A
Rating Factor	4.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.9	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Live Load Effect	136.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	217.4	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Resistance - Dead	702.5	0.0	702.5	0.0	702.5	0.0	686.3	0.0
Design Ratio	3.60	N/A	9.68	N/A	(9.68)	(N/A)	(8.07)	(N/A)
Rating Factor	5.15	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	3.4	-3.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	3.4	-3.4	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Design Ratio	56.06	56.05	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	56.06	56.05	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-5.23	5.23	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.71	7.71	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	3.11	3.11	N/A	N/A	N/A	9.68	N/A	N/A
Rating Factor	4.12	4.12	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-5.23	5.23	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.71	7.71	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	3.89	N/A	N/A	N/A	12.10	N/A	N/A	N/A
Rating Factor	5.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.9	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Live Load Effect	195.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	276.0	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Resistance - Dead	702.5	0.0	702.5	0.0	702.5	0.0	686.3	0.0
Design Ratio	2.84	N/A	9.68	N/A	(9.68)	(N/A)	(8.07)	(N/A)
Rating Factor	3.60	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	4.9	-4.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.9	-4.9	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Design Ratio	39.21	39.21	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	39.21	39.21	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-7.47	7.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.95	9.95	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	2.41	2.41	N/A	N/A	N/A	9.68	N/A	N/A
Rating Factor	2.88	2.88	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-7.47	7.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.95	9.95	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	3.01	N/A	N/A	N/A	12.10	N/A	N/A	N/A
Rating Factor	3.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.9	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Live Load Effect	209.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	290.3	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Resistance - Dead	702.5	0.0	702.5	0.0	702.5	0.0	686.3	0.0
Design Ratio	2.70	N/A	9.68	N/A	(9.68)	(N/A)	(8.07)	(N/A)
Rating Factor	3.35	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	5.2	-5.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	5.2	-5.2	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Design Ratio	36.54	36.53	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	36.54	36.53	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-8.02	8.02	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.50	10.50	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	2.29	2.29	N/A	N/A	N/A	9.68	N/A	N/A
Rating Factor	2.68	2.68	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-8.02	8.02	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.50	10.50	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	2.86	N/A	N/A	N/A	12.10	N/A	N/A	N/A
Rating Factor	3.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.9	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Live Load Effect	228.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	309.5	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Resistance - Dead	702.5	0.0	702.5	0.0	702.5	0.0	686.3	0.0
Design Ratio	2.53	N/A	9.68	N/A	(9.68)	(N/A)	(8.07)	(N/A)
Rating Factor	3.07	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	5.7	-5.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	5.7	-5.7	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Design Ratio	33.47	33.46	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	33.47	33.46	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-8.76	8.76	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.23	11.23	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	2.14	2.14	N/A	N/A	N/A	9.68	N/A	N/A
Rating Factor	2.46	2.46	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-8.76	8.76	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.23	11.23	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	2.67	N/A	N/A	N/A	12.10	N/A	N/A	N/A
Rating Factor	3.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.9	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Live Load Effect	239.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	319.9	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Resistance - Dead	702.5	0.0	702.5	0.0	702.5	0.0	686.3	0.0
Design Ratio	2.45	N/A	9.68	N/A	(9.68)	(N/A)	(8.07)	(N/A)
Rating Factor	2.94	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	6.0	-6.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	6.0	-6.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Design Ratio	32.02	32.01	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	32.02	32.01	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-9.15	9.15	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.63	11.63	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	2.06	2.06	N/A	N/A	N/A	9.68	N/A	N/A
Rating Factor	2.35	2.35	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-9.15	9.15	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.63	11.63	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	2.58	N/A	N/A	N/A	12.10	N/A	N/A	N/A
Rating Factor	3.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	783.4	0.0	783.4	0.0	783.4	0.0	783.4	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	80.9	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Live Load Effect	253.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	334.2	0.0	80.9	0.0	80.9	0.0	97.1	0.0
Resistance - Dead	702.5	0.0	702.5	0.0	702.5	0.0	686.3	0.0
Design Ratio	2.34	N/A	9.68	N/A	(9.68)	(N/A)	(8.07)	(N/A)
Rating Factor	2.77	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	6.3	-6.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	6.3	-6.3	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	190.5	-190.5	190.5	190.5	190.5	190.5	190.5	190.5
Design Ratio	30.21	30.21	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	30.21	30.21	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-9.70	9.70	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.18	12.18	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	1.97	1.97	N/A	N/A	N/A	9.68	N/A	N/A
Rating Factor	2.22	2.22	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-9.70	9.70	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.18	12.18	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	2.46	N/A	N/A	N/A	12.10	N/A	N/A	N/A
Rating Factor	2.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

RATING FACTOR SUMMARY: Design Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - TANDEM	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	2.10	N/A	2.72	N/A	2.72	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.01	N/A	2.61	N/A	2.61	N/A	N/A	N/A
Critical		2.01	N/A	2.61	N/A	(2.61) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - TANDEM	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - TANDEM	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	4.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	4.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	5.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.85	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	6.01	N/A	7.79	N/A	7.79	N/A	N/A	N/A
2 - TANDEM	(TRK)	5.78	N/A	7.49	N/A	7.49	N/A	N/A	N/A
Critical		5.78	N/A	7.49	N/A	(7.49) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	2.15	N/A	2.78	N/A	2.78	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.06	N/A	2.68	N/A	2.68	N/A	N/A	N/A
Critical		2.06	N/A	2.68	N/A	(2.68) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	6.48	6.48	N/A	N/A	8.42	8.42	N/A	N/A
2 - TANDEM	(TRK)	6.22	6.22	N/A	N/A	8.09	8.09	N/A	N/A
Critical		6.22		N/A		8.09		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	8.16	N/A	N/A	N/A	10.60	N/A	N/A	N/A
2 - TANDEM	(TRK)	7.84	N/A	N/A	N/A	10.19	N/A	N/A	N/A
Critical		7.84		N/A		10.19		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	12.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	13.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	15.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	10.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	9.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	9.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	8.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	8.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		8.16	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	4.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	4.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	5.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.92	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	9.90	9.90	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	10.65	10.65	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	12.11	12.11	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	8.47	8.47	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	7.90	7.90	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	7.23	7.23	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	6.92	6.92	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	6.53	6.53	N/A	N/A	N/A	N/A	N/A	N/A
Critical		6.53		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	12.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	13.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	15.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	10.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	9.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	9.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	8.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	8.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		8.22		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	2.92	N/A	3.78	N/A	3.78	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.80	N/A	3.63	N/A	3.63	N/A	N/A	N/A
Critical		2.80	N/A	3.63	N/A	(3.63) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	2.20	N/A	2.85	N/A	2.85	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.11	N/A	2.74	N/A	2.74	N/A	N/A	N/A
Critical		2.11	N/A	2.74	N/A	(2.74) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	3.14	3.14	N/A	N/A	4.08	4.08	N/A	N/A
2 - TANDEM	(TRK)	3.02	3.02	N/A	N/A	3.92	3.92	N/A	N/A
Critical		3.02		N/A		3.92		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	3.98	N/A	N/A	N/A	5.18	N/A	N/A	N/A
2 - TANDEM	(TRK)	3.83	N/A	N/A	N/A	4.97	N/A	N/A	N/A
Critical		3.83		N/A		4.97		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	6.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	6.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	7.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.96	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	4.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	4.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	5.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.99	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.99	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	4.80	4.80	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	5.17	5.17	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	5.88	5.88	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.11	4.11	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.83	3.83	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.51	3.51	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.36	3.36	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.17	3.17	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.17		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	6.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	6.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	7.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.01		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	2.11	N/A	2.74	N/A	2.74	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.03	N/A	2.63	N/A	2.63	N/A	N/A	N/A
Critical		2.03	N/A	2.63	N/A	(2.63) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	2.50	N/A	3.23	N/A	3.23	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.40	N/A	3.11	N/A	3.11	N/A	N/A	N/A
Critical		2.40	N/A	3.11	N/A	(3.11) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	2.28	2.28	N/A	N/A	2.96	2.96	N/A	N/A
2 - TANDEM	(TRK)	2.19	2.19	N/A	N/A	2.84	2.84	N/A	N/A
Critical		2.19		N/A		2.84		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	2.90	N/A	N/A	N/A	3.77	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.79	N/A	N/A	N/A	3.62	N/A	N/A	N/A
Critical		2.79		N/A		3.62		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	4.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	4.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	5.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.87	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	5.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	5.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	6.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.39	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	3.48	3.48	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	3.74	3.74	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	4.26	4.26	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.98	2.98	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.77	2.77	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.54	2.54	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.43	2.43	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.29	2.29	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.29		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	4.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	4.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	5.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.92		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	1.98	N/A	2.56	N/A	2.56	N/A	N/A	N/A
2 - TANDEM	(TRK)	1.90	N/A	2.46	N/A	2.46	N/A	N/A	N/A
Critical		1.90	N/A	2.46	N/A	(2.46)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	21.77	22.75	28.22	29.48	28.22	29.48	N/A	N/A
2 - TANDEM	(TRK)	20.92	21.86	27.12	28.34	27.12	28.34	N/A	N/A
Critical		20.92	21.86	27.12	28.34	(27.12)	(28.34)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	2.13	2.13	N/A	N/A	2.77	2.77	N/A	N/A
2 - TANDEM	(TRK)	2.05	2.05	N/A	N/A	2.66	2.66	N/A	N/A
Critical		2.05		N/A		2.66		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	2.72	N/A	N/A	N/A	3.54	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.61	N/A	N/A	N/A	3.40	N/A	N/A	N/A
Critical		2.61		N/A		3.40		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	4.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	4.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	4.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.68	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	44.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	48.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	54.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	38.35	40.07	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	35.74	37.33	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	32.73	34.20	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	31.32	32.72	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	29.55	30.87	N/A	N/A	N/A	N/A	N/A	N/A
Critical		29.55	30.87	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	3.25	3.25	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	3.50	3.50	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	3.98	3.98	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.79	2.79	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.60	2.60	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.38	2.38	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.27	2.27	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.15	2.15	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.15		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	4.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	4.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	5.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.56	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.74		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	2.01	N/A	2.60	N/A	2.60	N/A	N/A	N/A
2 - TANDEM	(TRK)	1.93	N/A	2.50	N/A	2.50	N/A	N/A	N/A
Critical		1.93	N/A	2.50	N/A	(2.50)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	22.02	22.50	28.54	29.17	28.54	29.17	N/A	N/A
2 - TANDEM	(TRK)	21.16	21.63	27.43	28.03	27.43	28.03	N/A	N/A
Critical		21.16	21.63	27.43	28.03	(27.43)	(28.03)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	2.16	2.16	N/A	N/A	2.81	2.81	N/A	N/A
2 - TANDEM	(TRK)	2.08	2.08	N/A	N/A	2.70	2.70	N/A	N/A
Critical		2.08		N/A		2.70		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	2.76	N/A	N/A	N/A	3.59	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.66	N/A	N/A	N/A	3.45	N/A	N/A	N/A
Critical		2.66		N/A		3.45		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	4.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	4.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	5.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.72	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	45.30	46.30	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	48.76	49.83	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	55.44	56.67	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	38.78	39.64	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	36.14	36.93	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	33.10	33.83	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	31.67	32.37	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	29.88	30.54	N/A	N/A	N/A	N/A	N/A	N/A
Critical		29.88	30.54	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	3.30	3.30	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	3.56	3.56	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	4.04	4.04	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.83	2.83	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.64	2.64	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.41	2.41	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.31	2.31	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.18	2.18	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.18		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	4.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	4.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	5.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.79		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	2.04	N/A	2.65	N/A	2.65	N/A	N/A	N/A
2 - TANDEM	(TRK)	1.96	N/A	2.55	N/A	2.55	N/A	N/A	N/A
Critical		1.96	N/A	2.55	N/A	(2.55) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	22.26	22.26	28.86	28.85	28.86	28.85	N/A	N/A
2 - TANDEM	(TRK)	21.39	21.39	27.73	27.73	27.73	27.73	N/A	N/A
Critical		21.39	21.39	27.73	27.73	(27.73) (	27.73) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	2.20	2.20	N/A	N/A	2.86	2.86	N/A	N/A
2 - TANDEM	(TRK)	2.12	2.12	N/A	N/A	2.75	2.75	N/A	N/A
Critical		2.12		N/A		2.75		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	2.81	N/A	N/A	N/A	3.66	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.70	N/A	N/A	N/A	3.52	N/A	N/A	N/A
Critical		2.70		N/A		3.52		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	4.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	4.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	5.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.77	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	45.81	45.80	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	49.30	49.29	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	56.06	56.05	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	39.21	39.21	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	36.54	36.53	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	33.47	33.46	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	32.02	32.01	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	30.21	30.21	N/A	N/A	N/A	N/A	N/A	N/A
Critical		30.21	30.21	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	3.36	3.36	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	3.62	3.62	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	4.12	4.12	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.88	2.88	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.68	2.68	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.46	2.46	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.35	2.35	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.22	2.22	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.22		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	4.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	4.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	5.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.84		N/A		N/A		N/A	

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load Combination No.	Description			Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory								
1	HL-93	+ HL-93	(TRK)	27.35	104.0000	STRENGTH I	1.98	54.06
2	TANDEM	+ TANDEM	(TRK)	28.40	104.0000	STRENGTH I	1.90	53.95
Crit	TANDEM	+ TANDEM	(TRK)	28.40	104.0000	STRENGTH I	1.90	53.95

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating								
1	HL-93	+ HL-93	(TRK)	27.35	104.0000	STRENGTH I-O	2.56	70.08
2	TANDEM	+ TANDEM	(TRK)	28.40	104.0000	STRENGTH I-O	2.46	69.94
Crit	TANDEM	+ TANDEM	(TRK)	28.40	104.0000	STRENGTH I-O	2.46	69.94

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load								
3	TYPE 3	+ TYPE 3	(TRK)	16.95	104.0000	SERVICE II	3.25	55.16
4	TYPE 3S2	+ TYPE 3S2	(TRK)	15.75	104.0000	SERVICE II	3.50	55.16
5	TYPE 3-3	+ TYPE 3-3	(TRK)	13.85	104.0000	SERVICE II	3.98	55.16
6	SU4	+ SU4	(TRK)	19.80	104.0000	SERVICE II	2.79	55.16
7	SU5	+ SU5	(TRK)	21.25	104.0000	SERVICE II	2.60	55.16
8	SU6	+ SU6	(TRK)	23.20	104.0000	SERVICE II	2.38	55.16
9	SU7	+ SU7	(TRK)	24.25	104.0000	SERVICE II	2.27	55.16
10	NRL	+ NRL	(TRK)	25.70	104.0000	SERVICE II	2.15	55.16
Crit	NRL	+ NRL	(TRK)	25.70	104.0000	SERVICE II	2.15	55.16

LIMIT STATE LEGEND:

BRASS	Specifications
STRENGTH I	Strength I Inventory
STRENGTH I-O	Strength I Operating
STRENGTH II	Strength II
STRENGTH IV	Strength IV
SERVICE I	Service I
SERVICE II	Service II Inventory
SERVICE II-O	Service II Operating
FATIGUE I	Fatigue I
FATIGUE II	Fatigue II

BRASS Input – Steel Girder

Wyoming Department of Transportation

BRASS-GIRDER™ Input Parameters

Version Information

Girder UI:	8.0.0.3001
Girder XML:	8.0.0.3001
BRASS™ XML:	1.8.0.3001

Administration

Project ID:	6856
Project Title:	R8 Bridge Load Ratings 2018
Bridge ID:	35-1-4.78
Bridge Name:	Citico Creek
Route Name:	35-1
Reference Marker:	4.78
Title 1:	Girder
Title 2:	
Date:	2019 4 30
Agency:	USDA Forest Service
Designer/Rater:	Ammon Groesbeck
Reviewer:	Brad Miller
Comments:	

Bridge Notes

No bridge notes have been defined.

Control

Structure

Structure Type:	GirderLine
Define Deck Cross Section:	No
Analysis Model Type:	Beam
Number of Top Spans:	1

Spans

Span	Length
1	108.833 ft

Structure Material:	Steel
Beam Type:	Builtup
Composite Structure:	No
Number of Stages:	1

Analysis

Unit System:	US
Analysis Method:	LRFD
Analysis Type:	Rating
Member of Interest:	1
Model Element Type:	Stepped
Point of Interest Generation Control:	User
Live-load Distribution Factor Application:	AnalysisPoint
Interpolate Reinforcement:	No
Calculate Effective Width:	No

Input

Symmetry

Component	Symmetric
Beam Profile	Yes
Deck Profile	No
Shear Connectors	Yes
Transverse Stiffeners	No
Bearing Stiffeners	Yes
Longitudinal Stiffeners	Yes
Bracing (Member)	No
Lateral Support	Yes
Cb Factors (LRFD)	Yes
Beam Distribution Factors (LRFD)	Yes
Reaction Distribution Factors (LRFD)	Yes

Merge Beam/Deck Profile Schedules: Yes

Libraries

Section Library: N:\BRASS\Libraries\BRASS-Sections.BLS
Vehicle Library: N:\BRASS\Libraries\BRASS-Vehicles.BLV

Output

Primary Output

Action Output Level: DL+LL
Action Locations: 10th+SpecialPoints

General

Member Properties:	Yes
Load Combinations:	Yes
Load and Resistance Factors:	Yes
Warnings:	Yes
Camber:	No
Critical Design Ratios / Rating Factors:	Condensed

Live Load

Truck Positions:	No
Variable Axle Spacing:	No
Live Load Settings:	Yes
Live Load Combinations:	Yes
Live Load Details:	Yes
Impact (LFD):	No

Stage

Stage	Output
1	Yes

Dead Load

Member Self Load: Yes
Distributed Dead Loads: Yes
Concentrated Dead Loads: Yes
Temperature Change: No
Settlements: No

Intermediate Output

Intermediate Output Level: Full
Effective Width: No
Floorbeam Lane Position: No

Points of Interest

Specification Checks: Yes
Load Factoring/Combinations: Yes

Limit State Output (LRFD)

Limit State	Specification Check	Load Combination
Strength I	Yes	Yes
Strength II	No	No
Strength IV	No	No
Service I	No	No
Service II	Yes	Yes
Fatigue I	No	No
Fatigue II	No	No

Intermediate Output (cont.)

Steel

Transverse Stiffeners: No
Bearing Stiffeners: No
Longitudinal Stiffeners: No

Results Tables

X-Y Plot Action Tables: No
Specification Check Results Tables: No
Mesh Plot Files: No

BRASS-PAD™ Data Transfer File: No

Influence

Output influence lines for: None
Ordinate Divisor: 1

Factors

Load Factors (LRFD)

Limit State	DC		DW		DU		TU	
	max	min	max	min	max	min	max	min
Strength I	1.25	0.9	1.5	0.65	1.5	0.65	1.2	0.5

Strength II	1.25	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Strength IV	1.5	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Service I	1	1	1	1	1	1	1.2	1
Service II	1	1	1	1	1	1	1.2	1
Fatigue I	0	0	0	0	0	0	0	0
Fatigue II	0	0	0	0	0	0	0	0

Load Factors (LRFD) (continued)

Limit State	LL				SE		PS		DS	
	Design		Legal	Permit						
	Inventory	Operating			max	min	max	min	max	min
Strength I	1.75	1.35	1.3	0	1	1	1	1	1.25	0.9
Strength II	1.35		0	0	1	1	1	1	1.25	0.9
Strength IV	0		0	0	0	0	1	1	1.5	0.9
Service I	1		0	1	1	1	1	1	1	1
Service II	1.3	1	1.3	1	0	0	1	1	1	1
Fatigue I	1.75		0	0	0	0	1	1	0	0
Fatigue II	0.8		0	0	0	0	1	1	0	0

Load Modifiers (LRFD)

Limit State	Ductility	Redundancy	Importance	Combined Product	
				max	min
Strength I	1	1	1	-	-
Strength II	1	1	1	-	-
Strength IV	1	1	1	-	-
Service I	1	1	1	-	-
Service II	1	1	1	-	-
Fatigue I	1	1	1	-	-
Fatigue II	1	1	1	-	-

Resistance Factors (LRFD)

Resistance Factors

Type	Value
φ Flexure	1
φ Shear	1
φ Bearing	1
φ Compression	0.95
φ Shear Connectors	0.85
φ Fatigue	1

System/Total Modifiers

Limit State	Resistance Type	System	Total
Strength	Flexure	0.85	-
Strength	Shear	1	-
Strength	Bearing	1	-

Strength	Compression	1	-
Strength	Shear Connectors	1	-
Strength	Longitudinal Reinforcement	1	-
Service	Flexure	1	-
Fatigue	Fatigue	1	-

Condition Modifiers

Limit State	Condition
Strength	0.95
Service	1
Fatigue	1

Materials

Steel

ID	Name	Yield Stress	Tensile Strength	Modulus of Elasticity	Density	Thermal Expansion Coefficient
1	Grade 50	50 ksi	65 ksi	29000 ksi	0.49 kcf	6.5E-06 $°F^{-1}$
2	Grade 50W	50 ksi	70 ksi	29000 ksi	0.49 kcf	6.5E-06 $°F^{-1}$
3	Grade 36	36 ksi	58 ksi	29000 ksi	0.49 kcf	6.5E-06 $°F^{-1}$
4	Grade HPS 70W	70 ksi	85 ksi	29000 ksi	0.49 kcf	6.5E-06 $°F^{-1}$
5	Grade 30	30 ksi	60 ksi	29000 ksi	0.49 kcf	6.5E-06 $°F^{-1}$

Dead Load Groups

Groups

ID	Name	Stage	Type	Description
1	DC Floor Beams	1	DC	DC Floor Beams

Live Loads

Live Load Control

Direction Control:	Up+Down
Standard Live Loads:	None
Wheel Advancement Denominator:	100
ADTT:	999
ADTT for Single Lane:	999
Multiple Presence Adjustment:	95 %
% of Dynamic Load Allowance (Impact):	100 %

Dynamic Load Allowance (LRFD)

Design/Rating Procedure	Truck	Lane	Fatigue
Design	33 %	0 %	15 %
Legal	33 %	0 %	0 %
Permit	33 %	0 %	0 %

Special Vehicles

Axle Vehicles

No axle vehicles have been defined.

Lane Vehicles

No lane vehicles have been defined.

Definitions (LRFD)

Definition 1

Code: HL-93-TRUCK
Type: GeneralTruck
Design Rating: Design
% of Dynamic Load Allowance: -
Scale Factor: -
Lanes Loaded: Critical
Notional Load: No
Fixed DLA: -

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 2

Code: HL-93-TANDEM
Type: GeneralTruck
Design Rating: Design
% of Dynamic Load Allowance: -
Scale Factor: -
Lanes Loaded: Critical
Notional Load: No
Fixed DLA: -

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 3

Code: HL-93-LANE
Type: GeneralLane
Design Rating: Design
% of Dynamic Load Allowance: -
Scale Factor: -
Lanes Loaded: Critical
Notional Load: No
Fixed DLA: -

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 4

Code: TYPE3
Type: GeneralTruck
Design Rating: Legal
% of Dynamic Load Allowance: -
Scale Factor: -
Lanes Loaded: Critical
Notional Load: No
Fixed DLA: -

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-

Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 5

Code: TYPE3S2
Type: GeneralTruck
Design Rating: Legal
% of Dynamic Load Allowance: -
Scale Factor: -
Lanes Loaded: Critical
Notional Load: No
Fixed DLA: -

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 6

Code: TYPE3-3
Type: GeneralTruck
Design Rating: Legal
% of Dynamic Load Allowance: -
Scale Factor: -
Lanes Loaded: Critical
Notional Load: No
Fixed DLA: -

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 7

Code: SU4
Type: GeneralTruck
Design Rating: Legal
% of Dynamic Load Allowance: -
Scale Factor: -
Lanes Loaded: Critical
Notional Load: No
Fixed DLA: -

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 8

Code: SU5
Type: GeneralTruck
Design Rating: Legal
% of Dynamic Load Allowance: -
Scale Factor: -
Lanes Loaded: Critical
Notional Load: No
Fixed DLA: -

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 9

Code:	SU6
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 10

Code:	SU7
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 11

Code:	NRL
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	Yes
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

General Combinations (LRFD)

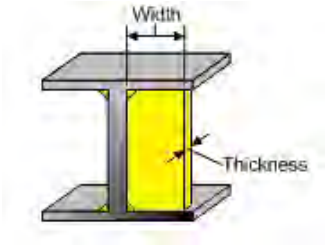
Standard Combo	Truck	Lane	Combination Factors	
			Truck	Lane
No	**HL-93-TRUCK**	**HL-93-LANE**	1	1
No	**HL-93-TANDEM**	**HL-93-LANE**	1	1

Deflection Combinations (LRFD)

No Deflection Combinations (LRFD) have been defined.

Component Groups

Transverse Stiffeners



ID	Name	Width	Thickness	Type	Type Factor	Material
1	L5x3-1/2x3/8 Stiffener (2 Legs)	5 in.	0.375 in.	Stiffener Pairs	-	**Grade 30**

Bearing Stiffeners

No bearing stiffener groups have been defined.

Longitudinal Stiffeners

No longitudinal stiffener groups have been defined.

Specification Control

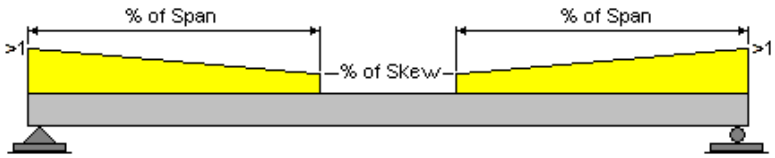
General

Lane Geometry

Design Vehicle Lane Width: 12 ft
Vehicle Width: 10 ft
Wheel Spacing: 6 ft
Encroachment Distance: -

Load Factors Control (LRFD): Use load factors per analysis type (Review = max/min; Rating = max only)

Skew Factors



Span #	% of Span	% of Skew
1	-	-

Steel

Use Appendix A6 (LRFD): No
Allow Plastic Analysis: Yes
Override Longitudinal Stiffeners: No
Slab thickness for longitudinal shear force: Structural
Slab thickness for minimum negative flexure concrete deck reinforcement: Structural

Fatigue

AASHTO LRFD Table 6.6.1.2.5-2

% of Span: 10
Span Length: 40 ft

Stress Range in Longitudinal Reinforcement Over the Piers: 10 ksi

Detail Categories (LRFD)

Detail Category	Constant, A x 10^8	Constant Amplitude Fatigue Threshold
A	250 kip^3	24 ksi
B	120 kip^3	16 ksi
B'	61 kip^3	12 ksi
C	44 kip^3	10 ksi
C'	44 kip^3	12 ksi
D	22 kip^3	7 ksi
E	11 kip^3	4.5 ksi
E'	3.9 kip^3	2.6 ksi

Limit State Map

Limit State Maps (LRFD)

Limit State	Design Review			Rating		
	Design Load	Legal Load	Permit Load	Design Load	Legal Load	Permit Load
Strength I	No	No	No	Inventory/Operating	Yes	No
Strength II	No	No	No	Exclude	No	No
Strength IV	No	No	No	Exclude	No	No
Service I	No	No	No	Exclude	No	No
Service II	No	No	No	Inventory/Operating	Yes	No
Service III	No	No	No	Exclude	No	No
Fatigue I	No	No	No	Inventory	No	No
Fatigue II	No	No	No	Inventory	No	No

Spec. Check Map (Strength)

LRFD Specification Check Maps

Design Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Legal Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Permit Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Design Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	Yes	No	No
Shear	Yes	No	No
Bearing	Yes	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Legal Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	Yes	No	No
Shear	Yes	No	No
Bearing	Yes	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Permit Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Spec. Check Map (Service)

LRFD Specification Check Maps

Design Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Legal Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Permit Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Design Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	Yes
Live Load Deflection	No	No

Legal Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	Yes
Live Load Deflection	No	No

Permit Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Spec. Check Map (Fatigue)

LRFD Specification Check Maps

Design Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No

Fatigue of Special Points	No	No
Fatigue Shear	No	No

Legal Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Permit Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Design Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Legal Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Permit Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Member

Member Notes

No member notes have been defined.

Member Materials

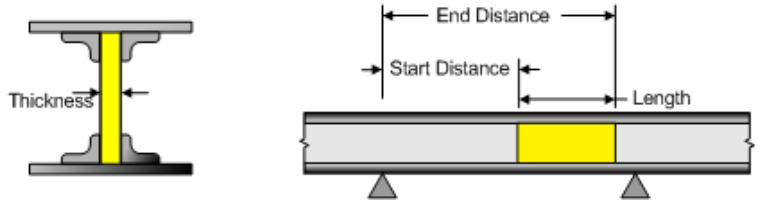
Beam

Beam Material: **Grade 30**

Beam Profile

Web

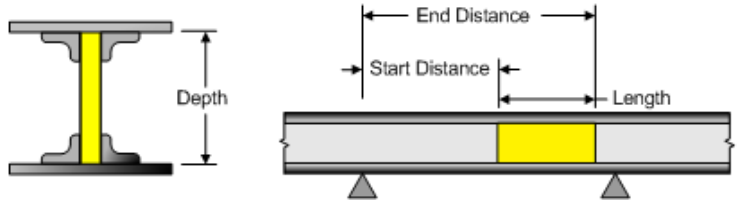
Apply to Entire Structure: Yes
Web Angle: -



Thickness	Material	Support Number	Start Distance	Length
0.375 in.	**Grade 30**	1	0 ft	54.417 ft

Web Depth

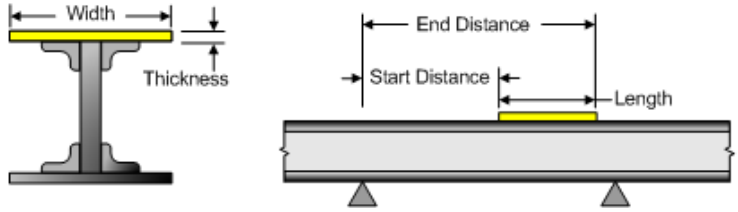
Apply to Entire Structure: Yes



Start Depth	Web Variation	End Depth	Support Number	Start Distance	Length
99.875 in.	Linear	99.875 in.	1	0 ft	54.417 ft

Top Cover Plate

Apply to Entire Structure: No

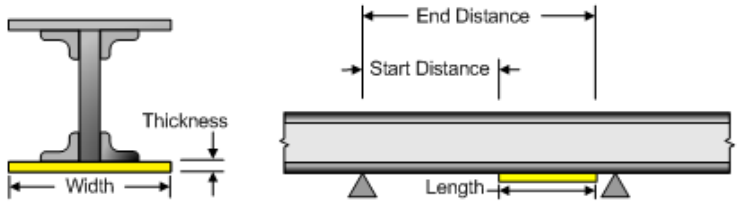


Start of Range	End of Range	Stage	Material	Support	Start	Length

Width	Thickness	Gap Thickness	Width	Thickness	Gap Thickness			Number	Distance	
13 in.	0.375 in.	-	-	-	-	1	**Grade 30**	1	0 ft	12.5 ft
13 in.	0.75 in.	-	-	-	-	1	**Grade 30**	1	12.5 ft	7.5 ft
13 in.	1.125 in.	-	-	-	-	1	**Grade 30**	1	20 ft	34.417 ft

Bottom Cover Plate

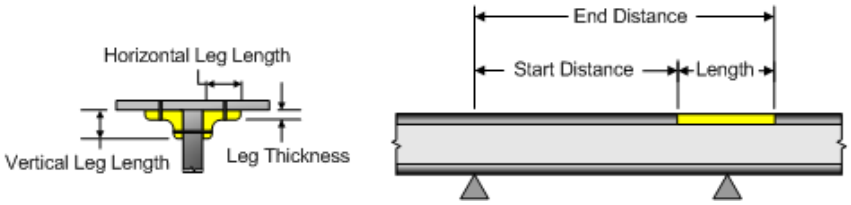
Apply to Entire Structure: No



Start of Range			End of Range							
Width	Thickness	Gap Thickness	Width	Thickness	Gap Thickness	Stage	Material	Support Number	Start Distance	Length
16 in.	0.625 in.	-	-	-	-	1	**Grade 30**	1	12.5 ft	7.5 ft
16 in.	1.125 in.	-	-	-	-	1	**Grade 30**	1	20 ft	9.5 ft
16 in.	1.625 in.	-	-	-	-	1	**Grade 30**	1	29.5 ft	24.917 ft

Top Angles

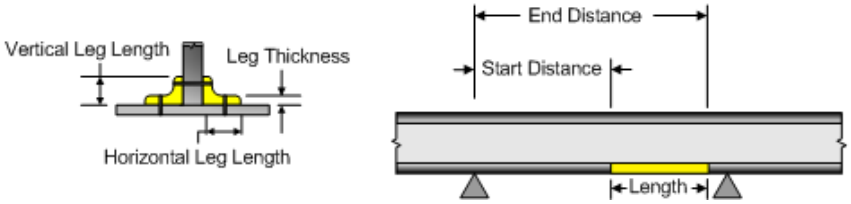
Apply to Entire Structure: Yes



Vertical Leg Length	Horizontal Leg Length	Leg Thickness	Material	Support Number	Start Distance	Length
3.5 in.	6 in.	0.375 in.	**Grade 30**	1	0 ft	54.417 ft

Bottom Angles

Apply to Entire Structure: Yes



Vertical Leg Length	Horizontal Leg Length	Leg Thickness	Material	Support Number	Start Distance	Length
3.5 in.	6 in.	0.375 in.	**Grade 30**	1	0 ft	54.417 ft

Hinges

No hinges have been defined.

Special Locations

No special locations have been defined.

Splice Locations

No splice locations have been defined.

Supports

Support Conditions

Support	Support Restraint		
	Horizontal	Vertical	Rotational
1	Restrained	Restrained	Free
2	Free	Restrained	Free

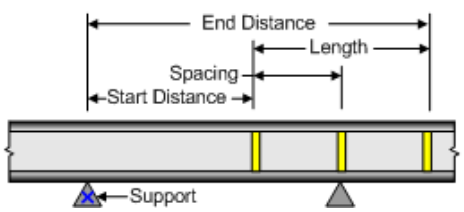
Spring Constants

Support	Spring Constants		
	Horizontal	Vertical	Rotational
1	-	-	-
2	-	-	-

Schedules

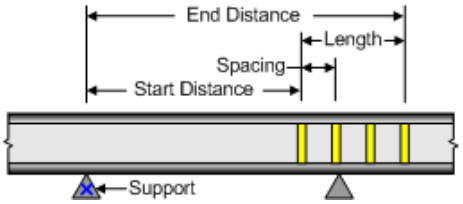
Bracing

Apply to Entire Structure: No



Spacing	Support	Start Distance	Length
10.167 ft	1	0 ft	10.167 ft
15.625 ft	1	10.167 ft	31.25 ft
15.5 ft	1	41.417 ft	15.5 ft
15.625 ft	1	56.917 ft	31.25 ft
20.667 ft	1	88.167 ft	20.667 ft

Transverse Stiffeners



Stiffener Group	Spacing	Support	Start Distance	Length
L5x3-1/2x3/8 Stiffener (2 Legs)	5.083 ft	1	0 ft	10.167 ft
L5x3-1/2x3/8 Stiffener (2 Legs)	5.208 ft	1	10.167 ft	31.25 ft
L5x3-1/2x3/8 Stiffener (2 Legs)	5.167 ft	1	41.417 ft	15.5 ft
L5x3-1/2x3/8 Stiffener (2 Legs)	5.208 ft	1	56.917 ft	31.25 ft
L5x3-1/2x3/8 Stiffener (2 Legs)	5.167 ft	1	88.167 ft	20.667 ft

Bearing Stiffeners

Apply to Entire Structure: No

Support	Stiffener Group
1	Not Assigned
2	Not Assigned

Longitudinal Stiffeners

No longitudinal stiffener schedules have been defined.

Lateral Support

No lateral support schedules have been defined.

Cb Factors (Standard)

No Cb factors (LRFD) have been defined.

Cb Factors (LRFD)

No Cb factors (LRFD) have been defined.

Fatigue Stress (Standard)

No fatigue stress (standard) schedules have been defined.

Member Control

Steel

Flexural Resistance

Span	Ignore Eq. 6.10.7.1.2-3 (LRFD)
1	No

End Panel Distances

Top Span

Left of Top Span: -
Right of Top Span: -

Flange Local Buckling Resistance Adjustment

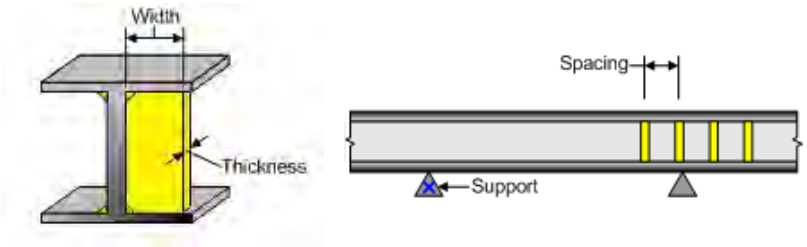
Standard Specifications: -
LRFD Specifications: -

Points of Interest

Points

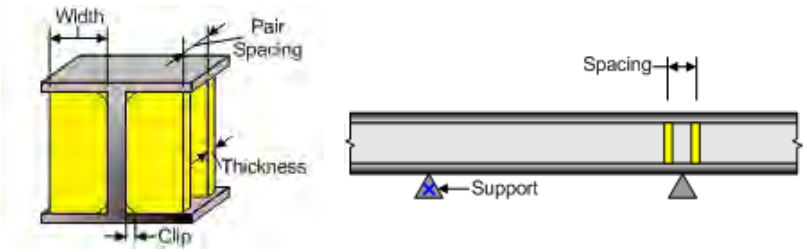
Point of Interest	Output Specification Checks	Output Load Combinations
100	Yes	Yes
101	Yes	Yes
102	Yes	Yes
103	Yes	Yes
104	Yes	Yes
104.5	Yes	Yes
105	Yes	Yes

Transverse Stiffeners



Point of Interest	Override	Width	Thickness	Spacing	Type	Type Factor	Material
100	No	-	-	-	-	-	-
101	No	-	-	-	-	-	-
102	No	-	-	-	-	-	-
103	No	-	-	-	-	-	-
104	No	-	-	-	-	-	-
104.5	No	-	-	-	-	-	-
105	No	-	-	-	-	-	-

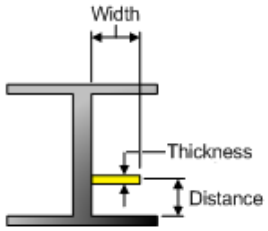
Bearing Stiffeners



Point of Interest	Override	Width	Thickness	Clip	Number of Pairs	Pair Spacing	Attachment	Material
100	No	-	-	-	-	-	-	-
101	No	-	-	-	-	-	-	-
102	No	-	-	-	-	-	-	-
103	No	-	-	-	-	-	-	-

104	No	-	-	-	-	-	-	-
104.5	No	-	-	-	-	-	-	-
105	No	-	-	-	-	-	-	-

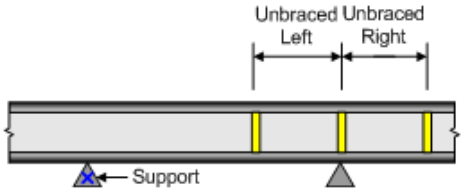
Longitudinal Stiffeners



Point of Interest	Main Stiffener					
	Override	Width	Thickness	Distance	Web Reference	Material
100	No	-	-	-	-	-
101	No	-	-	-	-	-
102	No	-	-	-	-	-
103	No	-	-	-	-	-
104	No	-	-	-	-	-
104.5	No	-	-	-	-	-
105	No	-	-	-	-	-

Point of Interest	Second Stiffener					
	Override	Width	Thickness	Distance	Web Reference	Material
100	No	-	-	-	-	-
101	No	-	-	-	-	-
102	No	-	-	-	-	-
103	No	-	-	-	-	-
104	No	-	-	-	-	-
104.5	No	-	-	-	-	-
105	No	-	-	-	-	-

Bracing



Point of Interest	Override	Lateral Support	Point Braced	Unbraced Length	
				Left	Right
100	No	-	-	-	-
101	No	-	-	-	-
102	No	-	-	-	-
103	No	-	-	-	-
104	No	-	-	-	-
104.5	No	-	-	-	-

105	No	-	-	-	-

Cb Factors

LRFD

Point of Interest	Override	Cb Method	Cb Factor	
			Top Flange	Bottom Flange
100	No	-	-	-
101	No	-	-	-
102	No	-	-	-
103	No	-	-	-
104	No	-	-	-
104.5	No	-	-	-
105	No	-	-	-

Fatigue

No fatigue detail categories have been defined.

Point of Interest	N Cycles	Zr (LRFD)
100	-	-
101	-	-
102	-	-
103	-	-
104	-	-
104.5	-	-
105	-	-

Point of Interest	r/h (Top Reinf.)	r/h (Bottom Reinf.)
100	-	-
101	-	-
102	-	-
103	-	-
104	-	-
104.5	-	-
105	-	-

Output

Point of Interest	Flexure	Shear	Bearing	Flexural Stress in Longitudinal Stiffener	Crack Control	Flexural Stress in Flanges
100	Yes	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes	Yes

104.5	Yes	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes	Yes

Point of Interest	Live Load Deflection	Fatigue of Reinforcement	Fatigue of Shear Connectors	Fatigue Shear Range of Shear Connectors	Fatigue of Special Points	Fatigue Shear
100	Yes	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes	Yes

Point of Interest	Details	Compactness and Bracing	Transverse Stiffeners	Bearing Stiffeners	Longitudinal Stiffeners
100	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes

Dead Loads

Uniform

Dead Load Type	Stage	Uniform Load
DC	1	0.017 kip / ft

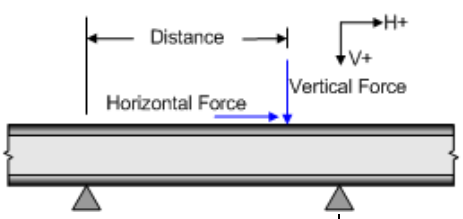
Additional Self-weight

No additional self-weight dead loads have been defined.

Distributed

No distributed dead loads have been defined.

Concentrated



Dead Load Group	Support	Concentrated Load		
		Distance	Horizontal Force	Vertical Force
DC Floor Beams	1	10.167 ft	-	14.46 kip

DC Floor Beams	1	25.792 ft	-	14.46 kip
DC Floor Beams	1	41.417 ft	-	14.46 kip
DC Floor Beams	1	56.917 ft	-	14.46 kip
DC Floor Beams	1	72.542 ft	-	14.46 kip
DC Floor Beams	1	88.167 ft	-	14.46 kip

Temperature

No temperature dead loads have been defined.

Settlement

Stage: 1

No settlement loads have been defined.

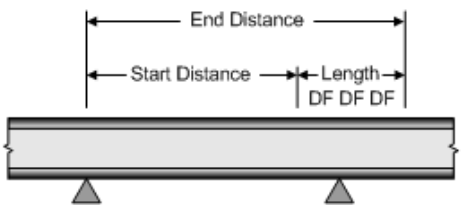
Pedestrian Load

Pedestrian Load: -

Distribution Factors (LRFD)

Moment

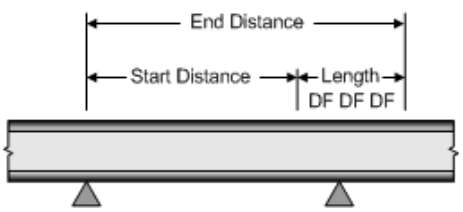
Apply to entire structure: Yes



mg Single-Lane	mg Multi-Lane	Support	Start	Length
0.58	0.58	1	0 ft	54.417 ft

Shear

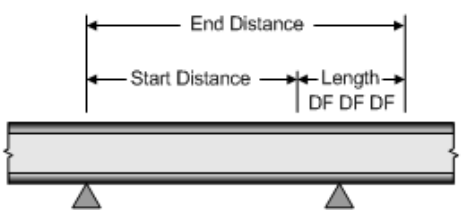
Apply to entire structure: Yes



mg Single-Lane	mg Multi-Lane	Support	Start	Length
0.58	0.58	1	0 ft	54.417 ft

Deflection

Apply to entire structure: Yes



mg	mg	Support	Start	Length

Single-Lane	Multi-Lane			
0.57	0.57	1	0 ft	54.417 ft

Reaction

Apply to entire structure: Yes

Support	mg Single-Lane			mg Multi-Lane		
	Moment	Shear	Deflection	Moment	Shear	Deflection
1	0.58	0.58	0.57	0.58	0.58	0.57
2	0.58	0.58	0.57	0.58	0.58	0.57

BRASS Results – Steel Girder

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**********************************************************************************************
**                                                                                          **
**                            WYOMING DEPARTMENT OF TRANSPORTATION                          **
**                       BRIDGE RATING AND ANALYSIS OF STRUCTURAL SYSTEMS                   **
**                                                                                          **
**                                                                                          **
**             BBBBBBBBBB   RRRRRRRRRRR    AAAAAAAAAA    SSSSSSSSSS    SSSSSSSSSS          **
**             BBBBBBBBBBB  RRRRRRRRRRRR  AAAAAAAAAAAA  SSSSSSSSSSS  SSSSSSSSSSS          **
**             BB        BB  RR        RR  AA        AA  SS        SS  SS        SS          **
**             BB        BB  RR        RR  AA        AA  SS            SS                  **
**             BB       BB   RR        RR  AA        AA  SSS           SSS                 **
**             BBBBBBBBBB    RRRRRRRRRRRR  AAAAAAAAAAAA   SSSSSSSSS     SSSSSSSSS          **
**             BBBBBBBBBB    RRRRRRRRRRR   AAAAAAAAAAAA    SSSSSSSSS     SSSSSSSSS         **
**             BB       BB   RR    RR      AA        AA           SSS           SSS         **
**             BB        BB  RR     RR     AA        AA            SS            SS         **
**             BB        BB  RR      RR    AA        AA  SS        SS  SS        SS          **
**             BBBBBBBBBBBB  RR       RR   AA        AA  SSSSSSSSSSS  SSSSSSSSSSS          **
**             BBBBBBBBBB   RR        RR  AA        AA   SSSSSSSSSS    SSSSSSSSSS          **
**                                                                                          **
**                                                                                          **
**        GGGGGGGGGG   IIIIIIIIIIII  RRRRRRRRRRR   DDDDDDDD      EEEEEEEEEEEE  RRRRRRRRRRR  **
**       GGGGGGGGGGGG  IIIIIIIIIIII  RRRRRRRRRRRR  DDDDDDDDD     EEEEEEEEEEEE  RRRRRRRRRRRR **
**       GG        GG       II       RR        RR  DD      DD    EE            RR        RR **
**       GG                 II       RR        RR  DD       DD   EE            RR        RR **
**       GG                 II       RR        RR  DD        DD  EE            RR        RR **
**       GG    GGGGGG       II       RRRRRRRRRRRR  DD        DD  EEEEEEEEEE    RRRRRRRRRRRR **
**       GG    GGGGGG       II       RRRRRRRRRRR   DD        DD  EEEEEEEEEE    RRRRRRRRRRR  **
**       GG        GG       II       RR    RR      DD        DD  EE            RR    RR     **
**       GG        GG       II       RR     RR     DD       DD   EE            RR     RR    **
**       GG        GG       II       RR      RR    DD      DD    EE            RR      RR   **
**       GGGGGGGGGGGG  IIIIIIIIIIII  RR       RR   DDDDDDDDD     EEEEEEEEEEEE  RR       RR  **
**        GGGGGGGGGG   IIIIIIIIIIII  RR        RR  DDDDDDDD      EEEEEEEEEEEE  RR        RR **
**                                                                                          **
**                                                                                          **
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**                                                                                          **
**                           Version  8   Release  0   Service Pack  0                      **
**                                    ** Release Version **                                 **
**                                 Release Date: Oct. 05, 2017                              **
**                                                                                          **
**                        For user assistance and system information contact:               **
**                                      Phone: (307) 777-4489                               **
**                                 E-mail: BRASSTechSupport@wyo.gov                         **
**                                                                                          **
**     The source version is maintained by BridgeTech, Inc.                                 **
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**        all responsibility and liability arising from such use or reliance.               **
**                                                                                          **
**     AASHTO LRFD Specifications:                                                          **
**                                                                                          **
**        BRASS-GIRDER™ is current with the AASHTO LRFD Bridge Design Specifications, 8th   **
**        Edition, 2017.  Load and Resistance Factor Ratings are current with the AASHTO    **
**        Manual for Bridge Evaluation, 3rd Edition, 2017.                                  **
**                                                                                          **
**     AASHTO Standard Specifications (LFD):                                                **
**                                                                                          **
**        BRASS-GIRDER is current with the AASHTO Standard Specifications for Highway       **
**        Bridges, 17th Edition, 2002.  Load Factor Ratings are current with the AASHTO     **
**        Manual for Bridge Evaluation, 3rd Edition, 2017.                                  **
**                                                                                          **
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** STRUCTURE/ANALYSIS SUMMARY **

Structure Type : Beam
Material Type : Steel
Number of Stages: 1
Element Type : Stepped
Analysis Type : Rating

Span No.	Length (ft)	Angle (deg)
1	108.8333	N/A

Supports:

Support No.	Fixity: Horizontal	Fixity: Vertical	Fixity: Rotational	Spring Constants: Horizontal (k/ft)	Spring Constants: Vertical (k/ft)	Spring Constants: Rotational (ft-k/rad)
1	Restrained	Restrained	Free	Infinity	Infinity	N/A
2	Free	Restrained	Free	N/A	Infinity	N/A

Beam Material Properties:
Unit Weight : 0.490 k/ft^3
Modulus of Elasticity (E) : 29000.000 ksi
Thermal Expansion Coefficient : 0.0000065 / deg. F

** OUTPUT CONTROL SUMMARY **

Action Output Locations	Actions at tenth points and special analysis points
Dead Load Actions	YES
Live Load Actions	YES
Concurrent Actions	NO
Girder Properties	YES
Truck Position	NO
Variable Axle Spacing	NO
Live Load Settings	YES
Live Load Combinations	YES
Live Load Details	YES
Load Combinations	YES
Load and Resistance Factors	YES
Warnings	YES
Member Self-Load	YES
Distributed Dead Loads	YES
Concentrated Dead Loads	YES
Temperature Change	NO
Settlements	NO
Camber Summary	NO
Influence Summary	NO
Critical Design Ratios or Rating Factors	YES (Condensed)
Dyn. Load Allowance Summary	NO
Intermediate Output Level	Expanded
Stage 1	YES

Limit State	Intermediate Output	Load Combinations
STRENGTH I	YES	YES
STRENGTH I-O	YES	YES
STRENGTH II	NO	NO
STRENGTH IV	NO	NO
SERVICE I	NO	NO
SERVICE II	YES	YES
SERVICE II-O	YES	YES
SERVICE III	NO	NO
FATIGUE I	NO	NO
FATIGUE II	NO	NO

Dead Load Distribution (Intermediate)	NO
Dead Load Distribution (Standard)	YES
Live Load Distribution (Intermediate)	NO
Live Load Distribution (Standard)	YES
Transverse Stiffeners (Intermediate)	NO
Bearing Stiffeners (Intermediate)	NO
Longitudinal Stiffeners (Intermediate)	NO
Shear Connectors (Intermediate)	NO
Shear Connectors (Standard)	NO
Floorbeam (Intermediate)	NO
Effective Width (Intermediate)	NO
Action X-Y Plot Tables	NO
Specification Check Results Tables	NO
Mesh Plot Files	NO

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 1 Span Length = 108.833 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Input Dimensions and Cross-Section Geometry: (in)

Point No.	Dist (ft)	Web Depth	Web Width top	Web Width bot	Flange Thickness top	Flange Thickness bot	Flange Width top	Flange Width bot
1-0.000	0.000	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.093	10.167	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.100	10.883	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.115	12.500	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.115	12.500	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.184	20.000	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.184	20.000	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.200	21.767	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.237	25.792	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.271	29.500	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.271	29.500	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.300	32.650	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.381	41.417	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.400	43.533	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.450	48.975	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.500	54.417	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.523	56.917	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.600	65.300	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.700	76.183	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.729	79.333	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.729	79.333	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.800	87.067	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.816	88.833	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.816	88.833	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.885	96.333	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.885	96.333	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-0.900	97.950	99.88	0.375	0.375	0.375	0.375	12.38	12.38
1-1.000	108.833	99.88	0.375	0.375	0.375	0.375	12.38	12.38

Calculated Properties:

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)	Standard Section Name
1-0.000	0.000	56.30	76783.4	54.69	-
1-0.093	10.167	56.30	76783.4	54.69	-
1-0.100	10.883	56.30	76783.4	54.69	-
1-0.115	12.500	56.30	76783.4	54.69	-
1-0.115	12.500	71.17	116105.1	50.14	-
1-0.184	20.000	71.17	116105.1	50.14	-
1-0.184	20.000	84.05	149522.3	48.27	-
1-0.200	21.767	84.05	149522.3	48.27	-
1-0.237	25.792	84.05	149522.3	48.27	-
1-0.271	29.500	84.05	149522.3	48.27	-
1-0.271	29.500	92.05	167525.5	43.95	-
1-0.300	32.650	92.05	167525.5	43.95	-
1-0.381	41.417	92.05	167525.5	43.95	-
1-0.400	43.533	92.05	167525.5	43.95	-
1-0.450	48.975	92.05	167525.5	43.95	-
1-0.500	54.417	92.05	167525.5	43.95	-
1-0.523	56.917	92.05	167525.5	43.95	-
1-0.600	65.300	92.05	167525.5	43.95	-
1-0.700	76.183	92.05	167525.5	43.95	-
1-0.729	79.333	92.05	167525.5	43.95	-
1-0.729	79.333	84.05	149522.3	48.27	-
1-0.800	87.067	84.05	149522.3	48.27	-
1-0.816	88.833	84.05	149522.3	48.27	-
1-0.816	88.833	71.17	116105.1	50.14	-
1-0.885	96.333	71.17	116105.1	50.14	-
1-0.885	96.333	56.30	76783.4	54.69	-
1-0.900	97.950	56.30	76783.4	54.69	-
1-1.000	108.833	56.30	76783.4	54.69	-

Note: The calculated properties reported above are based on the entire cross section geometry, which may include the slab if it was input. These properties are used only for the structural analysis to obtain moments, shears, etc. When specification and stress checks are performed, BRASS calculates the section properties for both positive and negative bending, and uses them in accordance with the sign of the factored moments. The section properties used for the section analysis are tabulated in a later report.

Note: The distance to the centroid (X-bar) references the bottom of the bottom flange.

Beam Properties (cont.)
Construction Stage: 1

Cover Plate Geometry: (in)

Point No.	Dist (ft)	Top Plate Width	Top Plate Thickness	Top Plate Gap	Bottom Plate Width	Bottom Plate Thickness	Bottom Plate Gap
1-0.000	0.000	13.00	0.38	0.00	0.00	0.00	0.00
1-0.093	10.167	13.00	0.38	0.00	0.00	0.00	0.00
1-0.100	10.883	13.00	0.38	0.00	0.00	0.00	0.00
1-0.115	12.500	13.00	0.38	0.00	0.00	0.00	0.00
1-0.115	12.500	13.00	0.75	0.00	16.00	0.62	0.00
1-0.184	20.000	13.00	0.75	0.00	16.00	0.62	0.00
1-0.184	20.000	13.00	1.12	0.00	16.00	1.12	0.00
1-0.200	21.767	13.00	1.12	0.00	16.00	1.12	0.00
1-0.237	25.792	13.00	1.12	0.00	16.00	1.12	0.00
1-0.271	29.500	13.00	1.12	0.00	16.00	1.12	0.00
1-0.271	29.500	13.00	1.12	0.00	16.00	1.62	0.00
1-0.300	32.650	13.00	1.12	0.00	16.00	1.62	0.00
1-0.381	41.417	13.00	1.12	0.00	16.00	1.62	0.00
1-0.400	43.533	13.00	1.12	0.00	16.00	1.62	0.00
1-0.450	48.975	13.00	1.12	0.00	16.00	1.62	0.00
1-0.500	54.417	13.00	1.12	0.00	16.00	1.62	0.00
1-0.523	56.917	13.00	1.12	0.00	16.00	1.62	0.00
1-0.600	65.300	13.00	1.12	0.00	16.00	1.62	0.00
1-0.700	76.183	13.00	1.12	0.00	16.00	1.62	0.00
1-0.729	79.333	13.00	1.12	0.00	16.00	1.62	0.00
1-0.729	79.333	13.00	1.12	0.00	16.00	1.12	0.00
1-0.800	87.067	13.00	1.12	0.00	16.00	1.12	0.00
1-0.816	88.833	13.00	1.12	0.00	16.00	1.12	0.00
1-0.816	88.833	13.00	0.75	0.00	16.00	0.62	0.00
1-0.885	96.333	13.00	0.75	0.00	16.00	0.62	0.00
1-0.885	96.333	13.00	0.38	0.00	0.00	0.00	0.00
1-0.900	97.950	13.00	0.38	0.00	0.00	0.00	0.00
1-1.000	108.833	13.00	0.38	0.00	0.00	0.00	0.00

Self-Load Summary:

Span No.	Beginning of Load Distance, ft	Beginning of Load Magnitude, k/ft	End of Load Distance, ft	End of Load Magnitude, k/ft
1	0.000	0.1916	12.500	0.1916
1	12.500	0.2422	20.000	0.2422
1	20.000	0.2860	29.500	0.2860
1	29.500	0.3132	79.333	0.3132
1	79.333	0.2860	88.833	0.2860
1	88.833	0.2422	96.333	0.2422
1	96.333	0.1916	108.833	0.1916

Load Groups:
1. DC Floor Beams

Distributed Dead Load Summary:

Load Group	Span No.	Beginning of Load Distance, ft	Beginning of Load Magnitude, k/ft	End of Load Distance, ft	End of Load Magnitude, k/ft
DC 1	All		0.0170		0.0170

Note: A span number denoted as "*" indicates the distances reference the left end of the bridge and the load may extend over one or more spans.
Note: A span number denoted as "All" indicates all TOP spans.

Deck Loads and Schedules Summary:
No loads are present.

Concentrated Dead Load Summary:

Load Group	Span No.	Distance ft	Load Magnitude, kips Horizontal	Load Magnitude, kips Vertical
1	*	10.167	0.000	14.460
1	*	25.792	0.000	14.460
1	*	41.417	0.000	14.460
1	*	56.917	0.000	14.460
1	*	72.542	0.000	14.460
1	*	88.167	0.000	14.460

Note: A span number denoted as "*" indicates the distance references the left end of the bridge.

** LIVE LOAD DISTRIBUTION FACTORS SUMMARY **

Beam Distribution Factor Schedule: Shear

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	54.417	0.580 (USER)	0.580 (M,USER)
1	54.417	108.833	0.580 (USER)	0.580 (M,USER)

Beam Distribution Factor Schedule: Moment

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	54.417	0.580 (USER)	0.580 (M,USER)
1	54.417	108.833	0.580 (USER)	0.580 (M,USER)

Beam Distribution Factor Schedule: Deflection

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	54.417	0.570 (USER)	0.570 (M,USER)
1	54.417	108.833	0.570 (USER)	0.570 (M,USER)

Reaction Distribution Factors: Shear

Support No.	mg(1-lane)	mg(M-lanes)
1	0.580 (USER)	0.580 (M,USER)
2	0.580 (USER)	0.580 (M,USER)

Reaction Distribution Factors: Moment

Support No.	mg(1-lane)	mg(M-lanes)
1	0.580 (USER)	0.580 (M,USER)
2	0.580 (USER)	0.580 (M,USER)

Reaction Distribution Factors: Deflection

Support No.	mg(1-lane)	mg(M-lanes)
1	0.570 (USER)	0.570 (M,USER)
2	0.570 (USER)	0.570 (M,USER)

Notes:
=> The controlling method is included in parenthesis next to each distribution factor.
USER = User Input LR-T = Lever Rule Specified in AASHTO LRFD Table
LRFD = AASHTO LRFD Formulas LR-O = Lever Rule Override
LR = Lever Rule Method RG-O = Rigid Method Override
=> Additionally, for multiple-lanes loaded, the number of lanes loaded is shown. An 'M' is used with the USER and LRFD methods because the number of multiple lanes is unknown.
=> The Lever Rule Override is invoked when the ranges of applicability are not satisfied for the AASHTO LRFD distribution factor formulas.

LIVE LOAD SETTINGS SUMMARY:

Direction Control : Up & Down Reference Marker
Pedestrian Load : 0.000 k/ft
Wheel Advancement Denominator: 100
ADTT : 999
ADTT (Single Lane) : 999
Multiple Presence Adjustment : 95.000 %

Design/Rating Procedure	Dynamic Load Allowance (%) Truck	Lane	Fatigue
Design Load	33.00	0.00	15.00
Legal Load	33.00	0.00	0.00
Permit Load	33.00	0.00	0.00

No.	Name	Description	Scale Factor	Percent Impact	Fixed Impact	Live Load Type	Rating Procedure	Lanes Loaded
1	HL-93-TRUCK	AASHTO LRFD HL-93 Design Truck (US)	1.000	100.000	0.33	TRK	Design Load	Critical
2	HL-93-TANDEM	AASHTO LRFD HL-93 Design Tandem (US)	1.000	100.000	0.33	TRK	Design Load	Critical
3	HL-93-LANE	AASHTO LRFD HL-93 Design Lane (US)	1.000	100.000	0.00	LAN	Design Load	Critical
4	TYPE3	AASHTO Type 3 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
5	TYPE3S2	AASHTO Type 3S2 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
6	TYPE3-3	AASHTO Type 3-3 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
7	SU4	AASHTO Specialized Hauling Vehicle SU4	1.000	100.000	0.33	TRK	Legal Load	Critical
8	SU5	AASHTO Specialized Hauling Vehicle SU5	1.000	100.000	0.33	TRK	Legal Load	Critical
9	SU6	AASHTO Specialized Hauling Vehicle SU6	1.000	100.000	0.33	TRK	Legal Load	Critical
10	SU7	AASHTO Specialized Hauling Vehicle SU7	1.000	100.000	0.33	TRK	Legal Load	Critical
11	NRL	AASHTO Notional Rating Load	1.000	100.000	0.33	TRK	Legal Load	Critical

LIVE LOAD COMBINATIONS SUMMARY:

Comb. No.	Name	Description	Truck No.	Lane No.	Combination Factors Truck	Lane
1	HL-93-TRUCK	HL-93-TRUCK + HL-93-LANE	1	3	1.000	1.000
2	HL-93-TANDEM	HL-93-TANDEM + HL-93-LANE	2	3	1.000	1.000
3	TYPE3	TYPE3	4	N/A	1.000	N/A
4	TYPE3S2	TYPE3S2	5	N/A	1.000	N/A
5	TYPE3-3	TYPE3-3	6	N/A	1.000	N/A
6	SU4	SU4	7	N/A	1.000	N/A
7	SU5	SU5	8	N/A	1.000	N/A
8	SU6	SU6	9	N/A	1.000	N/A
9	SU7	SU7	10	N/A	1.000	N/A
10	NRL	NRL	11	N/A	1.000	N/A

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Moment (kips)	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 1: HL-93-TRUCK : AASHTO LRFD HL-93 Design Truck (US)												
0.000	0.000	0.000	72.000	1	8.000	0.000	2	32.000	14.000	3	32.000	14.000
Live Load 2: HL-93-TANDEM: AASHTO LRFD HL-93 Design Tandem (US)												
0.000	0.000	0.000	50.000	1	25.000	0.000	2	25.000	4.000			
Live Load 3: HL-93-LANE : AASHTO LRFD HL-93 Design Lane (US)												
0.640	0.000	0.000	36.000									
Live Load 4: TYPE3 : AASHTO Type 3 Rating Truck (US)												
0.000	0.000	0.000	50.000	1	16.000	0.000	2	17.000	15.000	3	17.000	4.000
Live Load 5: TYPE3S2 : AASHTO Type 3S2 Rating Truck (US)												
0.000	0.000	0.000	72.000	1	10.000	0.000	2	15.500	11.000	3	15.500	4.000
				4	15.500	22.000	5	15.500	4.000			

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Concentrated Loads Moment (kips)	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 6: TYPE3-3 : AASHTO Type 3-3 Rating Truck (US)												
0.000	0.000	0.000	80.000	1	12.000	0.000	2	12.000	15.000	3	12.000	4.000
				4	16.000	15.000	5	14.000	16.000	6	14.000	4.000
Live Load 7: SU4 : AASHTO Specialized Hauling Vehicle SU4												
0.000	0.000	0.000	54.000	1	12.000	0.000	2	8.000	10.000	3	17.000	4.000
				4	17.000	4.000						
Live Load 8: SU5 : AASHTO Specialized Hauling Vehicle SU5												
0.000	0.000	0.000	62.000	1	12.000	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000			
Live Load 9: SU6 : AASHTO Specialized Hauling Vehicle SU6												
0.000	0.000	0.000	69.500	1	11.500	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
Live Load 10: SU7 : AASHTO Specialized Hauling Vehicle SU7												
0.000	0.000	0.000	77.500	1	11.500	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
				7	8.000	4.000						

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Concentrated Loads Moment (kips)	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 11: NRL : AASHTO Notional Rating Load												
0.000	0.000	0.000	80.000	1	6.000	0.000	2	8.000	6.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
				7	8.000	4.000	8	8.000	4.000			

LOAD FACTORS SUMMARY:

Limit State	eta D	eta R	eta I	eta T MAX	eta T MIN
STRENGTH I	1.00	1.00	1.00	1.00	1.00
STRENGTH II	1.00	1.00	1.00	1.00	1.00
STRENGTH IV	1.00	1.00	1.00	1.00	1.00
SERVICE I	1.00	1.00	1.00	1.00	1.00
SERVICE II	1.00	1.00	1.00	1.00	1.00
SERVICE III	1.00	1.00	1.00	1.00	1.00
FATIGUE I	1.00	1.00	1.00	1.00	1.00
FATIGUE II	1.00	1.00	1.00	1.00	1.00

Limit State	DC		DW		DU		LL (Design)		LL	LL
	MAX	MIN	MAX	MIN	MAX	MIN	Inventory	Operating	Legal	Permit
STRENGTH I	1.25	1.25	1.50	1.50	1.50	1.50	1.75	1.35	1.30	0.00
STRENGTH II	1.25	1.25	1.50	1.50	1.50	1.50	1.35	0.00	0.00	0.00
STRENGTH IV	1.50	1.50	1.50	1.50	1.50	1.50	0.00	0.00	0.00	0.00
SERVICE I	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00
SERVICE II	1.00	1.00	1.00	1.00	1.00	1.00	1.30	1.00	1.30	1.00
SERVICE III	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.00	1.00	0.00
FATIGUE I	0.00	0.00	0.00	0.00	0.00	0.00	1.75	0.00	0.00	0.00
FATIGUE II	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00

Limit State	TU		SE		PS		DS	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
STRENGTH I	1.20	1.20	1.00	1.00	1.00	1.00	1.25	1.25
STRENGTH II	1.20	1.20	1.00	1.00	1.00	1.00	1.25	1.25
STRENGTH IV	1.20	1.20	0.00	0.00	1.00	1.00	1.50	1.50
SERVICE I	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
SERVICE II	1.20	1.20	0.00	0.00	1.00	1.00	1.00	1.00
SERVICE III	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
FATIGUE I	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
FATIGUE II	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00

Notes:
=> DU = Utilities
=> PS = Prestress
=> DS = Differential Deck Shrinkage

RESISTANCE FACTORS SUMMARY:

Limit State	phi C
STRENGTH	0.95
SERVICE	1.00
FATIGUE	1.00

Resistance Type	phi* (Base)	STRENGTH phi S	STRENGTH phi T	SERVICE phi S	SERVICE phi T	FATIGUE phi S	FATIGUE phi T
Flexure	1.00	0.85	0.85	1.00	1.00	1.00	1.00
Shear	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Bearing	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Shear Connectors	0.85	1.00	0.95	1.00	1.00	1.00	1.00
Compression	0.95	1.00	0.95	1.00	1.00	1.00	1.00
Fatigue	1.00	1.00	0.95	1.00	1.00	1.00	1.00

* Base phi factors are not adjusted by phi C * phi S.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR GIRDER WEIGHT
Length of Span No. 1 = 108.833 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	-0.0	0.0	14.7	14.7	0.00	0.00
1-0.100	149.0	0.0	12.6		0.00	0.07
1-0.200	273.0	0.0	10.0		0.00	0.12
1-0.300	365.0	0.0	6.8		0.00	0.17
1-0.400	420.6	0.0	3.4		0.00	0.19
1-0.450	434.5	0.0	1.7		0.00	0.20
1-0.500	439.2	0.0	-0.0		0.00	0.20
1-0.600	420.6	0.0	-3.4		0.00	0.19
1-0.700	365.0	0.0	-6.8		0.00	0.17
1-0.800	273.0	0.0	-10.0		0.00	0.12
1-0.900	149.0	0.0	-12.6		0.00	0.07
1-1.000	-0.0	0.0	-14.7	14.7	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000534 rad Right End = -0.000534 rad

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD OF 0.017000 k/ft **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR SUPERIMPOSED UNIFORM DEAD LOAD (DC) ON TOP SPANS
Length of Span No. 1 = 108.833 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	-0.0	0.0	0.9	0.9	0.00	0.00
1-0.100	9.1	0.0	0.7		0.00	0.00
1-0.200	16.1	0.0	0.6		0.00	0.01
1-0.300	21.1	0.0	0.4		0.00	0.01
1-0.400	24.2	0.0	0.2		0.00	0.01
1-0.450	24.9	0.0	0.1		0.00	0.01
1-0.500	25.2	0.0	-0.0		0.00	0.01
1-0.600	24.2	0.0	-0.2		0.00	0.01
1-0.700	21.1	0.0	-0.4		0.00	0.01
1-0.800	16.1	0.0	-0.6		0.00	0.01
1-0.900	9.1	0.0	-0.7		0.00	0.00
1-1.000	-0.0	0.0	-0.9	0.9	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000031 rad Right End = -0.000031 rad

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR SUPERIMPOSED DEAD LOAD GROUP #1
LOAD DESCRIPTION: DC Floor Beams
Length of Span No. 1 = 108.833 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	-0.0	0.0	47.6	47.6	0.00	0.00
1-0.100	507.3	0.0	33.1		0.00	0.21
1-0.200	867.6	0.0	33.1		0.00	0.38
1-0.300	1128.7	0.0	18.6		0.00	0.51
1-0.400	1301.0	0.0	4.2		0.00	0.59
1-0.450	1323.8	0.0	4.2		0.00	0.61
1-0.500	1346.6	0.0	4.2		0.00	0.62
1-0.600	1270.9	0.0	-10.3		0.00	0.59
1-0.700	1106.4	0.0	-24.7		0.00	0.51
1-0.800	837.2	0.0	-24.7		0.00	0.38
1-0.900	426.6	0.0	-39.2		0.00	0.20
1-1.000	-0.0	0.0	-39.2	39.2	0.00	0.00

Rotations (+) Clockwise: Left End = 0.001673 rad Right End = -0.001617 rad

** COMBINED UNFACTORED DEAD LOAD ACTIONS **
** CONSTRUCTION STAGE 1 **

Length of Span No. 1 = 108.833 ft

POINT NO.	Dead Loads of Structural Components (DC) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)	Dead Loads of Wearing Surfaces (DW) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
1-0.000	-0.0	0.0	63.2	63.2	0.00	0.0	0.0	0.0	0.0	0.00
1-0.100	665.4	0.0	46.5		0.28	0.0	0.0	0.0		0.00
1-0.200	1156.8	0.0	43.7		0.51	0.0	0.0	0.0		0.00
1-0.300	1514.8	0.0	25.8		0.69	0.0	0.0	0.0		0.00
1-0.400	1745.8	0.0	7.8		0.80	0.0	0.0	0.0		0.00
1-0.450	1783.3	0.0	6.0		0.83	0.0	0.0	0.0		0.00
1-0.500	1810.9	0.0	4.2		0.83	0.0	0.0	0.0		0.00
1-0.600	1715.7	0.0	-13.9		0.80	0.0	0.0	0.0		0.00
1-0.700	1492.6	0.0	-31.9		0.68	0.0	0.0	0.0		0.00
1-0.800	1126.4	0.0	-35.3		0.51	0.0	0.0	0.0		0.00
1-0.900	584.6	0.0	-52.6		0.28	0.0	0.0	0.0		0.00
1-1.000	-0.0	0.0	-54.9	54.9	0.00	0.0	0.0	0.0	0.0	0.00

Rotations (DC): Left End = 0.002238 rad
(+) Clockwise Right End = -0.002182 rad

Rotations (DW): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

POINT NO.	Dead Loads of Utilities (DU) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
1-0.000	0.0	0.0	0.0	0.0	0.00
1-0.100	0.0	0.0	0.0		0.00
1-0.200	0.0	0.0	0.0		0.00
1-0.300	0.0	0.0	0.0		0.00
1-0.400	0.0	0.0	0.0		0.00
1-0.450	0.0	0.0	0.0		0.00
1-0.500	0.0	0.0	0.0		0.00
1-0.600	0.0	0.0	0.0		0.00
1-0.700	0.0	0.0	0.0		0.00
1-0.800	0.0	0.0	0.0		0.00
1-0.900	0.0	0.0	0.0		0.00
1-1.000	0.0	0.0	0.0	0.0	0.00

Rotations (DU): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 1: AASHTO LRFD HL-93 Design Truck (US) (TRK)
Length of Span No. 1 = 108.833 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	50.5	0.0	50.5	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	488.3	0.0	0.0	0.0	45.3	-2.2			0.00	0.00	0.17	0.00		
1-0.200	856.6	0.0	0.0	0.0	39.7	-6.4			0.00	0.00	0.32	0.00		
1-0.300	1108.1	0.0	0.0	0.0	34.1	-11.7			0.00	0.00	0.43	0.00		
1-0.400	1254.0	0.0	0.0	0.0	28.5	-17.3			0.00	0.00	0.50	0.00		
1-0.450	1287.8	0.0	0.0	0.0	25.7	-20.1			0.00	0.00	0.52	0.00		
1-0.500	1292.6	0.0	0.0	0.0	22.9	-22.9			0.00	0.00	0.52	0.00		
1-0.600	1254.0	0.0	0.0	0.0	17.3	-28.5			0.00	0.00	0.50	0.00		
1-0.700	1108.1	0.0	0.0	0.0	11.7	-34.1			0.00	0.00	0.43	0.00		
1-0.800	856.6	0.0	0.0	0.0	6.4	-39.7			0.00	0.00	0.32	0.00		
1-0.900	488.3	0.0	0.0	0.0	2.2	-45.3			0.00	0.00	0.17	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-50.5	50.5	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001347 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 25.301 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001347 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 24.035 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 2: AASHTO LRFD HL-93 Design Tandem (US) (TRK)
Length of Span No. 1 = 108.833 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	37.9	0.0	37.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	369.7	0.0	0.0	0.0	34.0	-2.8			0.00	0.00	0.12	0.00		
1-0.200	654.5	0.0	0.0	0.0	30.1	-6.7			0.00	0.00	0.23	0.00		
1-0.300	854.6	0.0	0.0	0.0	26.2	-10.6			0.00	0.00	0.31	0.00		
1-0.400	974.0	0.0	0.0	0.0	22.3	-14.5			0.00	0.00	0.36	0.00		
1-0.450	1003.1	0.0	0.0	0.0	20.3	-16.4			0.00	0.00	0.37	0.00		
1-0.500	1010.9	0.0	0.0	0.0	18.4	-18.4			0.00	0.00	0.38	0.00		
1-0.600	974.0	0.0	0.0	0.0	14.5	-22.3			0.00	0.00	0.36	0.00		
1-0.700	854.6	0.0	0.0	0.0	10.6	-26.2			0.00	0.00	0.31	0.00		
1-0.800	654.5	0.0	0.0	0.0	6.7	-30.1			0.00	0.00	0.23	0.00		
1-0.900	369.7	0.0	0.0	0.0	2.8	-34.0			0.00	0.00	0.12	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-37.9	37.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000963 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 17.523 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000963 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 17.043 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 3: AASHTO LRFD HL-93 Design Lane (US) (LAN)
Length of Span No. 1 = 108.833 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	20.2	0.0	20.2	0.0	0.00	0.00	0.00	0.00	0.00	0.00
1-0.100	197.8	0.0	0.0	0.0	16.5	-0.2			0.00	0.00	0.08	0.00		
1-0.200	351.7	0.0	0.0	0.0	13.0	-0.8			0.00	0.00	0.15	0.00		
1-0.300	461.6	0.0	0.0	0.0	10.0	-1.8			0.00	0.00	0.21	0.00		
1-0.400	527.6	0.0	0.0	0.0	7.3	-3.2			0.00	0.00	0.24	0.00		
1-0.450	544.0	0.0	0.0	0.0	6.1	-4.1			0.00	0.00	0.25	0.00		
1-0.500	549.5	0.0	0.0	0.0	5.0	-5.0			0.00	0.00	0.25	0.00		
1-0.600	527.6	0.0	0.0	0.0	3.2	-7.3			0.00	0.00	0.24	0.00		
1-0.700	461.6	0.0	0.0	0.0	1.8	-10.0			0.00	0.00	0.21	0.00		
1-0.800	351.7	0.0	0.0	0.0	0.8	-13.0			0.00	0.00	0.15	0.00		
1-0.900	197.8	0.0	0.0	0.0	0.2	-16.5			0.00	0.00	0.08	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-20.2	20.2	0.0	0.00	0.00	0.00	0.00	0.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000671 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 20.199 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000671 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 20.199 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 4: AASHTO Type 3 Rating Truck (US) (TRK)
Length of Span No. 1 = 108.833 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	35.7	0.0	35.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	346.2	0.0	0.0	0.0	32.1	-1.9			0.00	0.00	0.12	0.00		
1-0.200	611.7	0.0	0.0	0.0	28.2	-4.8			0.00	0.00	0.22	0.00		
1-0.300	793.8	0.0	0.0	0.0	24.3	-8.7			0.00	0.00	0.30	0.00		
1-0.400	900.0	0.0	0.0	0.0	20.4	-12.6			0.00	0.00	0.35	0.00		
1-0.450	922.6	0.0	0.0	0.0	18.5	-14.6			0.00	0.00	0.36	0.00		
1-0.500	927.0	0.0	0.0	0.0	16.5	-16.5			0.00	0.00	0.37	0.00		
1-0.600	900.0	0.0	0.0	0.0	12.6	-20.4			0.00	0.00	0.35	0.00		
1-0.700	793.8	0.0	0.0	0.0	8.7	-24.3			0.00	0.00	0.30	0.00		
1-0.800	611.7	0.0	0.0	0.0	4.8	-28.2			0.00	0.00	0.22	0.00		
1-0.900	346.2	0.0	0.0	0.0	1.9	-32.1			0.00	0.00	0.12	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-35.7	35.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000943 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 17.434 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000943 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 16.848 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 5: AASHTO Type 3S2 Rating Truck (US) (TRK)
Length of Span No. 1 = 108.833 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	45.6	0.0	45.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	438.4	0.0	0.0	0.0	40.6	-1.8			0.00	0.00	0.16	0.00		
1-0.200	759.4	0.0	0.0	0.0	35.0	-4.2			0.00	0.00	0.30	0.00		
1-0.300	992.4	0.0	0.0	0.0	29.3	-7.5			0.00	0.00	0.40	0.00		
1-0.400	1120.1	0.0	0.0	0.0	23.7	-12.5			0.00	0.00	0.47	0.00		
1-0.450	1144.7	0.0	0.0	0.0	20.9	-15.3			0.00	0.00	0.48	0.00		
1-0.500	1138.8	0.0	0.0	0.0	18.1	-18.1			0.00	0.00	0.49	0.00		
1-0.600	1120.1	0.0	0.0	0.0	12.5	-23.7			0.00	0.00	0.47	0.00		
1-0.700	991.8	0.0	0.0	0.0	7.5	-29.3			0.00	0.00	0.40	0.00		
1-0.800	759.4	0.0	0.0	0.0	4.2	-35.0			0.00	0.00	0.30	0.00		
1-0.900	438.4	0.0	0.0	0.0	1.8	-40.6			0.00	0.00	0.16	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-45.6	45.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001279 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 24.620 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001279 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 23.889 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 6: AASHTO Type 3-3 Rating Truck (US) (TRK)
Length of Span No. 1 = 108.833 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	47.6	0.0	47.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	455.8	0.0	0.0	0.0	42.0	-1.6			0.00	0.00	0.17	0.00		
1-0.200	784.6	0.0	0.0	0.0	35.8	-3.9			0.00	0.00	0.31	0.00		
1-0.300	996.3	0.0	0.0	0.0	29.5	-7.3			0.00	0.00	0.42	0.00		
1-0.400	1125.3	0.0	0.0	0.0	23.3	-11.8			0.00	0.00	0.49	0.00		
1-0.450	1161.5	0.0	0.0	0.0	20.2	-14.4			0.00	0.00	0.51	0.00		
1-0.500	1168.0	0.0	0.0	0.0	17.1	-17.1			0.00	0.00	0.51	0.00		
1-0.600	1125.3	0.0	0.0	0.0	11.8	-23.3			0.00	0.00	0.49	0.00		
1-0.700	996.3	0.0	0.0	0.0	7.3	-29.5			0.00	0.00	0.42	0.00		
1-0.800	784.6	0.0	0.0	0.0	3.9	-35.8			0.00	0.00	0.32	0.00		
1-0.900	455.8	0.0	0.0	0.0	1.6	-42.0			0.00	0.00	0.17	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-47.6	47.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001355 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 26.893 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001356 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 25.956 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 7: AASHTO Specialized Hauling Vehicle SU4 (TRK)
Length of Span No. 1 = 108.833 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	38.9	0.0	38.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	377.6	0.0	0.0	0.0	35.1	-2.1			0.00	0.00	0.13	0.00		
1-0.200	669.0	0.0	0.0	0.0	30.9	-5.6			0.00	0.00	0.24	0.00		
1-0.300	870.8	0.0	0.0	0.0	26.7	-9.8			0.00	0.00	0.33	0.00		
1-0.400	992.3	0.0	0.0	0.0	22.5	-14.1			0.00	0.00	0.38	0.00		
1-0.450	1019.7	0.0	0.0	0.0	20.4	-16.2			0.00	0.00	0.40	0.00		
1-0.500	1026.7	0.0	0.0	0.0	18.3	-18.3			0.00	0.00	0.40	0.00		
1-0.600	992.3	0.0	0.0	0.0	14.1	-22.5			0.00	0.00	0.38	0.00		
1-0.700	870.8	0.0	0.0	0.0	9.8	-26.7			0.00	0.00	0.33	0.00		
1-0.800	669.0	0.0	0.0	0.0	5.6	-30.9			0.00	0.00	0.24	0.00		
1-0.900	377.8	0.0	0.0	0.0	2.1	-35.1			0.00	0.00	0.13	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-38.9	38.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001026 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 18.827 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001026 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 18.511 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 8: AASHTO Specialized Hauling Vehicle SU5 (TRK)
Length of Span No. 1 = 108.833 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	43.9	0.0	43.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	429.9	0.0	0.0	0.0	39.5	-2.0			0.00	0.00	0.15	0.00		
1-0.200	754.8	0.0	0.0	0.0	34.7	-5.8			0.00	0.00	0.27	0.00		
1-0.300	982.9	0.0	0.0	0.0	29.9	-10.5			0.00	0.00	0.37	0.00		
1-0.400	1118.1	0.0	0.0	0.0	25.0	-15.4			0.00	0.00	0.43	0.00		
1-0.450	1146.3	0.0	0.0	0.0	22.6	-17.8			0.00	0.00	0.45	0.00		
1-0.500	1152.5	0.0	0.0	0.0	20.2	-20.2			0.00	0.00	0.46	0.00		
1-0.600	1118.1	0.0	0.0	0.0	15.4	-25.0			0.00	0.00	0.43	0.00		
1-0.700	982.9	0.0	0.0	0.0	10.5	-29.9			0.00	0.00	0.37	0.00		
1-0.800	754.8	0.0	0.0	0.0	5.8	-34.7			0.00	0.00	0.27	0.00		
1-0.900	429.9	0.0	0.0	0.0	2.0	-39.5			0.00	0.00	0.15	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-43.9	43.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001170 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 21.719 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001171 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 20.993 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact),
distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 9: AASHTO Specialized Hauling Vehicle SU6 (TRK)
Length of Span No. 1 = 108.833 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	48.3	0.0	48.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	468.3	0.0	0.0	0.0	42.9	-1.4			0.00	0.00	0.17	0.00		
1-0.200	838.5	0.0	0.0	0.0	37.4	-5.4			0.00	0.00	0.31	0.00		
1-0.300	1094.2	0.0	0.0	0.0	32.0	-10.4			0.00	0.00	0.42	0.00		
1-0.400	1242.5	0.0	0.0	0.0	26.6	-15.8			0.00	0.00	0.49	0.00		
1-0.450	1279.6	0.0	0.0	0.0	23.9	-18.5			0.00	0.00	0.50	0.00		
1-0.500	1287.2	0.0	0.0	0.0	21.2	-21.2			0.00	0.00	0.51	0.00		
1-0.600	1243.3	0.0	0.0	0.0	15.8	-26.6			0.00	0.00	0.49	0.00		
1-0.700	1093.5	0.0	0.0	0.0	10.4	-32.0			0.00	0.00	0.42	0.00		
1-0.800	838.5	0.0	0.0	0.0	5.4	-37.4			0.00	0.00	0.31	0.00		
1-0.900	468.3	0.0	0.0	0.0	1.4	-42.9			0.00	0.00	0.17	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-48.3	48.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001310 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 23.671 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001310 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 23.671 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 10: AASHTO Specialized Hauling Vehicle SU7 (TRK)
Length of Span No. 1 = 108.833 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	52.2	0.0	52.2	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	507.4	0.0	0.0	0.0	46.8	-1.2			0.00	0.00	0.18	0.00		
1-0.200	908.5	0.0	0.0	0.0	40.7	-5.2			0.00	0.00	0.34	0.00		
1-0.300	1201.3	0.0	0.0	0.0	34.7	-10.5			0.00	0.00	0.46	0.00		
1-0.400	1367.7	0.0	0.0	0.0	28.7	-16.6			0.00	0.00	0.54	0.00		
1-0.450	1405.3	0.0	0.0	0.0	25.6	-19.6			0.00	0.00	0.56	0.00		
1-0.500	1418.5	0.0	0.0	0.0	22.6	-22.6			0.00	0.00	0.56	0.00		
1-0.600	1367.7	0.0	0.0	0.0	16.6	-28.7			0.00	0.00	0.54	0.00		
1-0.700	1201.3	0.0	0.0	0.0	10.5	-34.7			0.00	0.00	0.46	0.00		
1-0.800	908.5	0.0	0.0	0.0	5.2	-40.7			0.00	0.00	0.34	0.00		
1-0.900	507.5	0.0	0.0	0.0	1.2	-46.8			0.00	0.00	0.18	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-52.2	52.2	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001454 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 27.012 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001454 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 26.104 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 11: AASHTO Notional Rating Load (TRK)
Length of Span No. 1 = 108.833 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	53.4	0.0	53.4	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	519.3	0.0	0.0	0.0	47.8	-2.1			0.00	0.00	0.19	0.00		
1-0.200	928.9	0.0	0.0	0.0	41.6	-6.1			0.00	0.00	0.35	0.00		
1-0.300	1229.0	0.0	0.0	0.0	35.3	-10.7			0.00	0.00	0.48	0.00		
1-0.400	1416.0	0.0	0.0	0.0	29.1	-16.6			0.00	0.00	0.56	0.00		
1-0.450	1460.3	0.0	0.0	0.0	26.0	-19.8			0.00	0.00	0.58	0.00		
1-0.500	1474.7	0.0	0.0	0.0	22.9	-22.9			0.00	0.00	0.59	0.00		
1-0.600	1415.3	0.0	0.0	0.0	16.6	-29.1			0.00	0.00	0.56	0.00		
1-0.700	1229.1	0.0	0.0	0.0	10.7	-35.3			0.00	0.00	0.48	0.00		
1-0.800	928.5	0.0	0.0	0.0	6.1	-41.6			0.00	0.00	0.35	0.00		
1-0.900	518.8	0.0	0.0	0.0	2.1	-47.8			0.00	0.00	0.19	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-53.4	53.4	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001506 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 27.998 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001506 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 26.839 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I
Length of Span No. 1 = 108.833 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	-0.0	-0.0	0.0	0.0	202.7	79.0	202.7	79.0	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	2032.5	831.7	0.0	0.0	166.3	52.9			0.80	0.35
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.200	3560.4	1445.9	0.0	0.0	146.9	41.5			1.47	0.64
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.300	4640.5	1893.6	0.0	0.0	109.4	8.8			1.97	0.86
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.400	5299.9	2182.3	0.0	0.0	72.3	-26.1			2.29	1.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.450	5434.8	2229.1	0.0	0.0	63.1	-34.8			2.37	1.03
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.500	5487.4	2263.7	0.0	0.0	54.1	-43.6			2.40	1.04
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.600	5262.3	2144.6	0.0	0.0	18.5	-79.9			2.29	0.99
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.700	4612.6	1865.7	0.0	0.0	-16.4	-117.0			1.96	0.85
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.800	3522.5	1408.0	0.0	0.0	-31.0	-136.4			1.46	0.63
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.900	1931.6	730.8	0.0	0.0	-60.5	-173.9			0.79	0.34
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-1.000	-0.0	-0.0	0.0	0.0	-68.6	-192.3	192.3	68.6	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I-O
Length of Span No. 1 = 108.833 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	-0.0	-0.0	0.0	0.0	174.4	79.0	174.4	79.0	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	1758.0	831.7	0.0	0.0	141.6	54.1			0.70	0.35
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.200	3077.1	1445.9	0.0	0.0	125.8	44.5			1.28	0.64
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.300	4012.6	1893.6	0.0	0.0	91.8	14.1			1.72	0.86
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.400	4587.3	2182.3	0.0	0.0	58.0	-17.9			1.99	1.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.450	4702.0	2229.1	0.0	0.0	50.4	-25.1			2.06	1.03
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.500	4750.5	2263.7	0.0	0.0	42.9	-32.5			2.09	1.04
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.600	4549.7	2144.6	0.0	0.0	10.3	-65.6			1.99	0.99
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.700	3984.7	1865.7	0.0	0.0	-21.8	-99.4			1.71	0.85
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.800	3039.1	1408.0	0.0	0.0	-34.0	-115.3			1.27	0.63
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.900	1657.1	730.8	0.0	0.0	-61.7	-149.2			0.69	0.34
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-1.000	-0.0	-0.0	0.0	0.0	-68.6	-164.0	164.0	68.6	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II
Length of Span No. 1 = 108.833 ft

POINT NO.	MOMENT (ft-kips) MAX	MOMENT (ft-kips) MIN	AXIAL (kips) MAX	AXIAL (kips) MIN	SHEAR (kips) MAX	SHEAR (kips) MIN	REACTION (kips) MAX	REACTION (kips) MIN	Y DEFLECTION (in) MAX	Y DEFLECTION (in) MIN
1-0.000	-0.0	-0.0	0.0	0.0	155.1	63.2	155.1	63.2	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	1557.4	665.4	0.0	0.0	126.9	42.6			0.61	0.28
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.200	2727.5	1156.8	0.0	0.0	112.2	34.0			1.13	0.51
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.300	3555.4	1514.8	0.0	0.0	83.1	8.4			1.51	0.69
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.400	4061.8	1745.8	0.0	0.0	54.3	-18.8			1.76	0.80
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.450	4164.6	1783.3	0.0	0.0	47.3	-25.4			1.82	0.83
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.500	4205.7	1810.9	0.0	0.0	40.5	-32.1			1.84	0.83
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.600	4031.7	1715.7	0.0	0.0	12.8	-60.4			1.75	0.80
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.700	3533.1	1492.6	0.0	0.0	-14.4	-89.2			1.51	0.68
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.800	2697.1	1126.4	0.0	0.0	-25.6	-103.9			1.12	0.51
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.900	1476.6	584.6	0.0	0.0	-48.7	-133.0			0.61	0.28
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-1.000	-0.0	-0.0	0.0	0.0	-54.9	-146.7	146.7	54.9	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
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2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II-O
Length of Span No. 1 = 108.833 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	-0.0	-0.0	0.0	0.0	133.9	63.2	133.9	63.2	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	1351.5	665.4	0.0	0.0	108.3	43.5			0.54	0.28
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.200	2365.0	1156.8	0.0	0.0	96.4	36.2			0.98	0.51
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.300	3084.5	1514.8	0.0	0.0	69.9	12.4			1.32	0.69
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.400	3527.3	1745.8	0.0	0.0	43.6	-12.7			1.54	0.80
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.450	3615.1	1783.3	0.0	0.0	37.8	-18.2			1.59	0.83
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.500	3653.1	1810.9	0.0	0.0	32.1	-23.7			1.61	0.83
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.600	3497.2	1715.7	0.0	0.0	6.6	-49.6			1.53	0.80
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.700	3062.2	1492.6	0.0	0.0	-18.5	-76.0			1.32	0.68
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.800	2334.7	1126.4	0.0	0.0	-27.8	-88.0			0.98	0.51
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.900	1270.8	584.6	0.0	0.0	-49.6	-114.4			0.53	0.28
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-1.000	-0.0	-0.0	0.0	0.0	-54.9	-125.5	125.5	54.9	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
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LIMIT STATE LEGEND:

BRASS	Specifications
STRENGTH I	Strength I Inventory
STRENGTH I-O	Strength I Operating
STRENGTH II	Strength II
STRENGTH IV	Strength IV
SERVICE I	Service I
SERVICE II	Service II Inventory
SERVICE II-O	Service II Operating
FATIGUE I	Fatigue I
FATIGUE II	Fatigue II

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 1 Span Length = 108.833 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Calculated Properties: Section Analysis (Positive Bending)

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)
1-0.000	0.000	56.30	76783.4	54.69
1-0.093	10.167	*	*	*
1-0.100	10.883	56.30	76783.4	54.69
1-0.115	12.500	*	*	*
1-0.184	20.000	*	*	*
1-0.200	21.767	84.05	149522.3	49.39
1-0.237	25.792	*	*	*
1-0.271	29.500	*	*	*
1-0.300	32.650	92.05	167525.5	45.58
1-0.381	41.417	*	*	*
1-0.400	43.533	92.05	167525.5	45.58
1-0.450	48.975	92.05	167525.5	45.58
1-0.500	54.417	92.05	167525.5	45.58
1-0.523	56.917	*	*	*
1-0.600	65.300	*	*	*
1-0.700	76.183	*	*	*
1-0.729	79.333	*	*	*
1-0.800	87.067	*	*	*
1-0.816	88.833	*	*	*
1-0.885	96.333	*	*	*
1-0.900	97.950	*	*	*
1-1.000	108.833	*	*	*

* Note: Section properties for section analysis are only calculated at
points of interest either specified by the user or generated by BRASS.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 100.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	101.0000			
Top Cover Plate Thickness	=	0.3750	Top Cover Plate Width	=	13.0000
Top Clearance	=	0.0000			
Top Flange Thickness	=	0.3750	Top Flange Width	=	12.3750
Web Depth	=	99.8750	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	12.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Cover Plate	=	30.00
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners:
Fy = 30.000 ksi
Width = 5.000 in
Thickness = 0.375 in
Spacing = 61.000 in
B = 1.000 (Type Factor)
Singles or Pairs? PAIRS

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 0.000 ft
Maximum distance to Right Brace Point = 10.167 ft
Is analysis point braced? YES

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION STIFFENER CHECKS:

Point of Interest : 100.000
Construction Stage: 1

No longitudinal stiffeners are present.

Transverse Stiffeners:

6.10.9.3.3	Spacing	PASS
6.10.11.1.2-1	Projecting Width	FAIL
6.10.11.1.2-2	Projecting Width	PASS
6.10.11.1.3-*	Moment of Inertia	PASS
6.10.11.1.3-11	Moment of Inertia	N/A

No bearing stiffeners are present.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	243.8	243.8	243.8	243.8	243.8	243.8	243.8	243.8
Dead Load Effect	79.0	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Live Load Effect	123.7	0.0	95.4	0.0	95.4	0.0	0.0	0.0
Total Load Effect	202.7	79.0	174.4	79.0	174.4	79.0	94.8	94.8
Resistance - Dead	164.8	164.8	164.8	164.8	164.8	164.8	148.9	148.9
Design Ratio	1.20	3.08	1.40	3.08	(1.40)	(3.08)	(2.57)	(2.57)
Rating Factor	1.33	N/A	1.73	N/A	(1.73)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	243.8	243.8	243.8	243.8	243.8	243.8	243.8	243.8
Dead Load Effect	79.0	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Live Load Effect	101.6	0.0	78.4	0.0	78.4	0.0	0.0	0.0
Total Load Effect	180.6	79.0	157.4	79.0	157.4	79.0	94.8	94.8
Resistance - Dead	164.8	164.8	164.8	164.8	164.8	164.8	148.9	148.9
Design Ratio	1.35	3.08	1.55	3.08	(1.55)	(3.08)	(2.57)	(2.57)
Rating Factor	1.62	N/A	2.10	N/A	(2.10)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	243.8	243.8	243.8	243.8	243.8	243.8	243.8	243.8
Dead Load Effect	79.0	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Live Load Effect	46.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	125.4	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Resistance - Dead	164.8	164.8	164.8	164.8	164.8	164.8	148.9	148.9
Design Ratio	1.94	3.08	3.08	3.08	(3.08)	(3.08)	(2.57)	(2.57)
Rating Factor	3.55	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	243.8	243.8	243.8	243.8	243.8	243.8	243.8	243.8
Dead Load Effect	79.0	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Live Load Effect	59.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	138.4	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Resistance - Dead	164.8	164.8	164.8	164.8	164.8	164.8	148.9	148.9
Design Ratio	1.76	3.08	3.08	3.08	(3.08)	(3.08)	(2.57)	(2.57)
Rating Factor	2.78	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	243.8	243.8	243.8	243.8	243.8	243.8	243.8	243.8
Dead Load Effect	79.0	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Live Load Effect	61.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	140.9	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Resistance - Dead	164.8	164.8	164.8	164.8	164.8	164.8	148.9	148.9
Design Ratio	1.73	3.08	3.08	3.08	(3.08)	(3.08)	(2.57)	(2.57)
Rating Factor	2.66	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	243.8	243.8	243.8	243.8	243.8	243.8	243.8	243.8
Dead Load Effect	79.0	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Live Load Effect	50.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	129.6	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Resistance - Dead	164.8	164.8	164.8	164.8	164.8	164.8	148.9	148.9
Design Ratio	1.88	3.08	3.08	3.08	(3.08)	(3.08)	(2.57)	(2.57)
Rating Factor	3.26	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	243.8	243.8	243.8	243.8	243.8	243.8	243.8	243.8
Dead Load Effect	79.0	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Live Load Effect	57.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	136.0	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Resistance - Dead	164.8	164.8	164.8	164.8	164.8	164.8	148.9	148.9
Design Ratio	1.79	3.08	3.08	3.08	(3.08)	(3.08)	(2.57)	(2.57)
Rating Factor	2.89	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	243.8	243.8	243.8	243.8	243.8	243.8	243.8	243.8
Dead Load Effect	79.0	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Live Load Effect	62.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	141.8	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Resistance - Dead	164.8	164.8	164.8	164.8	164.8	164.8	148.9	148.9
Design Ratio	1.72	3.08	3.08	3.08	(3.08)	(3.08)	(2.57)	(2.57)
Rating Factor	2.63	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	243.8	243.8	243.8	243.8	243.8	243.8	243.8	243.8
Dead Load Effect	79.0	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Live Load Effect	67.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	146.9	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Resistance - Dead	164.8	164.8	164.8	164.8	164.8	164.8	148.9	148.9
Design Ratio	1.66	3.08	3.08	3.08	(3.08)	(3.08)	(2.57)	(2.57)
Rating Factor	2.43	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	25.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	243.8	243.8	243.8	243.8	243.8	243.8	243.8	243.8
Dead Load Effect	79.0	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Live Load Effect	69.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	148.5	79.0	79.0	79.0	79.0	79.0	94.8	94.8
Resistance - Dead	164.8	164.8	164.8	164.8	164.8	164.8	148.9	148.9
Design Ratio	1.64	3.08	3.08	3.08	(3.08)	(3.08)	(2.57)	(2.57)
Rating Factor	2.37	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-15.91	0.00	0.00	N/A	-15.91	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 101.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	101.0000			
Top Cover Plate Thickness	=	0.3750	Top Cover Plate Width	=	13.0000
Top Clearance	=	0.0000			
Top Flange Thickness	=	0.3750	Top Flange Width	=	12.3750
Web Depth	=	99.8750	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	12.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Cover Plate	=	30.00
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners:
Fy = 30.000 ksi
Width = 5.000 in
Thickness = 0.375 in
Spacing = 62.500 in
B = 1.000 (Type Factor)
Singles or Pairs? PAIRS

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 0.717 ft
Maximum distance to Right Brace Point = 14.908 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION STIFFENER CHECKS:

Point of Interest : 101.000
Construction Stage: 1

No longitudinal stiffeners are present.

Transverse Stiffeners:

6.10.9.3.3	Spacing	N/A
6.10.11.1.2-1	Projecting Width	FAIL
6.10.11.1.2-2	Projecting Width	PASS
6.10.11.1.3-*	Moment of Inertia	PASS
6.10.11.1.3-11	Moment of Inertia	N/A

No bearing stiffeners are present.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.1	0.0	-20.1	0.0	-20.1	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.2.3-2	N/A	8.2.3-2	N/A	8.3-1	N/A
Dead Load Effect	-6.0	0.0	-6.0	0.0	-6.0	0.0	8.5	0.0
Live Load Effect	-8.6	0.0	-6.7	0.0	-6.7	0.0	0.0	0.0
Total Load Effect	-14.6	0.0	-12.6	0.0	-12.6	0.0	8.5	0.0
Resistance - Dead	-14.1	0.0	-14.1	0.0	-14.1	0.0	17.0	0.0
Design Ratio	1.37	N/A	1.59	N/A	(1.59)	(N/A)	(2.99)	(N/A)
Rating Factor	1.63	N/A	2.12	N/A	(2.12)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	58.1	58.1	58.1	58.1	58.1	58.1	69.7	69.7
Live Load Effect	108.2	-4.3	83.5	-3.3	83.5	-3.3	0.0	0.0
Total Load Effect	166.3	53.9	141.6	54.8	141.6	54.8	69.7	69.7
Resistance - Dead	362.2	362.2	362.2	362.2	362.2	362.2	350.5	350.5
Design Ratio	2.53	7.80	2.97	7.66	(2.97)	(7.66)	(6.03)	(6.03)
Rating Factor	3.35	N/A	4.34	N/A	(4.34)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.82	5.69	0.00	0.00
Live Load Effect	-6.46	7.62	0.00	0.00	-4.97	5.86	0.00	0.00
Total Load Effect	-11.27	13.31	0.00	0.00	-9.78	11.55	0.00	0.00
Resistance - Dead	-19.18	18.31	0.00	0.00	-19.18	18.31	0.00	0.00
Design Ratio	2.13	1.80	N/A	N/A	2.45	2.08	N/A	N/A
Rating Factor	2.97	2.40	N/A	N/A	3.86	3.12	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-15.91	N/A	0.00	0.00	-15.91	N/A	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.82	5.69	0.00	0.00
Live Load Effect	-6.46	7.62	0.00	0.00	-4.97	5.86	0.00	0.00
Total Load Effect	-11.27	13.31	0.00	0.00	-9.78	11.55	0.00	0.00
Resistance - Dead	-11.09	N/A	0.00	0.00	-11.09	N/A	0.00	0.00
Design Ratio	1.41	N/A	N/A	N/A	1.63	N/A	N/A	N/A
Rating Factor	1.72	N/A	N/A	N/A	2.23	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.1	0.0	-20.1	0.0	-20.1	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.2.3-2	N/A	8.2.3-2	N/A	8.3-1	N/A
Dead Load Effect	-6.0	0.0	-6.0	0.0	-6.0	0.0	8.5	0.0
Live Load Effect	-7.1	0.0	-5.5	0.0	-5.5	0.0	0.0	0.0
Total Load Effect	-13.1	0.0	-11.5	0.0	-11.5	0.0	8.5	0.0
Resistance - Dead	-14.1	0.0	-14.1	0.0	-14.1	0.0	17.0	0.0
Design Ratio	1.53	N/A	1.75	N/A	(1.75)	(N/A)	(2.99)	(N/A)
Rating Factor	1.98	N/A	2.56	N/A	(2.56)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	58.1	58.1	58.1	58.1	58.1	58.1	69.7	69.7
Live Load Effect	88.3	-5.2	68.1	-4.0	68.1	-4.0	0.0	0.0
Total Load Effect	146.4	52.9	126.3	54.1	126.3	54.1	69.7	69.7
Resistance - Dead	362.2	362.2	362.2	362.2	362.2	362.2	350.5	350.5
Design Ratio	2.87	7.95	3.33	7.77	(3.33)	(7.77)	(6.03)	(6.03)
Rating Factor	4.10	N/A	5.31	N/A	(5.31)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.82	5.69	0.00	0.00
Live Load Effect	-5.34	6.31	0.00	0.00	-4.11	4.85	0.00	0.00
Total Load Effect	-10.16	11.99	0.00	0.00	-8.92	10.54	0.00	0.00
Resistance - Dead	-19.18	18.31	0.00	0.00	-19.18	18.31	0.00	0.00
Design Ratio	2.36	2.00	N/A	N/A	2.69	2.28	N/A	N/A
Rating Factor	3.59	2.90	N/A	N/A	4.67	3.78	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-15.91	N/A	0.00	0.00	-15.91	N/A	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.82	5.69	0.00	0.00
Live Load Effect	-5.34	6.31	0.00	0.00	-4.11	4.85	0.00	0.00
Total Load Effect	-10.16	11.99	0.00	0.00	-8.92	10.54	0.00	0.00
Resistance - Dead	-11.09	N/A	0.00	0.00	-11.09	N/A	0.00	0.00
Design Ratio	1.57	N/A	N/A	N/A	1.78	N/A	N/A	N/A
Rating Factor	2.08	N/A	N/A	N/A	2.70	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.1	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.0	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Live Load Effect	-3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-9.2	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Resistance - Dead	-14.1	0.0	18.4	0.0	18.4	0.0	17.0	0.0
Design Ratio	2.18	N/A	3.59	N/A	(3.59)	(N/A)	(2.99)	(N/A)
Rating Factor	4.36	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	58.1	58.1	58.1	58.1	58.1	58.1	69.7	69.7
Live Load Effect	41.7	-2.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	99.9	55.6	58.1	58.1	58.1	58.1	69.7	69.7
Resistance - Dead	362.2	362.2	362.2	362.2	362.2	362.2	350.5	350.5
Design Ratio	4.21	7.56	7.23	7.23	(7.23)	(7.23)	(6.03)	(6.03)
Rating Factor	8.68	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-3.26	3.85	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.07	9.53	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-19.18	18.31	0.00	0.00	28.78	18.31	0.00	0.00
Design Ratio	2.97	2.52	N/A	N/A	N/A	4.22	N/A	N/A
Rating Factor	5.89	4.76	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-15.91	N/A	0.00	0.00	-15.91	N/A	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-3.26	3.85	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.07	9.53	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-11.09	N/A	0.00	0.00	-11.13	N/A	0.00	0.00
Design Ratio	1.97	N/A	N/A	N/A	3.33	N/A	N/A	N/A
Rating Factor	3.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.1	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.0	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Live Load Effect	-4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-10.1	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Resistance - Dead	-14.1	0.0	18.4	0.0	18.4	0.0	17.0	0.0
Design Ratio	1.99	N/A	3.59	N/A	(3.59)	(N/A)	(2.99)	(N/A)
Rating Factor	3.44	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	58.1	58.1	58.1	58.1	58.1	58.1	69.7	69.7
Live Load Effect	52.7	-2.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	110.8	55.8	58.1	58.1	58.1	58.1	69.7	69.7
Resistance - Dead	362.2	362.2	362.2	362.2	362.2	362.2	350.5	350.5
Design Ratio	3.79	7.53	7.23	7.23	(7.23)	(7.23)	(6.03)	(6.03)
Rating Factor	6.87	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-4.12	4.87	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.94	10.56	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-19.18	18.31	0.00	0.00	28.78	18.31	0.00	0.00
Design Ratio	2.68	2.27	N/A	N/A	N/A	4.22	N/A	N/A
Rating Factor	4.65	3.76	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-15.91	N/A	0.00	0.00	-15.91	N/A	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-4.12	4.87	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.94	10.56	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-11.09	N/A	0.00	0.00	-11.13	N/A	0.00	0.00
Design Ratio	1.78	N/A	N/A	N/A	3.33	N/A	N/A	N/A
Rating Factor	2.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.1	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.0	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Live Load Effect	-4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-10.2	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Resistance - Dead	-14.1	0.0	18.4	0.0	18.4	0.0	17.0	0.0
Design Ratio	1.96	N/A	3.59	N/A	(3.59)	(N/A)	(2.99)	(N/A)
Rating Factor	3.31	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	58.1	58.1	58.1	58.1	58.1	58.1	69.7	69.7
Live Load Effect	54.6	-2.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	112.7	56.1	58.1	58.1	58.1	58.1	69.7	69.7
Resistance - Dead	362.2	362.2	362.2	362.2	362.2	362.2	350.5	350.5
Design Ratio	3.73	7.50	7.23	7.23	(7.23)	(7.23)	(6.03)	(6.03)
Rating Factor	6.63	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-4.29	5.06	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.11	10.75	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-19.18	18.31	0.00	0.00	28.78	18.31	0.00	0.00
Design Ratio	2.64	2.23	N/A	N/A	N/A	4.22	N/A	N/A
Rating Factor	4.47	3.62	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-15.91	N/A	0.00	0.00	-15.91	N/A	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-4.29	5.06	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.11	10.75	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-11.09	N/A	0.00	0.00	-11.13	N/A	0.00	0.00
Design Ratio	1.75	N/A	N/A	N/A	3.33	N/A	N/A	N/A
Rating Factor	2.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.1	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.0	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Live Load Effect	-3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-9.5	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Resistance - Dead	-14.1	0.0	18.4	0.0	18.4	0.0	17.0	0.0
Design Ratio	2.11	N/A	3.59	N/A	(3.59)	(N/A)	(2.99)	(N/A)
Rating Factor	4.00	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	58.1	58.1	58.1	58.1	58.1	58.1	69.7	69.7
Live Load Effect	45.6	-2.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	103.7	55.4	58.1	58.1	58.1	58.1	69.7	69.7
Resistance - Dead	362.2	362.2	362.2	362.2	362.2	362.2	350.5	350.5
Design Ratio	4.05	7.59	7.23	7.23	(7.23)	(7.23)	(6.03)	(6.03)
Rating Factor	7.94	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-3.55	4.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.37	9.88	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-19.18	18.31	0.00	0.00	28.78	18.31	0.00	0.00
Design Ratio	2.87	2.43	N/A	N/A	N/A	4.22	N/A	N/A
Rating Factor	5.40	4.37	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-15.91	N/A	0.00	0.00	-15.91	N/A	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-3.55	4.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.37	9.88	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-11.09	N/A	0.00	0.00	-11.13	N/A	0.00	0.00
Design Ratio	1.90	N/A	N/A	N/A	3.33	N/A	N/A	N/A
Rating Factor	3.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.1	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.0	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Live Load Effect	-4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-10.0	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Resistance - Dead	-14.1	0.0	18.4	0.0	18.4	0.0	17.0	0.0
Design Ratio	2.01	N/A	3.59	N/A	(3.59)	(N/A)	(2.99)	(N/A)
Rating Factor	3.51	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	58.1	58.1	58.1	58.1	58.1	58.1	69.7	69.7
Live Load Effect	51.4	-2.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	109.5	55.5	58.1	58.1	58.1	58.1	69.7	69.7
Resistance - Dead	362.2	362.2	362.2	362.2	362.2	362.2	350.5	350.5
Design Ratio	3.84	7.57	7.23	7.23	(7.23)	(7.23)	(6.03)	(6.03)
Rating Factor	7.05	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-4.05	4.78	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.86	10.46	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-19.18	18.31	0.00	0.00	28.78	18.31	0.00	0.00
Design Ratio	2.71	2.29	N/A	N/A	N/A	4.22	N/A	N/A
Rating Factor	4.74	3.83	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-15.91	N/A	0.00	0.00	-15.91	N/A	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-4.05	4.78	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.86	10.46	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-11.09	N/A	0.00	0.00	-11.13	N/A	0.00	0.00
Design Ratio	1.80	N/A	N/A	N/A	3.33	N/A	N/A	N/A
Rating Factor	2.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.1	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.0	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Live Load Effect	-4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-10.3	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Resistance - Dead	-14.1	0.0	18.4	0.0	18.4	0.0	17.0	0.0
Design Ratio	1.94	N/A	3.59	N/A	(3.59)	(N/A)	(2.99)	(N/A)
Rating Factor	3.22	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	58.1	58.1	58.1	58.1	58.1	58.1	69.7	69.7
Live Load Effect	55.7	-1.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	113.8	56.3	58.1	58.1	58.1	58.1	69.7	69.7
Resistance - Dead	362.2	362.2	362.2	362.2	362.2	362.2	350.5	350.5
Design Ratio	3.69	7.46	7.23	7.23	(7.23)	(7.23)	(6.03)	(6.03)
Rating Factor	6.50	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-4.41	5.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.22	10.89	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-19.18	18.31	0.00	0.00	28.78	18.31	0.00	0.00
Design Ratio	2.60	2.20	N/A	N/A	N/A	4.22	N/A	N/A
Rating Factor	4.35	3.52	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-15.91	N/A	0.00	0.00	-15.91	N/A	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-4.41	5.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.22	10.89	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-11.09	N/A	0.00	0.00	-11.13	N/A	0.00	0.00
Design Ratio	1.73	N/A	N/A	N/A	3.33	N/A	N/A	N/A
Rating Factor	2.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.1	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.0	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Live Load Effect	-4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-10.7	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Resistance - Dead	-14.1	0.0	18.4	0.0	18.4	0.0	17.0	0.0
Design Ratio	1.87	N/A	3.59	N/A	(3.59)	(N/A)	(2.99)	(N/A)
Rating Factor	2.97	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	58.1	58.1	58.1	58.1	58.1	58.1	69.7	69.7
Live Load Effect	60.8	-1.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	118.9	56.6	58.1	58.1	58.1	58.1	69.7	69.7
Resistance - Dead	362.2	362.2	362.2	362.2	362.2	362.2	350.5	350.5
Design Ratio	3.53	7.43	7.23	7.23	(7.23)	(7.23)	(6.03)	(6.03)
Rating Factor	5.96	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-4.77	5.64	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.59	11.32	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-19.18	18.31	0.00	0.00	28.78	18.31	0.00	0.00
Design Ratio	2.50	2.12	N/A	N/A	N/A	4.22	N/A	N/A
Rating Factor	4.02	3.25	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-15.91	N/A	0.00	0.00	-15.91	N/A	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-4.77	5.64	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.59	11.32	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-11.09	N/A	0.00	0.00	-11.13	N/A	0.00	0.00
Design Ratio	1.66	N/A	N/A	N/A	3.33	N/A	N/A	N/A
Rating Factor	2.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.1	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.0	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Live Load Effect	-4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-10.8	0.0	7.1	0.0	7.1	0.0	8.5	0.0
Resistance - Dead	-14.1	0.0	18.4	0.0	18.4	0.0	17.0	0.0
Design Ratio	1.85	N/A	3.59	N/A	(3.59)	(N/A)	(2.99)	(N/A)
Rating Factor	2.91	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	58.1	58.1	58.1	58.1	58.1	58.1	69.7	69.7
Live Load Effect	62.2	-2.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	120.3	55.4	58.1	58.1	58.1	58.1	69.7	69.7
Resistance - Dead	362.2	362.2	362.2	362.2	362.2	362.2	350.5	350.5
Design Ratio	3.49	7.59	7.23	7.23	(7.23)	(7.23)	(6.03)	(6.03)
Rating Factor	5.83	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-4.89	5.77	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.70	11.46	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-19.18	18.31	0.00	0.00	28.78	18.31	0.00	0.00
Design Ratio	2.47	2.09	N/A	N/A	N/A	4.22	N/A	N/A
Rating Factor	3.93	3.17	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-15.91	N/A	0.00	0.00	-15.91	N/A	0.00	0.00
Dead Load Effect	-4.82	5.69	0.00	0.00	-4.78	5.69	0.00	0.00
Live Load Effect	-4.89	5.77	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.70	11.46	0.00	0.00	-4.78	5.69	0.00	0.00
Resistance - Dead	-11.09	N/A	0.00	0.00	-11.13	N/A	0.00	0.00
Design Ratio	1.64	N/A	N/A	N/A	3.33	N/A	N/A	N/A
Rating Factor	2.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 102.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	102.8750			
Top Cover Plate Thickness	=	1.1250	Top Cover Plate Width	=	13.0000
Top Clearance	=	0.0000			
Top Flange Thickness	=	0.3750	Top Flange Width	=	12.3750
Web Depth	=	99.8750	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	12.3750
Bottom Clearance	=	0.0000			
Bottom Cover Plate Thickness	=	1.1250	Bottom Cover Plate Width	=	16.0000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Cover Plate	=	30.00
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00
Bottom Cover Plate	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners:
Fy = 30.000 ksi
Width = 5.000 in
Thickness = 0.375 in
Spacing = 62.500 in
B = 1.000 (Type Factor)
Singles or Pairs? PAIRS

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 11.600 ft
Maximum distance to Right Brace Point = 4.025 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION STIFFENER CHECKS:

Point of Interest : 102.000
Construction Stage: 1

No longitudinal stiffeners are present.

Transverse Stiffeners:

6.10.9.3.3	Spacing	N/A
6.10.11.1.2-1	Projecting Width	FAIL
6.10.11.1.2-2	Projecting Width	PASS
6.10.11.1.3-*	Moment of Inertia	PASS
6.10.11.1.3-11	Moment of Inertia	N/A

No bearing stiffeners are present.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.5	0.0	-20.5	0.0	-20.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.2.3-2	N/A	8.2.3-2	N/A	8.3-1	N/A
Dead Load Effect	-6.1	0.0	-6.1	0.0	-6.1	0.0	6.7	0.0
Live Load Effect	-8.9	0.0	-6.9	0.0	-6.9	0.0	0.0	0.0
Total Load Effect	-15.0	0.0	-12.9	0.0	-12.9	0.0	6.7	0.0
Resistance - Dead	-14.4	0.0	-14.4	0.0	-14.4	0.0	18.8	0.0
Design Ratio	1.37	N/A	1.58	N/A	(1.58)	(N/A)	(3.79)	(N/A)
Rating Factor	1.62	N/A	2.10	N/A	(2.10)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	54.6	54.6	54.6	54.6	54.6	54.6	65.5	65.5
Live Load Effect	92.3	-12.6	71.2	-9.7	71.2	-9.7	0.0	0.0
Total Load Effect	146.9	42.0	125.8	44.9	125.8	44.9	65.5	65.5
Resistance - Dead	365.7	365.7	365.7	365.7	365.7	365.7	354.8	354.8
Design Ratio	2.86	10.01	3.34	9.37	(3.34)	(9.37)	(6.42)	(6.42)
Rating Factor	3.96	N/A	5.14	N/A	(5.14)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-4.96	4.59	0.00	0.00	-4.96	4.59	0.00	0.00
Live Load Effect	-6.74	6.23	0.00	0.00	-5.19	4.79	0.00	0.00
Total Load Effect	-11.71	10.81	0.00	0.00	-10.15	9.38	0.00	0.00
Resistance - Dead	-19.04	19.41	0.00	0.00	-19.04	19.41	0.00	0.00
Design Ratio	2.05	2.22	N/A	N/A	2.36	2.56	N/A	N/A
Rating Factor	2.82	3.12	N/A	N/A	3.67	4.05	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-12.23	N/A	0.00	0.00	-12.23	N/A	0.00	0.00
Dead Load Effect	-4.96	4.48	0.00	0.00	-4.96	4.48	0.00	0.00
Live Load Effect	-6.74	6.08	0.00	0.00	-5.19	4.68	0.00	0.00
Total Load Effect	-11.71	10.57	0.00	0.00	-10.15	9.16	0.00	0.00
Resistance - Dead	-7.26	N/A	0.00	0.00	-7.26	N/A	0.00	0.00
Design Ratio	1.04	N/A	N/A	N/A	1.20	N/A	N/A	N/A
Rating Factor	1.08	N/A	N/A	N/A	1.40	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.5	0.0	-20.5	0.0	-20.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.2.3-2	N/A	8.2.3-2	N/A	8.3-1	N/A
Dead Load Effect	-6.1	0.0	-6.1	0.0	-6.1	0.0	6.7	0.0
Live Load Effect	-7.4	0.0	-5.7	0.0	-5.7	0.0	0.0	0.0
Total Load Effect	-13.5	0.0	-11.8	0.0	-11.8	0.0	6.7	0.0
Resistance - Dead	-14.4	0.0	-14.4	0.0	-14.4	0.0	18.8	0.0
Design Ratio	1.52	N/A	1.74	N/A	(1.74)	(N/A)	(3.79)	(N/A)
Rating Factor	1.94	N/A	2.52	N/A	(2.52)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	54.6	54.6	54.6	54.6	54.6	54.6	65.5	65.5
Live Load Effect	75.4	-13.1	58.2	-10.1	58.2	-10.1	0.0	0.0
Total Load Effect	130.0	41.5	112.8	44.5	112.8	44.5	65.5	65.5
Resistance - Dead	365.7	365.7	365.7	365.7	365.7	365.7	354.8	354.8
Design Ratio	3.23	10.12	3.73	9.44	(3.73)	(9.44)	(6.42)	(6.42)
Rating Factor	4.85	N/A	6.29	N/A	(6.29)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-4.96	4.59	0.00	0.00	-4.96	4.59	0.00	0.00
Live Load Effect	-5.61	5.19	0.00	0.00	-4.32	3.99	0.00	0.00
Total Load Effect	-10.58	9.77	0.00	0.00	-9.28	8.57	0.00	0.00
Resistance - Dead	-19.04	19.41	0.00	0.00	-19.04	19.41	0.00	0.00
Design Ratio	2.27	2.46	N/A	N/A	2.59	2.80	N/A	N/A
Rating Factor	3.39	3.74	N/A	N/A	4.41	4.87	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-12.23	N/A	0.00	0.00	-12.23	N/A	0.00	0.00
Dead Load Effect	-4.96	4.48	0.00	0.00	-4.96	4.48	0.00	0.00
Live Load Effect	-5.61	5.07	0.00	0.00	-4.32	3.90	0.00	0.00
Total Load Effect	-10.58	9.55	0.00	0.00	-9.28	8.38	0.00	0.00
Resistance - Dead	-7.26	N/A	0.00	0.00	-7.26	N/A	0.00	0.00
Design Ratio	1.16	N/A	N/A	N/A	1.32	N/A	N/A	N/A
Rating Factor	1.29	N/A	N/A	N/A	1.68	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.1	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Live Load Effect	-3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-9.4	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Resistance - Dead	-14.4	0.0	19.9	0.0	19.9	0.0	18.8	0.0
Design Ratio	2.17	N/A	4.55	N/A	(4.55)	(N/A)	(3.79)	(N/A)
Rating Factor	4.31	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	54.6	54.6	54.6	54.6	54.6	54.6	65.5	65.5
Live Load Effect	36.7	-6.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	91.3	48.3	54.6	54.6	54.6	54.6	65.5	65.5
Resistance - Dead	365.7	365.7	365.7	365.7	365.7	365.7	354.8	354.8
Design Ratio	4.60	8.70	7.70	7.70	(7.70)	(7.70)	(6.42)	(6.42)
Rating Factor	9.97	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.96	4.59	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-3.41	3.15	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.38	7.74	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-19.04	19.41	0.00	0.00	28.86	19.52	0.00	0.00
Design Ratio	2.86	3.10	N/A	N/A	N/A	5.36	N/A	N/A
Rating Factor	5.58	6.16	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-12.23	N/A	0.00	0.00	-12.23	N/A	0.00	0.00
Dead Load Effect	-4.96	4.48	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-3.41	3.08	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.38	7.56	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-7.26	N/A	0.00	0.00	-7.36	N/A	0.00	0.00
Design Ratio	1.46	N/A	N/A	N/A	2.52	N/A	N/A	N/A
Rating Factor	2.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.1	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Live Load Effect	-4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-10.2	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Resistance - Dead	-14.4	0.0	19.9	0.0	19.9	0.0	18.8	0.0
Design Ratio	2.00	N/A	4.55	N/A	(4.55)	(N/A)	(3.79)	(N/A)
Rating Factor	3.47	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	54.6	54.6	54.6	54.6	54.6	54.6	65.5	65.5
Live Load Effect	45.4	-5.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	100.0	49.2	54.6	54.6	54.6	54.6	65.5	65.5
Resistance - Dead	365.7	365.7	365.7	365.7	365.7	365.7	354.8	354.8
Design Ratio	4.20	8.55	7.70	7.70	(7.70)	(7.70)	(6.42)	(6.42)
Rating Factor	8.05	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.96	4.59	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-4.24	3.91	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.20	8.50	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-19.04	19.41	0.00	0.00	28.86	19.52	0.00	0.00
Design Ratio	2.61	2.82	N/A	N/A	N/A	5.36	N/A	N/A
Rating Factor	4.49	4.96	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-12.23	N/A	0.00	0.00	-12.23	N/A	0.00	0.00
Dead Load Effect	-4.96	4.48	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-4.24	3.82	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.20	8.31	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-7.26	N/A	0.00	0.00	-7.36	N/A	0.00	0.00
Design Ratio	1.33	N/A	N/A	N/A	2.52	N/A	N/A	N/A
Rating Factor	1.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.1	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Live Load Effect	-4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-10.4	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Resistance - Dead	-14.4	0.0	19.9	0.0	19.9	0.0	18.8	0.0
Design Ratio	1.98	N/A	4.55	N/A	(4.55)	(N/A)	(3.79)	(N/A)
Rating Factor	3.36	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	54.6	54.6	54.6	54.6	54.6	54.6	65.5	65.5
Live Load Effect	46.5	-5.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	101.1	49.6	54.6	54.6	54.6	54.6	65.5	65.5
Resistance - Dead	365.7	365.7	365.7	365.7	365.7	365.7	354.8	354.8
Design Ratio	4.16	8.48	7.70	7.70	(7.70)	(7.70)	(6.42)	(6.42)
Rating Factor	7.87	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.96	4.59	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-4.38	4.04	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.34	8.63	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-19.04	19.41	0.00	0.00	28.86	19.52	0.00	0.00
Design Ratio	2.57	2.78	N/A	N/A	N/A	5.36	N/A	N/A
Rating Factor	4.35	4.80	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-12.23	N/A	0.00	0.00	-12.23	N/A	0.00	0.00
Dead Load Effect	-4.96	4.48	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-4.38	3.95	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.34	8.43	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-7.26	N/A	0.00	0.00	-7.36	N/A	0.00	0.00
Design Ratio	1.31	N/A	N/A	N/A	2.52	N/A	N/A	N/A
Rating Factor	1.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.1	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Live Load Effect	-3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-9.7	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Resistance - Dead	-14.4	0.0	19.9	0.0	19.9	0.0	18.8	0.0
Design Ratio	2.10	N/A	4.55	N/A	(4.55)	(N/A)	(3.79)	(N/A)
Rating Factor	3.94	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	54.6	54.6	54.6	54.6	54.6	54.6	65.5	65.5
Live Load Effect	40.1	-7.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	94.7	47.3	54.6	54.6	54.6	54.6	65.5	65.5
Resistance - Dead	365.7	365.7	365.7	365.7	365.7	365.7	354.8	354.8
Design Ratio	4.44	8.89	7.70	7.70	(7.70)	(7.70)	(6.42)	(6.42)
Rating Factor	9.11	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.96	4.59	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-3.73	3.45	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.70	8.03	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-19.04	19.41	0.00	0.00	28.86	19.52	0.00	0.00
Design Ratio	2.76	2.99	N/A	N/A	N/A	5.36	N/A	N/A
Rating Factor	5.10	5.63	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-12.23	N/A	0.00	0.00	-12.23	N/A	0.00	0.00
Dead Load Effect	-4.96	4.48	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-3.73	3.37	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.70	7.85	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-7.26	N/A	0.00	0.00	-7.36	N/A	0.00	0.00
Design Ratio	1.41	N/A	N/A	N/A	2.52	N/A	N/A	N/A
Rating Factor	1.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.1	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Live Load Effect	-4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-10.2	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Resistance - Dead	-14.4	0.0	19.9	0.0	19.9	0.0	18.8	0.0
Design Ratio	2.01	N/A	4.55	N/A	(4.55)	(N/A)	(3.79)	(N/A)
Rating Factor	3.49	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	54.6	54.6	54.6	54.6	54.6	54.6	65.5	65.5
Live Load Effect	45.1	-7.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	99.7	47.1	54.6	54.6	54.6	54.6	65.5	65.5
Resistance - Dead	365.7	365.7	365.7	365.7	365.7	365.7	354.8	354.8
Design Ratio	4.22	8.93	7.70	7.70	(7.70)	(7.70)	(6.42)	(6.42)
Rating Factor	8.11	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.96	4.59	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-4.21	3.89	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.18	8.48	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-19.04	19.41	0.00	0.00	28.86	19.52	0.00	0.00
Design Ratio	2.62	2.83	N/A	N/A	N/A	5.36	N/A	N/A
Rating Factor	4.52	4.99	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-12.23	N/A	0.00	0.00	-12.23	N/A	0.00	0.00
Dead Load Effect	-4.96	4.48	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-4.21	3.80	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.18	8.28	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-7.26	N/A	0.00	0.00	-7.36	N/A	0.00	0.00
Design Ratio	1.33	N/A	N/A	N/A	2.52	N/A	N/A	N/A
Rating Factor	1.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.1	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Live Load Effect	-4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-10.7	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Resistance - Dead	-14.4	0.0	19.9	0.0	19.9	0.0	18.8	0.0
Design Ratio	1.92	N/A	4.55	N/A	(4.55)	(N/A)	(3.79)	(N/A)
Rating Factor	3.14	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	54.6	54.6	54.6	54.6	54.6	54.6	65.5	65.5
Live Load Effect	48.7	-7.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	103.3	47.6	54.6	54.6	54.6	54.6	65.5	65.5
Resistance - Dead	365.7	365.7	365.7	365.7	365.7	365.7	354.8	354.8
Design Ratio	4.07	8.83	7.70	7.70	(7.70)	(7.70)	(6.42)	(6.42)
Rating Factor	7.51	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.96	4.59	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-4.68	4.32	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.64	8.91	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-19.04	19.41	0.00	0.00	28.86	19.52	0.00	0.00
Design Ratio	2.49	2.69	N/A	N/A	N/A	5.36	N/A	N/A
Rating Factor	4.07	4.49	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-12.23	N/A	0.00	0.00	-12.23	N/A	0.00	0.00
Dead Load Effect	-4.96	4.48	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-4.68	4.22	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.64	8.70	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-7.26	N/A	0.00	0.00	-7.36	N/A	0.00	0.00
Design Ratio	1.27	N/A	N/A	N/A	2.52	N/A	N/A	N/A
Rating Factor	1.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.1	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Live Load Effect	-5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-11.0	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Resistance - Dead	-14.4	0.0	19.9	0.0	19.9	0.0	18.8	0.0
Design Ratio	1.85	N/A	4.55	N/A	(4.55)	(N/A)	(3.79)	(N/A)
Rating Factor	2.90	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	54.6	54.6	54.6	54.6	54.6	54.6	65.5	65.5
Live Load Effect	53.0	-6.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	107.6	47.8	54.6	54.6	54.6	54.6	65.5	65.5
Resistance - Dead	365.7	365.7	365.7	365.7	365.7	365.7	354.8	354.8
Design Ratio	3.91	8.79	7.70	7.70	(7.70)	(7.70)	(6.42)	(6.42)
Rating Factor	6.90	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.96	4.59	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-5.07	4.68	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.03	9.27	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-19.04	19.41	0.00	0.00	28.86	19.52	0.00	0.00
Design Ratio	2.39	2.59	N/A	N/A	N/A	5.36	N/A	N/A
Rating Factor	3.76	4.15	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-12.23	N/A	0.00	0.00	-12.23	N/A	0.00	0.00
Dead Load Effect	-4.96	4.48	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-5.07	4.58	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.03	9.06	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-7.26	N/A	0.00	0.00	-7.36	N/A	0.00	0.00
Design Ratio	1.22	N/A	N/A	N/A	2.52	N/A	N/A	N/A
Rating Factor	1.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.5	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-6.1	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Live Load Effect	-5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-11.1	0.0	5.6	0.0	5.6	0.0	6.7	0.0
Resistance - Dead	-14.4	0.0	19.9	0.0	19.9	0.0	18.8	0.0
Design Ratio	1.84	N/A	4.55	N/A	(4.55)	(N/A)	(3.79)	(N/A)
Rating Factor	2.84	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	54.6	54.6	54.6	54.6	54.6	54.6	65.5	65.5
Live Load Effect	54.1	-8.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	108.7	46.6	54.6	54.6	54.6	54.6	65.5	65.5
Resistance - Dead	365.7	365.7	365.7	365.7	365.7	365.7	354.8	354.8
Design Ratio	3.87	9.02	7.70	7.70	(7.70)	(7.70)	(6.42)	(6.42)
Rating Factor	6.76	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-4.96	4.59	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-5.18	4.79	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.15	9.37	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-19.04	19.41	0.00	0.00	28.86	19.52	0.00	0.00
Design Ratio	2.37	2.56	N/A	N/A	N/A	5.36	N/A	N/A
Rating Factor	3.67	4.06	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-12.23	N/A	0.00	0.00	-12.23	N/A	0.00	0.00
Dead Load Effect	-4.96	4.48	0.00	0.00	-4.86	4.48	0.00	0.00
Live Load Effect	-5.18	4.68	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.15	9.16	0.00	0.00	-4.86	4.48	0.00	0.00
Resistance - Dead	-7.26	N/A	0.00	0.00	-7.36	N/A	0.00	0.00
Design Ratio	1.20	N/A	N/A	N/A	2.52	N/A	N/A	N/A
Rating Factor	1.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 103.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	103.3750			
Top Cover Plate Thickness	=	1.1250	Top Cover Plate Width	=	13.0000
Top Clearance	=	0.0000			
Top Flange Thickness	=	0.3750	Top Flange Width	=	12.3750
Web Depth	=	99.8750	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	12.3750
Bottom Clearance	=	0.0000			
Bottom Cover Plate Thickness	=	1.6250	Bottom Cover Plate Width	=	16.0000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Cover Plate	=	30.00
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00
Bottom Cover Plate	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners:
Fy = 30.000 ksi
Width = 5.000 in
Thickness = 0.375 in
Spacing = 62.500 in
B = 1.000 (Type Factor)
Singles or Pairs? PAIRS

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 6.858 ft
Maximum distance to Right Brace Point = 8.767 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION STIFFENER CHECKS:

Point of Interest : 103.000
Construction Stage: 1

No longitudinal stiffeners are present.

Transverse Stiffeners:

6.10.9.3.3	Spacing	N/A
6.10.11.1.2-1	Projecting Width	FAIL
6.10.11.1.2-2	Projecting Width	PASS
6.10.11.1.3-*	Moment of Inertia	PASS
6.10.11.1.3-11	Moment of Inertia	N/A

No bearing stiffeners are present.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-21.7	0.0	-21.7	0.0	-21.7	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.2.3-2	N/A	8.2.3-2	N/A	8.3-1	N/A
Dead Load Effect	-7.7	0.0	-7.7	0.0	-7.7	0.0	7.2	0.0
Live Load Effect	-11.2	0.0	-8.6	0.0	-8.6	0.0	0.0	0.0
Total Load Effect	-18.8	0.0	-16.3	0.0	-16.3	0.0	7.2	0.0
Resistance - Dead	-14.0	0.0	-14.0	0.0	-14.0	0.0	18.3	0.0
Design Ratio	1.15	N/A	1.33	N/A	(1.33)	(N/A)	(3.56)	(N/A)
Rating Factor	1.26	N/A	1.63	N/A	(1.63)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	32.3	32.3	32.3	32.3	32.3	32.3	38.7	38.7
Live Load Effect	77.1	-23.5	59.5	-18.2	59.5	-18.2	0.0	0.0
Total Load Effect	109.4	8.8	91.8	14.1	91.8	14.1	38.7	38.7
Resistance - Dead	388.0	388.0	388.0	388.0	388.0	388.0	381.5	381.5
Design Ratio	3.84	47.97	4.58	29.72	(4.58)	(29.72)	(10.85)	(10.85)
Rating Factor	5.03	N/A	6.52	N/A	(6.52)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-6.27	4.95	0.00	0.00	-6.27	4.95	0.00	0.00
Live Load Effect	-8.45	6.66	0.00	0.00	-6.50	5.12	0.00	0.00
Total Load Effect	-14.72	11.61	0.00	0.00	-12.77	10.07	0.00	0.00
Resistance - Dead	-17.73	19.05	0.00	0.00	-17.73	19.05	0.00	0.00
Design Ratio	1.63	2.07	N/A	N/A	1.88	2.38	N/A	N/A
Rating Factor	2.10	2.86	N/A	N/A	2.73	3.72	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-6.27	4.77	0.00	0.00	-6.27	4.77	0.00	0.00
Live Load Effect	-8.45	6.42	0.00	0.00	-6.50	4.94	0.00	0.00
Total Load Effect	-14.72	11.19	0.00	0.00	-12.77	9.71	0.00	0.00
Resistance - Dead	-4.15	N/A	0.00	0.00	-4.15	N/A	0.00	0.00
Design Ratio	0.71	N/A	N/A	N/A	0.82	N/A	N/A	N/A
Rating Factor	0.49	N/A	N/A	N/A	0.64	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-21.8	0.0	-21.8	0.0	-21.8	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.2.3-2	N/A	8.2.3-2	N/A	8.3-1	N/A
Dead Load Effect	-7.7	0.0	-7.7	0.0	-7.7	0.0	7.2	0.0
Live Load Effect	-9.3	0.0	-7.2	0.0	-7.2	0.0	0.0	0.0
Total Load Effect	-17.0	0.0	-14.9	0.0	-14.9	0.0	7.2	0.0
Resistance - Dead	-14.1	0.0	-14.1	0.0	-14.1	0.0	18.3	0.0
Design Ratio	1.28	N/A	1.46	N/A	(1.46)	(N/A)	(3.56)	(N/A)
Rating Factor	1.50	N/A	1.95	N/A	(1.95)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	32.3	32.3	32.3	32.3	32.3	32.3	38.7	38.7
Live Load Effect	63.2	-21.7	48.8	-16.7	48.8	-16.7	0.0	0.0
Total Load Effect	95.5	10.6	81.1	15.6	81.1	15.6	38.7	38.7
Resistance - Dead	388.0	388.0	388.0	388.0	388.0	388.0	381.5	381.5
Design Ratio	4.40	39.57	5.18	26.98	(5.18)	(26.98)	(10.85)	(10.85)
Rating Factor	6.14	N/A	7.95	N/A	(7.95)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-6.27	4.95	0.00	0.00	-6.27	4.95	0.00	0.00
Live Load Effect	-7.08	5.59	0.00	0.00	-5.45	4.30	0.00	0.00
Total Load Effect	-13.35	10.53	0.00	0.00	-11.72	9.24	0.00	0.00
Resistance - Dead	-17.73	19.05	0.00	0.00	-17.73	19.05	0.00	0.00
Design Ratio	1.80	2.28	N/A	N/A	2.05	2.60	N/A	N/A
Rating Factor	2.50	3.41	N/A	N/A	3.25	4.43	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-6.27	4.77	0.00	0.00	-6.27	4.77	0.00	0.00
Live Load Effect	-7.08	5.39	0.00	0.00	-5.45	4.14	0.00	0.00
Total Load Effect	-13.35	10.16	0.00	0.00	-11.72	8.91	0.00	0.00
Resistance - Dead	-4.15	N/A	0.00	0.00	-4.15	N/A	0.00	0.00
Design Ratio	0.78	N/A	N/A	N/A	0.89	N/A	N/A	N/A
Rating Factor	0.59	N/A	N/A	N/A	0.76	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-21.7	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-7.7	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Live Load Effect	-4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-11.9	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Resistance - Dead	-14.0	0.0	19.5	0.0	19.5	0.0	18.3	0.0
Design Ratio	1.83	N/A	4.28	N/A	(4.28)	(N/A)	(3.56)	(N/A)
Rating Factor	3.35	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	32.3	32.3	32.3	32.3	32.3	32.3	38.7	38.7
Live Load Effect	31.6	-11.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	63.9	20.9	32.3	32.3	32.3	32.3	38.7	38.7
Resistance - Dead	388.0	388.0	388.0	388.0	388.0	388.0	381.5	381.5
Design Ratio	6.58	20.07	13.02	13.02	(13.02)	(13.02)	(10.85)	(10.85)
Rating Factor	12.27	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-6.27	4.95	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-4.27	3.37	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.54	8.31	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-17.73	19.05	0.00	0.00	30.15	19.23	0.00	0.00
Design Ratio	2.28	2.89	N/A	N/A	N/A	5.03	N/A	N/A
Rating Factor	4.15	5.66	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-6.27	4.77	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-4.27	3.25	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.54	8.02	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-4.15	N/A	0.00	0.00	-4.27	N/A	0.00	0.00
Design Ratio	0.99	N/A	N/A	N/A	1.70	N/A	N/A	N/A
Rating Factor	0.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-21.7	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-7.7	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Live Load Effect	-5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-12.9	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Resistance - Dead	-14.0	0.0	19.5	0.0	19.5	0.0	18.3	0.0
Design Ratio	1.68	N/A	4.28	N/A	(4.28)	(N/A)	(3.56)	(N/A)
Rating Factor	2.68	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	32.3	32.3	32.3	32.3	32.3	32.3	38.7	38.7
Live Load Effect	38.1	-9.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	70.4	22.5	32.3	32.3	32.3	32.3	38.7	38.7
Resistance - Dead	388.0	388.0	388.0	388.0	388.0	388.0	381.5	381.5
Design Ratio	5.97	18.67	13.02	13.02	(13.02)	(13.02)	(10.85)	(10.85)
Rating Factor	10.17	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-6.27	4.95	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-5.34	4.21	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.61	9.16	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-17.73	19.05	0.00	0.00	30.15	19.23	0.00	0.00
Design Ratio	2.07	2.62	N/A	N/A	N/A	5.03	N/A	N/A
Rating Factor	3.32	4.52	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-6.27	4.77	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-5.34	4.06	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.61	8.83	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-4.15	N/A	0.00	0.00	-4.27	N/A	0.00	0.00
Design Ratio	0.90	N/A	N/A	N/A	1.70	N/A	N/A	N/A
Rating Factor	0.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-21.6	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-7.7	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Live Load Effect	-5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-12.9	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Resistance - Dead	-14.0	0.0	19.5	0.0	19.5	0.0	18.3	0.0
Design Ratio	1.67	N/A	4.28	N/A	(4.28)	(N/A)	(3.56)	(N/A)
Rating Factor	2.65	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	32.3	32.3	32.3	32.3	32.3	32.3	38.7	38.7
Live Load Effect	38.4	-9.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	70.7	22.8	32.3	32.3	32.3	32.3	38.7	38.7
Resistance - Dead	388.0	388.0	388.0	388.0	388.0	388.0	381.5	381.5
Design Ratio	5.95	18.44	13.02	13.02	(13.02)	(13.02)	(10.85)	(10.85)
Rating Factor	10.11	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-6.27	4.95	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-5.36	4.23	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.63	9.17	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-17.73	19.05	0.00	0.00	30.15	19.23	0.00	0.00
Design Ratio	2.06	2.62	N/A	N/A	N/A	5.03	N/A	N/A
Rating Factor	3.31	4.51	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-6.27	4.77	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-5.36	4.08	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.63	8.85	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-4.15	N/A	0.00	0.00	-4.27	N/A	0.00	0.00
Design Ratio	0.90	N/A	N/A	N/A	1.70	N/A	N/A	N/A
Rating Factor	0.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-21.7	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-7.7	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Live Load Effect	-4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-12.3	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Resistance - Dead	-14.1	0.0	19.5	0.0	19.5	0.0	18.3	0.0
Design Ratio	1.77	N/A	4.28	N/A	(4.28)	(N/A)	(3.56)	(N/A)
Rating Factor	3.06	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	32.3	32.3	32.3	32.3	32.3	32.3	38.7	38.7
Live Load Effect	34.7	-12.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	67.0	19.5	32.3	32.3	32.3	32.3	38.7	38.7
Resistance - Dead	388.0	388.0	388.0	388.0	388.0	388.0	381.5	381.5
Design Ratio	6.28	21.56	13.02	13.02	(13.02)	(13.02)	(10.85)	(10.85)
Rating Factor	11.19	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-6.27	4.95	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-4.69	3.70	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.96	8.64	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-17.73	19.05	0.00	0.00	30.15	19.23	0.00	0.00
Design Ratio	2.19	2.78	N/A	N/A	N/A	5.03	N/A	N/A
Rating Factor	3.78	5.16	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-6.27	4.77	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-4.69	3.56	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.96	8.33	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-4.15	N/A	0.00	0.00	-4.27	N/A	0.00	0.00
Design Ratio	0.95	N/A	N/A	N/A	1.70	N/A	N/A	N/A
Rating Factor	0.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-21.7	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-7.7	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Live Load Effect	-5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-12.9	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Resistance - Dead	-14.0	0.0	19.5	0.0	19.5	0.0	18.3	0.0
Design Ratio	1.69	N/A	4.28	N/A	(4.28)	(N/A)	(3.56)	(N/A)
Rating Factor	2.71	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	32.3	32.3	32.3	32.3	32.3	32.3	38.7	38.7
Live Load Effect	38.8	-13.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	71.1	18.6	32.3	32.3	32.3	32.3	38.7	38.7
Resistance - Dead	388.0	388.0	388.0	388.0	388.0	388.0	381.5	381.5
Design Ratio	5.91	22.59	13.02	13.02	(13.02)	(13.02)	(10.85)	(10.85)
Rating Factor	10.00	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-6.27	4.95	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-5.29	4.17	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.56	9.12	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-17.73	19.05	0.00	0.00	30.15	19.23	0.00	0.00
Design Ratio	2.08	2.63	N/A	N/A	N/A	5.03	N/A	N/A
Rating Factor	3.35	4.57	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-6.27	4.77	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-5.29	4.02	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.56	8.79	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-4.15	N/A	0.00	0.00	-4.27	N/A	0.00	0.00
Design Ratio	0.90	N/A	N/A	N/A	1.70	N/A	N/A	N/A
Rating Factor	0.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-21.7	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-7.7	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Live Load Effect	-5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-13.5	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Resistance - Dead	-14.0	0.0	19.5	0.0	19.5	0.0	18.3	0.0
Design Ratio	1.61	N/A	4.28	N/A	(4.28)	(N/A)	(3.56)	(N/A)
Rating Factor	2.43	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	32.3	32.3	32.3	32.3	32.3	32.3	38.7	38.7
Live Load Effect	41.6	-13.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	73.9	18.8	32.3	32.3	32.3	32.3	38.7	38.7
Resistance - Dead	388.0	388.0	388.0	388.0	388.0	388.0	381.5	381.5
Design Ratio	5.69	22.33	13.02	13.02	(13.02)	(13.02)	(10.85)	(10.85)
Rating Factor	9.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-6.27	4.95	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-5.89	4.64	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.16	9.59	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-17.73	19.05	0.00	0.00	30.15	19.23	0.00	0.00
Design Ratio	1.97	2.50	N/A	N/A	N/A	5.03	N/A	N/A
Rating Factor	3.01	4.10	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-6.27	4.77	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-5.89	4.48	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.16	9.25	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-4.15	N/A	0.00	0.00	-4.27	N/A	0.00	0.00
Design Ratio	0.86	N/A	N/A	N/A	1.70	N/A	N/A	N/A
Rating Factor	0.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-21.8	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-7.7	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Live Load Effect	-6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-14.0	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Resistance - Dead	-14.1	0.0	19.5	0.0	19.5	0.0	18.3	0.0
Design Ratio	1.55	N/A	4.28	N/A	(4.28)	(N/A)	(3.56)	(N/A)
Rating Factor	2.22	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	32.3	32.3	32.3	32.3	32.3	32.3	38.7	38.7
Live Load Effect	45.1	-13.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	77.4	18.6	32.3	32.3	32.3	32.3	38.7	38.7
Resistance - Dead	388.0	388.0	388.0	388.0	388.0	388.0	381.5	381.5
Design Ratio	5.43	22.62	13.02	13.02	(13.02)	(13.02)	(10.85)	(10.85)
Rating Factor	8.60	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-6.27	4.95	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-6.47	5.10	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.74	10.04	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-17.73	19.05	0.00	0.00	30.15	19.23	0.00	0.00
Design Ratio	1.88	2.39	N/A	N/A	N/A	5.03	N/A	N/A
Rating Factor	2.74	3.74	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-6.27	4.77	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-6.47	4.92	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.74	9.69	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-4.15	N/A	0.00	0.00	-4.27	N/A	0.00	0.00
Design Ratio	0.82	N/A	N/A	N/A	1.70	N/A	N/A	N/A
Rating Factor	0.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-21.8	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-7.7	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Live Load Effect	-6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-14.2	0.0	6.0	0.0	6.0	0.0	7.2	0.0
Resistance - Dead	-14.1	0.0	19.5	0.0	19.5	0.0	18.3	0.0
Design Ratio	1.54	N/A	4.28	N/A	(4.28)	(N/A)	(3.56)	(N/A)
Rating Factor	2.18	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	420.3	420.3	420.3	420.3	420.3	420.3	420.3	420.3
Dead Load Effect	32.3	32.3	32.3	32.3	32.3	32.3	38.7	38.7
Live Load Effect	46.0	-13.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	78.2	18.4	32.3	32.3	32.3	32.3	38.7	38.7
Resistance - Dead	388.0	388.0	388.0	388.0	388.0	388.0	381.5	381.5
Design Ratio	5.37	22.86	13.02	13.02	(13.02)	(13.02)	(10.85)	(10.85)
Rating Factor	8.44	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-6.27	4.95	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-6.61	5.22	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.89	10.16	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-17.73	19.05	0.00	0.00	30.15	19.23	0.00	0.00
Design Ratio	1.86	2.36	N/A	N/A	N/A	5.03	N/A	N/A
Rating Factor	2.68	3.65	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-6.27	4.77	0.00	0.00	-6.15	4.77	0.00	0.00
Live Load Effect	-6.61	5.03	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.89	9.80	0.00	0.00	-6.15	4.77	0.00	0.00
Resistance - Dead	-4.15	N/A	0.00	0.00	-4.27	N/A	0.00	0.00
Design Ratio	0.81	N/A	N/A	N/A	1.70	N/A	N/A	N/A
Rating Factor	0.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 104.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	103.3750			
Top Cover Plate Thickness	=	1.1250	Top Cover Plate Width	=	13.0000
Top Clearance	=	0.0000			
Top Flange Thickness	=	0.3750	Top Flange Width	=	12.3750
Web Depth	=	99.8750	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	12.3750
Bottom Clearance	=	0.0000			
Bottom Cover Plate Thickness	=	1.6250	Bottom Cover Plate Width	=	16.0000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Cover Plate	=	30.00
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00
Bottom Cover Plate	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners:
Fy = 30.000 ksi
Width = 5.000 in
Thickness = 0.375 in
Spacing = 62.000 in
B = 1.000 (Type Factor)
Singles or Pairs? PAIRS

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 2.117 ft
Maximum distance to Right Brace Point = 13.383 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION STIFFENER CHECKS:

Point of Interest : 104.000
Construction Stage: 1

No longitudinal stiffeners are present.

Transverse Stiffeners:

6.10.9.3.3	Spacing	N/A
6.10.11.1.2-1	Projecting Width	FAIL
6.10.11.1.2-2	Projecting Width	PASS
6.10.11.1.3-*	Moment of Inertia	PASS
6.10.11.1.3-11	Moment of Inertia	N/A

No bearing stiffeners are present.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	-20.0	0.0	-20.0	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.2.3-2	N/A	8.2.3-2	N/A	8.3-1	N/A
Dead Load Effect	-8.9	0.0	-8.9	0.0	-8.9	0.0	8.2	0.0
Live Load Effect	-12.7	0.0	-9.8	0.0	-9.8	0.0	0.0	0.0
Total Load Effect	-21.5	0.0	-18.6	0.0	-18.6	0.0	8.2	0.0
Resistance - Dead	-11.1	0.0	-11.1	0.0	-11.1	0.0	17.3	0.0
Design Ratio	0.93	N/A	1.07	N/A	(1.07)	(N/A)	(3.09)	(N/A)
Rating Factor	0.88	N/A	1.14	N/A	(1.14)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	-422.5	422.5	-422.5	422.5	422.5
Dead Load Effect	9.7	9.7	9.7	9.7	9.7	9.7	11.7	11.7
Live Load Effect	62.6	-35.8	48.3	-27.6	48.3	-27.6	0.0	0.0
Total Load Effect	72.3	-26.1	58.0	-17.9	58.0	-17.9	11.7	11.7
Resistance - Dead	412.7	-432.2	412.7	-432.2	412.7	-432.2	410.8	410.8
Design Ratio	5.84	16.18	7.28	23.57	(7.28)	(23.57)	(36.21)	(36.21)
Rating Factor	6.59	12.06	8.55	15.63	(8.55)	(15.63)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-7.23	5.70	0.00	0.00	-7.23	5.70	0.00	0.00
Live Load Effect	-9.59	7.56	0.00	0.00	-7.38	5.82	0.00	0.00
Total Load Effect	-16.82	13.26	0.00	0.00	-14.60	11.52	0.00	0.00
Resistance - Dead	-16.77	18.30	0.00	0.00	-16.77	18.30	0.00	0.00
Design Ratio	1.43	1.81	N/A	N/A	1.64	2.08	N/A	N/A
Rating Factor	1.75	2.42	N/A	N/A	2.27	3.15	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.23	5.50	0.00	0.00	-7.23	5.50	0.00	0.00
Live Load Effect	-9.59	7.29	0.00	0.00	-7.38	5.61	0.00	0.00
Total Load Effect	-16.82	12.79	0.00	0.00	-14.60	11.11	0.00	0.00
Resistance - Dead	-3.20	N/A	0.00	0.00	-3.20	N/A	0.00	0.00
Design Ratio	0.62	N/A	N/A	N/A	0.71	N/A	N/A	N/A
Rating Factor	0.33	N/A	N/A	N/A	0.43	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	-20.0	0.0	-20.0	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.2.3-2	N/A	8.2.3-2	N/A	8.3-1	N/A
Dead Load Effect	-8.9	0.0	-8.9	0.0	-8.9	0.0	8.2	0.0
Live Load Effect	-10.7	0.0	-8.2	0.0	-8.2	0.0	0.0	0.0
Total Load Effect	-19.5	0.0	-17.1	0.0	-17.1	0.0	8.2	0.0
Resistance - Dead	-11.1	0.0	-11.1	0.0	-11.1	0.0	17.3	0.0
Design Ratio	1.02	N/A	1.17	N/A	(1.17)	(N/A)	(3.09)	(N/A)
Rating Factor	1.04	N/A	1.35	N/A	(1.35)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	-422.5	422.5	-422.5	422.5	422.5
Dead Load Effect	9.7	9.7	9.7	9.7	9.7	9.7	11.7	11.7
Live Load Effect	51.8	-31.0	39.9	-23.9	39.9	-23.9	0.0	0.0
Total Load Effect	61.5	-21.3	49.6	-14.2	49.6	-14.2	11.7	11.7
Resistance - Dead	412.7	-432.2	412.7	-432.2	412.7	-432.2	410.8	410.8
Design Ratio	6.87	19.88	8.51	29.81	(8.51)	(29.81)	(36.21)	(36.21)
Rating Factor	7.98	13.95	10.34	18.09	(10.34)	(18.09)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-7.23	5.70	0.00	0.00	-7.23	5.70	0.00	0.00
Live Load Effect	-8.08	6.37	0.00	0.00	-6.22	4.90	0.00	0.00
Total Load Effect	-15.31	12.07	0.00	0.00	-13.44	10.60	0.00	0.00
Resistance - Dead	-16.77	18.30	0.00	0.00	-16.77	18.30	0.00	0.00
Design Ratio	1.57	1.99	N/A	N/A	1.79	2.26	N/A	N/A
Rating Factor	2.08	2.87	N/A	N/A	2.70	3.73	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.23	5.50	0.00	0.00	-7.23	5.50	0.00	0.00
Live Load Effect	-8.08	6.15	0.00	0.00	-6.22	4.73	0.00	0.00
Total Load Effect	-15.31	11.64	0.00	0.00	-13.44	10.22	0.00	0.00
Resistance - Dead	-3.20	N/A	0.00	0.00	-3.20	N/A	0.00	0.00
Design Ratio	0.68	N/A	N/A	N/A	0.78	N/A	N/A	N/A
Rating Factor	0.40	N/A	N/A	N/A	0.51	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-8.9	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Live Load Effect	-4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-13.6	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Resistance - Dead	-11.2	0.0	18.6	0.0	18.6	0.0	17.3	0.0
Design Ratio	1.47	N/A	3.71	N/A	(3.71)	(N/A)	(3.09)	(N/A)
Rating Factor	2.35	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	9.7	9.7	9.7	9.7	9.7	9.7	11.7	11.7
Live Load Effect	26.5	-16.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	36.3	-6.7	9.7	9.7	9.7	9.7	11.7	11.7
Resistance - Dead	412.7	-432.2	412.7	412.7	412.7	412.7	410.8	410.8
Design Ratio	11.65	63.10	43.45	43.45	(43.45)	(43.45)	(36.21)	(36.21)
Rating Factor	15.55	26.32	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.23	5.70	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-4.84	3.82	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.07	9.52	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-16.77	18.30	0.00	0.00	31.09	18.50	0.00	0.00
Design Ratio	1.99	2.52	N/A	N/A	N/A	4.37	N/A	N/A
Rating Factor	3.46	4.79	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.23	5.50	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-4.84	3.68	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.07	9.18	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-3.20	N/A	0.00	0.00	-3.34	N/A	0.00	0.00
Design Ratio	0.86	N/A	N/A	N/A	1.47	N/A	N/A	N/A
Rating Factor	0.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-8.9	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Live Load Effect	-5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-14.8	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Resistance - Dead	-11.1	0.0	18.6	0.0	18.6	0.0	17.3	0.0
Design Ratio	1.35	N/A	3.71	N/A	(3.71)	(N/A)	(3.09)	(N/A)
Rating Factor	1.88	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	9.7	9.7	9.7	9.7	9.7	9.7	11.7	11.7
Live Load Effect	30.9	-16.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	40.6	-6.5	9.7	9.7	9.7	9.7	11.7	11.7
Resistance - Dead	412.7	-432.2	412.7	412.7	412.7	412.7	410.8	410.8
Design Ratio	10.41	64.58	43.45	43.45	(43.45)	(43.45)	(36.21)	(36.21)
Rating Factor	13.38	26.57	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.23	5.70	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-6.03	4.75	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.26	10.45	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-16.77	18.30	0.00	0.00	31.09	18.50	0.00	0.00
Design Ratio	1.81	2.30	N/A	N/A	N/A	4.37	N/A	N/A
Rating Factor	2.78	3.85	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.23	5.50	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-6.03	4.58	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.26	10.08	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-3.20	N/A	0.00	0.00	-3.34	N/A	0.00	0.00
Design Ratio	0.79	N/A	N/A	N/A	1.47	N/A	N/A	N/A
Rating Factor	0.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-8.9	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Live Load Effect	-5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-14.8	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Resistance - Dead	-11.2	0.0	18.6	0.0	18.6	0.0	17.3	0.0
Design Ratio	1.35	N/A	3.71	N/A	(3.71)	(N/A)	(3.09)	(N/A)
Rating Factor	1.88	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	9.7	9.7	9.7	9.7	9.7	9.7	11.7	11.7
Live Load Effect	30.3	-15.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	40.0	-5.6	9.7	9.7	9.7	9.7	11.7	11.7
Resistance - Dead	412.7	-432.2	412.7	412.7	412.7	412.7	410.8	410.8
Design Ratio	10.56	76.00	43.45	43.45	(43.45)	(43.45)	(36.21)	(36.21)
Rating Factor	13.63	28.28	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.23	5.70	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-6.06	4.78	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.28	10.48	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-16.77	18.30	0.00	0.00	31.09	18.50	0.00	0.00
Design Ratio	1.81	2.29	N/A	N/A	N/A	4.37	N/A	N/A
Rating Factor	2.77	3.83	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.23	5.50	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-6.06	4.61	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.28	10.10	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-3.20	N/A	0.00	0.00	-3.34	N/A	0.00	0.00
Design Ratio	0.78	N/A	N/A	N/A	1.47	N/A	N/A	N/A
Rating Factor	0.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-8.9	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Live Load Effect	-5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-14.1	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Resistance - Dead	-11.2	0.0	18.6	0.0	18.6	0.0	17.3	0.0
Design Ratio	1.42	N/A	3.71	N/A	(3.71)	(N/A)	(3.09)	(N/A)
Rating Factor	2.13	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	9.7	9.7	9.7	9.7	9.7	9.7	11.7	11.7
Live Load Effect	29.2	-18.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	38.9	-8.5	9.7	9.7	9.7	9.7	11.7	11.7
Resistance - Dead	412.7	-432.2	412.7	412.7	412.7	412.7	410.8	410.8
Design Ratio	10.85	49.46	43.45	43.45	(43.45)	(43.45)	(36.21)	(36.21)
Rating Factor	14.13	23.66	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.23	5.70	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-5.34	4.21	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.57	9.91	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-16.77	18.30	0.00	0.00	31.09	18.50	0.00	0.00
Design Ratio	1.91	2.42	N/A	N/A	N/A	4.37	N/A	N/A
Rating Factor	3.14	4.35	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.23	5.50	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-5.34	4.06	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.57	9.56	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-3.20	N/A	0.00	0.00	-3.34	N/A	0.00	0.00
Design Ratio	0.83	N/A	N/A	N/A	1.47	N/A	N/A	N/A
Rating Factor	0.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-8.9	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Live Load Effect	-5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-14.8	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Resistance - Dead	-11.2	0.0	18.6	0.0	18.6	0.0	17.3	0.0
Design Ratio	1.36	N/A	3.71	N/A	(3.71)	(N/A)	(3.09)	(N/A)
Rating Factor	1.89	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	9.7	9.7	9.7	9.7	9.7	9.7	11.7	11.7
Live Load Effect	32.5	-20.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	42.2	-10.2	9.7	9.7	9.7	9.7	11.7	11.7
Resistance - Dead	412.7	-432.2	412.7	412.7	412.7	412.7	410.8	410.8
Design Ratio	10.00	41.25	43.45	43.45	(43.45)	(43.45)	(36.21)	(36.21)
Rating Factor	12.69	21.65	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.23	5.70	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-6.02	4.75	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.25	10.45	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-16.77	18.30	0.00	0.00	31.09	18.50	0.00	0.00
Design Ratio	1.81	2.30	N/A	N/A	N/A	4.37	N/A	N/A
Rating Factor	2.79	3.86	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.23	5.50	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-6.02	4.58	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.25	10.07	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-3.20	N/A	0.00	0.00	-3.34	N/A	0.00	0.00
Design Ratio	0.79	N/A	N/A	N/A	1.47	N/A	N/A	N/A
Rating Factor	0.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-8.9	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Live Load Effect	-6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-15.4	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Resistance - Dead	-11.1	0.0	18.6	0.0	18.6	0.0	17.3	0.0
Design Ratio	1.30	N/A	3.71	N/A	(3.71)	(N/A)	(3.09)	(N/A)
Rating Factor	1.70	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	9.7	9.7	9.7	9.7	9.7	9.7	11.7	11.7
Live Load Effect	34.6	-20.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	44.3	-10.8	9.7	9.7	9.7	9.7	11.7	11.7
Resistance - Dead	412.7	-432.2	412.7	412.7	412.7	412.7	410.8	410.8
Design Ratio	9.53	39.16	43.45	43.45	(43.45)	(43.45)	(36.21)	(36.21)
Rating Factor	11.93	21.07	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.23	5.70	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-6.69	5.27	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.91	10.97	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-16.77	18.30	0.00	0.00	31.09	18.50	0.00	0.00
Design Ratio	1.72	2.19	N/A	N/A	N/A	4.37	N/A	N/A
Rating Factor	2.51	3.47	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.23	5.50	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-6.69	5.09	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.91	10.58	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-3.20	N/A	0.00	0.00	-3.34	N/A	0.00	0.00
Design Ratio	0.75	N/A	N/A	N/A	1.47	N/A	N/A	N/A
Rating Factor	0.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-8.9	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Live Load Effect	-7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-16.1	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Resistance - Dead	-11.2	0.0	18.6	0.0	18.6	0.0	17.3	0.0
Design Ratio	1.25	N/A	3.71	N/A	(3.71)	(N/A)	(3.09)	(N/A)
Rating Factor	1.55	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	9.7	9.7	9.7	9.7	9.7	9.7	11.7	11.7
Live Load Effect	37.3	-21.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	47.0	-11.8	9.7	9.7	9.7	9.7	11.7	11.7
Resistance - Dead	412.7	-432.2	412.7	412.7	412.7	412.7	410.8	410.8
Design Ratio	8.99	35.69	43.45	43.45	(43.45)	(43.45)	(36.21)	(36.21)
Rating Factor	11.08	20.05	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.23	5.70	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-7.36	5.80	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.59	11.50	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-16.77	18.30	0.00	0.00	31.09	18.50	0.00	0.00
Design Ratio	1.65	2.09	N/A	N/A	N/A	4.37	N/A	N/A
Rating Factor	2.28	3.15	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.23	5.50	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-7.36	5.60	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.59	11.09	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-3.20	N/A	0.00	0.00	-3.34	N/A	0.00	0.00
Design Ratio	0.71	N/A	N/A	N/A	1.47	N/A	N/A	N/A
Rating Factor	0.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-8.9	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Live Load Effect	-7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-16.3	0.0	6.9	0.0	6.9	0.0	8.2	0.0
Resistance - Dead	-11.2	0.0	18.6	0.0	18.6	0.0	17.3	0.0
Design Ratio	1.23	N/A	3.71	N/A	(3.71)	(N/A)	(3.09)	(N/A)
Rating Factor	1.49	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	9.7	9.7	9.7	9.7	9.7	9.7	11.7	11.7
Live Load Effect	37.8	-21.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	47.6	-11.9	9.7	9.7	9.7	9.7	11.7	11.7
Resistance - Dead	412.7	-432.2	412.7	412.7	412.7	412.7	410.8	410.8
Design Ratio	8.88	35.45	43.45	43.45	(43.45)	(43.45)	(36.21)	(36.21)
Rating Factor	10.90	19.97	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.23	5.70	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-7.62	6.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.85	11.71	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-16.77	18.30	0.00	0.00	31.09	18.50	0.00	0.00
Design Ratio	1.62	2.05	N/A	N/A	N/A	4.37	N/A	N/A
Rating Factor	2.20	3.04	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.23	5.50	0.00	0.00	-7.09	5.50	0.00	0.00
Live Load Effect	-7.62	5.80	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.85	11.29	0.00	0.00	-7.09	5.50	0.00	0.00
Resistance - Dead	-3.20	N/A	0.00	0.00	-3.34	N/A	0.00	0.00
Design Ratio	0.70	N/A	N/A	N/A	1.47	N/A	N/A	N/A
Rating Factor	0.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 104.500
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	103.3750			
Top Cover Plate Thickness	=	1.1250	Top Cover Plate Width	=	13.0000
Top Clearance	=	0.0000			
Top Flange Thickness	=	0.3750	Top Flange Width	=	12.3750
Web Depth	=	99.8750	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	12.3750
Bottom Clearance	=	0.0000			
Bottom Cover Plate Thickness	=	1.6250	Bottom Cover Plate Width	=	16.0000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Cover Plate	=	30.00
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00
Bottom Cover Plate	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners:
Fy = 30.000 ksi
Width = 5.000 in
Thickness = 0.375 in
Spacing = 62.000 in
B = 1.000 (Type Factor)
Singles or Pairs? PAIRS

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 7.558 ft
Maximum distance to Right Brace Point = 7.942 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION STIFFENER CHECKS:

Point of Interest : 104.500
Construction Stage: 1

No longitudinal stiffeners are present.

Transverse Stiffeners:

6.10.9.3.3	Spacing	N/A
6.10.11.1.2-1	Projecting Width	FAIL
6.10.11.1.2-2	Projecting Width	PASS
6.10.11.1.3-*	Moment of Inertia	PASS
6.10.11.1.3-11	Moment of Inertia	N/A

No bearing stiffeners are present.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	-20.0	0.0	-20.0	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.2.3-2	N/A	8.2.3-2	N/A	8.3-1	N/A
Dead Load Effect	-9.0	0.0	-9.0	0.0	-9.0	0.0	8.4	0.0
Live Load Effect	-13.0	0.0	-10.0	0.0	-10.0	0.0	0.0	0.0
Total Load Effect	-22.1	0.0	-19.1	0.0	-19.1	0.0	8.4	0.0
Resistance - Dead	-10.9	0.0	-10.9	0.0	-10.9	0.0	17.1	0.0
Design Ratio	0.91	N/A	1.05	N/A	(1.05)	(N/A)	(3.03)	(N/A)
Rating Factor	0.84	N/A	1.09	N/A	(1.09)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	-422.5	422.5	-422.5	422.5	422.5
Dead Load Effect	7.5	7.5	7.5	7.5	7.5	7.5	9.0	9.0
Live Load Effect	55.6	-42.3	42.9	-32.6	42.9	-32.6	0.0	0.0
Total Load Effect	63.1	-34.8	50.4	-25.1	50.4	-25.1	9.0	9.0
Resistance - Dead	415.0	-429.9	415.0	-429.9	415.0	-429.9	413.5	413.5
Design Ratio	6.69	12.15	8.38	16.82	(8.38)	(16.82)	(47.08)	(47.08)
Rating Factor	7.46	10.17	9.67	13.19	(9.67)	(13.19)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-7.38	5.82	0.00	0.00	-7.38	5.82	0.00	0.00
Live Load Effect	-9.86	7.77	0.00	0.00	-7.58	5.98	0.00	0.00
Total Load Effect	-17.24	13.60	0.00	0.00	-14.97	11.80	0.00	0.00
Resistance - Dead	-16.62	18.18	0.00	0.00	-16.62	18.18	0.00	0.00
Design Ratio	1.39	1.77	N/A	N/A	1.60	2.03	N/A	N/A
Rating Factor	1.69	2.34	N/A	N/A	2.19	3.04	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.38	5.61	0.00	0.00	-7.38	5.61	0.00	0.00
Live Load Effect	-9.86	7.50	0.00	0.00	-7.58	5.77	0.00	0.00
Total Load Effect	-17.24	13.11	0.00	0.00	-14.97	11.38	0.00	0.00
Resistance - Dead	-3.04	N/A	0.00	0.00	-3.04	N/A	0.00	0.00
Design Ratio	0.60	N/A	N/A	N/A	0.70	N/A	N/A	N/A
Rating Factor	0.31	N/A	N/A	N/A	0.40	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	-20.0	0.0	-20.0	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.2.3-2	N/A	8.2.3-2	N/A	8.3-1	N/A
Dead Load Effect	-9.0	0.0	-9.0	0.0	-9.0	0.0	8.4	0.0
Live Load Effect	-11.0	0.0	-8.5	0.0	-8.5	0.0	0.0	0.0
Total Load Effect	-20.0	0.0	-17.5	0.0	-17.5	0.0	8.4	0.0
Resistance - Dead	-10.9	0.0	-11.0	0.0	-11.0	0.0	17.1	0.0
Design Ratio	1.00	N/A	1.14	N/A	(1.14)	(N/A)	(3.03)	(N/A)
Rating Factor	1.00	N/A	1.29	N/A	(1.29)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	-422.5	422.5	-422.5	422.5	422.5
Dead Load Effect	7.5	7.5	7.5	7.5	7.5	7.5	9.0	9.0
Live Load Effect	46.3	-35.9	35.7	-27.7	35.7	-27.7	0.0	0.0
Total Load Effect	53.8	-28.4	43.2	-20.2	43.2	-20.2	9.0	9.0
Resistance - Dead	415.0	-429.9	415.0	-429.9	415.0	-429.9	413.5	413.5
Design Ratio	7.86	14.86	9.78	20.90	(9.78)	(20.90)	(47.08)	(47.08)
Rating Factor	8.97	11.98	11.62	15.52	(11.62)	(15.52)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-7.38	5.82	0.00	0.00	-7.38	5.82	0.00	0.00
Live Load Effect	-8.33	6.57	0.00	0.00	-6.40	5.05	0.00	0.00
Total Load Effect	-15.71	12.39	0.00	0.00	-13.79	10.87	0.00	0.00
Resistance - Dead	-16.62	18.18	0.00	0.00	-16.62	18.18	0.00	0.00
Design Ratio	1.53	1.94	N/A	N/A	1.74	2.21	N/A	N/A
Rating Factor	2.00	2.77	N/A	N/A	2.59	3.60	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.38	5.61	0.00	0.00	-7.38	5.61	0.00	0.00
Live Load Effect	-8.33	6.33	0.00	0.00	-6.40	4.87	0.00	0.00
Total Load Effect	-15.71	11.95	0.00	0.00	-13.79	10.49	0.00	0.00
Resistance - Dead	-3.04	N/A	0.00	0.00	-3.04	N/A	0.00	0.00
Design Ratio	0.66	N/A	N/A	N/A	0.76	N/A	N/A	N/A
Rating Factor	0.37	N/A	N/A	N/A	0.47	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.0	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Live Load Effect	-4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-13.9	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Resistance - Dead	-11.0	0.0	18.5	0.0	18.5	0.0	17.1	0.0
Design Ratio	1.44	N/A	3.63	N/A	(3.63)	(N/A)	(3.03)	(N/A)
Rating Factor	2.26	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	7.5	7.5	7.5	7.5	7.5	7.5	9.0	9.0
Live Load Effect	24.0	-19.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	31.5	-11.5	7.5	7.5	7.5	7.5	9.0	9.0
Resistance - Dead	415.0	-429.9	415.0	415.0	415.0	415.0	413.5	413.5
Design Ratio	13.41	36.82	56.50	56.50	(56.50)	(56.50)	(47.08)	(47.08)
Rating Factor	17.28	22.69	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.38	5.82	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-4.97	3.92	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.35	9.74	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-16.62	18.18	0.00	0.00	31.24	18.39	0.00	0.00
Design Ratio	1.94	2.46	N/A	N/A	N/A	4.27	N/A	N/A
Rating Factor	3.35	4.64	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.38	5.61	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-4.97	3.78	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.35	9.39	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-3.04	N/A	0.00	0.00	-3.18	N/A	0.00	0.00
Design Ratio	0.84	N/A	N/A	N/A	1.44	N/A	N/A	N/A
Rating Factor	0.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.0	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Live Load Effect	-6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-15.1	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Resistance - Dead	-10.9	0.0	18.5	0.0	18.5	0.0	17.1	0.0
Design Ratio	1.32	N/A	3.63	N/A	(3.63)	(N/A)	(3.03)	(N/A)
Rating Factor	1.81	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	7.5	7.5	7.5	7.5	7.5	7.5	9.0	9.0
Live Load Effect	27.2	-19.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	34.7	-12.4	7.5	7.5	7.5	7.5	9.0	9.0
Resistance - Dead	415.0	-429.9	415.0	415.0	415.0	415.0	413.5	413.5
Design Ratio	12.18	33.98	56.50	56.50	(56.50)	(56.50)	(47.08)	(47.08)
Rating Factor	15.25	21.59	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.38	5.82	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-6.16	4.86	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.54	10.68	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-16.62	18.18	0.00	0.00	31.24	18.39	0.00	0.00
Design Ratio	1.77	2.25	N/A	N/A	N/A	4.27	N/A	N/A
Rating Factor	2.70	3.74	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.38	5.61	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-6.16	4.69	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.54	10.30	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-3.04	N/A	0.00	0.00	-3.18	N/A	0.00	0.00
Design Ratio	0.77	N/A	N/A	N/A	1.44	N/A	N/A	N/A
Rating Factor	0.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.0	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Live Load Effect	-6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-15.2	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Resistance - Dead	-11.0	0.0	18.5	0.0	18.5	0.0	17.1	0.0
Design Ratio	1.32	N/A	3.63	N/A	(3.63)	(N/A)	(3.03)	(N/A)
Rating Factor	1.79	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	7.5	7.5	7.5	7.5	7.5	7.5	9.0	9.0
Live Load Effect	26.2	-18.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	33.7	-11.2	7.5	7.5	7.5	7.5	9.0	9.0
Resistance - Dead	415.0	-429.9	415.0	415.0	415.0	415.0	413.5	413.5
Design Ratio	12.54	37.56	56.50	56.50	(56.50)	(56.50)	(47.08)	(47.08)
Rating Factor	15.83	22.96	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.38	5.82	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-6.25	4.93	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.63	10.75	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-16.62	18.18	0.00	0.00	31.24	18.39	0.00	0.00
Design Ratio	1.76	2.23	N/A	N/A	N/A	4.27	N/A	N/A
Rating Factor	2.66	3.69	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.38	5.61	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-6.25	4.75	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.63	10.37	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-3.04	N/A	0.00	0.00	-3.18	N/A	0.00	0.00
Design Ratio	0.76	N/A	N/A	N/A	1.44	N/A	N/A	N/A
Rating Factor	0.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.0	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Live Load Effect	-5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-14.4	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Resistance - Dead	-11.0	0.0	18.5	0.0	18.5	0.0	17.1	0.0
Design Ratio	1.39	N/A	3.63	N/A	(3.63)	(N/A)	(3.03)	(N/A)
Rating Factor	2.04	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	7.5	7.5	7.5	7.5	7.5	7.5	9.0	9.0
Live Load Effect	26.5	-21.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	33.9	-13.5	7.5	7.5	7.5	7.5	9.0	9.0
Resistance - Dead	415.0	-429.9	415.0	415.0	415.0	415.0	413.5	413.5
Design Ratio	12.44	31.24	56.50	56.50	(56.50)	(56.50)	(47.08)	(47.08)
Rating Factor	15.68	20.47	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.38	5.82	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-5.49	4.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.87	10.15	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-16.62	18.18	0.00	0.00	31.24	18.39	0.00	0.00
Design Ratio	1.86	2.36	N/A	N/A	N/A	4.27	N/A	N/A
Rating Factor	3.03	4.20	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.38	5.61	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-5.49	4.17	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.87	9.79	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-3.04	N/A	0.00	0.00	-3.18	N/A	0.00	0.00
Design Ratio	0.81	N/A	N/A	N/A	1.44	N/A	N/A	N/A
Rating Factor	0.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.0	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Live Load Effect	-6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-15.1	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Resistance - Dead	-11.0	0.0	18.5	0.0	18.5	0.0	17.1	0.0
Design Ratio	1.33	N/A	3.63	N/A	(3.63)	(N/A)	(3.03)	(N/A)
Rating Factor	1.81	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	7.5	7.5	7.5	7.5	7.5	7.5	9.0	9.0
Live Load Effect	29.4	-23.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	36.9	-15.6	7.5	7.5	7.5	7.5	9.0	9.0
Resistance - Dead	415.0	-429.9	415.0	415.0	415.0	415.0	413.5	413.5
Design Ratio	11.46	27.03	56.50	56.50	(56.50)	(56.50)	(47.08)	(47.08)
Rating Factor	14.12	18.61	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.38	5.82	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-6.17	4.87	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.55	10.69	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-16.62	18.18	0.00	0.00	31.24	18.39	0.00	0.00
Design Ratio	1.77	2.25	N/A	N/A	N/A	4.27	N/A	N/A
Rating Factor	2.69	3.74	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.38	5.61	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-6.17	4.69	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.55	10.31	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-3.04	N/A	0.00	0.00	-3.18	N/A	0.00	0.00
Design Ratio	0.77	N/A	N/A	N/A	1.44	N/A	N/A	N/A
Rating Factor	0.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.0	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Live Load Effect	-6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-15.8	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Resistance - Dead	-11.0	0.0	18.5	0.0	18.5	0.0	17.1	0.0
Design Ratio	1.27	N/A	3.63	N/A	(3.63)	(N/A)	(3.03)	(N/A)
Rating Factor	1.62	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	7.5	7.5	7.5	7.5	7.5	7.5	9.0	9.0
Live Load Effect	31.1	-24.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	38.5	-16.6	7.5	7.5	7.5	7.5	9.0	9.0
Resistance - Dead	415.0	-429.9	415.0	415.0	415.0	415.0	413.5	413.5
Design Ratio	10.96	25.52	56.50	56.50	(56.50)	(56.50)	(47.08)	(47.08)
Rating Factor	13.36	17.89	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.38	5.82	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-6.89	5.43	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.27	11.25	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-16.62	18.18	0.00	0.00	31.24	18.39	0.00	0.00
Design Ratio	1.68	2.13	N/A	N/A	N/A	4.27	N/A	N/A
Rating Factor	2.41	3.35	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.38	5.61	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-6.89	5.24	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.27	10.85	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-3.04	N/A	0.00	0.00	-3.18	N/A	0.00	0.00
Design Ratio	0.73	N/A	N/A	N/A	1.44	N/A	N/A	N/A
Rating Factor	0.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.0	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Live Load Effect	-7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-16.5	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Resistance - Dead	-11.0	0.0	18.5	0.0	18.5	0.0	17.1	0.0
Design Ratio	1.22	N/A	3.63	N/A	(3.63)	(N/A)	(3.03)	(N/A)
Rating Factor	1.48	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	7.5	7.5	7.5	7.5	7.5	7.5	9.0	9.0
Live Load Effect	33.3	-25.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	40.8	-18.0	7.5	7.5	7.5	7.5	9.0	9.0
Resistance - Dead	415.0	-429.9	415.0	415.0	415.0	415.0	413.5	413.5
Design Ratio	10.35	23.46	56.50	56.50	(56.50)	(56.50)	(47.08)	(47.08)
Rating Factor	12.45	16.87	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.38	5.82	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-7.56	5.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.95	11.79	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-16.62	18.18	0.00	0.00	31.24	18.39	0.00	0.00
Design Ratio	1.61	2.04	N/A	N/A	N/A	4.27	N/A	N/A
Rating Factor	2.20	3.05	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.38	5.61	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-7.56	5.75	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.95	11.37	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-3.04	N/A	0.00	0.00	-3.18	N/A	0.00	0.00
Design Ratio	0.70	N/A	N/A	N/A	1.44	N/A	N/A	N/A
Rating Factor	0.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.0	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Live Load Effect	-7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-16.8	0.0	7.0	0.0	7.0	0.0	8.4	0.0
Resistance - Dead	-11.0	0.0	18.5	0.0	18.5	0.0	17.1	0.0
Design Ratio	1.19	N/A	3.63	N/A	(3.63)	(N/A)	(3.03)	(N/A)
Rating Factor	1.42	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	7.5	7.5	7.5	7.5	7.5	7.5	9.0	9.0
Live Load Effect	33.8	-25.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	41.3	-18.2	7.5	7.5	7.5	7.5	9.0	9.0
Resistance - Dead	415.0	-429.9	415.0	415.0	415.0	415.0	413.5	413.5
Design Ratio	10.24	23.19	56.50	56.50	(56.50)	(56.50)	(47.08)	(47.08)
Rating Factor	12.28	16.73	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.38	5.82	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-7.86	6.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.24	12.02	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-16.62	18.18	0.00	0.00	31.24	18.39	0.00	0.00
Design Ratio	1.57	2.00	N/A	N/A	N/A	4.27	N/A	N/A
Rating Factor	2.11	2.93	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.38	5.61	0.00	0.00	-7.24	5.61	0.00	0.00
Live Load Effect	-7.86	5.98	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.24	11.59	0.00	0.00	-7.24	5.61	0.00	0.00
Resistance - Dead	-3.04	N/A	0.00	0.00	-3.18	N/A	0.00	0.00
Design Ratio	0.68	N/A	N/A	N/A	1.44	N/A	N/A	N/A
Rating Factor	0.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 105.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	103.3750			
Top Cover Plate Thickness	=	1.1250	Top Cover Plate Width	=	13.0000
Top Clearance	=	0.0000			
Top Flange Thickness	=	0.3750	Top Flange Width	=	12.3750
Web Depth	=	99.8750	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	12.3750
Bottom Clearance	=	0.0000			
Bottom Cover Plate Thickness	=	1.6250	Bottom Cover Plate Width	=	16.0000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Cover Plate	=	30.00
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00
Bottom Cover Plate	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners:
Fy = 30.000 ksi
Width = 5.000 in
Thickness = 0.375 in
Spacing = 62.000 in
B = 1.000 (Type Factor)
Singles or Pairs? PAIRS

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 13.000 ft
Maximum distance to Right Brace Point = 2.500 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION STIFFENER CHECKS:

Point of Interest : 105.000
Construction Stage: 1

No longitudinal stiffeners are present.

Transverse Stiffeners:

6.10.9.3.3	Spacing	N/A
6.10.11.1.2-1	Projecting Width	FAIL
6.10.11.1.2-2	Projecting Width	PASS
6.10.11.1.3-*	Moment of Inertia	PASS
6.10.11.1.3-11	Moment of Inertia	N/A

No bearing stiffeners are present.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	-20.0	0.0	-20.0	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.2.3-2	N/A	8.2.3-2	N/A	8.3-1	N/A
Dead Load Effect	-9.2	0.0	-9.2	0.0	-9.2	0.0	8.6	0.0
Live Load Effect	-13.1	0.0	-10.1	0.0	-10.1	0.0	0.0	0.0
Total Load Effect	-22.3	0.0	-19.3	0.0	-19.3	0.0	8.6	0.0
Resistance - Dead	-10.8	0.0	-10.8	0.0	-10.8	0.0	16.9	0.0
Design Ratio	0.90	N/A	1.04	N/A	(1.04)	(N/A)	(2.98)	(N/A)
Rating Factor	0.82	N/A	1.07	N/A	(1.07)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	-422.5	422.5	-422.5	422.5	422.5
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	48.9	-48.9	37.7	-37.7	37.7	-37.7	0.0	0.0
Total Load Effect	54.1	-43.6	42.9	-32.5	42.9	-32.5	6.3	6.3
Resistance - Dead	417.2	-427.7	417.2	-427.7	417.2	-427.7	416.2	416.2
Design Ratio	7.81	9.68	9.84	13.01	(9.84)	(13.01)	(67.30)	(67.30)
Rating Factor	8.54	8.75	11.07	11.35	(11.07)	(11.35)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-7.50	5.91	0.00	0.00	-7.50	5.91	0.00	0.00
Live Load Effect	-9.91	7.82	0.00	0.00	-7.63	6.01	0.00	0.00
Total Load Effect	-17.41	13.73	0.00	0.00	-15.12	11.93	0.00	0.00
Resistance - Dead	-16.50	18.09	0.00	0.00	-16.50	18.09	0.00	0.00
Design Ratio	1.38	1.75	N/A	N/A	1.59	2.01	N/A	N/A
Rating Factor	1.66	2.31	N/A	N/A	2.16	3.01	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.50	5.70	0.00	0.00	-7.50	5.70	0.00	0.00
Live Load Effect	-9.91	7.54	0.00	0.00	-7.63	5.80	0.00	0.00
Total Load Effect	-17.41	13.24	0.00	0.00	-15.12	11.50	0.00	0.00
Resistance - Dead	-2.93	N/A	0.00	0.00	-2.93	N/A	0.00	0.00
Design Ratio	0.60	N/A	N/A	N/A	0.69	N/A	N/A	N/A
Rating Factor	0.30	N/A	N/A	N/A	0.38	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	-20.0	0.0	-20.0	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.2.3-2	N/A	8.2.3-2	N/A	8.3-1	N/A
Dead Load Effect	-9.2	0.0	-9.2	0.0	-9.2	0.0	8.6	0.0
Live Load Effect	-11.1	0.0	-8.6	0.0	-8.6	0.0	0.0	0.0
Total Load Effect	-20.3	0.0	-17.7	0.0	-17.7	0.0	8.6	0.0
Resistance - Dead	-10.8	0.0	-10.8	0.0	-10.8	0.0	16.9	0.0
Design Ratio	0.99	N/A	1.13	N/A	(1.13)	(N/A)	(2.98)	(N/A)
Rating Factor	0.97	N/A	1.26	N/A	(1.26)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	-422.5	422.5	-422.5	422.5	422.5
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	41.0	-41.0	31.6	-31.6	31.6	-31.6	0.0	0.0
Total Load Effect	46.2	-35.8	36.9	-26.4	36.9	-26.4	6.3	6.3
Resistance - Dead	417.2	-427.7	417.2	-427.7	417.2	-427.7	416.2	416.2
Design Ratio	9.14	11.81	11.46	16.00	(11.46)	(16.00)	(67.30)	(67.30)
Rating Factor	10.18	10.43	13.19	13.52	(13.19)	(13.52)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-7.50	5.91	0.00	0.00	-7.50	5.91	0.00	0.00
Live Load Effect	-8.40	6.62	0.00	0.00	-6.46	5.09	0.00	0.00
Total Load Effect	-15.89	12.54	0.00	0.00	-13.96	11.01	0.00	0.00
Resistance - Dead	-16.50	18.09	0.00	0.00	-16.50	18.09	0.00	0.00
Design Ratio	1.51	1.91	N/A	N/A	1.72	2.18	N/A	N/A
Rating Factor	1.97	2.73	N/A	N/A	2.55	3.55	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.50	5.70	0.00	0.00	-7.50	5.70	0.00	0.00
Live Load Effect	-8.40	6.39	0.00	0.00	-6.46	4.91	0.00	0.00
Total Load Effect	-15.89	12.09	0.00	0.00	-13.96	10.61	0.00	0.00
Resistance - Dead	-2.93	N/A	0.00	0.00	-2.93	N/A	0.00	0.00
Design Ratio	0.66	N/A	N/A	N/A	0.75	N/A	N/A	N/A
Rating Factor	0.35	N/A	N/A	N/A	0.45	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.2	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Live Load Effect	-4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-14.1	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Resistance - Dead	-10.8	0.0	18.4	0.0	18.4	0.0	16.9	0.0
Design Ratio	1.42	N/A	3.58	N/A	(3.58)	(N/A)	(2.98)	(N/A)
Rating Factor	2.22	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	21.5	-21.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	26.7	-16.3	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	417.2	-427.7	417.2	417.2	417.2	417.2	416.2	416.2
Design Ratio	15.81	25.99	80.75	80.75	(80.75)	(80.75)	(67.30)	(67.30)
Rating Factor	19.42	19.91	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.50	5.91	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-4.99	3.93	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.49	9.85	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-16.50	18.09	0.00	0.00	31.35	18.30	0.00	0.00
Design Ratio	1.92	2.44	N/A	N/A	N/A	4.21	N/A	N/A
Rating Factor	3.31	4.60	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.50	5.70	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-4.99	3.79	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.49	9.50	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-2.93	N/A	0.00	0.00	-3.07	N/A	0.00	0.00
Design Ratio	0.83	N/A	N/A	N/A	1.42	N/A	N/A	N/A
Rating Factor	0.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.2	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Live Load Effect	-6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-15.2	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Resistance - Dead	-10.8	0.0	18.4	0.0	18.4	0.0	16.9	0.0
Design Ratio	1.31	N/A	3.58	N/A	(3.58)	(N/A)	(2.98)	(N/A)
Rating Factor	1.79	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	23.6	-23.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	28.8	-18.3	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	417.2	-427.7	417.2	417.2	417.2	417.2	416.2	416.2
Design Ratio	14.67	23.05	80.75	80.75	(80.75)	(80.75)	(67.30)	(67.30)
Rating Factor	17.71	18.15	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.50	5.91	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-6.13	4.83	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.63	10.75	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-16.50	18.09	0.00	0.00	31.35	18.30	0.00	0.00
Design Ratio	1.76	2.23	N/A	N/A	N/A	4.21	N/A	N/A
Rating Factor	2.69	3.74	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.50	5.70	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-6.13	4.66	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.63	10.36	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-2.93	N/A	0.00	0.00	-3.07	N/A	0.00	0.00
Design Ratio	0.76	N/A	N/A	N/A	1.42	N/A	N/A	N/A
Rating Factor	0.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.2	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Live Load Effect	-6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-15.4	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Resistance - Dead	-10.8	0.0	18.4	0.0	18.4	0.0	16.9	0.0
Design Ratio	1.30	N/A	3.58	N/A	(3.58)	(N/A)	(2.98)	(N/A)
Rating Factor	1.76	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	22.2	-22.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	27.4	-16.9	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	417.2	-427.7	417.2	417.2	417.2	417.2	416.2	416.2
Design Ratio	15.42	24.94	80.75	80.75	(80.75)	(80.75)	(67.30)	(67.30)
Rating Factor	18.82	19.29	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.50	5.91	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-6.29	4.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.78	10.87	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-16.50	18.09	0.00	0.00	31.35	18.30	0.00	0.00
Design Ratio	1.74	2.21	N/A	N/A	N/A	4.21	N/A	N/A
Rating Factor	2.63	3.65	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.50	5.70	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-6.29	4.78	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.78	10.48	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-2.93	N/A	0.00	0.00	-3.07	N/A	0.00	0.00
Design Ratio	0.76	N/A	N/A	N/A	1.42	N/A	N/A	N/A
Rating Factor	0.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.2	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Live Load Effect	-5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-14.6	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Resistance - Dead	-10.8	0.0	18.4	0.0	18.4	0.0	16.9	0.0
Design Ratio	1.37	N/A	3.58	N/A	(3.58)	(N/A)	(2.98)	(N/A)
Rating Factor	2.00	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	23.7	-23.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	29.0	-18.5	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	417.2	-427.7	417.2	417.2	417.2	417.2	416.2	416.2
Design Ratio	14.58	22.83	80.75	80.75	(80.75)	(80.75)	(67.30)	(67.30)
Rating Factor	17.58	18.02	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.50	5.91	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-5.53	4.36	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.02	10.27	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-16.50	18.09	0.00	0.00	31.35	18.30	0.00	0.00
Design Ratio	1.84	2.34	N/A	N/A	N/A	4.21	N/A	N/A
Rating Factor	2.99	4.15	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.50	5.70	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-5.53	4.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.02	9.90	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-2.93	N/A	0.00	0.00	-3.07	N/A	0.00	0.00
Design Ratio	0.80	N/A	N/A	N/A	1.42	N/A	N/A	N/A
Rating Factor	0.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.2	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Live Load Effect	-6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-15.3	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Resistance - Dead	-10.8	0.0	18.4	0.0	18.4	0.0	16.9	0.0
Design Ratio	1.31	N/A	3.58	N/A	(3.58)	(N/A)	(2.98)	(N/A)
Rating Factor	1.78	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	26.2	-26.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	31.5	-21.0	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	417.2	-427.7	417.2	417.2	417.2	417.2	416.2	416.2
Design Ratio	13.42	20.10	80.75	80.75	(80.75)	(80.75)	(67.30)	(67.30)
Rating Factor	15.90	16.30	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.50	5.91	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-6.20	4.89	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.70	10.80	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-16.50	18.09	0.00	0.00	31.35	18.30	0.00	0.00
Design Ratio	1.75	2.22	N/A	N/A	N/A	4.21	N/A	N/A
Rating Factor	2.66	3.70	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.50	5.70	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-6.20	4.72	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.70	10.42	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-2.93	N/A	0.00	0.00	-3.07	N/A	0.00	0.00
Design Ratio	0.76	N/A	N/A	N/A	1.42	N/A	N/A	N/A
Rating Factor	0.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.2	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Live Load Effect	-6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-16.0	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Resistance - Dead	-10.8	0.0	18.4	0.0	18.4	0.0	16.9	0.0
Design Ratio	1.25	N/A	3.58	N/A	(3.58)	(N/A)	(2.98)	(N/A)
Rating Factor	1.59	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	27.6	-27.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	32.8	-22.3	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	417.2	-427.7	417.2	417.2	417.2	417.2	416.2	416.2
Design Ratio	12.89	18.93	80.75	80.75	(80.75)	(80.75)	(67.30)	(67.30)
Rating Factor	15.14	15.52	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.50	5.91	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-6.93	5.46	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.42	11.38	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-16.50	18.09	0.00	0.00	31.35	18.30	0.00	0.00
Design Ratio	1.66	2.11	N/A	N/A	N/A	4.21	N/A	N/A
Rating Factor	2.38	3.31	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.50	5.70	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-6.93	5.27	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.42	10.97	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-2.93	N/A	0.00	0.00	-3.07	N/A	0.00	0.00
Design Ratio	0.72	N/A	N/A	N/A	1.42	N/A	N/A	N/A
Rating Factor	0.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.2	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Live Load Effect	-7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-16.7	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Resistance - Dead	-10.8	0.0	18.4	0.0	18.4	0.0	16.9	0.0
Design Ratio	1.20	N/A	3.58	N/A	(3.58)	(N/A)	(2.98)	(N/A)
Rating Factor	1.45	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	29.4	-29.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	34.6	-24.2	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	417.2	-427.7	417.2	417.2	417.2	417.2	416.2	416.2
Design Ratio	12.20	17.47	80.75	80.75	(80.75)	(80.75)	(67.30)	(67.30)
Rating Factor	14.19	14.54	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.50	5.91	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-7.63	6.02	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.13	11.93	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-16.50	18.09	0.00	0.00	31.35	18.30	0.00	0.00
Design Ratio	1.59	2.01	N/A	N/A	N/A	4.21	N/A	N/A
Rating Factor	2.16	3.00	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.50	5.70	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-7.63	5.81	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.13	11.51	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-2.93	N/A	0.00	0.00	-3.07	N/A	0.00	0.00
Design Ratio	0.69	N/A	N/A	N/A	1.42	N/A	N/A	N/A
Rating Factor	0.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	f	M	f	M	f	M	f	M
Resistance	-20.0	0.0	25.5	0.0	25.5	0.0	25.5	0.0
6.10. or Appendix A	8.2.3-2	N/A	8.3-1	N/A	8.3-1	N/A	8.3-1	N/A
Dead Load Effect	-9.2	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Live Load Effect	-7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-17.0	0.0	7.1	0.0	7.1	0.0	8.6	0.0
Resistance - Dead	-10.8	0.0	18.4	0.0	18.4	0.0	16.9	0.0
Design Ratio	1.18	N/A	3.58	N/A	(3.58)	(N/A)	(2.98)	(N/A)
Rating Factor	1.39	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	422.5	-422.5	422.5	422.5	422.5	422.5	422.5	422.5
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	29.7	-29.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	35.0	-24.5	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	417.2	-427.7	417.2	417.2	417.2	417.2	416.2	416.2
Design Ratio	12.08	17.23	80.75	80.75	(80.75)	(80.75)	(67.30)	(67.30)
Rating Factor	14.03	14.38	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-7.50	5.91	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-7.94	6.26	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.43	12.17	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-16.50	18.09	0.00	0.00	31.35	18.30	0.00	0.00
Design Ratio	1.56	1.97	N/A	N/A	N/A	4.21	N/A	N/A
Rating Factor	2.08	2.89	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-10.42	N/A	0.00	0.00	-10.42	N/A	0.00	0.00
Dead Load Effect	-7.50	5.70	0.00	0.00	-7.35	5.70	0.00	0.00
Live Load Effect	-7.94	6.04	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.43	11.74	0.00	0.00	-7.35	5.70	0.00	0.00
Resistance - Dead	-2.93	N/A	0.00	0.00	-3.07	N/A	0.00	0.00
Design Ratio	0.68	N/A	N/A	N/A	1.42	N/A	N/A	N/A
Rating Factor	0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

RATING FACTOR SUMMARY: Design Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.33	N/A	1.73	N/A	1.73	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.62	N/A	2.10	N/A	2.10	N/A	N/A	N/A
Critical	1.33	N/A	1.73	N/A	(1.73)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A		N/A		N/A		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	3.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.37	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.63	N/A	2.12	N/A	2.12	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.98	N/A	2.56	N/A	2.56	N/A	N/A	N/A
Critical	1.63	N/A	2.12	N/A	(2.12) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.35	N/A	4.34	N/A	4.34	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	4.10	N/A	5.31	N/A	5.31	N/A	N/A	N/A
Critical	3.35	N/A	4.34	N/A	(4.34) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.97	2.40	N/A	N/A	3.86	3.12	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.59	2.90	N/A	N/A	4.67	3.78	N/A	N/A
Critical	2.40		N/A		3.12		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.72	N/A	N/A	N/A	2.23	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.08	N/A	N/A	N/A	2.70	N/A	N/A	N/A
Critical	1.72		N/A		2.23		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	4.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	3.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	3.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.91	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	8.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	6.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	7.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	7.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	6.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	5.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	5.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		5.83	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	5.89	4.76	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.65	3.76	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.47	3.62	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.40	4.37	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.74	3.83	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.35	3.52	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.02	3.25	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.93	3.17	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.17		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	3.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.27		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.62	N/A	2.10	N/A	2.10	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.94	N/A	2.52	N/A	2.52	N/A	N/A	N/A
Critical	1.62	N/A	2.10	N/A	(2.10) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.96	N/A	5.14	N/A	5.14	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	4.85	N/A	6.29	N/A	6.29	N/A	N/A	N/A
Critical	3.96	N/A	5.14	N/A	(5.14) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.82	3.12	N/A	N/A	3.67	4.05	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.39	3.74	N/A	N/A	4.41	4.87	N/A	N/A
Critical	2.82		N/A		3.67		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.08	N/A	N/A	N/A	1.40	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.29	N/A	N/A	N/A	1.68	N/A	N/A	N/A
Critical	1.08		N/A		1.40		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	4.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	3.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	3.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.84	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	9.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	8.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	7.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	9.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	8.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	7.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	6.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	6.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		6.76	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	5.58	6.16	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.49	4.96	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.35	4.80	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.10	5.63	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.52	4.99	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.07	4.49	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.76	4.15	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.67	4.06	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.67		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	2.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	1.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	1.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.40		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.26	N/A	1.63	N/A	1.63	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.50	N/A	1.95	N/A	1.95	N/A	N/A	N/A
Critical	1.26	N/A	1.63	N/A	(1.63) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	5.03	N/A	6.52	N/A	6.52	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	6.14	N/A	7.95	N/A	7.95	N/A	N/A	N/A
Critical	5.03	N/A	6.52	N/A	(6.52) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.10	2.86	N/A	N/A	2.73	3.72	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.50	3.41	N/A	N/A	3.25	4.43	N/A	N/A
Critical	2.10		N/A		2.73		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	0.49	N/A	N/A	N/A	0.64	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	0.59	N/A	N/A	N/A	0.76	N/A	N/A	N/A
Critical	0.49		N/A		0.64		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	3.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.18	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	12.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	10.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	10.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	11.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	10.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	9.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	8.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	8.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		8.44	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	4.15	5.66	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	3.32	4.52	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	3.31	4.51	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.78	5.16	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.35	4.57	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.01	4.10	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.74	3.74	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.68	3.65	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.68		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	0.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	0.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	0.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	0.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	0.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	0.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	0.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	0.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		0.63		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	0.88	N/A	1.14	N/A	1.14	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.04	N/A	1.35	N/A	1.35	N/A	N/A	N/A
Critical	0.88	N/A	1.14	N/A	(1.14)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	6.59	12.06	8.55	15.63	8.55	15.63	N/A	N/A
2 - HL-93-TANDEM (TRK)	7.98	13.95	10.34	18.09	10.34	18.09	N/A	N/A
Critical	6.59	12.06	8.55	15.63	(8.55)	(15.63)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.75	2.42	N/A	N/A	2.27	3.15	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.08	2.87	N/A	N/A	2.70	3.73	N/A	N/A
Critical	1.75		N/A		2.27		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	0.33	N/A	N/A	N/A	0.43	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	0.40	N/A	N/A	N/A	0.51	N/A	N/A	N/A
Critical	0.33		N/A		0.43		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	2.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	1.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	1.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.49	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	15.55	26.32	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	13.38	26.57	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	13.63	28.28	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	14.13	23.66	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	12.69	21.65	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	11.93	21.07	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	11.08	20.05	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	10.90	19.97	N/A	N/A	N/A	N/A	N/A	N/A
Critical		10.90	19.97	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	3.46	4.79	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.78	3.85	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.77	3.83	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.14	4.35	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.79	3.86	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.51	3.47	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.28	3.15	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.20	3.04	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.20		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	0.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	0.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	0.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	0.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	0.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	0.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	0.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	0.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		0.42		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	0.84	N/A	1.09	N/A	1.09	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.00	N/A	1.29	N/A	1.29	N/A	N/A	N/A
Critical	0.84	N/A	1.09	N/A	(1.09)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	7.46	10.17	9.67	13.19	9.67	13.19	N/A	N/A
2 - HL-93-TANDEM (TRK)	8.97	11.98	11.62	15.52	11.62	15.52	N/A	N/A
Critical	7.46	10.17	9.67	13.19	(9.67)	(13.19)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.69	2.34	N/A	N/A	2.19	3.04	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.00	2.77	N/A	N/A	2.59	3.60	N/A	N/A
Critical	1.69		N/A		2.19		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	0.31	N/A	N/A	N/A	0.40	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	0.37	N/A	N/A	N/A	0.47	N/A	N/A	N/A
Critical	0.31		N/A		0.40		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	2.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	1.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	1.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.42	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	17.28	22.69	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	15.25	21.59	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	15.83	22.96	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	15.68	20.47	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	14.12	18.61	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	13.36	17.89	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	12.45	16.87	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	12.28	16.73	N/A	N/A	N/A	N/A	N/A	N/A
Critical		12.28	16.73	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	3.35	4.64	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.70	3.74	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.66	3.69	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.03	4.20	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.69	3.74	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.41	3.35	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.20	3.05	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.11	2.93	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.11		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	0.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	0.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	0.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	0.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	0.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	0.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	0.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	0.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		0.39		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	0.82	N/A	1.07	N/A	1.07	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	0.97	N/A	1.26	N/A	1.26	N/A	N/A	N/A
Critical	0.82	N/A	1.07	N/A	(1.07)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	8.54	8.75	11.07	11.35	11.07	11.35	N/A	N/A
2 - HL-93-TANDEM (TRK)	10.18	10.43	13.19	13.52	13.19	13.52	N/A	N/A
Critical	8.54	8.75	11.07	11.35	(11.07)	(11.35)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.66	2.31	N/A	N/A	2.16	3.01	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.97	2.73	N/A	N/A	2.55	3.55	N/A	N/A
Critical	1.66		N/A		2.16		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	0.30	N/A	N/A	N/A	0.38	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	0.35	N/A	N/A	N/A	0.45	N/A	N/A	N/A
Critical	0.30		N/A		0.38		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	2.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	1.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	1.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.39	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	19.42	19.91	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	17.71	18.15	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	18.82	19.29	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	17.58	18.02	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	15.90	16.30	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	15.14	15.52	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	14.19	14.54	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	14.03	14.38	N/A	N/A	N/A	N/A	N/A	N/A
Critical		14.03	14.38	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	3.31	4.60	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.69	3.74	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.63	3.65	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.99	4.15	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.66	3.70	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.38	3.31	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.16	3.00	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.08	2.89	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.08		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	0.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	0.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	0.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	0.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	0.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	0.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	0.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		0.37		N/A		N/A		N/A	

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load Combination No.	Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	SERVICE II	0.30	10.63
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	105.0000	SERVICE II	0.35	8.71
Crit	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	SERVICE II	0.30	10.63

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	SERVICE II-O	0.38	13.81
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	105.0000	SERVICE II-O	0.45	11.32
Crit	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	SERVICE II-O	0.38	13.81

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load							
3	TYPE3	(TRK)	25.00	105.0000	SERVICE II	0.59	14.66
4	TYPE3S2	(TRK)	36.00	105.0000	SERVICE II	0.48	17.19
5	TYPE3-3	(TRK)	40.00	105.0000	SERVICE II	0.47	18.62
6	SU4	(TRK)	27.00	105.0000	SERVICE II	0.53	14.30
7	SU5	(TRK)	31.00	105.0000	SERVICE II	0.47	14.62
8	SU6	(TRK)	34.75	105.0000	SERVICE II	0.42	14.68
9	SU7	(TRK)	38.75	105.0000	SERVICE II	0.38	14.85
10	NRL	(TRK)	40.00	105.0000	SERVICE II	0.37	14.75
Crit	NRL	(TRK)	40.00	105.0000	SERVICE II	0.37	14.75

LIMIT STATE LEGEND:

BRASS	Specifications
STRENGTH I	Strength I Inventory
STRENGTH I-O	Strength I Operating
STRENGTH II	Strength II
STRENGTH IV	Strength IV
SERVICE I	Service I
SERVICE II	Service II Inventory
SERVICE II-O	Service II Operating
FATIGUE I	Fatigue I
FATIGUE II	Fatigue II

BRIDGE LOAD RATING REPORT

BRIDGE 35-1-5.91, Structure No. 080404000003075

Single Lane Steel Bridge, (50'-0" Girder Length)

Cherokee National Forest
Tellico Ranger District
Southern Region, USFS

May 2019

PREPARED BY:
DJ&A, P.C. Engineers – Planners – Surveyors
3203 Russell Street
Missoula, MT 59801

RATED BY:
Ammon Groesbeck, P.E.

CHECKED BY:
Brad Miller, P.E.

RATING ENGINEER:
Ammon Groesbeck, P.E.

GENERAL COMMENTS:

Rating factors are calculated for the HL-93 design live loads (Inventory and Operating), Type 3, Type 3S2, Type 3-3, and SU4, SU5, SU6, SU7 legal vehicles, and the AASHTO Notional Rating Load (NRL).

BRASS 8.0, Microsoft Excel, MathCAD 15.0, and Visual Analysis 18.0 are used for bridge rating calculations.

BRASS output is furnished for the controlling girder line (interior or exterior) only.

See the calculation sheets immediately following the Rating Form for detailed rating assumption information.

DRAWING/DESIGN ASSUMPTIONS:

Available design drawings for the deck were used as a reference for this bridge load rating. All other information for this rating was field-measured by DJ&A at a site visit.

BRIDGE CONDITION ASSUMPTIONS:

This bridge is rated based on the latest USFS bridge inspection, available USFS design drawings, and DJ&A site visit measurements. This site was visited by DJ&A prior to completing rating calculations to verify dimensions and condition assumptions.

Abutment scour observed during the site visit and noted in the inspection report does not require a reduction in bridge superstructure load capacity.

CONTROLLING RATING:

The rating factors for Type 3, Type 3S2, and Type 3-3 AASHTO legal vehicles are greater than 1.0; therefore load posting of the bridge is not required.

BRIDGE RATING FORM
USFS REGION 8 LOAD RATING REPORT

Forest:	Cherokee	Ranger District:	Tellico
Bridge Name:	35-1-5.91	Structure No.:	080404000003075
Rated By:	Ammon Groesbeck	Date:	May 2019
Firm:	DJ&A P.C.	Drawing No.	-

==========

SUMMARY OF CONTROLLING RATING

(Rating Factors)

	RF	Safe Load Capacity (tons)	Controlling Member	Location (Span Ratio)	M, V, or B
HL-93 Inventory	0.94	-	Stringer	104.50	M
HL-93 Operating	1.22	-	Stringer	104.50	M
Type 3 Truck	1.63	40	Stringer	104.50	M
Type 3S2 Truck	1.79	64	Stringer	104.50	M
Type 3-3 Truck	1.98	79	Stringer	104.50	M
SU4 Truck	1.50	40	Stringer	104.50	M
SU5 Truck	1.50	46	Stringer	104.50	M
SU6 Truck	1.50	52	Stringer	104.50	M
SU7 Truck	1.50	58	Stringer	104.50	M
NRL	1.50	60	Stringer	104.50	M

Notes or Comments:

Safe load capacity is calculated as RF x GVW if RF ≥ 1.0. If RF < 1.0, equation 6A.8.3-1 in the Manual for Bridge Evaluation is used to calculate the safe posting load (highlighted).

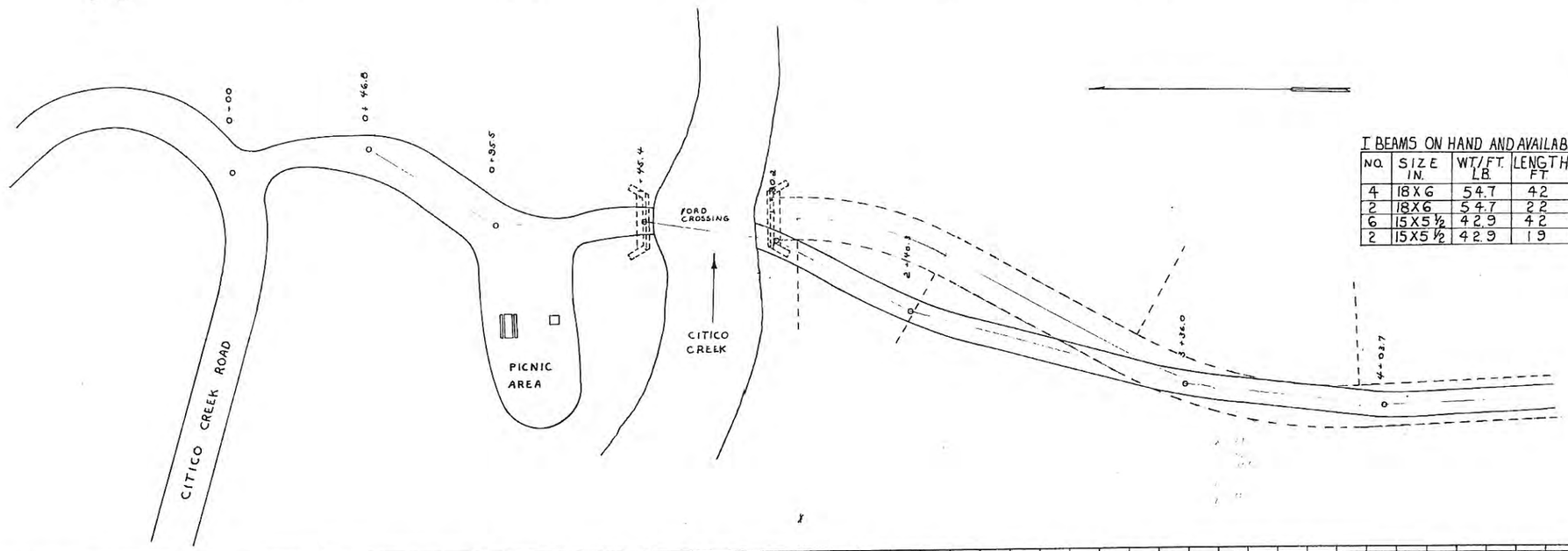
Locations are span fractions as designated in BRASS (e.g. 105.00 = Mid-span).

M = Moment, V = Shear, and B = Bearing

CITICO CREEK
BRIDGE SITE # 1

DRAINAGE AREA : 4852 ACRES

SCALE 1" = 20'

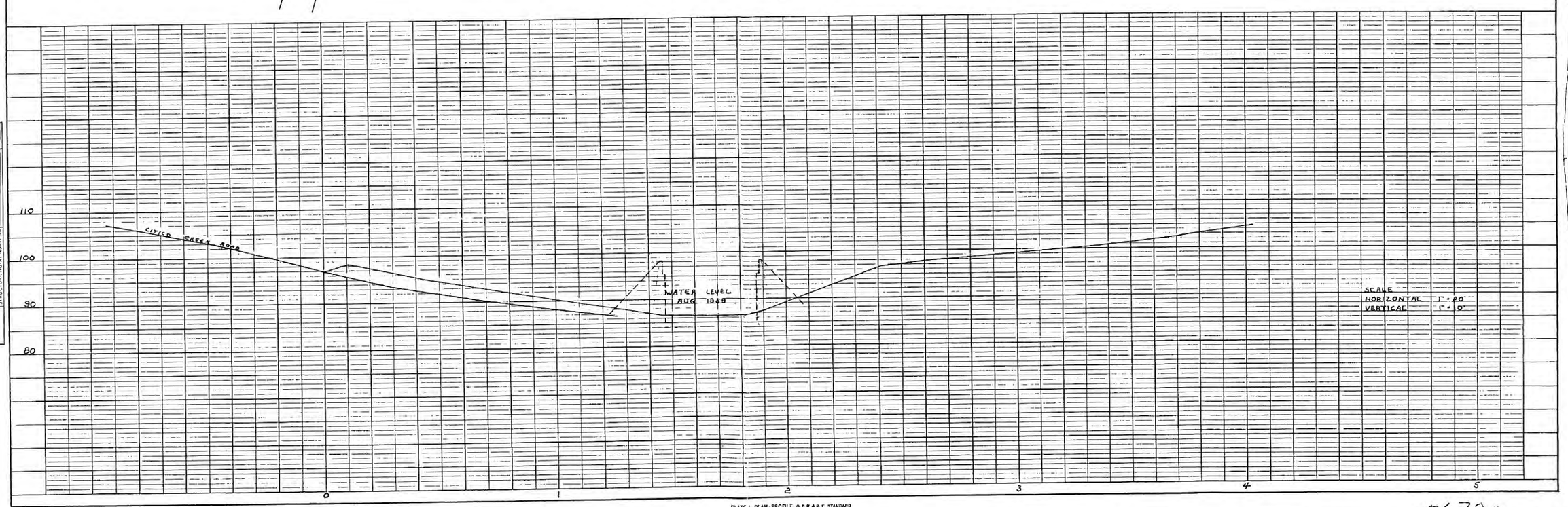


I BEAMS ON HAND AND AVAILABLE FOR USE

NO.	SIZE IN.	WT/FT LB.	LENGTH FT	SECTION MODULUS IN.³
4	18X6	54.7	42	88.4
2	18X6	54.7	22	88.4
6	15X5½	42.9	42	58.9
2	15X5½	42.9	19	58.9

2 @ 8' 2" left.
2 @ 42' 2" left.
2 @ 5' 2" left for splices.
24' for diaphs.

PLAN
SURVEYED R.H.B. 3/59
PLOTTED 3/59
NOTE BOOK PLOTTED 3/59
NO. RIGHT OF WAY CHECKED J.S.



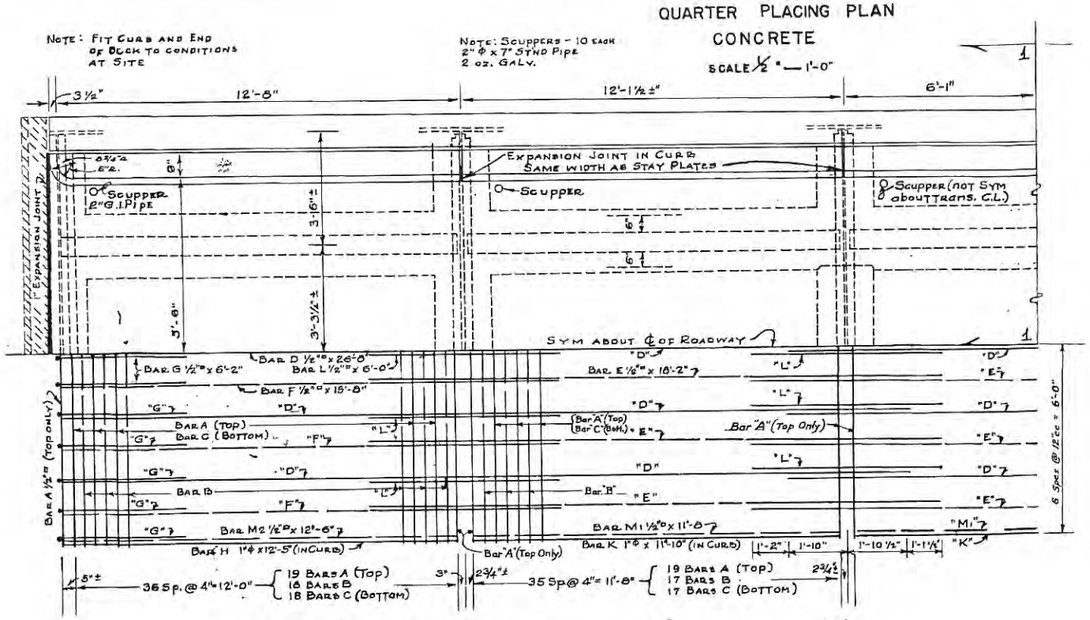
SCALE
HORIZONTAL 1" = 20'
VERTICAL 1" = 10'

PROFILE
BY D.W.H. 3/59
SURVEYED R.H.B. 3/59
PLOTTED 3/59
NOTE BOOK SWM
NO. STRUCTURE INVT. AT NSCH KO

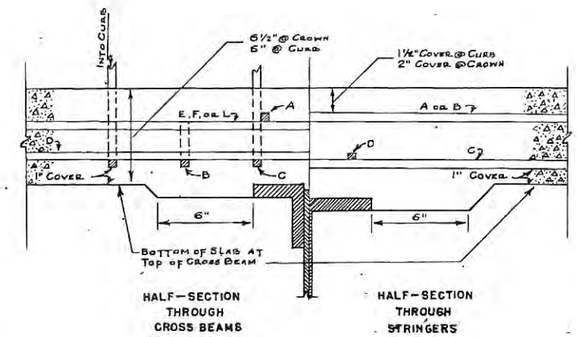
PLATE 1 PLAN-PROFILE O.P.R.&R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.
K & E CO. NO. 343-1

26700

QUARTER PLACING PLAN
CONCRETE
SCALE 1/2" — 1'-0"

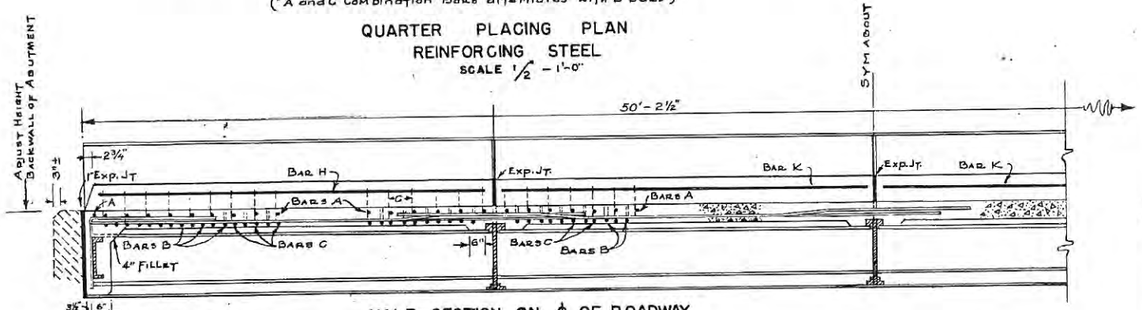


("A and C Combination" Bars alternates with B Bars)

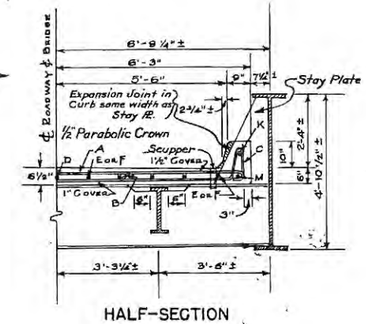


RELATIVE ELEVATIONS AND SLAB HAUNCHES
SCALE 3" — 1'-0"

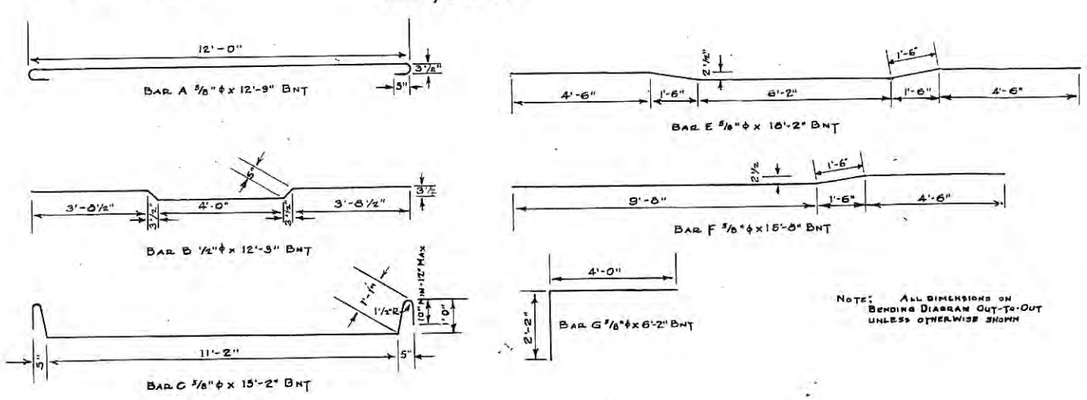
QUARTER PLACING PLAN
REINFORCING STEEL
SCALE 1/2" — 1'-0"



HALF-SECTION ON ℄ OF ROADWAY
SCALE 1/2" — 1'-0"



HALF-SECTION 1-1
SCALE 1/2" — 1'-0"



NOTE: ALL DIMENSIONS ON BENDING DIAGRAM OUT-TO-OUT UNLESS OTHERWISE SHOWN

REINFORCING STEEL SCHEDULE				
BAR MK.	NO. REQD	SECT. IN.	LENGTH FT.-IN.	REMARKS
A	78	⅝ϕ	12 - 9	BNT.
B	70	½ϕ	12 - 3	"
C	70	⅝ϕ	15 - 2	"
D	10	½ϕ	26 - 0	ST.
E	12	⅝ϕ	16 - 2	BNT
F	12	"	15 - 8	"
G	26	"	6 - 2	"
H	4	1"ϕ	12 - 5	ST.
K	4	"	11 - 10	"
L	15	⅝ϕ	6 - 0	"
M1	4	"	11 - 8	"
M2	4	"	12 - 6	"
X	2	"	20 - 0	ST. Spacer Bars

ESTIMATE OF QUANTITIES

CLASS A CONCRETE — 17.0 Cu Yd.
MAX. TOTAL WATER 6 GAL PER SACK CEMENT
MAX AGGREGATE SIZE 3/4"

REINFORCING STEEL (DEFORMED-INTERMEDIATE GRD) 3640 LBS

SCUPPERS 2"ϕ x 7" STND PIPE - 2 oz. GALV. — 10 Reqd.

DESIGN DATA

f_s = 18000 p.s.i.
f_c' = 3600 p.s.i. @ 28 DAYS
f_c = 1200 p.s.i.

LOADING

H-15 '44 A.A.S.H.O.

Note: Bar sizes revised in accordance with correspondence of Mar. 8, 1948. - F.G.B., 8-16-48.

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION 8 — R.E. PIDGEON REGIONAL ENGR.

CHEROKEE N.F.
CITICO RIVER BR. NO. 1
CONCRETE DECK

DESIGNED G.T.P. DRAWN G.T.P. TRACED W.D.R.
SCALE As Shown CHECKED K.B.H.
APPROVED [signature] DATE 2-12-48

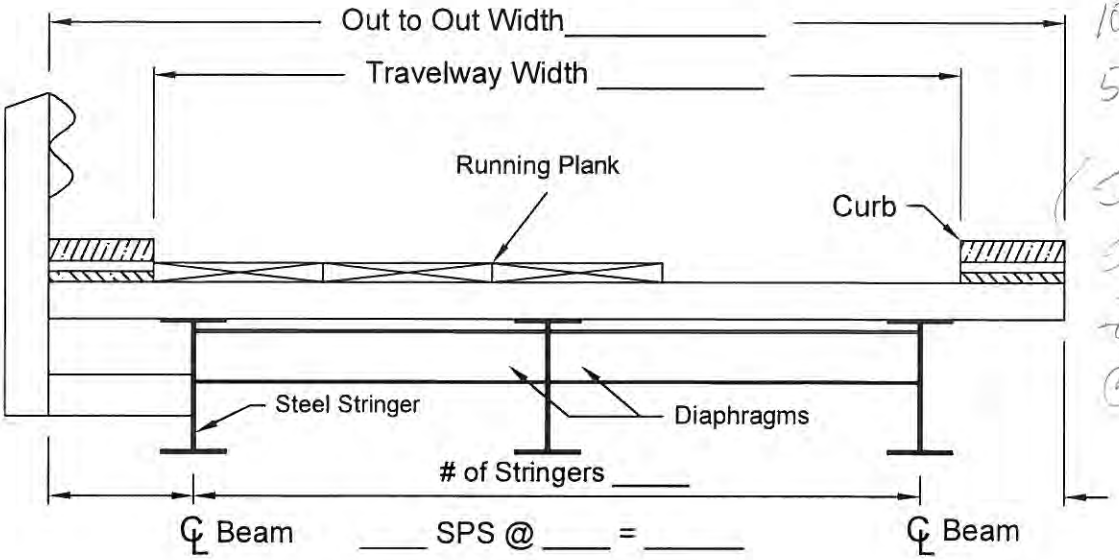
SHEET 1 OF 1 — DRAWING R-8301

5-2-15

Single Span Steel Bridge

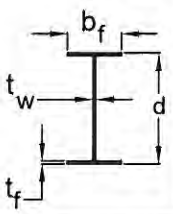
(All Measurements in Feet and Inches)

Bam
35-1 3.92
10:00 am
5/22/2018
(See single span sketch or Br 3.92 @ 6.70)



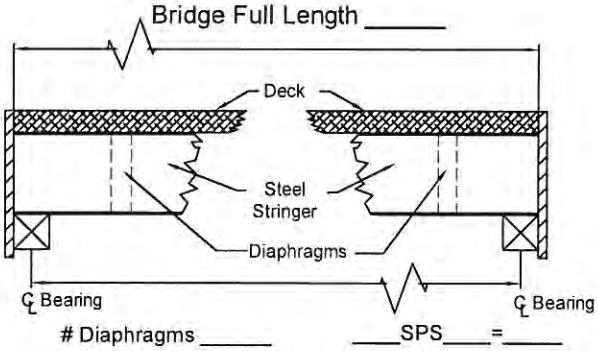
Steel Stringer

Measure to 1/16"



d _____
b_f _____
t_w _____
t_f _____

(Pick One ✓)
Rolled Shape _____
Welded Plate Girder _____
Riveted Built_up Member_____



Bearing Distance_____
Elevation

Deck
Plank (Size) _____
Nail Laminated (Depth) _____
Glue Laminated (Depth) _____
Steel Corrugated (Depth) _____
Conc. Cast in Place (Depth)_____
Conc. Precast Panels (Depth) _____

Curb/ Railing
Curb Only Ht_____
W-Beam Ht _____
Other(Describe)_____

Wearing Surface
None _____
Steel Plate (size) _____
Timber Running Plank (size) _____
Gravel (Depth) _____
Asphalt (Depth) _____

Substructure (Pick One ✓)
Piling _____ Crib _____ Other(Describe)_____
Ledger/Sill _____ Wall _____

Substructure Material Type (Pick One ✓)
Timber,Treated _____
Timber,Untreated _____
Steel _____
Reinforced Concrete _____
Gabion _____
Other (Describe) _____

Take pictures along bridge surface and underneath to illustrate features ie. wearing surface, railing, stringers/slabs, substructure

Skew (Left or Right Ahead)
0° ____15°____ 30°____ 45°____

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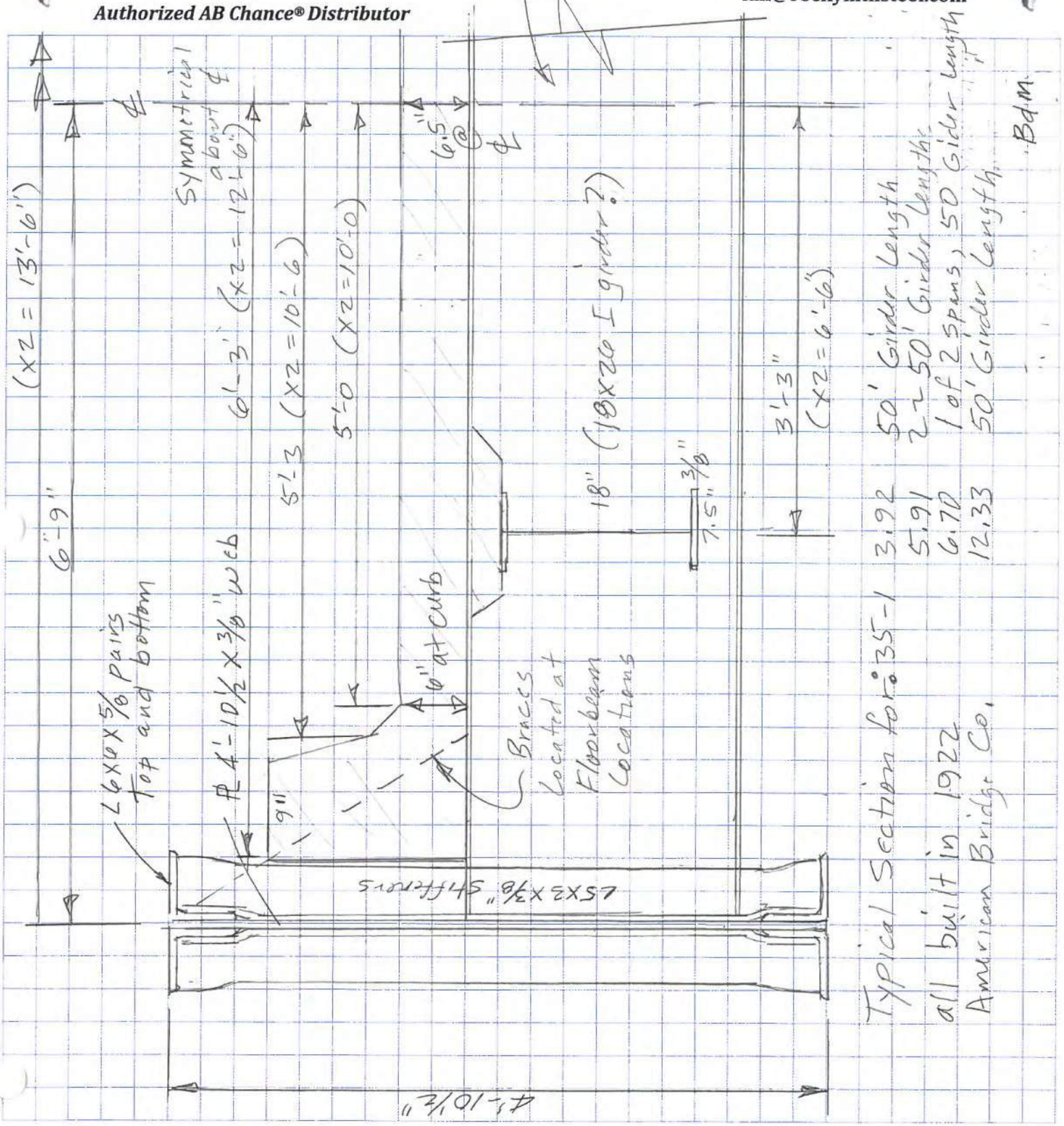

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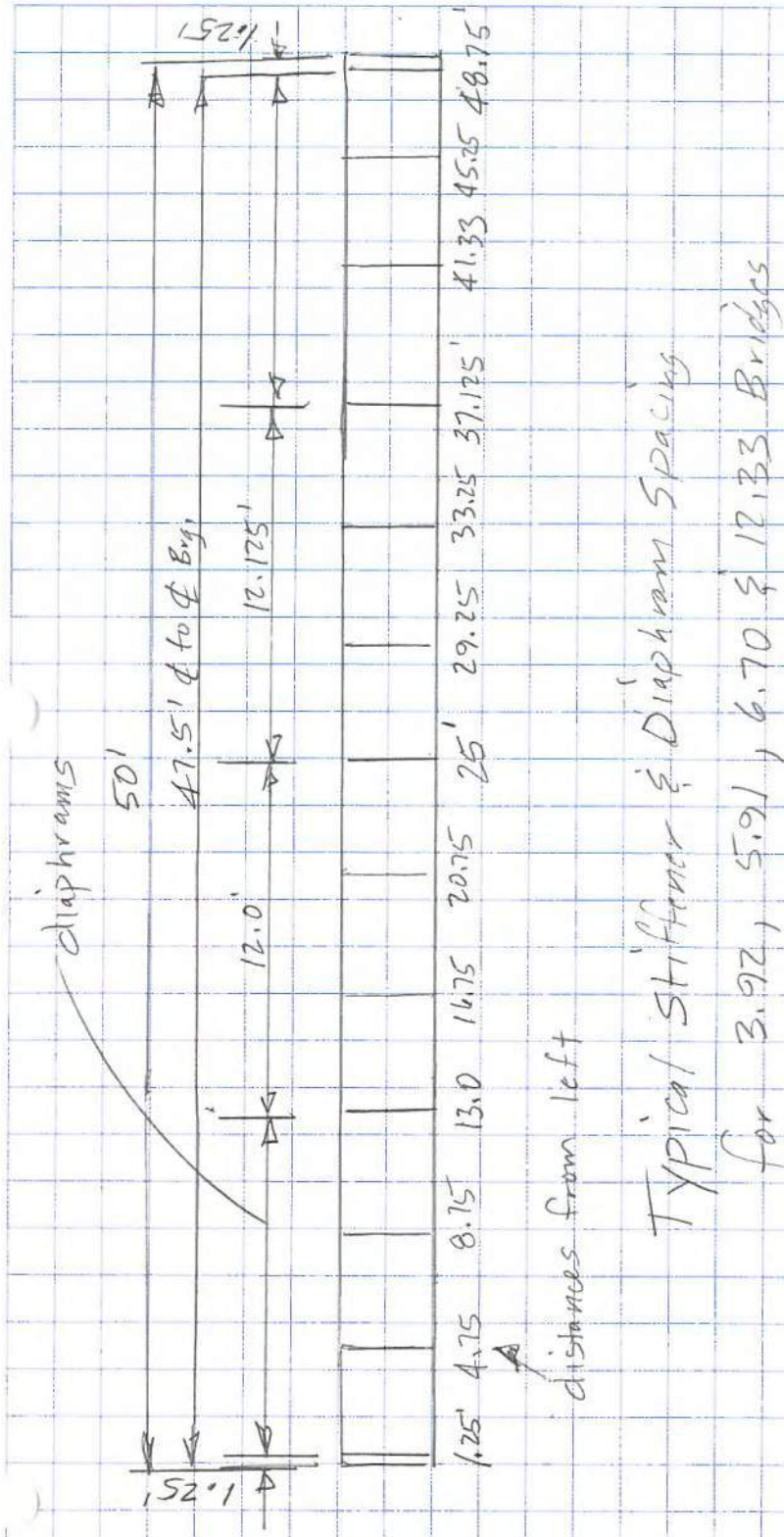


Typical Stiffener & Diaphram Spacing
for 3.92, 5.91, 6.70 & 12.33 Bridges

Calculations are in accordance with AASHTO LRFD Bridge Design Specifications, 8th Ed. & AASHTO Manual for Bridge Evaluation, 3rd Ed.
References to the Design Specifications are shown in [ ] brackets, references to the Bridge Evaluation Manual are shown in { } brackets.

ENGINEERS PLANNERS SURVEYORS

GENERAL COMMENTS AND ASSUMPTIONS

All dimensions and properties of the existing bridge taken from USFS design drawings and field measurements.
Load Resistance Factor Rating (LRFR) methodology is used.
Load rating calculations are completed for superstructure elements only.
Live load distribution by approximate method.
BRASS-GIRDER v.8.0 program used for girder rating calculations. Electronic input/output BRASS files can be found in the Regional Bridge Engineer's files.

GENERAL INFORMATION

The following unit weights are used:

Concrete,	$\gamma c := 150 \cdot pcf$	pcf = Pounds Per Cubic Foot
Asphalt,	$\gamma ws := 140 \cdot pcf$	[Table 3.5.1-1]
Steel,	$\gamma s := 490 \cdot pcf$	
Wood,	$\gamma w := 50 \cdot pcf$	

Load Modifiers are as follows:

Ductility	$\eta D := 1.0$	For Conventional Designs		[1.3.3]
Redundancy	$\eta R := 1.0$	For Conventional Redundancy	** System factor reduction made for non-redundant bridges. **	[1.3.4]
Importance	$\eta I := 1.0$	For Typical Bridges		[1.3.5]

$\eta i = \eta D \cdot \eta R \cdot \eta I \geq 0.95$ [1.3.2.1] therefore, $\eta i := \max(\eta D \cdot \eta R \cdot \eta I, 0.95) = 1.00$
(maximum load factors)

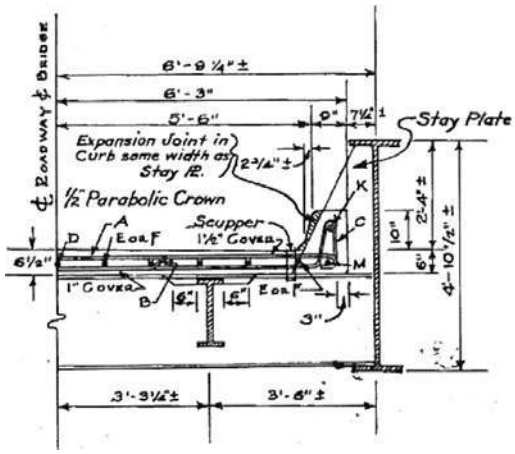
Load Factors are as follows:

	STRENGTH	SERVICE		
DC:	$\gamma DC := 1.25$	$\gamma DC_S := 1.0$	Dead Load of Components	
DW:	$\gamma DW := 1.50$	$\gamma DW_S := 1.0$	Dead Load of Wearing Surface	{6A.4.2.2-1 Notes}
Design LL:	$\gamma HL93_I := 1.75$	$\gamma HL93_{I.S} := 1.30$	HL-93 Live Load - Inventory Level	{Table 6A.4.2.2-1}
	$\gamma HL93_O := 1.35$	$\gamma HL93_{O.S} := 1.0$	HL-93 Live Load - Operating Level	
AASHTO Legal LL:	$\gamma LEGAL := 1.30$	$\gamma LEGAL_S := 1.30$	Type 3, Type 3S2, Type 3-3, SU4-SU7, NRL	{Table 6A.4.4.2.3a-1} $ADTT \leq 1000$

Resistance Factors are as follows:

Resistance Factor:		$\phi_f := 1.0$	$\phi_v := 1.0$	Steel Girders Flexure or Shear	[6.5.4.2]
		$\phi_{f.D} := 0.9$		Tension-Controlled Reinforced Concrete Sections	[5.5.4.2.1]
Condition Factor:	Girders,	$\phi c := 0.95$		** Based on Most Recent Inspection **	{Table 6A.4.2.3-1}
		$\phi c_{FB} := 0.95$		Floor Beams	
		$\phi c_S := 1.0$		Stringers	
		$\phi c_{deck} := 1.0$		For the Deck	
System Factor:		$\phi s := 0.85$		For 2 Girder Bridge Per USFS (& Stringers)	{Table 6A.4.2.4-1}
		$\phi s_{FB} := 1.0$		Floor Beams	
		$\phi s_{deck} := 1.0$		Deck	

BRIDGE GEOMETRY



Roadway Width,	$Wr := 10 \cdot ft$	Skew,	$Skew := 0 \cdot deg$	
Out-to-Out Deck Width,	$Wd := 12.5 \cdot ft$	Spans 1 & 2,	$Span := 47.5 \cdot ft$	CL Brg. to CL Brg.
Girder Spacing,	$S := 13.5 \cdot ft$	Stringer Span,	$Span_S := 12.5 \cdot ft$	Max
Stringer Spacing,	$S_S := 6.5 \cdot ft$	Stringer Span,	$Span_{S2} := 11.25 \cdot ft$	
Number of Lanes,	$N_L := 1$	Number of Girders,	$N := 2$	
		Number of Stringers,	$N_S := 2$	
		Overhang,	$S_{over} := \frac{Wd - (N-1) \cdot S_S}{2} = 3.0000 \cdot ft$	

MATERIAL PROPERTIES

Concrete Deck: **Cast-In-Place Concrete Deck**

$t_D := 6 \cdot in$	Deck Thickness
$t_{D.OH} := 6 \cdot in$	Deck Thickness at Face of Exterior Soffit
$t_{D.OH.avg} := 6 \cdot in$	Average Deck Thickness for DL Calcs - Overhang
$Fc_D := 3000 \cdot psi$	28-day Compressive Strength
$Fy_D := 40 \cdot ksi$	Deck Rebar Yield
$cover_{top} := 1.5 \cdot in$	Concrete Cover to Top Transverse Bars
$cover_{bot} := 1 \cdot in$	Concrete Cover to Bottom Transverse Bars

Steel Stringer: **Rolled Steel Stringer**

$b_{f.S} := 7.5 \cdot in$	Flange Width
$t_{f.S} := 0.375 \cdot in$	Flange Thickness
$d_S := 18 \cdot in$	Beam Depth
$t_{w.S} := 0.375 \cdot in$	Web Thickness (Assumed)
$E := 29000 \cdot ksi$	Modulus of Elasticity
$F_y := 30 \cdot ksi$	Yield Stress - Based on Construction Between 1905 & 1935 {Table 6.A.6.2.1-1}

$A_S := 2 \cdot b_{f.S} \cdot t_{f.S} + (d_S - 2 \cdot t_{f.S}) \cdot t_{w.S} = 12.09 \cdot in^2$ Gross Area

$d_{S.web} := d_S - 2 \cdot t_{f.S} = 17.250 \cdot in$ Web Depth

Steel Floor Beam: **Rolled Steel Floor Beam**

$b_{f.FB} := 7 \cdot in$ Flange Width

$t_{f.FB} := 0.625 \cdot in$ Flange Thickness

$d_{FB} := 24 \cdot in$ Floorbeam Depth

$t_{w.FB} := 0.5 \cdot in$ Web Thickness (Assumed)

$A_{FB} := 2 \cdot b_{f.FB} \cdot t_{f.FB} + \left(d_{FB} - 2 \cdot t_{f.FB}\right) \cdot t_{w.FB} = 20.13 \cdot in^2$ Gross Area

$d_{FB.web} := d_{FB} - 2 \cdot t_{f.FB} = 22.750 \cdot in$ Web Depth

Steel Girder: **Plate Girder**

$b_{f.G} := 12.375 \cdot in$ Flange Width - Out to Out of Angles & Web

$t_{f.G} := 0.625 \cdot in$ Flange Thickness - Angles

$d_G := 58.5 \cdot in$ Girder Depth - Web Only

$t_{w.G} := 0.375 \cdot in$ Web Thickness

Angles Top & Bottom are L6x6x5/8

BRIDGE RATING FACTOR ANALYSIS:

DEAD LOADS

Girder and curb weight computed by BRASS.

Component Dead Load, DC:

Concrete Curb,

$w_{curb} := 12 \cdot in$ $t_{curb} := 9 \cdot in$

$h_{curb} := 11 \cdot in$ $w_{curb2} := 3 \cdot in$

$$DC_{curb} := \left(\frac{w_{curb} + t_{curb}}{2} \cdot h_{curb} + \frac{w_{curb2}^{2}}{2} \right) \cdot \gamma c = 0.125 \cdot kl$$

Deck (Interior),

$$DC_{Deck} := t_D \cdot \gamma c = 0.075 \cdot ksf$$

Deck (Overhang),

$$DC_{Deck.OH} := t_{D.OH.avg} \cdot \gamma c = 0.075 \cdot ksf$$

$$DC_{Deck.OH.Brass} := \left(t_{D.OH.avg} - t_D\right) \cdot \gamma c = 0.000 \cdot ksf$$

Stringer Diaphragm (Assume C12x20.7),

$w_{Dia.S} := 20.7 \cdot plf$

$$DC_{Dia.S} := w_{Dia.S} \cdot \frac{S_S}{2} = 0.067 \cdot kip$$

Steel Stringer Self Weight,

$$DC_S := A_S \cdot \gamma s = 0.041 \cdot klf$$

Steel Floor Beam Self Weight,

$$DC_{FB} := A_{FB} \cdot \gamma s = 0.068 \cdot klf$$

Cross Bracing & Gussets (Plate Girder),

L 3-1/2 x 2-1/2 x 1/2 (Assumed),

$w_{Angle.G} := 9.4 \cdot plf$ $L_{Angle.G} := 17 \cdot ft$ $N_{Angle.G} := 2$

Increase by 20% for Gussets & Connections $DC_{brace.G} := \dfrac{1.2 \cdot w_{Angle.G} \cdot L_{Angle.G} \cdot N_{Angle.G}}{2 \cdot Span_S} = 0.015 \cdot klf$

Wearing Surface Dead Load, DW:

Asphalt Wearing Surface,

$t_{ws} := 0 \cdot in$ Average Thickness $DW_{ws} := t_{ws} \cdot \gamma ws = 0.000 \cdot ksf$

LIVE LOADS

Live loads and live load distribution factors are computed directly by BRASS.

Multiple Presence Factor: Multiple Presence Factor for live loads is included per [3.6.1.1.2].
Multiple Presence Factor may be reduced to 95% of given value for $ADTT \le 1000$

$m_1 := 1.2$ Multiple Presence Factor for Single Lane Bridge [Table 3.6.1.1.2-1]

Adjust m for Low ADTT? $Adjust_m1 := 1$ 1 for "Yes", 0 for "No"

$$m_{1adjusted} := \begin{cases} (0.95 \cdot m_1) & \text{if } Adjust_m1 = 1 \\ m_1 & \text{if } Adjust_m1 = 0 \end{cases} \qquad m_{1adjusted} = 1.14$$

CONCRETE DECK RATING FACTOR ANALYSIS:

CONCRETE DECK RATING

The deck transverse reinforcement is rated for moment. AASHTO LRFD strip widths are used to distribute the wheel loads.

DESIGN STRIP WIDTHS - [4.6.2.1]:

$X := 5.25 \cdot in$ Distance from Load to Point of Support

$B_{Pos} := 26 \cdot in + \frac{6.6 \cdot S}{12} = 9.59\,ft$ Interior Portion Between Girders (+Moment) [Table 4.6.2.1.3-1]

$B_{Neg} := 48 \cdot in + \frac{3.0 \cdot S}{12} = 7.37\,ft$ Interior Portion Over Girders (-Moment) [Table 4.6.2.1.3-1]

$B_{OH} := 45 \cdot in + \frac{10 \cdot X}{12} = 4.11\,ft$ Overhang (-Moment) [Table 4.6.2.1.3-1]

$B_{unit} := 1 \cdot ft$ Unit Strip Width for Dead & Live Loads in Visual Analysis

DECK NOMINAL RESISTANCE

Deck Thickness, $t_D = 6.00 \cdot in$

Nominal Flexural Resistance [5.7.3.2]

+Moment $Bar_No_{bot} := 5$ $Dia_{bar.bot} := \frac{Bar_No_{bot}}{8} \cdot in = 0.63 \cdot in$ $A_{bar.bot} := \frac{\pi}{4} \cdot \left(Dia_{bar.bot}\right)^2 = 0.31 \cdot in^2$

$d_{bot} := t_D - cover_{bot} - \frac{Dia_{bar.bot}}{2} = 4.69 \cdot in$

$Spa_{bar.bot} := 4 \cdot in$ $As_{bot} := A_{bar.bot} \cdot \frac{B_{Pos}}{Spa_{bar.bot}} = 8.83 \cdot in^2$ $a_{bot} := \frac{As_{bot} \cdot Fy_D}{0.85 \cdot Fc_D \cdot B_{Pos}} = 1.20 \cdot in$

$Mn_{D.Pos} := As_{bot} \cdot Fy_D \cdot \left(d_{bot} - \frac{a_{bot}}{2}\right) = 120.24 \cdot kip \cdot ft$ [5.7.3.2.2-1]

- Moment $Bar_No_{top} := 5$ $Dia_{bar.top} := \frac{Bar_No_{top}}{8} \cdot in = 0.63 \cdot in$ $A_{bar.top} := \frac{\pi}{4} \cdot \left(Dia_{bar.top}\right)^2 = 0.31 \cdot in^2$

$Spa_{bar.top} := 4 \cdot in$ $d_{top} := t_D - cover_{top} - \frac{Dia_{bar.top}}{2} = 4.19 \cdot in$

$As_{top} := A_{bar.top} \cdot \frac{B_{Neg}}{Spa_{bar.top}} = 6.79 \cdot in^2$ $a_{top} := \frac{As_{top} \cdot Fy_D}{0.85 \cdot Fc_D \cdot B_{Neg}} = 1.20 \cdot in$

$Mn_{D.Neg} := As_{top} \cdot Fy_D \cdot \left(d_{top} - \frac{a_{top}}{2}\right) = 81.14 \cdot kip \cdot ft$ [5.7.3.2.2-1]

Overhang -Moment

$Bar_No_{OH} := 5$ $\quad Dia_{bar.OH} := \frac{Bar_No_{OH}}{8} \cdot in = 0.63 \cdot in$ $\quad A_{bar.OH} := \frac{\pi}{4} \cdot (Dia_{bar.OH})^2 = 0.31 \cdot in^2$

$Spa_{bar.OH} := 4 \cdot in$ $\quad As_{OH} := A_{bar.OH} \cdot \frac{B_{OH}}{Spa_{bar.OH}} = 3.79 \cdot in^2$

$d_{OH} := t_D - \left(cover_{top} + \frac{Dia_{bar.OH}}{2}\right) = 4.19 \cdot in$ $\quad a_{OH} := \frac{As_{OH} \cdot Fy_D}{0.85 \cdot Fc_D \cdot B_{OH}} = 1.20 \cdot in$

$Mn_{D.OH} := As_{OH} \cdot Fy_D \cdot \left(d_{OH} - \frac{a_{OH}}{2}\right) = 45.27 \cdot kip \cdot ft$ [5.7.3.2.2-1]

DECK DEAD LOADS:

Component Dead Load, DC:

Curb Weight per Foot of Width - Apply at Edge of Deck in Visual Analysis: $DC_{Rail.D} := DC_{curb} \cdot B_{unit} = 0.125 \cdot kip$

Deck (Interior), $DC_D := DC_{Deck} \cdot B_{unit} = 0.075 \cdot klf$

Deck (Overhang), $DC_{D.OH} := DC_{Deck.OH} \cdot B_{unit} = 0.075 \cdot klf$

Wearing Surface Dead Load, DW:

Asphalt Wearing Surface, $DW_D := DW_{ws} \cdot B_{unit} = 0.000 \cdot klf$

DECK LIVE LOADS:

Add Dynamic Load Allowance per {6A.4.4.3} $IM_D := 0.33$

AASHTO LRFD 3.6.1.2.1 Specifies the **HL-93** vehicular live loading shall consist of the maximum of a design truck or design tandem. The design truck and design tandem must include the dynamic load allowance. Lane loads are not applied per 3.6.1.3.3. Only the axles of the design and legal vehicles are analyzed.

Live loads are applied as moving point loads equal to a 1 kip unit axle weight at 6' spacing in Visual Analysis.

DECK ANALYSIS RESULTS: (Per Unit Strip Width)

Deck loads were calculated using Visual Analysis.

	MAX (+) MOMENT	MAX (-) MOMENT	MAX (-) OH. MOMENT
DC	$M_{DC.Pos} := -0.32 \cdot kip \cdot ft$	$M_{DC.Neg} := 0.71 \cdot kip \cdot ft$	$M_{DC.OH} := 0.71 \cdot kip \cdot ft$
DW	$M_{DW.Pos} := 0 \cdot kip \cdot ft$	$M_{DW.Neg} := 0 \cdot kip \cdot ft$	$M_{DW.OH} := 0 \cdot kip \cdot ft$
1 kip Unit Truck	$M_{Unit.Pos} := 0.69 \cdot kip \cdot ft$	$M_{Unit.Neg} := 0.45 \cdot kip \cdot ft$	$M_{Unit.OH} := 0.45 \cdot kip \cdot ft$

Max Moments for Axle Loads:

	MAX (+) MOMENT	MAX (-) MOMENT
HL-93 $W_{HL93} := 32 \cdot kip$	$M_{HL93.Pos} := M_{Unit.Pos} \cdot \frac{W_{HL93}}{1 \cdot kip} = 22.08 \cdot kip \cdot ft$	$M_{HL93.Neg} := M_{Unit.Neg} \cdot \frac{W_{HL93}}{1 \cdot kip} = 14.40 \cdot kip \cdot ft$
TANDEM TRUCK $W_{Tdm} := 25 \cdot kip$	$M_{Tdm.Pos} := M_{Unit.Pos} \cdot \frac{W_{Tdm}}{1 \cdot kip} = 17.25 \cdot kip \cdot ft$	$M_{Tdm.Neg} := M_{Unit.Neg} \cdot \frac{W_{Tdm}}{1 \cdot kip} = 11.25 \cdot kip \cdot ft$
TYPE 3 $W_{T3} := 17 \cdot kip$	$M_{T3.Pos} := M_{Unit.Pos} \cdot \frac{W_{T3}}{1 \cdot kip} = 11.73 \cdot kip \cdot ft$	$M_{T3.Neg} := M_{Unit.Neg} \cdot \frac{W_{T3}}{1 \cdot kip} = 7.65 \cdot kip \cdot ft$
TYPE 3S2 $W_{T3S2} := 15.5 \cdot kip$	$M_{T3S2.Pos} := M_{Unit.Pos} \cdot \frac{W_{T3S2}}{1 \cdot kip} = 10.69 \cdot kip \cdot ft$	$M_{T3S2.Neg} := M_{Unit.Neg} \cdot \frac{W_{T3S2}}{1 \cdot kip} = 6.97 \cdot kip \cdot ft$
TYPE 3-3 $W_{T33} := 16 \cdot kip$	$M_{T33.Pos} := M_{Unit.Pos} \cdot \frac{W_{T33}}{1 \cdot kip} = 11.04 \cdot kip \cdot ft$	$M_{T33.Neg} := M_{Unit.Neg} \cdot \frac{W_{T33}}{1 \cdot kip} = 7.20 \cdot kip \cdot ft$
SU4-SU7, & NRL $W_{NRL} := 17 \cdot kip$	$M_{NRL.Pos} := M_{Unit.Pos} \cdot \frac{W_{NRL}}{1 \cdot kip} = 11.73 \cdot kip \cdot ft$	$M_{NRL.Neg} := M_{Unit.Neg} \cdot \frac{W_{NRL}}{1 \cdot kip} = 7.65 \cdot kip \cdot ft$

MAX (-) OH. MOMENT

HL-93	$M_{HL93.OH} := M_{Unit.OH} \cdot \frac{W_{HL93}}{1 \cdot kip} = 14.40 \cdot kip \cdot ft$
Tandem Truck	$M_{Tdm.OH} := M_{Unit.OH} \cdot \frac{W_{Tdm}}{1 \cdot kip} = 11.25 \cdot kip \cdot ft$
Type 3	$M_{T3.OH} := M_{Unit.OH} \cdot \frac{W_{T3}}{1 \cdot kip} = 7.65 \cdot kip \cdot ft$
Type 3S2	$M_{T3S2.OH} := M_{Unit.OH} \cdot \frac{W_{T3S2}}{1 \cdot kip} = 6.97 \cdot kip \cdot ft$
Type 3-3	$M_{T33.OH} := M_{Unit.OH} \cdot \frac{W_{T33}}{1 \cdot kip} = 7.20 \cdot kip \cdot ft$
SU4-SU7, & NRL	$M_{NRL.OH} := M_{Unit.OH} \cdot \frac{W_{NRL}}{1 \cdot kip} = 7.65 \cdot kip \cdot ft$

STRIP WIDTH SCALE FACTOR

$$B_{Pos.D} := \frac{B_{Pos}}{B_{unit}} = 9.59$$

$$B_{Neg.D} := \frac{B_{Neg}}{B_{unit}} = 7.37$$

$$B_{OH.D} := \frac{B_{OH}}{B_{unit}} = 4.11$$

Note: All SU Vehicles & NRL have same max wheel load.

RATING FACTOR GENERAL EQUATION

Rating Factor, $RF = \dfrac{\text{Member Capacity - Factored DL effects}}{\text{Factored LL effects}}$ {6A.4.2.1} {Eq. 6A.4.2.1-1}

Member Capacity, $C = \text{Nominal_Capacity} \cdot \phi c \cdot \phi s \cdot \phi$ {Eq. 6A.4.2.1-2}

$\phi c_{deck} = 1.00 \qquad \phi s_{deck} = 1.00$

$\phi c_{deck} \cdot \phi s_{deck} = 1.00$

Deck Capacity: {Table 6A.4.2.2-1}

$C_{M.D.Pos} := \max(\phi c_{deck} \cdot \phi s_{deck}, 0.85) \cdot \phi_{f.D} \cdot Mn_{D.Pos} = 108.21 \cdot kip \cdot ft$

$C_{M.D.Neg} := \max(\phi c_{deck} \cdot \phi s_{deck}, 0.85) \cdot \phi_{f.D} \cdot Mn_{D.Neg} = 73.02 \cdot kip \cdot ft$

$C_{M.D.OH} := \max(\phi c_{deck} \cdot \phi s_{deck}, 0.85) \cdot \phi_{f.D} \cdot Mn_{D.OH} = 40.74 \cdot kip \cdot ft$

STRENGTH Factored Force Effects: {Table 6A.4.2.2-1}

Dead Load

$MuDL_{D.Pos} := \eta i \cdot (\gamma DC \cdot M_{DC.Pos} + \gamma DW \cdot M_{DW.Pos}) \cdot B_{Pos.D} = -3.84 \cdot kip \cdot ft$

$MuDL_{D.Neg} := \eta i \cdot (\gamma DC \cdot M_{DC.Neg} + \gamma DW \cdot M_{DW.Neg}) \cdot B_{Neg.D} = 6.55 \cdot kip \cdot ft$

$MuDL_{D.OH} := \eta i \cdot (\gamma DC \cdot M_{DC.OH} + \gamma DW \cdot M_{DW.OH}) \cdot B_{OH.D} = 3.65 \cdot kip \cdot ft$

HL-93 INVENTORY

$MuHL93_{D.Pos.I} := \eta i \cdot \gamma HL93_I \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.Pos}, M_{Tdm.Pos}) = 58.59 \cdot kip \cdot ft$

$MuHL93_{D.Neg.I} := \eta i \cdot \gamma HL93_I \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.Neg}, M_{Tdm.Neg}) = 38.21 \cdot kip \cdot ft$

$MuHL93_{D.OH.I} := \eta i \cdot \gamma HL93_I \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.OH}, M_{Tdm.OH}) = 38.21 \cdot kip \cdot ft$

HL-93 OPERATING

$MuHL93_{D.Pos.O} := \eta i \cdot \gamma HL93_O \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.Pos}, M_{Tdm.Pos}) = 45.19 \cdot kip \cdot ft$

$MuHL93_{D.Neg.O} := \eta i \cdot \gamma HL93_O \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.Neg}, M_{Tdm.Neg}) = 29.47 \cdot kip \cdot ft$

$MuHL93_{D.OH.O} := \eta i \cdot \gamma HL93_O \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.OH}, M_{Tdm.OH}) = 29.47 \cdot kip \cdot ft$

Type 3

$MuT3_{D.Pos} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3.Pos} = 23.12 \cdot kip \cdot ft$

$MuT3_{D.Neg} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3.Neg} = 15.08 \cdot kip \cdot ft$

$MuT3_{D.OH} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3.OH} = 15.08 \cdot kip \cdot ft$

Type 3S2

$MuT3S2_{D.Pos} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3S2.Pos} = 21.08 \cdot kip \cdot ft$

$MuT3S2_{D.Neg} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3S2.Neg} = 13.75 \cdot kip \cdot ft$

$MuT3S2_{D.OH} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3S2.OH} = 13.75 \cdot kip \cdot ft$

Type 3-3

$MuT33_{D.Pos} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T33.Pos} = 21.76 \cdot kip \cdot ft$

$MuT33_{D.Neg} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T33.Neg} = 14.19 \cdot kip \cdot ft$

$MuT33_{D.OH} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T33.OH} = 14.19 \cdot kip \cdot ft$

SU4-SU7, & NRL

$MuNRL_{D.Pos} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{NRL.Pos} = 23.12 \cdot kip \cdot ft$

$MuNRL_{D.Neg} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{NRL.Neg} = 15.08 \cdot kip \cdot ft$

$MuNRL_{D.OH} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{NRL.OH} = 15.08 \cdot kip \cdot ft$

DECK RATING FACTORS

	POSITIVE MOMENT	NEGATIVE MOMENT
HL-93 INVENTORY	$RF_{HL93.I.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuHL93_{D.Pos.I}} = 1.91$	$RF_{HL93.I.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuHL93_{D.Neg.I}} = 1.74$
HL-93 OPERATING	$RF_{HL93.O.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuHL93_{D.Pos.O}} = 2.48$	$RF_{HL93.O.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuHL93_{D.Neg.O}} = 2.26$
Type 3	$RF_{T3.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuT3_{D.Pos}} = 4.85$	$RF_{T3.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuT3_{D.Neg}} = 4.41$
Type 3S2	$RF_{T3S2.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuT3S2_{D.Pos}} = 5.32$	$RF_{T3S2.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuT3S2_{D.Neg}} = 4.84$
Type 3-3	$RF_{T33.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuT33_{D.Pos}} = 5.15$	$RF_{T33.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuT33_{D.Neg}} = 4.68$
SU4-SU7, & NRL	$RF_{NRL.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuNRL_{D.Pos}} = 4.85$	$RF_{NRL.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuNRL_{D.Neg}} = 4.41$

	NEGATIVE OH. MOMENT
HL-93 INVENTORY	$RF_{HL93.I.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuHL93_{D.OH.I}} = 0.97$
HL-93 OPERATING	$RF_{HL93.O.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuHL93_{D.OH.O}} = 1.26$
Type 3	$RF_{T3.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuT3_{D.OH}} = 2.46$
Type 3S2	$RF_{T3S2.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuT3S2_{D.OH}} = 2.70$
Type 3-3	$RF_{T33.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuT33_{D.OH}} = 2.61$
SU4-SU7, & NRL	$RF_{NRL.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuNRL_{D.OH}} = 2.46$

DECK RATING FACTOR SUMMARY:

HL-93 INVENTORY	$RF_{HL93.I} := \min(RF_{HL93.I.P}, RF_{HL93.I.N}, RF_{HL93.I.OH}) = 0.97$
HL-93 OPERATING	$RF_{HL93.O} := \min(RF_{HL93.O.P}, RF_{HL93.O.N}, RF_{HL93.O.OH}) = 1.26$
Type 3	$RF_{T3} := \min(RF_{T3.P}, RF_{T3.N}, RF_{T3.OH}) = 2.46$
Type 3S2	$RF_{T3S2} := \min(RF_{T3S2.P}, RF_{T3S2.N}, RF_{T3S2.OH}) = 2.70$
Type 3-3	$RF_{T33} := \min(RF_{T33.P}, RF_{T33.N}, RF_{T33.OH}) = 2.61$
SU4-SU7, & NRL	$RF_{NRL} := \min(RF_{NRL.P}, RF_{NRL.N}, RF_{NRL.OH}) = 2.46$

STEEL STRINGER RATING FACTOR ANALYSIS:

DEAD LOADS

Stringer, deck, and curb self weight computed by BRASS.

Component Dead Load, DC:

Diaphragm, $DC_{Dia.S} = 0.067 \cdot kip$

Wearing Surface Dead Load, DW:

Asphalt Wearing Surface, $DW_{ws} = 0.000 \cdot ksf$

LIVE LOADS

Add Dynamic Load Allowance per {6A.4.4.3} $IM_S := 0.33$ Applies only to truck loads

AASHTO LRFD 3.6.1.2.1 Specifies the **HL-93** vehicular live loading shall consist of the maximum of a design truck or design tandem in combination with a 64 psf lane load over a 10' wide design lane. The design truck and design tandem must include the dynamic load allowance, but the design lane load need not include the dynamic load allowance.

BRASS POINTS OF INTEREST

The design is investigated at the 10th points along the span, at any changes in bottom plate conditions, and at either side of hinge locations. Locations are span fractions as designated in BRASS (e.g. 105.00 = Mid-span)

At Tenth Points:

$POI_{0.0} := 100.00$ $POI_{0.1} := 101.00$ $POI_{0.2} := 102.00$ $POI_{0.3} := 103.00$ $POI_{0.4} := 104.00$ $POI_{0.5} := 105.00$

(etc.)

SUMMARY OF RATING FACTORS

Rating Factors calculated using BRASS are shown for the stringer below.

STRENGTH I Limit State results are:

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load No.	Combination Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I	1.03	37.09
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I	0.94	23.53
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I	0.94	23.53

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I-O	1.34	48.09
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I-O	1.22	30.50
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I-O	1.22	30.50

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load							
3	TYPE3	(TRK)	25.00	104.5000	STRENGTH I	2.02	50.61
4	TYPE3S2	(TRK)	36.00	104.5000	STRENGTH I	2.22	79.85
5	TYPE3-3	(TRK)	40.00	104.5000	STRENGTH I	2.45	98.19
6	SU4	(TRK)	27.00	104.5000	STRENGTH I	1.85	50.04
7	SU5	(TRK)	31.00	104.5000	STRENGTH I	1.85	57.47
8	SU6	(TRK)	34.75	104.5000	STRENGTH I	1.86	64.48
9	SU7	(TRK)	38.75	104.5000	STRENGTH I	1.86	71.90
10	NRL	(TRK)	40.00	104.5000	STRENGTH I	1.85	74.13
Crit	NRL	(TRK)	40.00	104.5000	STRENGTH I	1.85	74.13

SERVICE II Limit State results are:

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load No.	Combination Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	SERVICE II	1.12	40.30
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	SERVICE II	1.02	25.56
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	SERVICE II	1.02	25.56

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	SERVICE II-O	1.46	52.39
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	SERVICE II-O	1.33	33.23
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	SERVICE II-O	1.33	33.23

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load							
3	TYPE3	(TRK)	25.00	104.5000	SERVICE II	1.63	40.84
4	TYPE3S2	(TRK)	36.00	104.5000	SERVICE II	1.79	64.44
5	TYPE3-3	(TRK)	40.00	104.5000	SERVICE II	1.98	79.24
6	SU4	(TRK)	27.00	104.5000	SERVICE II	1.50	40.38
7	SU5	(TRK)	31.00	104.5000	SERVICE II	1.50	46.38
8	SU6	(TRK)	34.75	104.5000	SERVICE II	1.50	52.04
9	SU7	(TRK)	38.75	104.5000	SERVICE II	1.50	58.03
10	NRL	(TRK)	40.00	104.5000	SERVICE II	1.50	59.82
Crit	NRL	(TRK)	40.00	104.5000	SERVICE II	1.50	59.82

** Full electronic copy of BRASS output can be found in the Regional Bridge Engineer's files **

STEEL FLOOR BEAM RATING FACTOR ANALYSIS:

DEAD LOADS

Floor Beam self weight computed by BRASS.

Component Dead Load, DC:

Tributary width for the floor beam is equal to stringer span.

Concrete Curb, $DC_{curb.FB} := \frac{2 \cdot DC_{curb} \cdot Span_S}{S} = 0.231 \cdot klf$

Deck, $DC_{Deck.FB} := DC_{Deck} \cdot Span_S = 0.937 \cdot klf$

Stringer Diaphragm, $DC_{Dia.S.FB} := \frac{2 \cdot DC_{Dia.S}}{S} = 0.010 \cdot klf$

Steel Stringer, $DC_{S.FB} := \frac{DC_S \cdot N_S \cdot Span_S}{S} = 0.076 \cdot klf$

Total: $DC_{TotalFB} := DC_{curb.FB} + DC_{Deck.FB} + DC_{Dia.S.FB} + DC_{S.FB} = 1.255 \cdot klf$

Wearing Surface Dead Load, DW:

Asphalt Wearing Surface, $DW_{ws.FB} := DW_{ws} \cdot Span_S = 0.000 \cdot klf$

LIVE LOADS

Add Dynamic Load Allowance per {6A.4.4.3} $IM_{FB} := 0.33$ Applies only to truck loads

AASHTO LRFD 3.6.1.2.1 Specifies the **HL-93** vehicular live loading shall consist of the maximum of a design truck or design tandem in combination with a 64 psf lane load over a 10' wide design lane. The design truck and design tandem must include the dynamic load allowance, but the design lane load need not include the dynamic load allowance.

Reactions from the stringers on the floor beams were calculated using Visual Analysis. The resulting live load reactions are used in BRASS for the applied floor beam live loads.

Max Live Load Reactions:

HL-93	$R_{HL93} := 32 \cdot kip$	**Type 3**	$R_{T3} := 29 \cdot kip$	**SU4**	$R_{SU4} := 34 \cdot kip$	**SU7**	$R_{SU7} := 40 \cdot kip$
Tandem	$R_{Tdm} := 42 \cdot kip$	**Type 3S2**	$R_{T3S2} := 27 \cdot kip$	**SU5**	$R_{SU5} := 37 \cdot kip$	**NRL**	$R_{NRL} := 40 \cdot kip$
Lane	$R_{Lane} := 8 \cdot kip$	**Type 3-3**	$R_{T33} := 24 \cdot kip$	**SU6**	$R_{SU6} := 39 \cdot kip$		

BRASS POINTS OF INTEREST

The design is investigated at the 10th points along the span, at any changes in bottom plate conditions, and at either side of hinge locations. Locations are span fractions as designated in BRASS (e.g. 105.00 = Mid-span)

At Tenth Points:

$POI_{0.0} = 100.00$ $POI_{0.1} = 101.00$ $POI_{0.2} = 102.00$ $POI_{0.3} = 103.00$ $POI_{0.4} = 104.00$ $POI_{0.5} = 105.00$

(etc.)

SUMMARY OF RATING FACTORS

Rating Factors calculated using BRASS are shown for the stringer below.

STRENGTH I Limit State results are:

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load No.	Combination Description			Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory								
1	HL-93	+ HL-93	(TRK)	20.00	105.0000	STRENGTH I	1.81	36.16
2	TANDEM	+ TANDEM	(TRK)	25.00	105.0000	STRENGTH I	1.43	35.78
Crit	TANDEM	+ TANDEM	(TRK)	25.00	105.0000	STRENGTH I	1.43	35.78

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating								
1	HL-93	+ HL-93	(TRK)	20.00	105.0000	STRENGTH I-O	2.34	46.87
2	TANDEM	+ TANDEM	(TRK)	25.00	105.0000	STRENGTH I-O	1.86	46.38
Crit	TANDEM	+ TANDEM	(TRK)	25.00	105.0000	STRENGTH I-O	1.86	46.38

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load								
3	TYPE 3	+ TYPE 3	(TRK)	14.50	105.0000	STRENGTH I	3.19	46.26
4	TYPE 3S2	+ TYPE 3S2	(TRK)	13.50	105.0000	STRENGTH I	3.43	46.26
5	TYPE 3-3	+ TYPE 3-3	(TRK)	12.00	105.0000	STRENGTH I	3.85	46.26
6	SU4	+ SU4	(TRK)	17.00	105.0000	STRENGTH I	2.72	46.26
7	SU5	+ SU5	(TRK)	18.50	105.0000	STRENGTH I	2.50	46.26
8	SU6	+ SU6	(TRK)	19.50	105.0000	STRENGTH I	2.37	46.26
9	SU7	+ SU7	(TRK)	20.00	105.0000	STRENGTH I	2.31	46.26
10	NRL	+ NRL	(TRK)	20.00	105.0000	STRENGTH I	2.31	46.26
Crit	SU7	+ SU7	(TRK)	20.00	105.0000	STRENGTH I	2.31	46.26

SERVICE II Limit State results are:

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load No.	Combination Description			Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory								
1	HL-93	+ HL-93	(TRK)	20.00	105.0000	SERVICE II	1.70	34.04
2	TANDEM	+ TANDEM	(TRK)	25.00	105.0000	SERVICE II	1.35	33.69
Crit	TANDEM	+ TANDEM	(TRK)	25.00	105.0000	SERVICE II	1.35	33.69

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating								
1	HL-93	+ HL-93	(TRK)	20.00	105.0000	SERVICE II-O	2.21	44.25
2	TANDEM	+ TANDEM	(TRK)	25.00	105.0000	SERVICE II-O	1.75	43.80
Crit	TANDEM	+ TANDEM	(TRK)	25.00	105.0000	SERVICE II-O	1.75	43.80

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load								
3	TYPE 3	+ TYPE 3	(TRK)	14.50	105.0000	SERVICE II	2.23	32.35
4	TYPE 3S2	+ TYPE 3S2	(TRK)	13.50	105.0000	SERVICE II	2.40	32.35
5	TYPE 3-3	+ TYPE 3-3	(TRK)	12.00	105.0000	SERVICE II	2.70	32.35
6	SU4	+ SU4	(TRK)	17.00	105.0000	SERVICE II	1.90	32.35
7	SU5	+ SU5	(TRK)	18.50	105.0000	SERVICE II	1.75	32.35
8	SU6	+ SU6	(TRK)	19.50	105.0000	SERVICE II	1.66	32.35
9	SU7	+ SU7	(TRK)	20.00	105.0000	SERVICE II	1.62	32.35
10	NRL	+ NRL	(TRK)	20.00	105.0000	SERVICE II	1.62	32.35
Crit	SU7	+ SU7	(TRK)	20.00	105.0000	SERVICE II	1.62	32.35

** Full electronic copy of BRASS output can be found in the Regional Bridge Engineer's files **

STEEL GIRDER RATING FACTOR ANALYSIS:

DEAD LOADS

Girder self weight computed by BRASS.

Component Dead Load, DC:

Loads are calculated per tributariy width of the floor beams and applied as point loads to the girders.

Concrete Curb, $DC_{curb.G1} := DC_{curb} \cdot Span_S = 1.562 \cdot kip$

$DC_{curb.G2} := DC_{curb} \cdot Span_{S2} = 1.406 \cdot kip$

Deck, $DC_{Deck.G1} := DC_{Deck} \cdot Span_S \cdot \frac{Wd}{2} = 5.859 \cdot kip$

$DC_{Deck.G2} := DC_{Deck} \cdot Span_{S2} \cdot \frac{Wd}{2} = 5.273 \cdot kip$

Stringer Haunch,

$w_{H1} := 2 \cdot 6 \cdot in + b_{f.S} = 19.50 \cdot in$

$w_{H2} := b_{f.S} = 7.50 \cdot in$

$t_H := 2 \cdot in$

$DC_{H.G1} := \frac{w_{H1} + w_{H2}}{2} \cdot t_H \cdot \gamma c \cdot Span_S = 0.352 \cdot kip$

$DC_{H.G2} := \frac{w_{H1} + w_{H2}}{2} \cdot t_H \cdot \gamma c \cdot Span_{S2} = 0.316 \cdot kip$

Stringer Diaphragm, $DC_{Dia.S.G} := w_{Dia.S} \cdot S_S = 0.135 \cdot kip$

Steel Stringer, $DC_{S.G1} := DC_S \cdot N_S \cdot Span_S = 1.029 \cdot kip$

$DC_{S.G2} := DC_S \cdot N_S \cdot Span_{S2} = 0.926 \cdot kip$

Steel Floor Beam, $DC_{FB.G} := DC_{FB} \cdot \frac{S}{2} = 0.462 \cdot kip$

Cross Bracing & Gussets, $DC_{brace.G} = 0.015 \cdot klf$

Total: $DC_G := DC_{curb.G1} + DC_{Deck.G1} + DC_{H.G1} + DC_{Dia.S.G} + DC_{S.G1} + DC_{FB.G} = 9.399 \cdot kip$ Max Stringer Span

$DC_{G2} := DC_{curb.G2} + DC_{Deck.G2} + DC_{H.G2} + DC_{Dia.S.G} + DC_{S.G2} + DC_{FB.G} = 8.519 \cdot kip$

Floor Beam Loads on Girder:

$DC_{G.FB.1} := DC_G = 9.40 \cdot kip$

$DC_{G.FB2} := \frac{DC_G}{2} + \frac{DC_{G2}}{2} = 8.96 \cdot kip$

Wearing Surface Dead Load, DW:

Asphalt Wearing Surface, $DW_{ws.G1} := DW_{ws} \cdot Wr \cdot Span_S = 0.000 \cdot kip$

$DW_{ws.G2} := DW_{ws} \cdot Wr \cdot Span_{S2} = 0.000 \cdot kip$

LIVE LOADS

Add Dynamic Load Allowance per {6A.4.4.3} $IM_G := 0.33$ Applies only to truck loads

AASHTO LRFD 3.6.1.2.1 Specifies the **HL-93** vehicular live loading shall consist of the maximum of a design truck or design tandem in combination with a 64 psf lane load over a 10' wide design lane. The design truck and design tandem must include the dynamic load allowance, but the design lane load need not include the dynamic load allowance.

LIVE LOAD DISTRIBUTION FACTORS:

Lane Live Load distribution per [3.6.1.1.2]. The controlling distribution factor is used in the load rating.

Distribution Factor for Exterior Girders:

Lever Rule: Moment & Shear

x_O= Distance from wheel line 2' off rail face to exterior girder per [3.6.1.3.1]

$x_O := -3.75 \cdot ft$ (negative number indicates wheel on interior of girder)

$$DF_{Ext} := \left[\frac{S + x_O}{S} + \frac{S - (6 \cdot ft - x_O)}{S}\right] \cdot 0.5 \cdot m_{1adjusted}$$

Distribution by Lever Rule with 6' axle spacing

$DF_{Ext} = 0.57$

Final Distribution Factors:

$DF_M := DF_{Ext} = 0.57$

$DF_V := DF_{Ext} = 0.57$

BRASS POINTS OF INTEREST

The design is investigated at the 10th points along the span, at any changes in bottom plate conditions, and at either side of hinge locations. Locations are span fractions as designated in BRASS (e.g. 105.00 = Mid-span)

At Tenth Points:

$POI_{0.0} = 100.00$ $POI_{0.1} = 101.00$ $POI_{0.2} = 102.00$ $POI_{0.3} = 103.00$ $POI_{0.4} = 104.00$ $POI_{0.5} = 105.00$

(etc.)

BRASS Girder Transverse Stiffeners

Symmetric About Centerline Bridge

Stiffener Group	Spacing	Support	Start Distance	Length	End Distance
	(ft)		(ft)	(ft)	(ft)
5 x 3/8	3.75	1	0	11.25	11.25
5 x 3/8	4.1666	1	11.25	12.5	23.75

SUMMARY OF RATING FACTORS

Rating Factors calculated using BRASS are shown for the stringer below.

STRENGTH I Limit State results are:

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load No.	Combination Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I	1.74	62.79
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	105.0000	STRENGTH I	1.85	46.29
Crit	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I	1.74	62.79

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	104.5000	STRENGTH I-O	2.27	81.80
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	105.0000	STRENGTH I-O	2.41	60.23
Crit	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	104.5000	STRENGTH I-O	2.27	81.80

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load							
3	TYPE3	(TRK)	25.00	105.0000	STRENGTH I	3.87	96.81
4	TYPE3S2	(TRK)	36.00	105.0000	STRENGTH I	4.25	152.83
5	TYPE3-3	(TRK)	40.00	104.5000	STRENGTH I	4.60	184.19
6	SU4	(TRK)	27.00	105.0000	STRENGTH I	3.37	90.92
7	SU5	(TRK)	31.00	105.0000	STRENGTH I	3.09	95.76
8	SU6	(TRK)	34.75	105.0000	STRENGTH I	2.80	97.36
9	SU7	(TRK)	38.75	105.0000	STRENGTH I	2.61	101.09
10	NRL	(TRK)	40.00	105.0000	STRENGTH I	2.49	99.74
Crit	NRL	(TRK)	40.00	105.0000	STRENGTH I	2.49	99.74

SERVICE II Limit State results are:

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load No.	Combination Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	104.5000	SERVICE II	2.42	87.26
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	105.0000	SERVICE II	2.53	63.33
Crit	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	104.5000	SERVICE II	2.42	87.26

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	104.5000	SERVICE II-O	3.15	113.44
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	105.0000	SERVICE II-O	3.29	82.34
Crit	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	104.5000	SERVICE II-O	3.15	113.44

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load							
3	TYPE3	(TRK)	25.00	105.0000	SERVICE II	3.93	98.30
4	TYPE3S2	(TRK)	36.00	105.0000	SERVICE II	4.31	155.11
5	TYPE3-3	(TRK)	40.00	104.5000	SERVICE II	4.69	187.46
6	SU4	(TRK)	27.00	105.0000	SERVICE II	3.41	92.04
7	SU5	(TRK)	31.00	104.5000	SERVICE II	3.16	97.84
8	SU6	(TRK)	34.75	105.0000	SERVICE II	2.84	98.74
9	SU7	(TRK)	38.75	105.0000	SERVICE II	2.64	102.18
10	NRL	(TRK)	40.00	105.0000	SERVICE II	2.51	100.44
Crit	NRL	(TRK)	40.00	105.0000	SERVICE II	2.51	100.44

** Full electronic copy of BRASS output can be found in the Regional Bridge Engineer's files **

BRIDGE RATING FACTOR SUMMARY:

A summary of the rating factors for each superstructure element evaluated is shown below. The safe load capacity is given in tons. If the vehicle rating factor is greater than 1.0, then the vehicle weight rating is GVW*RF. If that condition is not satisfied, safe posting loads are calculated using equation {6A.8.3-1} from the Manual for Bridge Evaluation.{6A.8.3}

Vehicle	Deck			Steel Stringer	
	STRENGTH I			STRENGTH I & SERVICE II	
	+ M	- M	- OH	M	V
HL-93 I	1.91	1.74	0.97	**0.94**	-
HL-93 O	2.48	2.26	1.26	**1.22**	-
Type 3	4.85	4.41	2.46	**1.63**	-
Type 3S2	5.32	4.84	2.70	**1.79**	-
Type 3-3	5.15	4.68	2.61	**1.98**	-
SU4	4.85	4.41	2.46	**1.50**	-
SU5	4.85	4.41	2.46	**1.50**	-
SU6	4.85	4.41	2.46	**1.50**	-
SU7	4.85	4.41	2.46	**1.50**	-
NRL	4.85	4.41	2.46	**1.50**	-

Vehicle	Steel Floor Beam		Steel Plate Girder	
	STRENGTH I & SERVICE II		STRENGTH I & SERVICE II	
	M	V	M	V
HL-93 I	1.35	-	1.74	-
HL-93 O	1.75	-	2.27	-
Type 3	2.23	-	3.87	-
Type 3S2	2.40	-	4.25	-
Type 3-3	2.70	-	4.60	-
SU4	1.90	-	3.37	-
SU5	1.75	-	3.09	-
SU6	1.66	-	2.80	-
SU7	1.62	-	2.61	-
NRL	1.62	-	2.49	-

Summary

Vehicle	RF	GVW (tons)	Safe Load Capacity
HL-93 I	0.94	36	-
HL-93 O	1.22	25	-
Type 3	1.63	25	40.8
Type 3S2	1.79	36	64.4
Type 3-3	1.98	40	79.2
SU4	1.50	27	40.5
SU5	1.50	31	46.5
SU6	1.50	34.75	52.1
SU7	1.50	38.75	58.1
NRL	1.50	40	60.0

Safe Load Capacity: {6A.8.3-1}

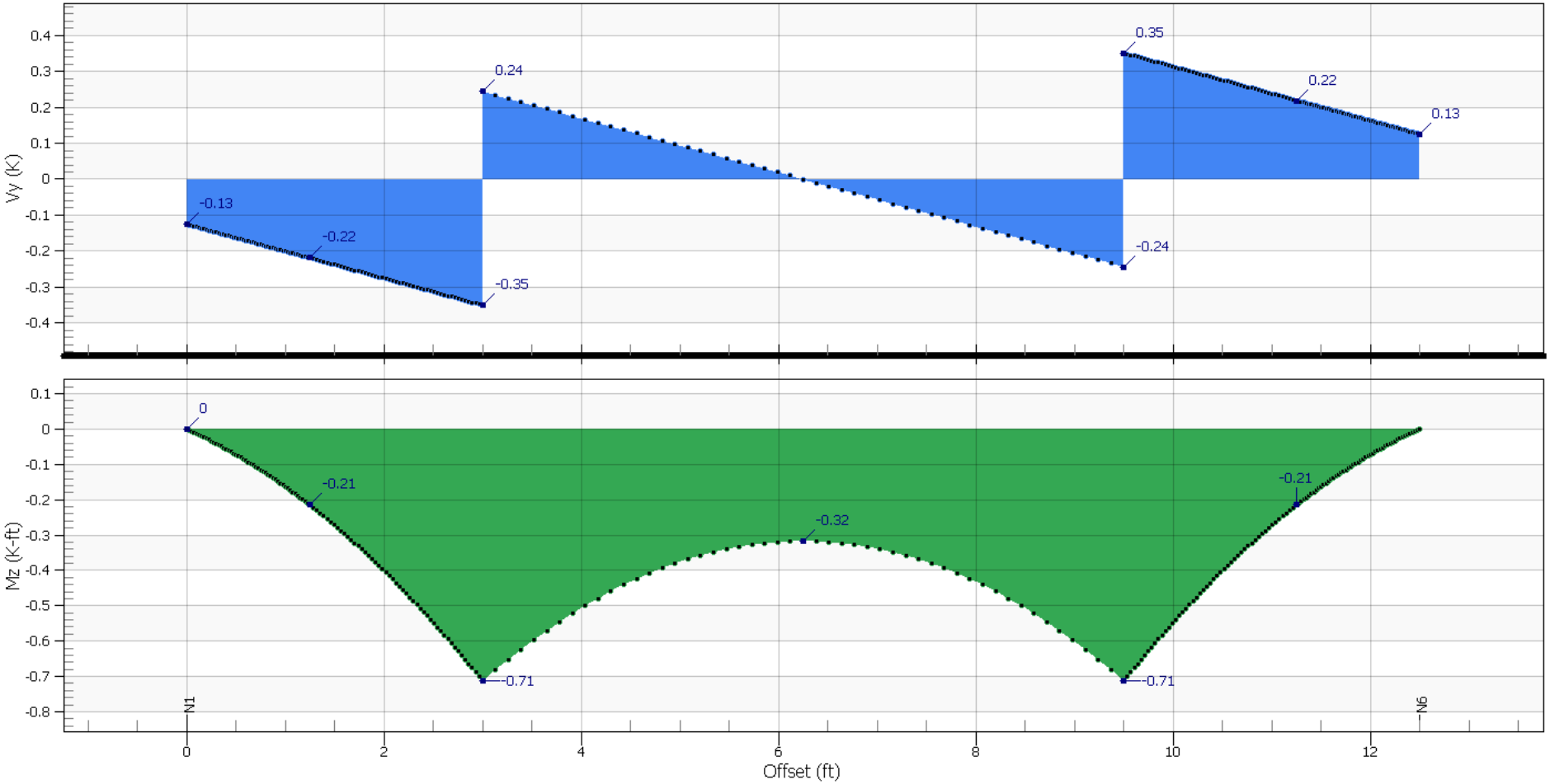
$$RF \cdot GVW \quad \text{if} \quad RF \geq 1.0$$

$$\frac{GVW}{0.7} \cdot (RF - 0.3) \quad \text{if} \quad RF < 1.0$$

Visual Analysis Results – Concrete Deck

Concrete Deck - 35-1-5.91
DJ & A, P.C.
Member: M1...M5
Load Case: DC

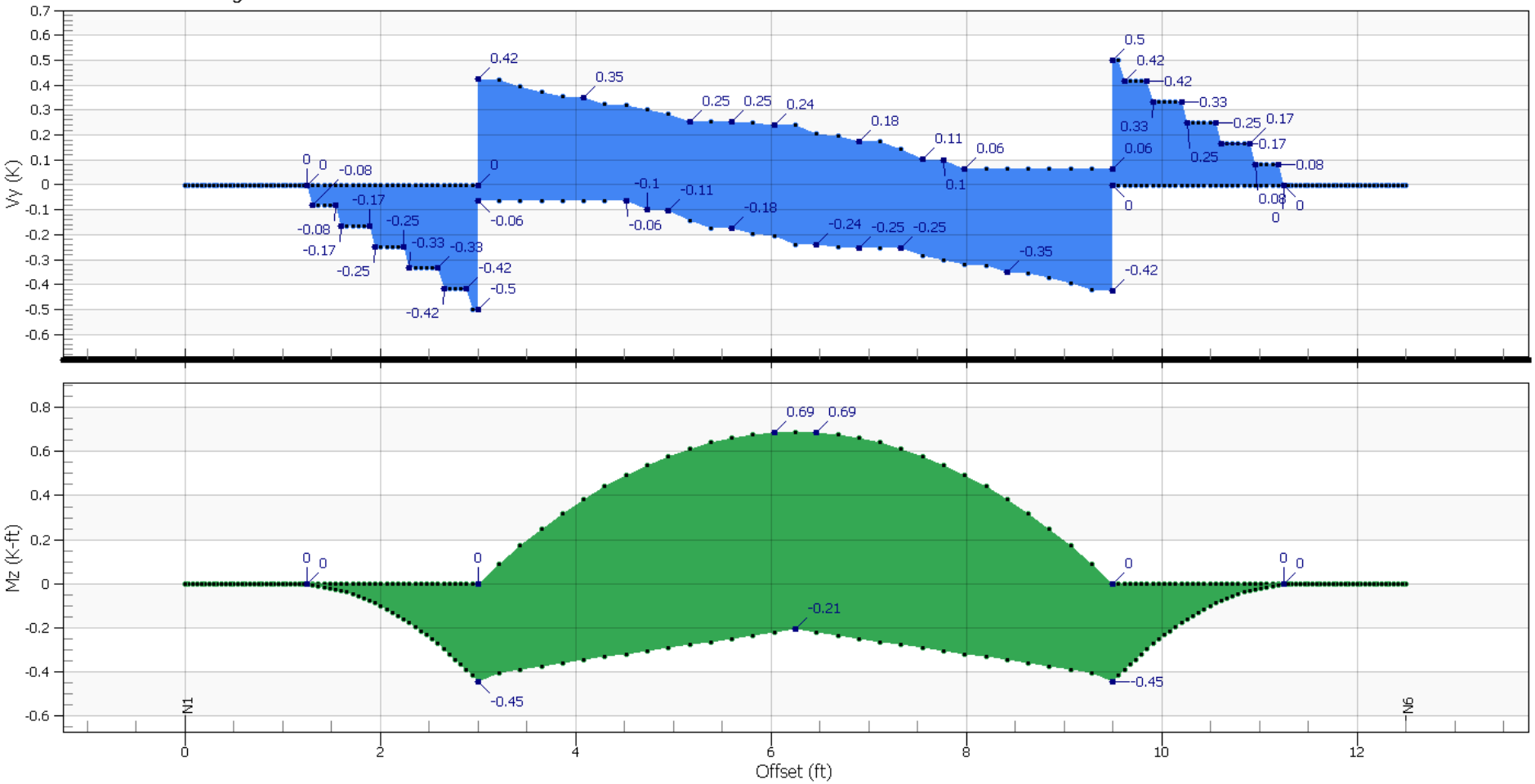
4/29/2019 - 1:18 PM
Ammon Groesbeck



VisualAnalysis 18.0
www.iesweb.com

Concrete Deck - 35-1-5.91
DJ & A, P.C.
Member: M1...M5
Load Case: Unit Truck High Extreme

4/29/2019 - 1:18 PM
Ammon Groesbeck



VisualAnalysis 18.0
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BRASS Input – Steel Stringer

BRASS-GIRDER™ Input Parameters

Version Information

Girder UI:	8.0.0.3001
Girder XML:	8.0.0.3001
BRASS™ XML:	1.8.0.3001

Administration

Project ID:	6856
Project Title:	R8 Bridge Load Ratings 2018
Bridge ID:	35-1-5.91
Bridge Name:	Citico Creek
Route Name:	35-1
Reference Marker:	5.91
Title 1:	Stringer
Title 2:	
Date:	2019 4 30
Agency:	USDA Forest Service
Designer/Rater:	Ammon Groesbeck
Reviewer:	Brad Miller
Comments:	

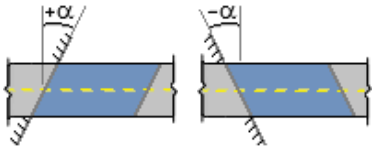
Bridge Notes

No bridge notes have been defined.

Control

Structure

Structure Type:	GirderSystem
Define Deck Cross Section:	Yes
Number of Members:	2
Skew Angle:	-



Analysis Model Type:	Beam
Number of Top Spans:	1

Spans

Span	Length

1	12.5 ft

Structure Material: Steel
Beam Type: Plate
Composite Structure: No
Number of Stages: 1
Bracing Definition Type: PerBay
Deck Material: Concrete

Analysis

Unit System: US
Analysis Method: LRFD
Analysis Type: Rating
Member of Interest: 1
Model Element Type: Stepped
Point of Interest Generation Control: User
Live-load Distribution Factor Application: AnalysisPoint
Interpolate Reinforcement: No
Calculate Effective Width: No

Input

Symmetry

Component	Symmetric
Bracing (Bay)	Yes
Beam Profile	Yes
Deck Profile	Yes
Shear Connectors	Yes
Transverse Stiffeners	Yes
Bearing Stiffeners	Yes
Longitudinal Stiffeners	Yes
Bracing (Member)	No
Lateral Support	Yes
Cb Factors (LRFD)	Yes
Beam Distribution Factors (LRFD)	Yes
Reaction Distribution Factors (LRFD)	Yes

Merge Beam/Deck Profile Schedules: Yes

Distribution

Perform Dead Load Distribution: Yes
Calculate LRFD Live Load Distribution Factors: Yes

Dead Load Distribution Methods

Stage	Method
1	Tributary area

Live Load Distribution (LRFD)

Distribution Method:	AASHTO LRFD
Cross Section Code:	a1
Max. Number of Lanes Loaded:	Computed
Consider Rigid Method:	Yes
Slab Thickness Type:	Structural
Set eg = 0 for Non-composite:	No
Apply Skew to Lever Rule Override:	Yes
Apply Skew to Ridgid Rule Override:	Yes
Use Constants from Table 4.6.2.2.1-2:	No

Libraries

Section Library: N:\BRASS\Libraries\BRASS-Sections.BLS
Vehicle Library: N:\BRASS\Libraries\BRASS-Vehicles.BLV

Output

Primary Output

Action Output Level: DL+LL
Action Locations: 10thPoints

General

Member Properties:	Yes
Load Combinations:	Yes
Load and Resistance Factors:	Yes
Warnings:	Yes
Camber:	No
Critical Design Ratios / Rating Factors:	Condensed

Live Load

Truck Positions:	No
Variable Axle Spacing:	No
Live Load Settings:	Yes
Live Load Combinations:	Yes
Live Load Details:	Yes
Impact (LFD):	No

Stage

Stage	Output
1	Yes

Dead Load

Member Self Load:	Yes
Distributed Dead Loads:	Yes
Concentrated Dead Loads:	Yes
Temperature Change:	No
Settlements:	No

Load Distribution

Dead Load Distribution:	Yes
Live Load Distribution:	Yes

Intermediate Output

Intermediate Output Level:	Full
Effective Width:	No
Floorbeam Lane Position:	No

Points of Interest

Specification Checks:	Yes

Load Factoring/Combinations: Yes

Load Distribution

Dead Load: No
Live Load: Yes

Limit State Output (LRFD)

Limit State	Specification Check	Load Combination
Strength I	Yes	Yes
Strength II	No	No
Strength IV	No	No
Service I	No	No
Service II	Yes	Yes
Fatigue I	No	No
Fatigue II	No	No

Intermediate Output (cont.)

Steel

Transverse Stiffeners: No
Bearing Stiffeners: No
Longitudinal Stiffeners: No

Results Tables

X-Y Plot Action Tables: No
Specification Check Results Tables: No
Mesh Plot Files: No

BRASS-PAD™ Data Transfer File: No

Influence

Output influence lines for: None
Ordinate Divisor: 1

Factors

Load Factors (LRFD)

Limit State	DC		DW		DU		TU	
	max	min	max	min	max	min	max	min
Strength I	1.25	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Strength II	1.25	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Strength IV	1.5	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Service I	1	1	1	1	1	1	1.2	1
Service II	1	1	1	1	1	1	1.2	1
Fatigue I	0	0	0	0	0	0	0	0
Fatigue II	0	0	0	0	0	0	0	0

Load Factors (LRFD) (continued)

Limit State	LL			SE	PS	DS
	Design	Legal	Permit			

	Inventory	Operating			max	min	max	min	max	min
Strength I	1.75	1.35	1.3	0	1	1	1	1	1.25	0.9
Strength II	1.35		0	0	1	1	1	1	1.25	0.9
Strength IV	0		0	0	0	0	1	1	1.5	0.9
Service I	1		0	1	1	1	1	1	1	1
Service II	1.3	1	1.3	1	0	0	1	1	1	1
Fatigue I	1.5		0	0	0	0	1	1	0	0
Fatigue II	0.75		0	0	0	0	1	1	0	0

Load Modifiers (LRFD)

Limit State	Ductility	Redundancy	Importance	Combined Product	
				max	min
Strength I	1	1	1	-	-
Strength II	1	1	1	-	-
Strength IV	1	1	1	-	-
Service I	1	1	1	-	-
Service II	1	1	1	-	-
Fatigue I	1	1	1	-	-
Fatigue II	1	1	1	-	-

Resistance Factors (LRFD)

Resistance Factors

Type	Value
φ Flexure	1
φ Shear	1
φ Bearing	1
φ Compression	0.95
φ Shear Connectors	0.85
φ Fatigue	1

System/Total Modifiers

Limit State	Resistance Type	System	Total
Strength	Flexure	0.85	-
Strength	Shear	1	-
Strength	Bearing	1	-
Strength	Compression	1	-
Strength	Shear Connectors	1	-
Strength	Longitudinal Reinforcement	1	-
Service	Flexure	1	-
Fatigue	Fatigue	1	-

Condition Modifiers

Limit State	Condition
Strength	1

Service	1
Fatigue	1

Materials

Steel

ID	Name	Yield Stress	Tensile Strength	Modulus of Elasticity	Density	Thermal Expansion Coefficient
1	Grade 50	50 ksi	65 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
2	Grade 50W	50 ksi	70 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
3	Grade 36	36 ksi	58 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
4	Grade HPS 70W	70 ksi	85 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
5	Grade 30	30 ksi	60 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}

Concrete

ID	Name	28 Day Compressive Strength	Modulus of Elasticity	Density	Modulus of Rupture	Modulus of Rupture (VCI Method)	Thermal Expansion Coefficient
1	Deck Concrete	3 ksi	-	0.15 kcf	-	-	6E-06 °F^{-1}

Dead Load Groups

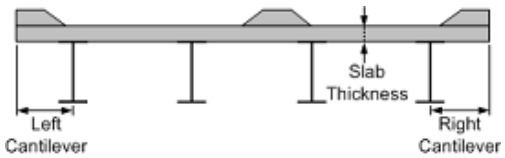
Groups

ID	Name	Stage	Type	Description
1	DC Diaphragms	1	DC	DC Diaphragms

Deck Geometry

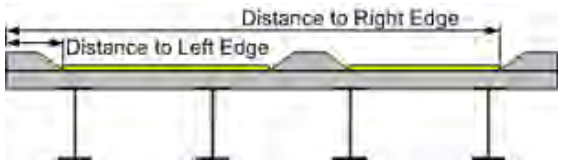
Deck

Deck Thickness: 6 in.
Left Cantilever Length: 3 ft
Right Cantilever Length: 3 ft
Equal Member Spacing: Yes



Travelway Locations

Distance to Left Edge: 1.25 ft
Distance to Right Edge: 11.25 ft



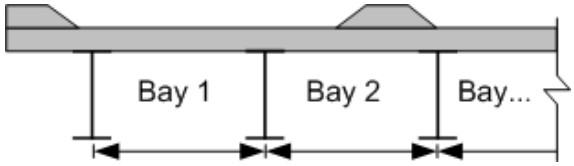
Sacrificial Topping

Thickness: -
Dead Load Type: DC

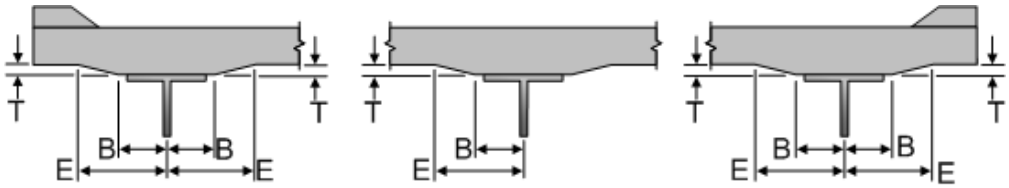
Member Spacing

Bay #	Spacing

1	6.5 ft

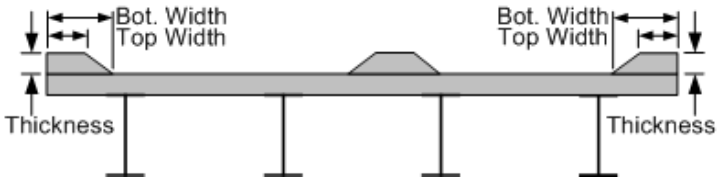


Soffits



Location	Side	Thickness	Taper Begin	Taper End
Left Exterior	Left	2 in.	3.75 in.	9.75 in.
	Right	2 in.	3.75 in.	9.75 in.
Right Exterior	Left	2 in.	3.75 in.	9.75 in.
	Right	2 in.	3.75 in.	9.75 in.

Appurtenances



Appurtenance Type	Bottom Width	Top Width	Thickness	Location
Left Curb	15 in.	15 in.	8 in.	N/A
Right Curb	15 in.	15 in.	8 in.	N/A

Deck Loads

Materials/Stages

Deck Material: **Deck Concrete**
Curb & Median Material: **Deck Concrete**
Wearing Surface Weight: -

Stages

Apply to Entire Structure: Yes
Deck Stage: 1
Curbs Stage: 1
Median Stage: Not Assigned
Wearing Surface Stage: Not Assigned

Line Loads

No line loads have been defined.

Uniform Loads

No uniform loads have been defined.

Live Loads

Live Load Control

Direction Control:	Up+Down
Standard Live Loads:	None
Wheel Advancement Denominator:	100
ADTT:	999
ADTT for Single Lane:	999
Multiple Presence Adjustment:	95 %
% of Dynamic Load Allowance (Impact):	100 %

Dynamic Load Allowance (LRFD)

Design/Rating Procedure	Truck	Lane	Fatigue
Design	33 %	0 %	15 %
Legal	33 %	0 %	0 %
Permit	33 %	0 %	0 %

Special Vehicles

Axle Vehicles

No axle vehicles have been defined.

Lane Vehicles

No lane vehicles have been defined.

Definitions (LRFD)

Definition 1

Code:	HL-93-TRUCK
Type:	GeneralTruck
Design Rating:	Design
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 2

Code:	HL-93-TANDEM
Type:	GeneralTruck
Design Rating:	Design
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 3

Code:	HL-93-LANE
Type:	GeneralLane

Live Load Factor Overrides

Design Rating:	Design
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 4

Code:	TYPE3
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 5

Code:	TYPE3S2
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 6

Code:	TYPE3-3
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 7

Code:	SU4
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-

Lanes Loaded:	Critical	Strength II	-	-
Notional Load:	No	Strength IV	-	-
Fixed DLA:	-	Service I	-	-
		Service II	-	-
		Service III	-	-
		Fatigue I	-	-
		Fatigue II	-	-

Definition 8

Code:	SU5
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 9

Code:	SU6
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 10

Code:	SU7
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 11

Code:	NRL
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	Yes
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-

Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

General Combinations (LRFD)

Standard Combo	Truck	Lane	Combination Factors	
			Truck	Lane
No	HL-93-TRUCK	HL-93-LANE	1	1
No	HL-93-TANDEM	HL-93-LANE	1	1

Deflection Combinations (LRFD)

No Deflection Combinations (LRFD) have been defined.

Component Groups

Bracing Groups

No bracing groups have been defined.

Transverse Stiffeners

No transverse stiffener groups have been defined.

Bearing Stiffeners

No bearing stiffener groups have been defined.

Longitudinal Stiffeners

No longitudinal stiffener groups have been defined.

Specification Control

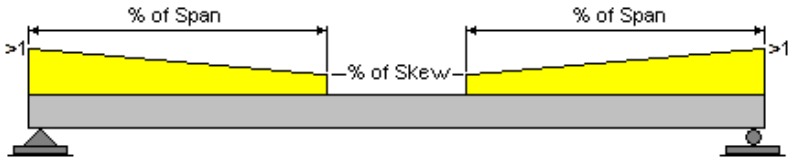
General

Lane Geometry

Design Vehicle Lane Width: 12 ft
Vehicle Width: 10 ft
Wheel Spacing: 6 ft
Encroachment Distance: -

Load Factors Control (LRFD): Use load factors per analysis type (Review = max/min; Rating = max only)

Skew Factors



Span #	% of Span	% of Skew
1	-	-

Steel

Use Appendix A6 (LRFD): Yes
Allow Plastic Analysis: Yes
Override Longitudinal Stiffeners: No
Slab thickness for longitudinal shear force: Structural
Slab thickness for minimum negative flexure concrete deck reinforcement: Structural

Fatigue

AASHTO LRFD Table 6.6.1.2.5-2

% of Span: 10
Span Length: 40 ft

Stress Range in Longitudinal Reinforcement Over the Piers: 10 ksi

Detail Categories (LRFD)

Detail Category	Constant, A x 10^8	Constant Amplitude Fatigue Threshold
A	250 kip^3	24 ksi
B	120 kip^3	16 ksi
B'	61 kip^3	12 ksi
C	44 kip^3	10 ksi
C'	44 kip^3	12 ksi
D	22 kip^3	7 ksi
E	11 kip^3	4.5 ksi
E'	3.9 kip^3	2.6 ksi

Limit State Map

Limit State Maps (LRFD)

Limit State	Design Review			Rating		
	Design Load	Legal Load	Permit Load	Design Load	Legal Load	Permit Load
Strength I	Yes	Yes	No	Inventory/Operating	Yes	No
Strength II	Yes	Yes	Yes	Exclude	No	Yes
Strength IV	No	No	No	Exclude	No	No
Service I	No	No	No	Exclude	No	No
Service II	Yes	Yes	No	Inventory/Operating	Yes	Yes
Service III	No	No	No	Exclude	No	No
Fatigue I	Yes	Yes	No	Inventory	No	No
Fatigue II	Yes	Yes	No	Inventory	No	No

Spec. Check Map (Strength)

LRFD Specification Check Maps

Design Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Legal Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Permit Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Design Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	Yes	No	No
Shear	Yes	No	No
Bearing	Yes	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Legal Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	Yes	No	No
Shear	Yes	No	No
Bearing	Yes	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Permit Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Spec. Check Map (Service)

LRFD Specification Check Maps

Design Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Legal Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Permit Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Design Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	Yes
Live Load Deflection	No	No

Legal Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	Yes
Live Load Deflection	No	No

Permit Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Spec. Check Map (Fatigue)

LRFD Specification Check Maps

Design Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No

Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Legal Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Permit Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Design Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Legal Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Permit Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Bracing Schedules

No bracing schedules have been defined.

Member 1

Member Notes

No member notes have been defined.

Member Materials

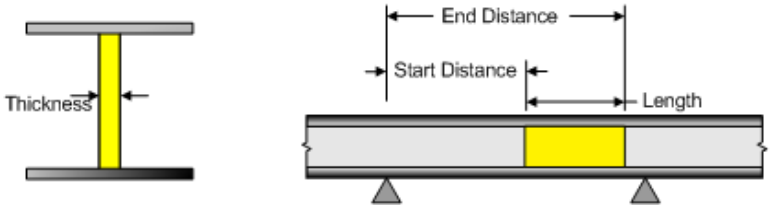
Beam

Beam Material: **Grade 30**

Beam Profile

Web

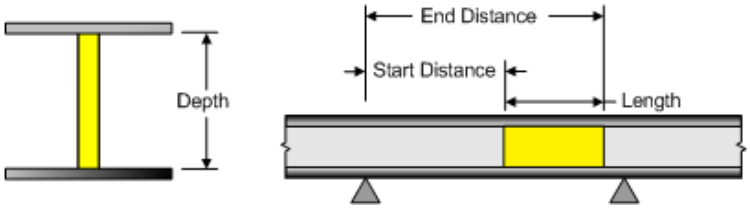
Apply to Entire Structure: Yes
Web Angle: -



Thickness	Material	Support Number	Start Distance	Length
0.375 in.	**Grade 30**	1	0 ft	6.25 ft

Web Depth

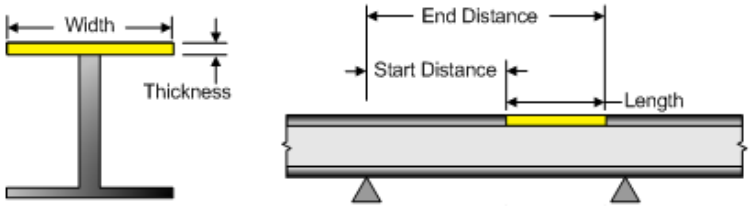
Apply to Entire Structure: Yes



Start Depth	Web Variation	End Depth	Support Number	Start Distance	Length
17.25 in.	Linear	17.25 in.	1	0 ft	6.25 ft

Top Flange

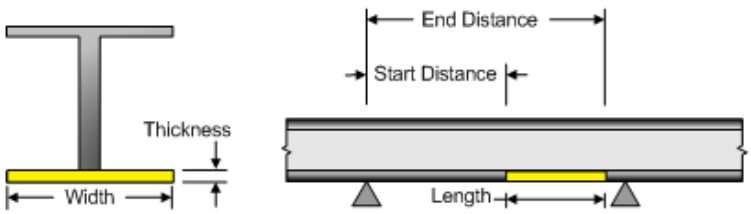
Apply to Entire Structure: Yes



Start of Range		End of Range		Material	Support Number	Start Distance	Length
Width	Thickness	Width	Thickness				
7.5 in.	0.375 in.	-	-	**Grade 30**	1	0 ft	6.25 ft

Bottom Flange

Apply to Entire Structure: Yes



Start of Range		End of Range		Material	Support Number	Start Distance	Length
Width	Thickness	Width	Thickness				
7.5 in.	0.375 in.	-	-	**Grade 30**	1	0 ft	6.25 ft

Top Cover Plate

No top cover plate schedules have been defined.

Bottom Cover Plate

No bottom cover plate schedules have been defined.

Hinges

No hinges have been defined.

Special Locations

No special locations have been defined.

Splice Locations

No splice locations have been defined.

Supports

Support Conditions

Support	Support Restraint		
	Horizontal	Vertical	Rotational
1	Restrained	Restrained	Free
2	Free	Restrained	Free

Spring Constants

Support	Spring Constants		
	Horizontal	Vertical	Rotational
1	-	-	-
2	-	-	-

Schedules

Transverse Stiffeners

No transverse stiffener schedules have been defined.

Bearing Stiffeners

Apply to Entire Structure: No

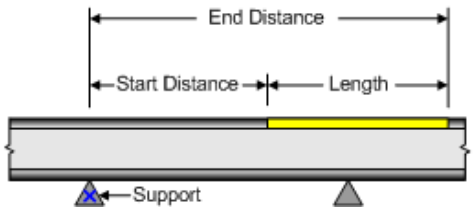
Support	Stiffener Group
1	Not Assigned

Longitudinal Stiffeners

No longitudinal stiffener schedules have been defined.

Lateral Support

Apply to Entire Structure: Yes



Support	Start Distance	Length
1	0 ft	6.25 ft

Cb Factors (Standard)

No Cb factors (LRFD) have been defined.

Cb Factors (LRFD)

No Cb factors (LRFD) have been defined.

Fatigue Stress (Standard)

No fatigue stress (standard) schedules have been defined.

Member Control

Steel

Flexural Resistance

Span	Ignore Eq. 6.10.7.1.2-3 (LRFD)
1	No

End Panel Distances

Top Span

Left of Top Span: -
Right of Top Span: -

Flange Local Buckling Resistance Adjustment

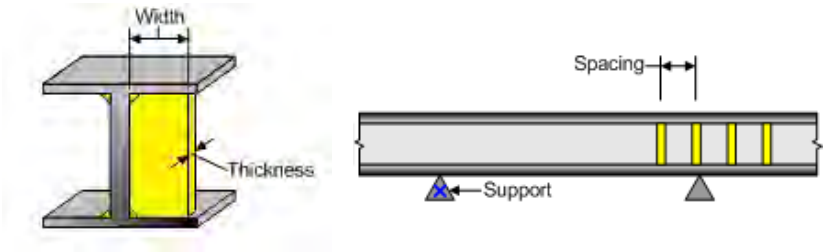
Standard Specifications: -
LRFD Specifications: -

Points of Interest

Points

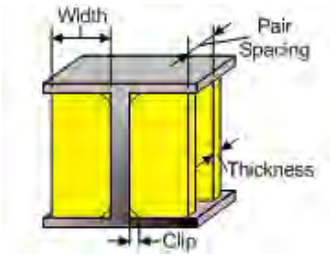
Point of Interest	Output Specification Checks	Output Load Combinations
100	Yes	Yes
101	Yes	Yes
102	Yes	Yes
103	Yes	Yes
104	Yes	Yes
104.5	Yes	Yes
105	Yes	Yes

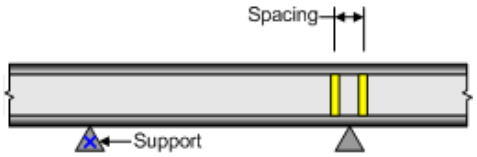
Transverse Stiffeners



Point of Interest	Override	Width	Thickness	Spacing	Type	Type Factor	Material
100	No	-	-	-	-	-	-
101	No	-	-	-	-	-	-
102	No	-	-	-	-	-	-
103	No	-	-	-	-	-	-
104	No	-	-	-	-	-	-
104.5	No	-	-	-	-	-	-
105	No	-	-	-	-	-	-

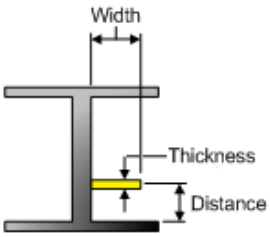
Bearing Stiffeners





Point of Interest	Override	Width	Thickness	Clip	Number of Pairs	Pair Spacing	Attachment	Material
100	No	-	-	-	-	-	-	-
101	No	-	-	-	-	-	-	-
102	No	-	-	-	-	-	-	-
103	No	-	-	-	-	-	-	-
104	No	-	-	-	-	-	-	-
104.5	No	-	-	-	-	-	-	-
105	No	-	-	-	-	-	-	-

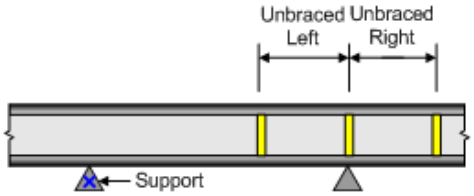
Longitudinal Stiffeners



Point of Interest	Main Stiffener					
	Override	Width	Thickness	Distance	Web Reference	Material
100	No	-	-	-	-	-
101	No	-	-	-	-	-
102	No	-	-	-	-	-
103	No	-	-	-	-	-
104	No	-	-	-	-	-
104.5	No	-	-	-	-	-
105	No	-	-	-	-	-

Point of Interest	Second Stiffener					
	Override	Width	Thickness	Distance	Web Reference	Material
100	No	-	-	-	-	-
101	No	-	-	-	-	-
102	No	-	-	-	-	-
103	No	-	-	-	-	-
104	No	-	-	-	-	-
104.5	No	-	-	-	-	-
105	No	-	-	-	-	-

Bracing



Point of Interest	Override	Lateral Support	Point Braced	Unbraced Length	
				Left	Right
100	No	-	-	-	-
101	No	-	-	-	-
102	No	-	-	-	-
103	No	-	-	-	-
104	No	-	-	-	-
104.5	No	-	-	-	-
105	No	-	-	-	-

Cb Factors

LRFD

Point of Interest	Override	Cb Method	Cb Factor	
			Top Flange	Bottom Flange
100	No	-	-	-
101	No	-	-	-
102	No	-	-	-
103	No	-	-	-
104	No	-	-	-
104.5	No	-	-	-
105	No	-	-	-

Fatigue

No fatigue detail categories have been defined.

Point of Interest	N Cycles	Zr (LRFD)
100	-	-
101	-	-
102	-	-
103	-	-
104	-	-
104.5	-	-
105	-	-

Point of Interest	r/h (Top Reinf.)	r/h (Bottom Reinf.)
100	-	-
101	-	-
102	-	-
103	-	-
104	-	-
104.5	-	-
105	-	-

Output

Point of Interest	Flexure	Shear	Bearing	Flexural Stress in Longitudinal Stiffener	Crack Control	Flexural Stress in Flanges
100	Yes	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes	Yes

Point of Interest	Live Load Deflection	Fatigue of Reinforcement	Fatigue of Shear Connectors	Fatigue Shear Range of Shear Connectors	Fatigue of Special Points	Fatigue Shear
100	Yes	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes	Yes

Point of Interest	Details	Compactness and Bracing	Transverse Stiffeners	Bearing Stiffeners	Longitudinal Stiffeners
100	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes

Dead Loads

Uniform

No uniform dead loads have been defined.

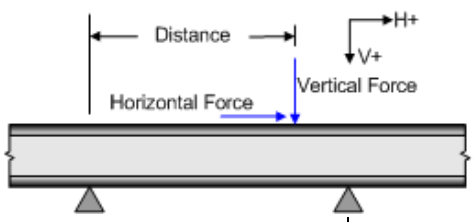
Additional Self-weight

No additional self-weight dead loads have been defined.

Distributed

No distributed dead loads have been defined.

Concentrated



Dead Load Group	Support	Concentrated Load		
		Distance	Horizontal Force	Vertical Force
DC Diaphragms	1	6.25 ft	-	0.067 kip

Temperature

No temperature dead loads have been defined.

Settlement

Stage: 1

No settlement loads have been defined.

Pedestrian Load

Pedestrian Load: -

Member 2

Identical to: Member 1

BRASS Results – Steel Stringer

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**********************************************************************************************
**                                                                                          **
**                            WYOMING DEPARTMENT OF TRANSPORTATION                          **
**                       BRIDGE RATING AND ANALYSIS OF STRUCTURAL SYSTEMS                   **
**                                                                                          **
**                                                                                          **
**             BBBBBBBBBB   RRRRRRRRRR    AAAAAAAAAA    SSSSSSSSSS    SSSSSSSSSS            **
**             BBBBBBBBBBB  RRRRRRRRRRR  AAAAAAAAAAAA  SSSSSSSSSSS  SSSSSSSSSSS            **
**             BB        BB  RR        RR  AA        AA  SS        SS  SS        SS            **
**             BB        BB  RR        RR  AA        AA  SS            SS                    **
**             BB       BB   RR        RR  AA        AA  SSS           SSS                   **
**             BBBBBBBBBB    RRRRRRRRRRR  AAAAAAAAAAAA   SSSSSSSSS     SSSSSSSSS             **
**             BBBBBBBBBB    RRRRRRRRRR   AAAAAAAAAAAA    SSSSSSSS     SSSSSSSS              **
**             BB       BB   RR    RR      AA        AA           SSS           SSS           **
**             BB        BB  RR      RR    AA        AA            SS            SS           **
**             BB        BB  RR       RR   AA        AA  SS        SS  SS        SS           **
**             BBBBBBBBBBBB  RR        RR  AA        AA  SSSSSSSSSSS  SSSSSSSSSSS            **
**             BBBBBBBBBB   RR         RR  AA        AA   SSSSSSSSSS    SSSSSSSSSS            **
**                                                                                          **
**                                                                                          **
**        GGGGGGGGGG   IIIIIIIIIIII  RRRRRRRRRRR   DDDDDDDD      EEEEEEEEEEEE  RRRRRRRRRRR    **
**       GGGGGGGGGGGG  IIIIIIIIIIII  RRRRRRRRRRRR  DDDDDDDDD     EEEEEEEEEEEE  RRRRRRRRRRRR   **
**       GG        GG       II       RR        RR  DD      DD    EE            RR        RR   **
**       GG                 II       RR        RR  DD       DD   EE            RR        RR   **
**       GG                 II       RR        RR  DD        DD  EE            RR        RR   **
**       GG    GGGGGG       II       RRRRRRRRRRRR  DD        DD  EEEEEEEEEE    RRRRRRRRRRRR   **
**       GG    GGGGGG       II       RRRRRRRRRRR   DD        DD  EEEEEEEEEE    RRRRRRRRRRR    **
**       GG        GG       II       RR    RR      DD        DD  EE            RR    RR       **
**       GG        GG       II       RR     RR     DD       DD   EE            RR     RR      **
**       GG        GG       II       RR      RR    DD      DD    EE            RR      RR     **
**       GGGGGGGGGGGG  IIIIIIIIIIII  RR       RR   DDDDDDDDD     EEEEEEEEEEEE  RR       RR    **
**        GGGGGGGGGG   IIIIIIIIIIII  RR        RR  DDDDDDDD      EEEEEEEEEEEE  RR        RR   **
**                                                                                          **
**                                                                                          **
**                                C O P Y R I G H T  ©  1997 - 2017                         **
**                                                                                          **
**                           Version  8   Release  0   Service Pack  0                      **
**                                    ** Release Version **                                 **
**                                 Release Date: Oct. 05, 2017                              **
**                                                                                          **
**                        For user assistance and system information contact:               **
**                                      Phone: (307) 777-4489                               **
**                                 E-mail: BRASSTechSupport@wyo.gov                         **
**                                                                                          **
**     The source version is maintained by BridgeTech, Inc.                                 **
**                                                                                          **
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**                                                                                          **
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**        for and make no representations or warranties as to applicability or suitability **
**        of this computer program.  Anyone making use thereof or relying thereon assumes   **
**        all responsibility and liability arising from such use or reliance.               **
**                                                                                          **
**     AASHTO LRFD Specifications:                                                          **
**                                                                                          **
**        BRASS-GIRDER™ is current with the AASHTO LRFD Bridge Design Specifications, 8th   **
**        Edition, 2017.  Load and Resistance Factor Ratings are current with the AASHTO    **
**        Manual for Bridge Evaluation, 3rd Edition, 2017.                                  **
**                                                                                          **
**     AASHTO Standard Specifications (LFD):                                                **
**                                                                                          **
**        BRASS-GIRDER is current with the AASHTO Standard Specifications for Highway       **
**        Bridges, 17th Edition, 2002.  Load Factor Ratings are current with the AASHTO     **
**        Manual for Bridge Evaluation, 3rd Edition, 2017.                                  **
**                                                                                          **
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DECK GEOMETRY AND LOAD SUMMARY REPORT

No. Girders: 2

Girder Spacing, in

Bay No.	Spacing
1	78.000

Cantilevers:
Left = 36.000 in
Right = 36.000 in

Deck Width = 150.000 in

Slab Thickness = 6.000 in

Left Curb:
Thickness = 8.000 in
Width (top) = 15.000 in
Width (bot) = 15.000 in

Right Curb:
Thickness = 8.000 in
Width (top) = 15.000 in
Width (bot) = 15.000 in

DECK GEOMETRY AND LOAD SUMMARY REPORT (continued)

Left Exterior Soffit:

	Left Side, in	Right Side, in
Thickness	2.000	2.000
Distance (beg)	3.750	3.750
Distance (end)	9.750	9.750

Right Exterior Soffit:

	Left Side, in	Right Side, in
Thickness	2.000	2.000
Distance (beg)	3.750	3.750
Distance (end)	9.750	9.750

Travel Way Locations:
Left Edge = 15.000 in
Right Edge = 135.000 in

Material Weights:
Concrete (deck) = 0.1500 k/ft^3
Concrete (other) = 0.1500 k/ft^3

MEMBER LOADS SUMMARY REPORT (Deck Dead Load Distribution Only)

Units: Loads are in k/ft.

Member Loads Due to Deck Components:

Member No.	Stage	Slab DC	Soffit DC	Curbs DC	Median DC	Topping DC	Wearing Surface DW
=> 1	1	0.469	0.028	0.125	0.000	0.000	0.000
2	1	0.469	0.028	0.125	0.000	0.000	0.000

MEMBER LOADS SUMMARY REPORT (Deck Dead Load Distribution Only)(continued)

Units: Loads are in k/ft.

Member of Interest: 1

Total Loads Due to Load Groups:

Load Group	1	2	3	4	5	6	7	8	9	10
Member No.										
=> 1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Total Loads:

Member No.	Stage	Dead Load
=> 1	1	0.000
2	1	0.000

Member No.	Total Dead Load
=> 1	0.000
2	0.000

** STRUCTURE/ANALYSIS SUMMARY **

Structure Type : Beam
Material Type : Steel
Number of Stages: 1
Element Type : Stepped
Analysis Type : Rating

Span No.	Length (ft)	Angle (deg)
1	12.5000	N/A

Supports:

Support No.	Fixity Horizontal	Fixity Vertical	Fixity Rotational	Spring Constants Horizontal (k/ft)	Spring Constants Vertical (k/ft)	Spring Constants Rotational (ft-k/rad)
1	Restrained	Restrained	Free	Infinity	Infinity	N/A
2	Free	Restrained	Free	N/A	Infinity	N/A

Beam Material Properties:
Unit Weight : 0.490 k/ft^3
Modulus of Elasticity (E) : 29000.000 ksi
Thermal Expansion Coefficient : 0.0000065 / deg. F

** OUTPUT CONTROL SUMMARY **

Action Output Locations	Actions at tenth points
Dead Load Actions	YES
Live Load Actions	YES
Concurrent Actions	NO
Girder Properties	YES
Truck Position	NO
Variable Axle Spacing	NO
Live Load Settings	YES
Live Load Combinations	YES
Live Load Details	YES
Load Combinations	YES
Load and Resistance Factors	YES
Warnings	YES
Member Self-Load	YES
Distributed Dead Loads	YES
Concentrated Dead Loads	YES
Temperature Change	NO
Settlements	NO
Camber Summary	NO
Influence Summary	NO
Critical Design Ratios or Rating Factors	YES (Condensed)
Dyn. Load Allowance Summary	NO
Intermediate Output Level	Expanded
Stage 1	YES

Limit State	Intermediate Output	Load Combinations
STRENGTH I	YES	YES
STRENGTH I-O	YES	YES
STRENGTH II	NO	NO
STRENGTH IV	NO	NO
SERVICE I	NO	NO
SERVICE II	YES	YES
SERVICE II-O	YES	YES
SERVICE III	NO	NO
FATIGUE I	NO	NO
FATIGUE II	NO	NO

Dead Load Distribution (Intermediate)	NO
Dead Load Distribution (Standard)	YES
Live Load Distribution (Intermediate)	YES
Live Load Distribution (Standard)	YES
Transverse Stiffeners (Intermediate)	NO
Bearing Stiffeners (Intermediate)	NO
Longitudinal Stiffeners (Intermediate)	NO
Shear Connectors (Intermediate)	NO
Shear Connectors (Standard)	NO
Floorbeam (Intermediate)	NO
Effective Width (Intermediate)	NO
Action X-Y Plot Tables	NO
Specification Check Results Tables	NO
Mesh Plot Files	NO

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 1 Span Length = 12.500 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Input Dimensions and Cross-Section Geometry: (in)

Point No.	Dist (ft)	Web Depth	Web Width top	Web Width bot	Flange Thickness top	Flange Thickness bot	Flange Width top	Flange Width bot
1-0.000	0.000	17.25	0.375	0.375	0.375	0.375	7.50	7.50
1-0.100	1.250	17.25	0.375	0.375	0.375	0.375	7.50	7.50
1-0.200	2.500	17.25	0.375	0.375	0.375	0.375	7.50	7.50
1-0.300	3.750	17.25	0.375	0.375	0.375	0.375	7.50	7.50
1-0.400	5.000	17.25	0.375	0.375	0.375	0.375	7.50	7.50
1-0.450	5.625	17.25	0.375	0.375	0.375	0.375	7.50	7.50
1-0.500	6.250	17.25	0.375	0.375	0.375	0.375	7.50	7.50
1-0.600	7.500	17.25	0.375	0.375	0.375	0.375	7.50	7.50
1-0.700	8.750	17.25	0.375	0.375	0.375	0.375	7.50	7.50
1-0.800	10.000	17.25	0.375	0.375	0.375	0.375	7.50	7.50
1-0.900	11.250	17.25	0.375	0.375	0.375	0.375	7.50	7.50
1-1.000	12.500	17.25	0.375	0.375	0.375	0.375	7.50	7.50

Calculated Properties:

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)	Standard Section Name
1-0.000	0.000	12.09	597.3	9.00	-
1-0.100	1.250	12.09	597.3	9.00	-
1-0.200	2.500	12.09	597.3	9.00	-
1-0.300	3.750	12.09	597.3	9.00	-
1-0.400	5.000	12.09	597.3	9.00	-
1-0.450	5.625	12.09	597.3	9.00	-
1-0.500	6.250	12.09	597.3	9.00	-
1-0.600	7.500	12.09	597.3	9.00	-
1-0.700	8.750	12.09	597.3	9.00	-
1-0.800	10.000	12.09	597.3	9.00	-
1-0.900	11.250	12.09	597.3	9.00	-
1-1.000	12.500	12.09	597.3	9.00	-

Note: The calculated properties reported above are based on the entire cross section geometry, which may include the slab if it was input. These properties are used only for the structural analysis to obtain moments, shears, etc. When specification and stress checks are performed, BRASS calculates the section properties for both positive and negative bending, and uses them in accordance with the sign of the factored moments. The section properties used for the section analysis are tabulated in a later report.

Note: The distance to the centroid (X-bar) references the bottom of the bottom flange.

Self-Load Summary:

Span No.	Beginning of Load Distance, ft	Beginning of Load Magnitude, k/ft	End of Load Distance, ft	End of Load Magnitude, k/ft
1	0.000	0.0412	12.500	0.0412

Load Groups:
1. DC Diaphragms

Distributed Dead Load Summary:
No loads are present.

Deck Loads and Schedules Summary:

Element	Stage	Load, k/ft
Deck	1	0.4969
Curbs	1	0.1250

Element	Stage	Span No.	Start Distance, ft	Length, ft
Deck	1	*	0.000	12.500
Curbs	1	*	0.000	12.500

Note: A span number denoted as "*" indicates the distances reference the left end of the bridge and the load may extend over one or more spans.

Concentrated Dead Load Summary:

Load Group	Span No.	Distance ft	Load Magnitude, kips Horizontal	Vertical
1	*	6.250	0.000	0.067

Note: A span number denoted as "*" indicates the distance references the left end of the bridge.

** LIVE LOAD DISTRIBUTION FACTORS SUMMARY **

** Warning! - The Lever Rule Override was invoked because one or more the ranges of applicability are not satisfied for the AASHTO LRFD distribution factor formulas. See the .DST intermediate output file for details.

Beam Distribution Factor Schedule: Shear

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	6.250	0.570 (RG-O)	0.000 (1,LR-O)
1	6.250	12.500	0.570 (RG-O)	0.000 (1,LR-O)

Beam Distribution Factor Schedule: Moment

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	12.500	0.570 (RG-O)	0.000 (1,LR-O)

Beam Distribution Factor Schedule: Deflection

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	12.500	0.570 (LRFD)	0.570 (1,LRFD)

Reaction Distribution Factors: Shear

Support No.	mg(1-lane)	mg(M-lanes)
1	0.570 (RG-O)	0.000 (1,LR-O)
2	0.570 (RG-O)	0.000 (1,LR-O)

Reaction Distribution Factors: Moment

Support No.	mg(1-lane)	mg(M-lanes)
1	0.570 (RG-O)	0.000 (1,LR-O)
2	0.570 (RG-O)	0.000 (1,LR-O)

Reaction Distribution Factors: Deflection

Support No.	mg(1-lane)	mg(M-lanes)
1	0.570 (LRFD)	0.570 (1,LRFD)
2	0.570 (LRFD)	0.570 (1,LRFD)

Notes:
=> The controlling method is included in parenthesis next to each distribution factor.
USER = User Input LR-T = Lever Rule Specified in AASHTO LRFD Table
LRFD = AASHTO LRFD Formulas LR-O = Lever Rule Override
LR = Lever Rule Method RG-O = Rigid Method Override
=> Additionally, for multiple-lanes loaded, the number of lanes loaded is shown. An 'M' is used with the USER and LRFD methods because the number of multiple lanes is unknown.
=> The Lever Rule Override is invoked when the ranges of applicability are not satisfied for the AASHTO LRFD distribution factor formulas.

LIVE LOAD SETTINGS SUMMARY:

Direction Control : Up & Down Reference Marker
Pedestrian Load : 0.000 k/ft
Wheel Advancement Denominator: 100
ADTT : 999
ADTT (Single Lane) : 999
Multiple Presence Adjustment : 95.000 %

Design/Rating Procedure	Dynamic Load Allowance (%) Truck	Lane	Fatigue
Design Load	33.00	0.00	15.00
Legal Load	33.00	0.00	0.00
Permit Load	33.00	0.00	0.00

No.	Name	Description	Scale Factor	Percent Impact	Fixed Impact	Live Load Type	Rating Procedure	Lanes Loaded
1	HL-93-TRUCK	AASHTO LRFD HL-93 Design Truck (US)	1.000	100.000	0.33	TRK	Design Load	Critical
2	HL-93-TANDEM	AASHTO LRFD HL-93 Design Tandem (US)	1.000	100.000	0.33	TRK	Design Load	Critical
3	HL-93-LANE	AASHTO LRFD HL-93 Design Lane (US)	1.000	100.000	0.00	LAN	Design Load	Critical
4	TYPE3	AASHTO Type 3 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
5	TYPE3S2	AASHTO Type 3S2 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
6	TYPE3-3	AASHTO Type 3-3 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
7	SU4	AASHTO Specialized Hauling Vehicle SU4	1.000	100.000	0.33	TRK	Legal Load	Critical
8	SU5	AASHTO Specialized Hauling Vehicle SU5	1.000	100.000	0.33	TRK	Legal Load	Critical
9	SU6	AASHTO Specialized Hauling Vehicle SU6	1.000	100.000	0.33	TRK	Legal Load	Critical
10	SU7	AASHTO Specialized Hauling Vehicle SU7	1.000	100.000	0.33	TRK	Legal Load	Critical
11	NRL	AASHTO Notional Rating Load	1.000	100.000	0.33	TRK	Legal Load	Critical

LIVE LOAD COMBINATIONS SUMMARY:

Comb. No.	Name	Description	Truck No.	Lane No.	Combination Factors Truck	Lane
1	HL-93-TRUCK	HL-93-TRUCK + HL-93-LANE	1	3	1.000	1.000
2	HL-93-TANDEM	HL-93-TANDEM + HL-93-LANE	2	3	1.000	1.000
3	TYPE3	TYPE3	4	N/A	1.000	N/A
4	TYPE3S2	TYPE3S2	5	N/A	1.000	N/A
5	TYPE3-3	TYPE3-3	6	N/A	1.000	N/A
6	SU4	SU4	7	N/A	1.000	N/A
7	SU5	SU5	8	N/A	1.000	N/A
8	SU6	SU6	9	N/A	1.000	N/A
9	SU7	SU7	10	N/A	1.000	N/A
10	NRL	NRL	11	N/A	1.000	N/A

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Concentrated Loads Moment (kips)	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 1: HL-93-TRUCK : AASHTO LRFD HL-93 Design Truck (US)												
0.000	0.000	0.000	72.000	1	8.000	0.000	2	32.000	14.000	3	32.000	14.000
Live Load 2: HL-93-TANDEM: AASHTO LRFD HL-93 Design Tandem (US)												
0.000	0.000	0.000	50.000	1	25.000	0.000	2	25.000	4.000			
Live Load 3: HL-93-LANE : AASHTO LRFD HL-93 Design Lane (US)												
0.640	0.000	0.000	36.000									
Live Load 4: TYPE3 : AASHTO Type 3 Rating Truck (US)												
0.000	0.000	0.000	50.000	1	16.000	0.000	2	17.000	15.000	3	17.000	4.000
Live Load 5: TYPE3S2 : AASHTO Type 3S2 Rating Truck (US)												
0.000	0.000	0.000	72.000	1	10.000	0.000	2	15.500	11.000	3	15.500	4.000
				4	15.500	22.000	5	15.500	4.000			

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Concentrated Loads Moment (kips)	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 6: TYPE3-3 : AASHTO Type 3-3 Rating Truck (US)												
0.000	0.000	0.000	80.000	1	12.000	0.000	2	12.000	15.000	3	12.000	4.000
				4	16.000	15.000	5	14.000	16.000	6	14.000	4.000
Live Load 7: SU4 : AASHTO Specialized Hauling Vehicle SU4												
0.000	0.000	0.000	54.000	1	12.000	0.000	2	8.000	10.000	3	17.000	4.000
				4	17.000	4.000						
Live Load 8: SU5 : AASHTO Specialized Hauling Vehicle SU5												
0.000	0.000	0.000	62.000	1	12.000	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000			
Live Load 9: SU6 : AASHTO Specialized Hauling Vehicle SU6												
0.000	0.000	0.000	69.500	1	11.500	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
Live Load 10: SU7 : AASHTO Specialized Hauling Vehicle SU7												
0.000	0.000	0.000	77.500	1	11.500	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
				7	8.000	4.000						

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Concentrated Loads Moment (kips)	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 11: NRL : AASHTO Notional Rating Load												
0.000	0.000	0.000	80.000	1	6.000	0.000	2	8.000	6.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
				7	8.000	4.000	8	8.000	4.000			

LOAD FACTORS SUMMARY:

Limit State	eta D	eta R	eta I	eta T MAX	eta T MIN
STRENGTH I	1.00	1.00	1.00	1.00	1.00
STRENGTH II	1.00	1.00	1.00	1.00	1.00
STRENGTH IV	1.00	1.00	1.00	1.00	1.00
SERVICE I	1.00	1.00	1.00	1.00	1.00
SERVICE II	1.00	1.00	1.00	1.00	1.00
SERVICE III	1.00	1.00	1.00	1.00	1.00
FATIGUE I	1.00	1.00	1.00	1.00	1.00
FATIGUE II	1.00	1.00	1.00	1.00	1.00

Limit State	DC		DW		DU		LL (Design)		LL	LL
	MAX	MIN	MAX	MIN	MAX	MIN	Inventory	Operating	Legal	Permit
STRENGTH I	1.25	1.25	1.50	1.50	1.50	1.50	1.75	1.35	1.30	0.00
STRENGTH II	1.25	1.25	1.50	1.50	1.50	1.50	1.35	0.00	0.00	0.00
STRENGTH IV	1.50	1.50	1.50	1.50	1.50	1.50	0.00	0.00	0.00	0.00
SERVICE I	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00
SERVICE II	1.00	1.00	1.00	1.00	1.00	1.00	1.30	1.00	1.30	1.00
SERVICE III	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.00	1.00	0.00
FATIGUE I	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	0.00	0.00
FATIGUE II	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00

Limit State	TU		SE		PS		DS	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
STRENGTH I	1.20	1.20	1.00	1.00	1.00	1.00	1.25	1.25
STRENGTH II	1.20	1.20	1.00	1.00	1.00	1.00	1.25	1.25
STRENGTH IV	1.20	1.20	0.00	0.00	1.00	1.00	1.50	1.50
SERVICE I	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
SERVICE II	1.20	1.20	0.00	0.00	1.00	1.00	1.00	1.00
SERVICE III	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
FATIGUE I	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
FATIGUE II	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00

Notes:
=> DU = Utilities
=> PS = Prestress
=> DS = Differential Deck Shrinkage

RESISTANCE FACTORS SUMMARY:

Limit State	phi C
STRENGTH	1.00
SERVICE	1.00
FATIGUE	1.00

Resistance Type	phi* (Base)	STRENGTH phi S	STRENGTH phi T	SERVICE phi S	SERVICE phi T	FATIGUE phi S	FATIGUE phi T
Flexure	1.00	0.85	0.85	1.00	1.00	1.00	1.00
Shear	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Bearing	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shear Connectors	0.85	1.00	1.00	1.00	1.00	1.00	1.00
Compression	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fatigue	1.00	1.00	1.00	1.00	1.00	1.00	1.00

* Base phi factors are not adjusted by phi C * phi S.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR GIRDER WEIGHT
Length of Span No. 1 = 12.500 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	0.0	0.0	0.3	0.3	0.00	0.00
1-0.100	0.3	0.0	0.2		0.00	0.00
1-0.200	0.5	0.0	0.2		0.00	0.00
1-0.300	0.7	0.0	0.1		0.00	0.00
1-0.400	0.8	0.0	0.1		0.00	0.00
1-0.500	0.8	0.0	-0.0		0.00	0.00
1-0.600	0.8	0.0	-0.1		0.00	0.00
1-0.700	0.7	0.0	-0.1		0.00	0.00
1-0.800	0.5	0.0	-0.2		0.00	0.00
1-0.900	0.3	0.0	-0.2		0.00	0.00
1-1.000	0.0	0.0	-0.3	0.3	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000028 rad Right End = -0.000028 rad

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD FROM DECK LOADS **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR SUPERIMPOSED UNIFORM DEAD LOAD (DC) ON TOP SPANS
Length of Span No. 1 = 12.500 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	-0.0	0.0	3.9	3.9	0.00	0.00
1-0.100	4.4	0.0	3.1		0.00	0.01
1-0.200	7.8	0.0	2.3		0.00	0.01
1-0.300	10.2	0.0	1.6		0.00	0.02
1-0.400	11.7	0.0	0.8		0.00	0.02
1-0.500	12.1	0.0	-0.0		0.00	0.02
1-0.600	11.7	0.0	-0.8		0.00	0.02
1-0.700	10.2	0.0	-1.6		0.00	0.02
1-0.800	7.8	0.0	-2.3		0.00	0.01
1-0.900	4.4	0.0	-3.1		0.00	0.01
1-1.000	0.0	0.0	-3.9	3.9	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000421 rad Right End = -0.000421 rad

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR SUPERIMPOSED DEAD LOAD GROUP #1
LOAD DESCRIPTION: DC Diaphragms
Length of Span No. 1 = 12.500 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	0.0	0.0	0.0	0.0	0.00	0.00
1-0.100	0.0	0.0	0.0		0.00	0.00
1-0.200	0.1	0.0	0.0		0.00	0.00
1-0.300	0.1	0.0	0.0		0.00	0.00
1-0.400	0.2	0.0	0.0		0.00	0.00
1-0.500	0.2	0.0	-0.0		0.00	0.00
1-0.600	0.2	0.0	-0.0		0.00	0.00
1-0.700	0.1	0.0	-0.0		0.00	0.00
1-0.800	0.1	0.0	-0.0		0.00	0.00
1-0.900	0.0	0.0	-0.0		0.00	0.00
1-1.000	0.0	0.0	-0.0	0.0	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000005 rad Right End = -0.000005 rad

** COMBINED UNFACTORED DEAD LOAD ACTIONS **
** CONSTRUCTION STAGE 1 **

Length of Span No. 1 = 12.500 ft

Dead Loads of Structural Components (DC)

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
1-0.000	-0.0	0.0	4.2	4.2	0.00
1-0.100	4.7	0.0	3.3		0.01
1-0.200	8.4	0.0	2.5		0.01
1-0.300	11.0	0.0	1.7		0.02
1-0.400	12.6	0.0	0.9		0.02
1-0.500	13.2	0.0	-0.0		0.02
1-0.600	12.6	0.0	-0.9		0.02
1-0.700	11.0	0.0	-1.7		0.02
1-0.800	8.4	0.0	-2.5		0.01
1-0.900	4.7	0.0	-3.3		0.01
1-1.000	0.0	0.0	-4.2	4.2	0.00

Rotations (DC): Left End = 0.000454 rad
(+) Clockwise Right End = -0.000454 rad

Dead Loads of Wearing Surfaces (DW)

MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
0.0	0.0	0.0	0.0	0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0	0.0	0.00

Rotations (DW): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

Dead Loads of Utilities (DU)

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
1-0.000	0.0	0.0	0.0	0.0	0.00
1-0.100	0.0	0.0	0.0		0.00
1-0.200	0.0	0.0	0.0		0.00
1-0.300	0.0	0.0	0.0		0.00
1-0.400	0.0	0.0	0.0		0.00
1-0.500	0.0	0.0	0.0		0.00
1-0.600	0.0	0.0	0.0		0.00
1-0.700	0.0	0.0	0.0		0.00
1-0.800	0.0	0.0	0.0		0.00
1-0.900	0.0	0.0	0.0		0.00
1-1.000	0.0	0.0	0.0	0.0	0.00

Rotations (DU): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 1: AASHTO LRFD HL-93 Design Truck (US) (TRK)
Length of Span No. 1 = 12.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	24.2	0.0	24.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	27.2	0.0	0.0	0.0	21.8	-2.2			0.00	0.00	0.03	0.00		
1-0.200	48.3	0.0	0.0	0.0	19.4	-4.7			0.00	0.00	0.06	0.00		
1-0.300	63.3	0.0	0.0	0.0	16.9	-7.1			0.00	0.00	0.08	0.00		
1-0.400	72.2	0.0	0.0	0.0	14.5	-9.6			0.00	0.00	0.09	0.00		
1-0.500	75.0	0.0	0.0	0.0	12.0	-12.0			0.00	0.00	0.10	0.00		
1-0.600	72.2	0.0	0.0	0.0	9.6	-14.5			0.00	0.00	0.09	0.00		
1-0.700	63.3	0.0	0.0	0.0	7.1	-16.9			0.00	0.00	0.08	0.00		
1-0.800	48.3	0.0	0.0	0.0	4.7	-19.4			0.00	0.00	0.06	0.00		
1-0.900	27.2	0.0	0.0	0.0	2.2	-21.8			0.00	0.00	0.03	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-24.2	24.2	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.002021 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 10.664 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.002020 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 10.340 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 2: AASHTO LRFD HL-93 Design Tandem (US) (TRK)
Length of Span No. 1 = 12.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	31.8	0.0	31.8	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	35.0	0.0	0.0	0.0	28.0	-1.7			0.00	0.00	0.04	0.00		
1-0.200	60.5	0.0	0.0	0.0	24.2	-3.6			0.00	0.00	0.08	0.00		
1-0.300	76.3	0.0	0.0	0.0	20.4	-5.6			0.00	0.00	0.11	0.00		
1-0.400	83.1	0.0	0.0	0.0	16.5	-8.9			0.00	0.00	0.13	0.00		
1-0.500	80.5	0.0	0.0	0.0	12.7	-12.7			0.00	0.00	0.13	0.00		
1-0.600	83.1	0.0	0.0	0.0	8.9	-16.5			0.00	0.00	0.13	0.00		
1-0.700	76.3	0.0	0.0	0.0	5.6	-20.4			0.00	0.00	0.11	0.00		
1-0.800	60.5	0.0	0.0	0.0	3.6	-24.2			0.00	0.00	0.08	0.00		
1-0.900	35.0	0.0	0.0	0.0	1.7	-28.0			0.00	0.00	0.04	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-31.8	31.8	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.002800 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 16.075 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.002801 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 15.592 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 3: AASHTO LRFD HL-93 Design Lane (US) (LAN)
Length of Span No. 1 = 12.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	2.3	0.0	2.3	0.0	0.00	0.00	0.00	0.00	0.00	0.00
1-0.100	2.6	0.0	0.0	0.0	1.9	-0.0			0.00	0.00	0.00	0.00		
1-0.200	4.6	0.0	0.0	0.0	1.5	-0.1			0.00	0.00	0.01	0.00		
1-0.300	6.0	0.0	0.0	0.0	1.1	-0.2			0.00	0.00	0.01	0.00		
1-0.400	6.8	0.0	0.0	0.0	0.8	-0.4			0.00	0.00	0.01	0.00		
1-0.500	7.1	0.0	0.0	0.0	0.6	-0.6			0.00	0.00	0.01	0.00		
1-0.600	6.8	0.0	0.0	0.0	0.4	-0.8			0.00	0.00	0.01	0.00		
1-0.700	6.0	0.0	0.0	0.0	0.2	-1.1			0.00	0.00	0.01	0.00		
1-0.800	4.6	0.0	0.0	0.0	0.1	-1.5			0.00	0.00	0.01	0.00		
1-0.900	2.6	0.0	0.0	0.0	0.0	-1.9			0.00	0.00	0.00	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-2.3	2.3	0.0	0.00	0.00	0.00	0.00	0.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000247 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 2.280 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000247 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 2.280 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 4: AASHTO Type 3 Rating Truck (US) (TRK)
Length of Span No. 1 = 12.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	21.5	0.0	21.4	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	23.6	0.0	0.0	0.0	19.1	-1.2			0.00	0.00	0.03	0.00		
1-0.200	41.0	0.0	0.0	0.0	16.5	-2.5			0.00	0.00	0.05	0.00		
1-0.300	51.8	0.0	0.0	0.0	13.9	-3.8			0.00	0.00	0.07	0.00		
1-0.400	56.4	0.0	0.0	0.0	11.3	-6.1			0.00	0.00	0.09	0.00		
1-0.500	54.8	0.0	0.0	0.0	8.7	-8.7			0.00	0.00	0.09	0.00		
1-0.600	56.4	0.0	0.0	0.0	6.1	-11.3			0.00	0.00	0.09	0.00		
1-0.700	51.9	0.0	0.0	0.0	3.8	-13.9			0.00	0.00	0.07	0.00		
1-0.800	41.0	0.0	0.0	0.0	2.5	-16.5			0.00	0.00	0.05	0.00		
1-0.900	23.6	0.0	0.0	0.0	1.2	-19.1			0.00	0.00	0.03	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-21.5	21.5	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001904 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 10.892 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001905 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 10.641 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 5: AASHTO Type 3S2 Rating Truck (US) (TRK)
Length of Span No. 1 = 12.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	19.7	0.0	19.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	21.7	0.0	0.0	0.0	17.4	-1.1			0.00	0.00	0.03	0.00		
1-0.200	37.5	0.0	0.0	0.0	15.0	-2.3			0.00	0.00	0.05	0.00		
1-0.300	47.3	0.0	0.0	0.0	12.6	-3.4			0.00	0.00	0.07	0.00		
1-0.400	51.5	0.0	0.0	0.0	10.2	-5.5			0.00	0.00	0.08	0.00		
1-0.500	49.9	0.0	0.0	0.0	7.9	-7.9			0.00	0.00	0.08	0.00		
1-0.600	51.5	0.0	0.0	0.0	5.5	-10.2			0.00	0.00	0.08	0.00		
1-0.700	47.3	0.0	0.0	0.0	3.4	-12.6			0.00	0.00	0.07	0.00		
1-0.800	37.5	0.0	0.0	0.0	2.2	-15.0			0.00	0.00	0.05	0.00		
1-0.900	21.7	0.0	0.0	0.0	1.1	-17.4			0.00	0.00	0.03	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-19.7	19.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001736 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 9.988 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001736 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 9.645 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 6: AASHTO Type 3-3 Rating Truck (US) (TRK)
Length of Span No. 1 = 12.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	17.8	0.0	17.8	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	19.6	0.0	0.0	0.0	15.7	-1.1			0.00	0.00	0.02	0.00		
1-0.200	33.9	0.0	0.0	0.0	13.5	-2.3			0.00	0.00	0.04	0.00		
1-0.300	42.7	0.0	0.0	0.0	11.4	-3.6			0.00	0.00	0.06	0.00		
1-0.400	46.5	0.0	0.0	0.0	9.3	-5.0			0.00	0.00	0.07	0.00		
1-0.500	45.1	0.0	0.0	0.0	7.1	-7.1			0.00	0.00	0.07	0.00		
1-0.600	46.5	0.0	0.0	0.0	5.0	-9.3			0.00	0.00	0.07	0.00		
1-0.700	42.7	0.0	0.0	0.0	3.6	-11.4			0.00	0.00	0.06	0.00		
1-0.800	33.9	0.0	0.0	0.0	2.3	-13.5			0.00	0.00	0.04	0.00		
1-0.900	19.6	0.0	0.0	0.0	1.1	-15.7			0.00	0.00	0.02	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-17.8	17.8	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001568 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 9.003 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001568 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 8.730 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 7: AASHTO Specialized Hauling Vehicle SU4 (TRK)
Length of Span No. 1 = 12.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	23.7	0.0	23.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	25.6	0.0	0.0	0.0	20.5	-1.1			0.00	0.00	0.03	0.00		
1-0.200	43.2	0.0	0.0	0.0	17.3	-2.4			0.00	0.00	0.06	0.00		
1-0.300	53.2	0.0	0.0	0.0	14.0	-3.7			0.00	0.00	0.08	0.00		
1-0.400	60.0	0.0	0.0	0.0	11.1	-5.9			0.00	0.00	0.09	0.00		
1-0.500	61.4	0.0	0.0	0.0	8.5	-8.5			0.00	0.00	0.09	0.00		
1-0.600	60.0	0.0	0.0	0.0	5.9	-11.1			0.00	0.00	0.09	0.00		
1-0.700	53.2	0.0	0.0	0.0	3.7	-14.0			0.00	0.00	0.08	0.00		
1-0.800	43.2	0.0	0.0	0.0	2.4	-17.3			0.00	0.00	0.06	0.00		
1-0.900	25.6	0.0	0.0	0.0	1.1	-20.5			0.00	0.00	0.03	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-23.7	23.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.002044 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 12.736 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.002044 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 12.495 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 8: AASHTO Specialized Hauling Vehicle SU5 (TRK)
Length of Span No. 1 = 12.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	23.8	0.0	23.8	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	25.5	0.0	0.0	0.0	20.7	-1.2			0.00	0.00	0.03	0.00		
1-0.200	43.4	0.0	0.0	0.0	17.4	-2.5			0.00	0.00	0.06	0.00		
1-0.300	53.2	0.0	0.0	0.0	14.2	-3.8			0.00	0.00	0.08	0.00		
1-0.400	59.9	0.0	0.0	0.0	11.3	-6.1			0.00	0.00	0.09	0.00		
1-0.500	61.2	0.0	0.0	0.0	8.7	-8.7			0.00	0.00	0.09	0.00		
1-0.600	59.9	0.0	0.0	0.0	6.1	-11.3			0.00	0.00	0.09	0.00		
1-0.700	53.2	0.0	0.0	0.0	3.8	-14.2			0.00	0.00	0.08	0.00		
1-0.800	43.4	0.0	0.0	0.0	2.5	-17.4			0.00	0.00	0.06	0.00		
1-0.900	25.5	0.0	0.0	0.0	1.2	-20.7			0.00	0.00	0.03	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-23.8	23.8	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.002042 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 12.901 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.002043 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 12.418 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 9: AASHTO Specialized Hauling Vehicle SU6 (TRK)
Length of Span No. 1 = 12.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	23.8	0.0	23.8	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	25.5	0.0	0.0	0.0	20.7	-0.8			0.00	0.00	0.03	0.00		
1-0.200	43.4	0.0	0.0	0.0	17.5	-1.7			0.00	0.00	0.06	0.00		
1-0.300	53.2	0.0	0.0	0.0	14.3	-2.6			0.00	0.00	0.08	0.00		
1-0.400	60.0	0.0	0.0	0.0	10.8	-4.4			0.00	0.00	0.09	0.00		
1-0.500	61.3	0.0	0.0	0.0	7.6	-7.6			0.00	0.00	0.09	0.00		
1-0.600	59.9	0.0	0.0	0.0	4.4	-10.8			0.00	0.00	0.09	0.00		
1-0.700	53.2	0.0	0.0	0.0	2.6	-14.3			0.00	0.00	0.08	0.00		
1-0.800	43.4	0.0	0.0	0.0	1.7	-17.5			0.00	0.00	0.06	0.00		
1-0.900	25.5	0.0	0.0	0.0	0.8	-20.7			0.00	0.00	0.03	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-23.8	23.8	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.002042 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 12.901 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.002044 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 12.465 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 10: AASHTO Specialized Hauling Vehicle SU7 (TRK)
Length of Span No. 1 = 12.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	23.9	0.0	23.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	25.5	0.0	0.0	0.0	20.7	-0.8			0.00	0.00	0.03	0.00		
1-0.200	43.4	0.0	0.0	0.0	17.5	-1.7			0.00	0.00	0.06	0.00		
1-0.300	53.2	0.0	0.0	0.0	14.3	-2.6			0.00	0.00	0.08	0.00		
1-0.400	60.0	0.0	0.0	0.0	10.8	-4.4			0.00	0.00	0.09	0.00		
1-0.500	61.3	0.0	0.0	0.0	7.6	-7.6			0.00	0.00	0.09	0.00		
1-0.600	59.9	0.0	0.0	0.0	4.4	-10.8			0.00	0.00	0.09	0.00		
1-0.700	53.2	0.0	0.0	0.0	2.6	-14.3			0.00	0.00	0.08	0.00		
1-0.800	43.4	0.0	0.0	0.0	1.7	-17.5			0.00	0.00	0.06	0.00		
1-0.900	25.5	0.0	0.0	0.0	0.8	-20.7			0.00	0.00	0.03	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-23.9	23.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.002042 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 12.901 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.002044 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 12.465 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 11: AASHTO Notional Rating Load (TRK)
Length of Span No. 1 = 12.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	23.9	0.0	23.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	25.6	0.0	0.0	0.0	20.6	-1.2			0.00	0.00	0.03	0.00		
1-0.200	43.4	0.0	0.0	0.0	17.4	-2.5			0.00	0.00	0.06	0.00		
1-0.300	53.2	0.0	0.0	0.0	14.2	-3.8			0.00	0.00	0.08	0.00		
1-0.400	59.9	0.0	0.0	0.0	11.3	-6.0			0.00	0.00	0.09	0.00		
1-0.500	61.4	0.0	0.0	0.0	8.6	-8.6			0.00	0.00	0.09	0.00		
1-0.600	60.0	0.0	0.0	0.0	6.0	-11.3			0.00	0.00	0.09	0.00		
1-0.700	53.2	0.0	0.0	0.0	3.8	-14.2			0.00	0.00	0.08	0.00		
1-0.800	43.4	0.0	0.0	0.0	2.5	-17.4			0.00	0.00	0.06	0.00		
1-0.900	25.6	0.0	0.0	0.0	1.2	-20.6			0.00	0.00	0.03	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-23.9	23.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.002044 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 12.736 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.002043 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 12.388 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I
Length of Span No. 1 = 12.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	-0.0	0.0	0.0	64.9	5.2	64.9	5.2	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	71.6	5.9	0.0	0.0	56.5	0.3			0.09	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	124.2	10.5	0.0	0.0	48.0	-5.2			0.17	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	157.8	13.8	0.0	0.0	39.7	-10.7			0.23	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.400	173.1	15.7	0.0	0.0	31.4	-16.3			0.27	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.500	169.9	16.4	0.0	0.0	23.2	-23.3			0.28	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	173.1	15.7	0.0	0.0	16.3	-31.4			0.27	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	157.8	13.8	0.0	0.0	10.7	-39.7			0.23	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	124.2	10.5	0.0	0.0	5.2	-48.0			0.17	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	71.6	5.9	0.0	0.0	-0.3	-56.5			0.09	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-5.2	-64.9	64.9	5.2	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I-O
Length of Span No. 1 = 12.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	-0.0	0.0	0.0	51.3	5.2	51.3	5.2	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	56.6	5.9	0.0	0.0	44.5	1.2			0.07	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	98.2	10.5	0.0	0.0	37.8	-3.3			0.13	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	124.9	13.8	0.0	0.0	31.1	-7.8			0.18	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.400	137.2	15.7	0.0	0.0	24.5	-12.3			0.21	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.500	134.8	16.4	0.0	0.0	17.9	-18.0			0.22	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	137.2	15.7	0.0	0.0	12.3	-24.5			0.21	0.03
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	124.9	13.8	0.0	0.0	7.8	-31.1			0.18	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	98.2	10.5	0.0	0.0	3.3	-37.8			0.13	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	56.6	5.9	0.0	0.0	-1.2	-44.5			0.07	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-5.2	-51.3	51.3	5.2	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II
Length of Span No. 1 = 12.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	-0.0	0.0	0.0	48.5	4.2	48.5	4.2	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	53.6	4.7	0.0	0.0	42.2	0.5			0.07	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	92.9	8.4	0.0	0.0	35.9	-3.6			0.12	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	118.0	11.0	0.0	0.0	29.6	-7.8			0.17	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.400	129.5	12.6	0.0	0.0	23.4	-12.0			0.20	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.500	127.1	13.2	0.0	0.0	17.2	-17.3			0.21	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	129.5	12.6	0.0	0.0	12.0	-23.4			0.20	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	118.0	11.0	0.0	0.0	7.8	-29.6			0.17	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	92.9	8.4	0.0	0.0	3.6	-35.9			0.12	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	53.6	4.7	0.0	0.0	-0.5	-42.2			0.07	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-4.2	-48.5	48.5	4.2	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II-O
Length of Span No. 1 = 12.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	-0.0	0.0	0.0	38.3	4.2	38.3	4.2	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	42.3	4.7	0.0	0.0	33.2	1.1			0.05	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	73.4	8.4	0.0	0.0	28.2	-2.2			0.10	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	93.3	11.0	0.0	0.0	23.2	-5.6			0.13	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.400	102.5	12.6	0.0	0.0	18.2	-9.1			0.16	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.500	100.8	13.2	0.0	0.0	13.2	-13.3			0.17	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	102.5	12.6	0.0	0.0	9.1	-18.2			0.16	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	93.3	11.0	0.0	0.0	5.6	-23.2			0.13	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	73.4	8.4	0.0	0.0	2.2	-28.2			0.10	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	42.3	4.7	0.0	0.0	-1.1	-33.2			0.05	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-4.2	-38.3	38.3	4.2	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

LIMIT STATE LEGEND:

BRASS	Specifications
STRENGTH I	Strength I Inventory
STRENGTH I-O	Strength I Operating
STRENGTH II	Strength II
STRENGTH IV	Strength IV
SERVICE I	Service I
SERVICE II	Service II Inventory
SERVICE II-O	Service II Operating
FATIGUE I	Fatigue I
FATIGUE II	Fatigue II

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 1 Span Length = 12.500 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Calculated Properties: Section Analysis (Positive Bending)

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)
1-0.000	0.000	12.09	597.3	9.00
1-0.100	1.250	12.09	597.3	9.00
1-0.200	2.500	12.09	597.3	9.00
1-0.300	3.750	12.09	597.3	9.00
1-0.400	5.000	12.09	597.3	9.00
1-0.450	5.625	12.09	597.3	9.00
1-0.500	6.250	12.09	597.3	9.00
1-0.600	7.500	*	*	*
1-0.700	8.750	*	*	*
1-0.800	10.000	*	*	*
1-0.900	11.250	*	*	*
1-1.000	12.500	*	*	*

* Note: Section properties for section analysis are only calculated at
points of interest either specified by the user or generated by BRASS.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 100.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	18.0000			
Top Flange Thickness	=	0.3750	Top Flange Width	=	7.5000
Web Depth	=	17.2500	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	7.5000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 0.000 ft
Maximum distance to Right Brace Point = 12.500 ft
Is analysis point braced? YES

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0
Resistance - Dead	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	46.4	0.0	35.8	0.0	35.8	0.0	0.0	0.0
Total Load Effect	51.6	5.2	41.0	5.2	41.0	5.2	6.3	6.3
Resistance - Dead	107.3	107.3	107.3	107.3	107.3	107.3	106.3	106.3
Design Ratio	2.18	21.56	2.74	21.56	(2.74)	(21.56)	(17.96)	(17.96)
Rating Factor	2.31	N/A	3.00	N/A	(3.00)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0
Resistance - Dead	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	59.7	0.0	46.1	0.0	46.1	0.0	0.0	0.0
Total Load Effect	64.9	5.2	51.3	5.2	51.3	5.2	6.3	6.3
Resistance - Dead	107.3	107.3	107.3	107.3	107.3	107.3	106.3	106.3
Design Ratio	1.73	21.56	2.19	21.56	(2.19)	(21.56)	(17.96)	(17.96)
Rating Factor	1.80	N/A	2.33	N/A	(2.33)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	28.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	33.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	107.3	107.3	107.3	107.3	107.3	107.3	106.3	106.3
Design Ratio	3.39	21.56	21.56	21.56	(21.56)	(21.56)	(17.96)	(17.96)
Rating Factor	3.84	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	25.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	30.9	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	107.3	107.3	107.3	107.3	107.3	107.3	106.3	106.3
Design Ratio	3.65	21.56	21.56	21.56	(21.56)	(21.56)	(17.96)	(17.96)
Rating Factor	4.18	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	23.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	28.4	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	107.3	107.3	107.3	107.3	107.3	107.3	106.3	106.3
Design Ratio	3.96	21.56	21.56	21.56	(21.56)	(21.56)	(17.96)	(17.96)
Rating Factor	4.63	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	30.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	36.0	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	107.3	107.3	107.3	107.3	107.3	107.3	106.3	106.3
Design Ratio	3.12	21.56	21.56	21.56	(21.56)	(21.56)	(17.96)	(17.96)
Rating Factor	3.48	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	30.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	36.1	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	107.3	107.3	107.3	107.3	107.3	107.3	106.3	106.3
Design Ratio	3.11	21.56	21.56	21.56	(21.56)	(21.56)	(17.96)	(17.96)
Rating Factor	3.47	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	30.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	36.1	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	107.3	107.3	107.3	107.3	107.3	107.3	106.3	106.3
Design Ratio	3.11	21.56	21.56	21.56	(21.56)	(21.56)	(17.96)	(17.96)
Rating Factor	3.47	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	31.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	36.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	107.3	107.3	107.3	107.3	107.3	107.3	106.3	106.3
Design Ratio	3.11	21.56	21.56	21.56	(21.56)	(21.56)	(17.96)	(17.96)
Rating Factor	3.46	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
Resistance - Dead	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Live Load Effect	31.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	36.3	5.2	5.2	5.2	5.2	5.2	6.3	6.3
Resistance - Dead	107.3	107.3	107.3	107.3	107.3	107.3	106.3	106.3
Design Ratio	3.10	21.56	21.56	21.56	(21.56)	(21.56)	(17.96)	(17.96)
Rating Factor	3.45	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 101.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	18.0000			
Top Flange Thickness	=	0.3750	Top Flange Width	=	7.5000
Web Depth	=	17.2500	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	7.5000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 1.250 ft
Maximum distance to Right Brace Point = 11.250 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	5.9	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Live Load Effect	52.1	0.0	40.2	0.0	40.2	0.0	0.0	0.0
Total Load Effect	58.0	0.0	46.1	0.0	46.1	0.0	7.1	0.0
Resistance - Dead	158.7	0.0	158.7	0.0	158.7	0.0	157.6	0.0
Design Ratio	2.84	N/A	3.57	N/A	(3.57)	(N/A)	(23.33)	(N/A)
Rating Factor	3.04	N/A	3.95	N/A	(3.95)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	41.4	-3.9	32.0	-3.0	32.0	-3.0	0.0	0.0
Total Load Effect	45.6	0.3	36.1	1.2	36.1	1.2	5.0	5.0
Resistance - Dead	108.4	108.4	108.4	108.4	108.4	108.4	107.5	107.5
Design Ratio	2.47	388.82	3.11	95.38	(3.11)	(95.38)	(22.41)	(22.41)
Rating Factor	2.62	N/A	3.39	N/A	(3.39)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-7.00	7.00	0.00	0.00	-5.39	5.39	0.00	0.00
Total Load Effect	-7.85	7.85	0.00	0.00	-6.24	6.24	0.00	0.00
Resistance - Dead	-23.15	23.15	0.00	0.00	-23.15	23.15	0.00	0.00
Design Ratio	3.06	3.06	N/A	N/A	3.85	3.85	N/A	N/A
Rating Factor	3.31	3.31	N/A	N/A	4.30	4.30	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-7.00	7.00	0.00	0.00	-5.39	5.39	0.00	0.00
Total Load Effect	-7.85	7.85	0.00	0.00	-6.24	6.24	0.00	0.00
Resistance - Dead	-29.15	N/A	0.00	0.00	-29.15	N/A	0.00	0.00
Design Ratio	3.82	N/A	N/A	N/A	4.81	N/A	N/A	N/A
Rating Factor	4.16	N/A	N/A	N/A	5.41	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	5.9	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Live Load Effect	65.8	0.0	50.7	0.0	50.7	0.0	0.0	0.0
Total Load Effect	71.6	0.0	56.6	0.0	56.6	0.0	7.1	0.0
Resistance - Dead	158.7	0.0	158.7	0.0	158.7	0.0	157.6	0.0
Design Ratio	2.30	N/A	2.91	N/A	(2.91)	(N/A)	(23.33)	(N/A)
Rating Factor	2.41	N/A	3.13	N/A	(3.13)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	52.3	-3.1	40.3	-2.4	40.3	-2.4	0.0	0.0
Total Load Effect	56.5	1.1	44.5	1.8	44.5	1.8	5.0	5.0
Resistance - Dead	108.4	108.4	108.4	108.4	108.4	108.4	107.5	107.5
Design Ratio	1.99	99.27	2.53	61.46	(2.53)	(61.46)	(22.41)	(22.41)
Rating Factor	2.07	N/A	2.69	N/A	(2.69)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-8.83	8.83	0.00	0.00	-6.79	6.79	0.00	0.00
Total Load Effect	-9.68	9.68	0.00	0.00	-7.65	7.65	0.00	0.00
Resistance - Dead	-23.15	23.15	0.00	0.00	-23.15	23.15	0.00	0.00
Design Ratio	2.48	2.48	N/A	N/A	3.14	3.14	N/A	N/A
Rating Factor	2.62	2.62	N/A	N/A	3.41	3.41	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-8.83	8.83	0.00	0.00	-6.79	6.79	0.00	0.00
Total Load Effect	-9.68	9.68	0.00	0.00	-7.65	7.65	0.00	0.00
Resistance - Dead	-29.15	N/A	0.00	0.00	-29.15	N/A	0.00	0.00
Design Ratio	3.10	N/A	N/A	N/A	3.92	N/A	N/A	N/A
Rating Factor	3.30	N/A	N/A	N/A	4.29	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	5.9	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Live Load Effect	30.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	36.6	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Resistance - Dead	158.7	0.0	158.7	0.0	158.7	0.0	157.6	0.0
Design Ratio	4.50	N/A	28.00	N/A	(28.00)	(N/A)	(23.33)	(N/A)
Rating Factor	5.17	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	24.8	-1.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	29.0	2.7	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	108.4	108.4	108.4	108.4	108.4	108.4	107.5	107.5
Design Ratio	3.88	42.27	26.89	26.89	(26.89)	(26.89)	(22.41)	(22.41)
Rating Factor	4.36	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-5.56	5.56	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.41	6.41	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-23.15	23.15	0.00	0.00	24.85	23.15	0.00	0.00
Design Ratio	3.75	3.75	N/A	N/A	N/A	28.22	N/A	N/A
Rating Factor	4.17	4.17	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-5.56	5.56	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.41	6.41	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-29.15	N/A	0.00	0.00	-29.15	N/A	0.00	0.00
Design Ratio	4.68	N/A	N/A	N/A	35.27	N/A	N/A	N/A
Rating Factor	5.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	5.9	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Live Load Effect	28.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	34.1	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Resistance - Dead	158.7	0.0	158.7	0.0	158.7	0.0	157.6	0.0
Design Ratio	4.83	N/A	28.00	N/A	(28.00)	(N/A)	(23.33)	(N/A)
Rating Factor	5.63	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	22.6	-1.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	26.7	2.8	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	108.4	108.4	108.4	108.4	108.4	108.4	107.5	107.5
Design Ratio	4.21	40.15	26.89	26.89	(26.89)	(26.89)	(22.41)	(22.41)
Rating Factor	4.80	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-5.10	5.10	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.95	5.95	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-23.15	23.15	0.00	0.00	24.85	23.15	0.00	0.00
Design Ratio	4.03	4.03	N/A	N/A	N/A	28.22	N/A	N/A
Rating Factor	4.54	4.54	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-5.10	5.10	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.95	5.95	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-29.15	N/A	0.00	0.00	-29.15	N/A	0.00	0.00
Design Ratio	5.04	N/A	N/A	N/A	35.27	N/A	N/A	N/A
Rating Factor	5.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	5.9	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Live Load Effect	25.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	31.4	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Resistance - Dead	158.7	0.0	158.7	0.0	158.7	0.0	157.6	0.0
Design Ratio	5.25	N/A	28.00	N/A	(28.00)	(N/A)	(23.33)	(N/A)
Rating Factor	6.23	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	20.4	-1.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	24.6	2.8	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	108.4	108.4	108.4	108.4	108.4	108.4	107.5	107.5
Design Ratio	4.58	40.90	26.89	26.89	(26.89)	(26.89)	(22.41)	(22.41)
Rating Factor	5.31	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-4.61	4.61	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.46	5.46	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-23.15	23.15	0.00	0.00	24.85	23.15	0.00	0.00
Design Ratio	4.40	4.40	N/A	N/A	N/A	28.22	N/A	N/A
Rating Factor	5.02	5.02	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-4.61	4.61	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.46	5.46	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-29.15	N/A	0.00	0.00	-29.15	N/A	0.00	0.00
Design Ratio	5.50	N/A	N/A	N/A	35.27	N/A	N/A	N/A
Rating Factor	6.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	5.9	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Live Load Effect	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	39.2	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Resistance - Dead	158.7	0.0	158.7	0.0	158.7	0.0	157.6	0.0
Design Ratio	4.20	N/A	28.00	N/A	(28.00)	(N/A)	(23.33)	(N/A)
Rating Factor	4.77	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	26.6	-1.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	30.8	2.7	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	108.4	108.4	108.4	108.4	108.4	108.4	107.5	107.5
Design Ratio	3.65	41.13	26.89	26.89	(26.89)	(26.89)	(22.41)	(22.41)
Rating Factor	4.07	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-6.02	6.02	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.87	6.87	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-23.15	23.15	0.00	0.00	24.85	23.15	0.00	0.00
Design Ratio	3.49	3.49	N/A	N/A	N/A	28.22	N/A	N/A
Rating Factor	3.85	3.85	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-6.02	6.02	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.87	6.87	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-29.15	N/A	0.00	0.00	-29.15	N/A	0.00	0.00
Design Ratio	4.37	N/A	N/A	N/A	35.27	N/A	N/A	N/A
Rating Factor	4.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	5.9	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Live Load Effect	33.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	39.1	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Resistance - Dead	158.7	0.0	158.7	0.0	158.7	0.0	157.6	0.0
Design Ratio	4.22	N/A	28.00	N/A	(28.00)	(N/A)	(23.33)	(N/A)
Rating Factor	4.79	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	26.9	-1.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	31.0	2.7	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	108.4	108.4	108.4	108.4	108.4	108.4	107.5	107.5
Design Ratio	3.63	42.27	26.89	26.89	(26.89)	(26.89)	(22.41)	(22.41)
Rating Factor	4.03	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.85	6.85	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-23.15	23.15	0.00	0.00	24.85	23.15	0.00	0.00
Design Ratio	3.50	3.50	N/A	N/A	N/A	28.22	N/A	N/A
Rating Factor	3.86	3.86	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.85	6.85	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-29.15	N/A	0.00	0.00	-29.15	N/A	0.00	0.00
Design Ratio	4.38	N/A	N/A	N/A	35.27	N/A	N/A	N/A
Rating Factor	4.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	5.9	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Live Load Effect	33.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	39.1	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Resistance - Dead	158.7	0.0	158.7	0.0	158.7	0.0	157.6	0.0
Design Ratio	4.21	N/A	28.00	N/A	(28.00)	(N/A)	(23.33)	(N/A)
Rating Factor	4.78	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	26.9	-1.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	31.1	3.2	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	108.4	108.4	108.4	108.4	108.4	108.4	107.5	107.5
Design Ratio	3.62	35.67	26.89	26.89	(26.89)	(26.89)	(22.41)	(22.41)
Rating Factor	4.03	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.86	6.86	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-23.15	23.15	0.00	0.00	24.85	23.15	0.00	0.00
Design Ratio	3.50	3.50	N/A	N/A	N/A	28.22	N/A	N/A
Rating Factor	3.86	3.86	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.86	6.86	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-29.15	N/A	0.00	0.00	-29.15	N/A	0.00	0.00
Design Ratio	4.38	N/A	N/A	N/A	35.27	N/A	N/A	N/A
Rating Factor	4.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	5.9	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Live Load Effect	33.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	39.1	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Resistance - Dead	158.7	0.0	158.7	0.0	158.7	0.0	157.6	0.0
Design Ratio	4.21	N/A	28.00	N/A	(28.00)	(N/A)	(23.33)	(N/A)
Rating Factor	4.78	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	26.9	-1.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	31.1	3.2	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	108.4	108.4	108.4	108.4	108.4	108.4	107.5	107.5
Design Ratio	3.62	35.67	26.89	26.89	(26.89)	(26.89)	(22.41)	(22.41)
Rating Factor	4.03	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.86	6.86	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-23.15	23.15	0.00	0.00	24.85	23.15	0.00	0.00
Design Ratio	3.50	3.50	N/A	N/A	N/A	28.22	N/A	N/A
Rating Factor	3.86	3.86	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.86	6.86	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-29.15	N/A	0.00	0.00	-29.15	N/A	0.00	0.00
Design Ratio	4.38	N/A	N/A	N/A	35.27	N/A	N/A	N/A
Rating Factor	4.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	5.9	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Live Load Effect	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	39.2	0.0	5.9	0.0	5.9	0.0	7.1	0.0
Resistance - Dead	158.7	0.0	158.7	0.0	158.7	0.0	157.6	0.0
Design Ratio	4.20	N/A	28.00	N/A	(28.00)	(N/A)	(23.33)	(N/A)
Rating Factor	4.76	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
Live Load Effect	26.8	-1.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	31.0	2.7	4.2	4.2	4.2	4.2	5.0	5.0
Resistance - Dead	108.4	108.4	108.4	108.4	108.4	108.4	107.5	107.5
Design Ratio	3.63	42.27	26.89	26.89	(26.89)	(26.89)	(22.41)	(22.41)
Rating Factor	4.04	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-6.03	6.03	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.88	6.88	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-23.15	23.15	0.00	0.00	24.85	23.15	0.00	0.00
Design Ratio	3.49	3.49	N/A	N/A	N/A	28.22	N/A	N/A
Rating Factor	3.84	3.84	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.85	0.85	0.00	0.00	-0.85	0.85	0.00	0.00
Live Load Effect	-6.03	6.03	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.88	6.88	0.00	0.00	-0.85	0.85	0.00	0.00
Resistance - Dead	-29.15	N/A	0.00	0.00	-29.15	N/A	0.00	0.00
Design Ratio	4.36	N/A	N/A	N/A	35.27	N/A	N/A	N/A
Rating Factor	4.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 102.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	18.0000			
Top Flange Thickness	=	0.3750	Top Flange Width	=	7.5000
Web Depth	=	17.2500	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	7.5000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 2.500 ft
Maximum distance to Right Brace Point = 10.000 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	10.5	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Live Load Effect	92.5	0.0	71.4	0.0	71.4	0.0	0.0	0.0
Total Load Effect	103.0	0.0	81.9	0.0	81.9	0.0	12.6	0.0
Resistance - Dead	154.2	0.0	154.2	0.0	154.2	0.0	152.1	0.0
Design Ratio	1.60	N/A	2.01	N/A	(2.01)	(N/A)	(13.11)	(N/A)
Rating Factor	1.67	N/A	2.16	N/A	(2.16)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	-112.6	112.6	-112.6	112.6	112.6
Dead Load Effect	3.1	3.1	3.1	3.1	3.1	3.1	3.8	3.8
Live Load Effect	36.4	-8.3	28.1	-6.4	28.1	-6.4	0.0	0.0
Total Load Effect	39.6	-5.2	31.3	-3.3	31.3	-3.3	3.8	3.8
Resistance - Dead	109.4	-115.7	109.4	-115.7	109.4	-115.7	108.8	108.8
Design Ratio	2.84	21.84	3.60	34.58	(3.60)	(34.58)	(29.78)	(29.78)
Rating Factor	3.00	13.94	3.89	18.07	(3.89)	(18.07)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-12.43	12.43	0.00	0.00	-9.56	9.56	0.00	0.00
Total Load Effect	-13.94	13.94	0.00	0.00	-11.08	11.08	0.00	0.00
Resistance - Dead	-22.49	22.49	0.00	0.00	-22.49	22.49	0.00	0.00
Design Ratio	1.72	1.72	N/A	N/A	2.17	2.17	N/A	N/A
Rating Factor	1.81	1.81	N/A	N/A	2.35	2.35	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-12.43	12.43	0.00	0.00	-9.56	9.56	0.00	0.00
Total Load Effect	-13.94	13.94	0.00	0.00	-11.08	11.08	0.00	0.00
Resistance - Dead	-28.49	N/A	0.00	0.00	-28.49	N/A	0.00	0.00
Design Ratio	2.15	N/A	N/A	N/A	2.71	N/A	N/A	N/A
Rating Factor	2.29	N/A	N/A	N/A	2.98	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	10.5	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Live Load Effect	113.8	0.0	87.8	0.0	87.8	0.0	0.0	0.0
Total Load Effect	124.2	0.0	98.2	0.0	98.2	0.0	12.6	0.0
Resistance - Dead	154.2	0.0	154.2	0.0	154.2	0.0	152.1	0.0
Design Ratio	1.32	N/A	1.68	N/A	(1.68)	(N/A)	(13.11)	(N/A)
Rating Factor	1.35	N/A	1.76	N/A	(1.76)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	-112.6	112.6	-112.6	112.6	112.6
Dead Load Effect	3.1	3.1	3.1	3.1	3.1	3.1	3.8	3.8
Live Load Effect	44.9	-6.5	34.6	-5.0	34.6	-5.0	0.0	0.0
Total Load Effect	48.0	-3.4	37.8	-1.9	37.8	-1.9	3.8	3.8
Resistance - Dead	109.4	-115.7	109.4	-115.7	109.4	-115.7	108.8	108.8
Design Ratio	2.34	33.40	2.98	59.87	(2.98)	(59.87)	(29.78)	(29.78)
Rating Factor	2.44	17.75	3.16	23.00	(3.16)	(23.00)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-15.28	15.28	0.00	0.00	-11.76	11.76	0.00	0.00
Total Load Effect	-16.80	16.80	0.00	0.00	-13.27	13.27	0.00	0.00
Resistance - Dead	-22.49	22.49	0.00	0.00	-22.49	22.49	0.00	0.00
Design Ratio	1.43	1.43	N/A	N/A	1.81	1.81	N/A	N/A
Rating Factor	1.47	1.47	N/A	N/A	1.91	1.91	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-15.28	15.28	0.00	0.00	-11.76	11.76	0.00	0.00
Total Load Effect	-16.80	16.80	0.00	0.00	-13.27	13.27	0.00	0.00
Resistance - Dead	-28.49	N/A	0.00	0.00	-28.49	N/A	0.00	0.00
Design Ratio	1.79	N/A	N/A	N/A	2.26	N/A	N/A	N/A
Rating Factor	1.86	N/A	N/A	N/A	2.42	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	10.5	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Live Load Effect	53.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	63.7	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Resistance - Dead	154.2	0.0	154.2	0.0	154.2	0.0	152.1	0.0
Design Ratio	2.58	N/A	15.73	N/A	(15.73)	(N/A)	(13.11)	(N/A)
Rating Factor	2.89	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	3.1	3.1	3.1	3.1	3.1	3.1	3.8	3.8
Live Load Effect	21.5	-3.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	24.6	-0.1	3.1	3.1	3.1	3.1	3.8	3.8
Resistance - Dead	109.4	-115.7	109.4	109.4	109.4	109.4	108.8	108.8
Design Ratio	4.57	1713.81	35.73	35.73	(35.73)	(35.73)	(29.78)	(29.78)
Rating Factor	5.10	35.98	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-9.63	9.63	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.15	11.15	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-22.49	22.49	0.00	0.00	25.51	22.49	0.00	0.00
Design Ratio	2.15	2.15	N/A	N/A	N/A	15.86	N/A	N/A
Rating Factor	2.33	2.33	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-9.63	9.63	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.15	11.15	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-28.49	N/A	0.00	0.00	-28.49	N/A	0.00	0.00
Design Ratio	2.69	N/A	N/A	N/A	19.82	N/A	N/A	N/A
Rating Factor	2.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	10.5	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Live Load Effect	48.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	59.2	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Resistance - Dead	154.2	0.0	154.2	0.0	154.2	0.0	152.1	0.0
Design Ratio	2.78	N/A	15.73	N/A	(15.73)	(N/A)	(13.11)	(N/A)
Rating Factor	3.17	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	3.1	3.1	3.1	3.1	3.1	3.1	3.8	3.8
Live Load Effect	19.5	-2.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	22.6	0.2	3.1	3.1	3.1	3.1	3.8	3.8
Resistance - Dead	109.4	109.4	109.4	109.4	109.4	109.4	108.8	108.8
Design Ratio	4.97	500.77	35.73	35.73	(35.73)	(35.73)	(29.78)	(29.78)
Rating Factor	5.62	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-8.80	8.80	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.32	10.32	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-22.49	22.49	0.00	0.00	25.51	22.49	0.00	0.00
Design Ratio	2.33	2.33	N/A	N/A	N/A	15.86	N/A	N/A
Rating Factor	2.55	2.55	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-8.80	8.80	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.32	10.32	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-28.49	N/A	0.00	0.00	-28.49	N/A	0.00	0.00
Design Ratio	2.91	N/A	N/A	N/A	19.82	N/A	N/A	N/A
Rating Factor	3.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	10.5	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Live Load Effect	44.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	54.5	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Resistance - Dead	154.2	0.0	154.2	0.0	154.2	0.0	152.1	0.0
Design Ratio	3.02	N/A	15.73	N/A	(15.73)	(N/A)	(13.11)	(N/A)
Rating Factor	3.50	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	3.1	3.1	3.1	3.1	3.1	3.1	3.8	3.8
Live Load Effect	17.6	-3.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	20.8	0.1	3.1	3.1	3.1	3.1	3.8	3.8
Resistance - Dead	109.4	109.4	109.4	109.4	109.4	109.4	108.8	108.8
Design Ratio	5.42	911.60	35.73	35.73	(35.73)	(35.73)	(29.78)	(29.78)
Rating Factor	6.22	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-7.96	7.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.47	9.47	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-22.49	22.49	0.00	0.00	25.51	22.49	0.00	0.00
Design Ratio	2.53	2.53	N/A	N/A	N/A	15.86	N/A	N/A
Rating Factor	2.83	2.83	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-7.96	7.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.47	9.47	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-28.49	N/A	0.00	0.00	-28.49	N/A	0.00	0.00
Design Ratio	3.17	N/A	N/A	N/A	19.82	N/A	N/A	N/A
Rating Factor	3.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	10.5	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Live Load Effect	56.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	66.7	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Resistance - Dead	154.2	0.0	154.2	0.0	154.2	0.0	152.1	0.0
Design Ratio	2.47	N/A	15.73	N/A	(15.73)	(N/A)	(13.11)	(N/A)
Rating Factor	2.74	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	3.1	3.1	3.1	3.1	3.1	3.1	3.8	3.8
Live Load Effect	22.4	-3.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	25.6	0.0	3.1	3.1	3.1	3.1	3.8	3.8
Resistance - Dead	109.4	109.4	109.4	109.4	109.4	109.4	108.8	108.8
Design Ratio	4.40	N/A	35.73	35.73	(35.73)	(35.73)	(29.78)	(29.78)
Rating Factor	4.88	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-10.16	10.16	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.67	11.67	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-22.49	22.49	0.00	0.00	25.51	22.49	0.00	0.00
Design Ratio	2.06	2.06	N/A	N/A	N/A	15.86	N/A	N/A
Rating Factor	2.21	2.21	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-10.16	10.16	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.67	11.67	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-28.49	N/A	0.00	0.00	-28.49	N/A	0.00	0.00
Design Ratio	2.57	N/A	N/A	N/A	19.82	N/A	N/A	N/A
Rating Factor	2.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	10.5	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Live Load Effect	56.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	66.9	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Resistance - Dead	154.2	0.0	154.2	0.0	154.2	0.0	152.1	0.0
Design Ratio	2.46	N/A	15.73	N/A	(15.73)	(N/A)	(13.11)	(N/A)
Rating Factor	2.73	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	3.1	3.1	3.1	3.1	3.1	3.1	3.8	3.8
Live Load Effect	22.7	-3.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	25.8	-0.1	3.1	3.1	3.1	3.1	3.8	3.8
Resistance - Dead	109.4	-115.7	109.4	109.4	109.4	109.4	108.8	108.8
Design Ratio	4.36	1713.81	35.73	35.73	(35.73)	(35.73)	(29.78)	(29.78)
Rating Factor	4.82	35.98	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-10.20	10.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.71	11.71	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-22.49	22.49	0.00	0.00	25.51	22.49	0.00	0.00
Design Ratio	2.05	2.05	N/A	N/A	N/A	15.86	N/A	N/A
Rating Factor	2.21	2.21	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-10.20	10.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.71	11.71	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-28.49	N/A	0.00	0.00	-28.49	N/A	0.00	0.00
Design Ratio	2.56	N/A	N/A	N/A	19.82	N/A	N/A	N/A
Rating Factor	2.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	10.5	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Live Load Effect	56.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	66.9	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Resistance - Dead	154.2	0.0	154.2	0.0	154.2	0.0	152.1	0.0
Design Ratio	2.46	N/A	15.73	N/A	(15.73)	(N/A)	(13.11)	(N/A)
Rating Factor	2.73	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	3.1	3.1	3.1	3.1	3.1	3.1	3.8	3.8
Live Load Effect	22.7	-2.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	25.9	1.0	3.1	3.1	3.1	3.1	3.8	3.8
Resistance - Dead	109.4	109.4	109.4	109.4	109.4	109.4	108.8	108.8
Design Ratio	4.35	115.49	35.73	35.73	(35.73)	(35.73)	(29.78)	(29.78)
Rating Factor	4.81	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-10.20	10.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.71	11.71	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-22.49	22.49	0.00	0.00	25.51	22.49	0.00	0.00
Design Ratio	2.05	2.05	N/A	N/A	N/A	15.86	N/A	N/A
Rating Factor	2.21	2.21	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-10.20	10.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.71	11.71	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-28.49	N/A	0.00	0.00	-28.49	N/A	0.00	0.00
Design Ratio	2.56	N/A	N/A	N/A	19.82	N/A	N/A	N/A
Rating Factor	2.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	10.5	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Live Load Effect	56.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	66.9	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Resistance - Dead	154.2	0.0	154.2	0.0	154.2	0.0	152.1	0.0
Design Ratio	2.46	N/A	15.73	N/A	(15.73)	(N/A)	(13.11)	(N/A)
Rating Factor	2.73	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	3.1	3.1	3.1	3.1	3.1	3.1	3.8	3.8
Live Load Effect	22.7	-2.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	25.9	1.0	3.1	3.1	3.1	3.1	3.8	3.8
Resistance - Dead	109.4	109.4	109.4	109.4	109.4	109.4	108.8	108.8
Design Ratio	4.35	115.49	35.73	35.73	(35.73)	(35.73)	(29.78)	(29.78)
Rating Factor	4.81	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-10.20	10.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.71	11.71	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-22.49	22.49	0.00	0.00	25.51	22.49	0.00	0.00
Design Ratio	2.05	2.05	N/A	N/A	N/A	15.86	N/A	N/A
Rating Factor	2.21	2.21	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-10.20	10.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.71	11.71	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-28.49	N/A	0.00	0.00	-28.49	N/A	0.00	0.00
Design Ratio	2.56	N/A	N/A	N/A	19.82	N/A	N/A	N/A
Rating Factor	2.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	10.5	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Live Load Effect	56.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	66.9	0.0	10.5	0.0	10.5	0.0	12.6	0.0
Resistance - Dead	154.2	0.0	154.2	0.0	154.2	0.0	152.1	0.0
Design Ratio	2.46	N/A	15.73	N/A	(15.73)	(N/A)	(13.11)	(N/A)
Rating Factor	2.73	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	3.1	3.1	3.1	3.1	3.1	3.1	3.8	3.8
Live Load Effect	22.7	-3.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	25.8	-0.1	3.1	3.1	3.1	3.1	3.8	3.8
Resistance - Dead	109.4	-115.7	109.4	109.4	109.4	109.4	108.8	108.8
Design Ratio	4.36	1713.81	35.73	35.73	(35.73)	(35.73)	(29.78)	(29.78)
Rating Factor	4.83	35.98	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-10.21	10.21	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.73	11.73	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-22.49	22.49	0.00	0.00	25.51	22.49	0.00	0.00
Design Ratio	2.05	2.05	N/A	N/A	N/A	15.86	N/A	N/A
Rating Factor	2.20	2.20	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.51	1.51	0.00	0.00	-1.51	1.51	0.00	0.00
Live Load Effect	-10.21	10.21	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.73	11.73	0.00	0.00	-1.51	1.51	0.00	0.00
Resistance - Dead	-28.49	N/A	0.00	0.00	-28.49	N/A	0.00	0.00
Design Ratio	2.56	N/A	N/A	N/A	19.82	N/A	N/A	N/A
Rating Factor	2.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 103.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	18.0000			
Top Flange Thickness	=	0.3750	Top Flange Width	=	7.5000
Web Depth	=	17.2500	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	7.5000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 3.750 ft
Maximum distance to Right Brace Point = 8.750 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.8	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Live Load Effect	121.2	0.0	93.5	0.0	93.5	0.0	0.0	0.0
Total Load Effect	135.0	0.0	107.3	0.0	107.3	0.0	16.5	0.0
Resistance - Dead	150.9	0.0	150.9	0.0	150.9	0.0	148.1	0.0
Design Ratio	1.22	N/A	1.53	N/A	(1.53)	(N/A)	(9.97)	(N/A)
Rating Factor	1.24	N/A	1.61	N/A	(1.61)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	-112.6	112.6	-112.6	112.6	112.6
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	31.6	-12.8	24.3	-9.9	24.3	-9.9	0.0	0.0
Total Load Effect	33.7	-10.7	26.5	-7.8	26.5	-7.8	2.5	2.5
Resistance - Dead	110.4	-114.7	110.4	-114.7	110.4	-114.7	110.0	110.0
Design Ratio	3.34	10.54	4.25	14.52	(4.25)	(14.52)	(44.37)	(44.37)
Rating Factor	3.50	8.97	4.54	11.62	(4.54)	(11.62)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-16.28	16.28	0.00	0.00	-12.53	12.53	0.00	0.00
Total Load Effect	-18.27	18.27	0.00	0.00	-14.52	14.52	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	-22.01	22.01	0.00	0.00
Design Ratio	1.31	1.31	N/A	N/A	1.65	1.65	N/A	N/A
Rating Factor	1.35	1.35	N/A	N/A	1.76	1.76	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-16.28	16.28	0.00	0.00	-12.53	12.53	0.00	0.00
Total Load Effect	-18.27	18.27	0.00	0.00	-14.52	14.52	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	1.64	N/A	N/A	N/A	2.07	N/A	N/A	N/A
Rating Factor	1.72	N/A	N/A	N/A	2.24	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.8	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Live Load Effect	144.0	0.0	111.1	0.0	111.1	0.0	0.0	0.0
Total Load Effect	157.8	0.0	124.9	0.0	124.9	0.0	16.5	0.0
Resistance - Dead	150.9	0.0	150.9	0.0	150.9	0.0	148.1	0.0
Design Ratio	1.04	N/A	1.32	N/A	(1.32)	(N/A)	(9.97)	(N/A)
Rating Factor	1.05	N/A	1.36	N/A	(1.36)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	-112.6	112.6	-112.6	112.6	112.6
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	37.6	-10.1	29.0	-7.8	29.0	-7.8	0.0	0.0
Total Load Effect	39.7	-8.0	31.1	-5.7	31.1	-5.7	2.5	2.5
Resistance - Dead	110.4	-114.7	110.4	-114.7	110.4	-114.7	110.0	110.0
Design Ratio	2.84	14.15	3.62	19.91	(3.62)	(19.91)	(44.37)	(44.37)
Rating Factor	2.94	11.39	3.81	14.76	(3.81)	(14.76)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-19.35	19.35	0.00	0.00	-14.88	14.88	0.00	0.00
Total Load Effect	-21.34	21.34	0.00	0.00	-16.87	16.87	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	-22.01	22.01	0.00	0.00
Design Ratio	1.12	1.12	N/A	N/A	1.42	1.42	N/A	N/A
Rating Factor	1.14	1.14	N/A	N/A	1.48	1.48	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-19.35	19.35	0.00	0.00	-14.88	14.88	0.00	0.00
Total Load Effect	-21.34	21.34	0.00	0.00	-16.87	16.87	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	1.41	N/A	N/A	N/A	1.78	N/A	N/A	N/A
Rating Factor	1.45	N/A	N/A	N/A	1.88	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.8	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Live Load Effect	67.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	81.1	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Resistance - Dead	150.9	0.0	150.9	0.0	150.9	0.0	148.1	0.0
Design Ratio	2.03	N/A	11.97	N/A	(11.97)	(N/A)	(9.97)	(N/A)
Rating Factor	2.24	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	18.1	-4.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	20.2	-2.8	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	110.4	-114.7	110.4	110.4	110.4	110.4	110.0	110.0
Design Ratio	5.58	40.29	53.25	53.25	(53.25)	(53.25)	(44.37)	(44.37)
Rating Factor	6.11	23.36	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-12.18	12.18	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.17	14.17	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	1.69	1.69	N/A	N/A	N/A	12.06	N/A	N/A
Rating Factor	1.81	1.81	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-12.18	12.18	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.17	14.17	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.12	N/A	N/A	N/A	15.08	N/A	N/A	N/A
Rating Factor	2.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.8	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Live Load Effect	61.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	75.2	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Resistance - Dead	150.9	0.0	150.9	0.0	150.9	0.0	148.1	0.0
Design Ratio	2.19	N/A	11.97	N/A	(11.97)	(N/A)	(9.97)	(N/A)
Rating Factor	2.45	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	16.4	-4.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	18.5	-2.4	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	110.4	-114.7	110.4	110.4	110.4	110.4	110.0	110.0
Design Ratio	6.08	47.81	53.25	53.25	(53.25)	(53.25)	(44.37)	(44.37)
Rating Factor	6.74	25.66	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-11.11	11.11	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.10	13.10	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	1.83	1.83	N/A	N/A	N/A	12.06	N/A	N/A
Rating Factor	1.98	1.98	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-11.11	11.11	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.10	13.10	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.29	N/A	N/A	N/A	15.08	N/A	N/A	N/A
Rating Factor	2.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.8	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Live Load Effect	55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	69.3	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Resistance - Dead	150.9	0.0	150.9	0.0	150.9	0.0	148.1	0.0
Design Ratio	2.37	N/A	11.97	N/A	(11.97)	(N/A)	(9.97)	(N/A)
Rating Factor	2.72	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	14.8	-4.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	16.9	-2.5	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	110.4	-114.7	110.4	110.4	110.4	110.4	110.0	110.0
Design Ratio	6.65	44.93	53.25	53.25	(53.25)	(53.25)	(44.37)	(44.37)
Rating Factor	7.45	24.83	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-10.05	10.05	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.04	12.04	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	1.99	1.99	N/A	N/A	N/A	12.06	N/A	N/A
Rating Factor	2.19	2.19	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-10.05	10.05	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.04	12.04	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.49	N/A	N/A	N/A	15.08	N/A	N/A	N/A
Rating Factor	2.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.8	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Live Load Effect	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	83.0	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Resistance - Dead	150.9	0.0	150.9	0.0	150.9	0.0	148.1	0.0
Design Ratio	1.98	N/A	11.97	N/A	(11.97)	(N/A)	(9.97)	(N/A)
Rating Factor	2.18	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	18.3	-4.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	20.4	-2.7	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	110.4	-114.7	110.4	110.4	110.4	110.4	110.0	110.0
Design Ratio	5.52	41.38	53.25	53.25	(53.25)	(53.25)	(44.37)	(44.37)
Rating Factor	6.05	23.72	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-12.51	12.51	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.50	14.50	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	1.65	1.65	N/A	N/A	N/A	12.06	N/A	N/A
Rating Factor	1.76	1.76	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-12.51	12.51	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.50	14.50	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.07	N/A	N/A	N/A	15.08	N/A	N/A	N/A
Rating Factor	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.8	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Live Load Effect	69.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	82.9	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Resistance - Dead	150.9	0.0	150.9	0.0	150.9	0.0	148.1	0.0
Design Ratio	1.99	N/A	11.97	N/A	(11.97)	(N/A)	(9.97)	(N/A)
Rating Factor	2.18	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	18.5	-4.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	20.6	-2.8	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	110.4	-114.7	110.4	110.4	110.4	110.4	110.0	110.0
Design Ratio	5.46	40.29	53.25	53.25	(53.25)	(53.25)	(44.37)	(44.37)
Rating Factor	5.97	23.36	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-12.50	12.50	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.49	14.49	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	1.66	1.66	N/A	N/A	N/A	12.06	N/A	N/A
Rating Factor	1.76	1.76	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-12.50	12.50	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.49	14.49	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.07	N/A	N/A	N/A	15.08	N/A	N/A	N/A
Rating Factor	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.8	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Live Load Effect	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	82.9	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Resistance - Dead	150.9	0.0	150.9	0.0	150.9	0.0	148.1	0.0
Design Ratio	1.98	N/A	11.97	N/A	(11.97)	(N/A)	(9.97)	(N/A)
Rating Factor	2.18	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	18.6	-3.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	20.7	-1.2	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	110.4	-114.7	110.4	110.4	110.4	110.4	110.0	110.0
Design Ratio	5.45	93.32	53.25	53.25	(53.25)	(53.25)	(44.37)	(44.37)
Rating Factor	5.95	34.54	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-12.51	12.51	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.50	14.50	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	1.66	1.66	N/A	N/A	N/A	12.06	N/A	N/A
Rating Factor	1.76	1.76	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-12.51	12.51	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.50	14.50	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.07	N/A	N/A	N/A	15.08	N/A	N/A	N/A
Rating Factor	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.8	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Live Load Effect	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	82.9	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Resistance - Dead	150.9	0.0	150.9	0.0	150.9	0.0	148.1	0.0
Design Ratio	1.98	N/A	11.97	N/A	(11.97)	(N/A)	(9.97)	(N/A)
Rating Factor	2.18	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	18.6	-3.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	20.7	-1.2	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	110.4	-114.7	110.4	110.4	110.4	110.4	110.0	110.0
Design Ratio	5.45	93.32	53.25	53.25	(53.25)	(53.25)	(44.37)	(44.37)
Rating Factor	5.95	34.54	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-12.51	12.51	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.50	14.50	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	1.66	1.66	N/A	N/A	N/A	12.06	N/A	N/A
Rating Factor	1.76	1.76	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-12.51	12.51	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.50	14.50	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.07	N/A	N/A	N/A	15.08	N/A	N/A	N/A
Rating Factor	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.8	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Live Load Effect	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	83.0	0.0	13.8	0.0	13.8	0.0	16.5	0.0
Resistance - Dead	150.9	0.0	150.9	0.0	150.9	0.0	148.1	0.0
Design Ratio	1.98	N/A	11.97	N/A	(11.97)	(N/A)	(9.97)	(N/A)
Rating Factor	2.18	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.5
Live Load Effect	18.5	-4.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	20.6	-2.8	2.1	2.1	2.1	2.1	2.5	2.5
Resistance - Dead	110.4	-114.7	110.4	110.4	110.4	110.4	110.0	110.0
Design Ratio	5.47	40.29	53.25	53.25	(53.25)	(53.25)	(44.37)	(44.37)
Rating Factor	5.98	23.36	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-12.51	12.51	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.50	14.50	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-22.01	22.01	0.00	0.00	25.99	22.01	0.00	0.00
Design Ratio	1.65	1.65	N/A	N/A	N/A	12.06	N/A	N/A
Rating Factor	1.76	1.76	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.99	1.99	0.00	0.00	-1.99	1.99	0.00	0.00
Live Load Effect	-12.51	12.51	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.50	14.50	0.00	0.00	-1.99	1.99	0.00	0.00
Resistance - Dead	-28.01	N/A	0.00	0.00	-28.01	N/A	0.00	0.00
Design Ratio	2.07	N/A	N/A	N/A	15.08	N/A	N/A	N/A
Rating Factor	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 104.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	18.0000			
Top Flange Thickness	=	0.3750	Top Flange Width	=	7.5000
Web Depth	=	17.2500	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	7.5000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 5.000 ft
Maximum distance to Right Brace Point = 7.500 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	15.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Live Load Effect	138.3	0.0	106.7	0.0	106.7	0.0	0.0	0.0
Total Load Effect	154.1	0.0	122.5	0.0	122.5	0.0	18.9	0.0
Resistance - Dead	148.9	0.0	148.9	0.0	148.9	0.0	145.7	0.0
Design Ratio	1.07	N/A	1.34	N/A	(1.34)	(N/A)	(8.71)	(N/A)
Rating Factor	1.08	N/A	1.39	N/A	(1.39)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	-112.6	112.6	-112.6	112.6	112.6
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	26.7	-17.4	20.6	-13.4	20.6	-13.4	0.0	0.0
Total Load Effect	27.8	-16.3	21.7	-12.3	21.7	-12.3	1.3	1.3
Resistance - Dead	111.5	-113.6	111.5	-113.6	111.5	-113.6	111.3	111.3
Design Ratio	4.05	6.91	5.19	9.14	(5.19)	(9.14)	(87.02)	(87.02)
Rating Factor	4.17	6.55	5.40	8.49	(5.40)	(8.49)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-18.58	18.58	0.00	0.00	-14.29	14.29	0.00	0.00
Total Load Effect	-20.86	20.86	0.00	0.00	-16.57	16.57	0.00	0.00
Resistance - Dead	-21.72	21.72	0.00	0.00	-21.72	21.72	0.00	0.00
Design Ratio	1.15	1.15	N/A	N/A	1.45	1.45	N/A	N/A
Rating Factor	1.17	1.17	N/A	N/A	1.52	1.52	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-18.58	18.58	0.00	0.00	-14.29	14.29	0.00	0.00
Total Load Effect	-20.86	20.86	0.00	0.00	-16.57	16.57	0.00	0.00
Resistance - Dead	-27.72	N/A	0.00	0.00	-27.72	N/A	0.00	0.00
Design Ratio	1.44	N/A	N/A	N/A	1.81	N/A	N/A	N/A
Rating Factor	1.49	N/A	N/A	N/A	1.94	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	15.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Live Load Effect	157.4	0.0	121.4	0.0	121.4	0.0	0.0	0.0
Total Load Effect	173.1	0.0	137.2	0.0	137.2	0.0	18.9	0.0
Resistance - Dead	148.9	0.0	148.9	0.0	148.9	0.0	145.7	0.0
Design Ratio	0.95	N/A	1.20	N/A	(1.20)	(N/A)	(8.71)	(N/A)
Rating Factor	0.95	N/A	1.23	N/A	(1.23)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	-112.6	112.6	-112.6	112.6	112.6
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	30.4	-16.2	23.4	-12.5	23.4	-12.5	0.0	0.0
Total Load Effect	31.4	-15.1	24.5	-11.4	24.5	-11.4	1.3	1.3
Resistance - Dead	111.5	-113.6	111.5	-113.6	111.5	-113.6	111.3	111.3
Design Ratio	3.58	7.47	4.59	9.89	(4.59)	(9.89)	(87.02)	(87.02)
Rating Factor	3.67	7.03	4.76	9.12	(4.76)	(9.12)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-21.14	21.14	0.00	0.00	-16.26	16.26	0.00	0.00
Total Load Effect	-23.42	23.42	0.00	0.00	-18.54	18.54	0.00	0.00
Resistance - Dead	-21.72	21.72	0.00	0.00	-21.72	21.72	0.00	0.00
Design Ratio	1.02	1.02	N/A	N/A	1.29	1.29	N/A	N/A
Rating Factor	1.03	1.03	N/A	N/A	1.34	1.34	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-21.14	21.14	0.00	0.00	-16.26	16.26	0.00	0.00
Total Load Effect	-23.42	23.42	0.00	0.00	-18.54	18.54	0.00	0.00
Resistance - Dead	-27.72	N/A	0.00	0.00	-27.72	N/A	0.00	0.00
Design Ratio	1.28	N/A	N/A	N/A	1.62	N/A	N/A	N/A
Rating Factor	1.31	N/A	N/A	N/A	1.70	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	15.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Live Load Effect	73.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	89.1	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Resistance - Dead	148.9	0.0	148.9	0.0	148.9	0.0	145.7	0.0
Design Ratio	1.85	N/A	10.45	N/A	(10.45)	(N/A)	(8.71)	(N/A)
Rating Factor	2.03	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	14.7	-7.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	15.8	-6.8	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	111.5	-113.6	111.5	111.5	111.5	111.5	111.3	111.3
Design Ratio	7.14	16.45	104.43	104.43	(104.43)	(104.43)	(87.02)	(87.02)
Rating Factor	7.59	14.35	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-13.27	13.27	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.55	15.55	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-21.72	21.72	0.00	0.00	26.28	21.72	0.00	0.00
Design Ratio	1.54	1.54	N/A	N/A	N/A	10.54	N/A	N/A
Rating Factor	1.64	1.64	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-13.27	13.27	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.55	15.55	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-27.72	N/A	0.00	0.00	-27.72	N/A	0.00	0.00
Design Ratio	1.93	N/A	N/A	N/A	13.17	N/A	N/A	N/A
Rating Factor	2.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	15.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Live Load Effect	66.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	82.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Resistance - Dead	148.9	0.0	148.9	0.0	148.9	0.0	145.7	0.0
Design Ratio	1.99	N/A	10.45	N/A	(10.45)	(N/A)	(8.71)	(N/A)
Rating Factor	2.23	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	13.3	-7.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	14.4	-6.1	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	111.5	-113.6	111.5	111.5	111.5	111.5	111.3	111.3
Design Ratio	7.83	18.59	104.43	104.43	(104.43)	(104.43)	(87.02)	(87.02)
Rating Factor	8.38	15.93	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-12.10	12.10	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.38	14.38	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-21.72	21.72	0.00	0.00	26.28	21.72	0.00	0.00
Design Ratio	1.67	1.67	N/A	N/A	N/A	10.54	N/A	N/A
Rating Factor	1.80	1.80	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-12.10	12.10	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.38	14.38	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-27.72	N/A	0.00	0.00	-27.72	N/A	0.00	0.00
Design Ratio	2.09	N/A	N/A	N/A	13.17	N/A	N/A	N/A
Rating Factor	2.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	15.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Live Load Effect	60.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	76.2	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Resistance - Dead	148.9	0.0	148.9	0.0	148.9	0.0	145.7	0.0
Design Ratio	2.16	N/A	10.45	N/A	(10.45)	(N/A)	(8.71)	(N/A)
Rating Factor	2.46	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	12.0	-6.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	13.1	-5.4	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	111.5	-113.6	111.5	111.5	111.5	111.5	111.3	111.3
Design Ratio	8.59	20.94	104.43	104.43	(104.43)	(104.43)	(87.02)	(87.02)
Rating Factor	9.27	17.61	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-10.94	10.94	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.22	13.22	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-21.72	21.72	0.00	0.00	26.28	21.72	0.00	0.00
Design Ratio	1.82	1.82	N/A	N/A	N/A	10.54	N/A	N/A
Rating Factor	1.99	1.99	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-10.94	10.94	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.22	13.22	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-27.72	N/A	0.00	0.00	-27.72	N/A	0.00	0.00
Design Ratio	2.27	N/A	N/A	N/A	13.17	N/A	N/A	N/A
Rating Factor	2.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	15.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Live Load Effect	78.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	93.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Resistance - Dead	148.9	0.0	148.9	0.0	148.9	0.0	145.7	0.0
Design Ratio	1.76	N/A	10.45	N/A	(10.45)	(N/A)	(8.71)	(N/A)
Rating Factor	1.91	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	14.5	-7.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	15.5	-6.6	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	111.5	-113.6	111.5	111.5	111.5	111.5	111.3	111.3
Design Ratio	7.24	17.02	104.43	104.43	(104.43)	(104.43)	(87.02)	(87.02)
Rating Factor	7.71	14.78	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-14.10	14.10	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.38	16.38	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-21.72	21.72	0.00	0.00	26.28	21.72	0.00	0.00
Design Ratio	1.47	1.47	N/A	N/A	N/A	10.54	N/A	N/A
Rating Factor	1.54	1.54	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-14.10	14.10	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.38	16.38	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-27.72	N/A	0.00	0.00	-27.72	N/A	0.00	0.00
Design Ratio	1.83	N/A	N/A	N/A	13.17	N/A	N/A	N/A
Rating Factor	1.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	15.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Live Load Effect	77.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	93.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Resistance - Dead	148.9	0.0	148.9	0.0	148.9	0.0	145.7	0.0
Design Ratio	1.76	N/A	10.45	N/A	(10.45)	(N/A)	(8.71)	(N/A)
Rating Factor	1.91	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	14.6	-7.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	15.7	-6.8	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	111.5	-113.6	111.5	111.5	111.5	111.5	111.3	111.3
Design Ratio	7.16	16.55	104.43	104.43	(104.43)	(104.43)	(87.02)	(87.02)
Rating Factor	7.61	14.42	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-14.09	14.09	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.37	16.37	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-21.72	21.72	0.00	0.00	26.28	21.72	0.00	0.00
Design Ratio	1.47	1.47	N/A	N/A	N/A	10.54	N/A	N/A
Rating Factor	1.54	1.54	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-14.09	14.09	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.37	16.37	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-27.72	N/A	0.00	0.00	-27.72	N/A	0.00	0.00
Design Ratio	1.83	N/A	N/A	N/A	13.17	N/A	N/A	N/A
Rating Factor	1.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	15.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Live Load Effect	78.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	93.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Resistance - Dead	148.9	0.0	148.9	0.0	148.9	0.0	145.7	0.0
Design Ratio	1.76	N/A	10.45	N/A	(10.45)	(N/A)	(8.71)	(N/A)
Rating Factor	1.91	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	14.1	-5.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	15.1	-4.6	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	111.5	-113.6	111.5	111.5	111.5	111.5	111.3	111.3
Design Ratio	7.44	24.39	104.43	104.43	(104.43)	(104.43)	(87.02)	(87.02)
Rating Factor	7.93	19.96	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-14.10	14.10	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.38	16.38	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-21.72	21.72	0.00	0.00	26.28	21.72	0.00	0.00
Design Ratio	1.47	1.47	N/A	N/A	N/A	10.54	N/A	N/A
Rating Factor	1.54	1.54	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-14.10	14.10	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.38	16.38	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-27.72	N/A	0.00	0.00	-27.72	N/A	0.00	0.00
Design Ratio	1.83	N/A	N/A	N/A	13.17	N/A	N/A	N/A
Rating Factor	1.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	15.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Live Load Effect	78.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	93.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Resistance - Dead	148.9	0.0	148.9	0.0	148.9	0.0	145.7	0.0
Design Ratio	1.76	N/A	10.45	N/A	(10.45)	(N/A)	(8.71)	(N/A)
Rating Factor	1.91	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	14.1	-5.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	15.1	-4.6	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	111.5	-113.6	111.5	111.5	111.5	111.5	111.3	111.3
Design Ratio	7.44	24.39	104.43	104.43	(104.43)	(104.43)	(87.02)	(87.02)
Rating Factor	7.93	19.96	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-14.10	14.10	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.38	16.38	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-21.72	21.72	0.00	0.00	26.28	21.72	0.00	0.00
Design Ratio	1.47	1.47	N/A	N/A	N/A	10.54	N/A	N/A
Rating Factor	1.54	1.54	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-14.10	14.10	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.38	16.38	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-27.72	N/A	0.00	0.00	-27.72	N/A	0.00	0.00
Design Ratio	1.83	N/A	N/A	N/A	13.17	N/A	N/A	N/A
Rating Factor	1.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	15.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Live Load Effect	77.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	93.7	0.0	15.7	0.0	15.7	0.0	18.9	0.0
Resistance - Dead	148.9	0.0	148.9	0.0	148.9	0.0	145.7	0.0
Design Ratio	1.76	N/A	10.45	N/A	(10.45)	(N/A)	(8.71)	(N/A)
Rating Factor	1.91	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	14.6	-7.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	15.7	-6.8	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	111.5	-113.6	111.5	111.5	111.5	111.5	111.3	111.3
Design Ratio	7.17	16.60	104.43	104.43	(104.43)	(104.43)	(87.02)	(87.02)
Rating Factor	7.62	14.46	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-14.09	14.09	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.37	16.37	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-21.72	21.72	0.00	0.00	26.28	21.72	0.00	0.00
Design Ratio	1.47	1.47	N/A	N/A	N/A	10.54	N/A	N/A
Rating Factor	1.54	1.54	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.28	2.28	0.00	0.00	-2.28	2.28	0.00	0.00
Live Load Effect	-14.09	14.09	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.37	16.37	0.00	0.00	-2.28	2.28	0.00	0.00
Resistance - Dead	-27.72	N/A	0.00	0.00	-27.72	N/A	0.00	0.00
Design Ratio	1.83	N/A	N/A	N/A	13.17	N/A	N/A	N/A
Rating Factor	1.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 104.500
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	18.0000			
Top Flange Thickness	=	0.3750	Top Flange Width	=	7.5000
Web Depth	=	17.2500	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	7.5000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 5.625 ft
Maximum distance to Right Brace Point = 6.875 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.3	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Live Load Effect	142.5	0.0	109.9	0.0	109.9	0.0	0.0	0.0
Total Load Effect	158.7	0.0	126.2	0.0	126.2	0.0	19.5	0.0
Resistance - Dead	148.4	0.0	148.4	0.0	148.4	0.0	145.1	0.0
Design Ratio	1.04	N/A	1.30	N/A	(1.30)	(N/A)	(8.44)	(N/A)
Rating Factor	1.04	N/A	1.35	N/A	(1.35)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	-112.6	112.6	-112.6	112.6	112.6
Dead Load Effect	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Live Load Effect	24.4	-19.7	18.8	-15.2	18.8	-15.2	0.0	0.0
Total Load Effect	24.9	-19.1	19.4	-14.6	19.4	-14.6	0.7	0.7
Resistance - Dead	112.0	-113.1	112.0	-113.1	112.0	-113.1	111.9	111.9
Design Ratio	4.52	5.89	5.82	7.70	(5.82)	(7.70)	(167.53)	(167.53)
Rating Factor	4.60	5.75	5.96	7.45	(5.96)	(7.45)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-19.14	19.14	0.00	0.00	-14.72	14.72	0.00	0.00
Total Load Effect	-21.49	21.49	0.00	0.00	-17.07	17.07	0.00	0.00
Resistance - Dead	-21.65	21.65	0.00	0.00	-21.65	21.65	0.00	0.00
Design Ratio	1.12	1.12	N/A	N/A	1.41	1.41	N/A	N/A
Rating Factor	1.13	1.13	N/A	N/A	1.47	1.47	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-19.14	19.14	0.00	0.00	-14.72	14.72	0.00	0.00
Total Load Effect	-21.49	21.49	0.00	0.00	-17.07	17.07	0.00	0.00
Resistance - Dead	-27.65	N/A	0.00	0.00	-27.65	N/A	0.00	0.00
Design Ratio	1.40	N/A	N/A	N/A	1.76	N/A	N/A	N/A
Rating Factor	1.44	N/A	N/A	N/A	1.88	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.3	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Live Load Effect	157.6	0.0	121.6	0.0	121.6	0.0	0.0	0.0
Total Load Effect	173.9	0.0	137.9	0.0	137.9	0.0	19.5	0.0
Resistance - Dead	148.4	0.0	148.4	0.0	148.4	0.0	145.1	0.0
Design Ratio	0.95	N/A	1.19	N/A	(1.19)	(N/A)	(8.44)	(N/A)
Rating Factor	0.94	N/A	1.22	N/A	(1.22)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	-112.6	112.6	-112.6	112.6	112.6
Dead Load Effect	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Live Load Effect	26.8	-19.7	20.7	-15.2	20.7	-15.2	0.0	0.0
Total Load Effect	27.3	-19.1	21.2	-14.6	21.2	-14.6	0.7	0.7
Resistance - Dead	112.0	-113.1	112.0	-113.1	112.0	-113.1	111.9	111.9
Design Ratio	4.12	5.89	5.31	7.70	(5.31)	(7.70)	(167.53)	(167.53)
Rating Factor	4.18	5.75	5.42	7.45	(5.42)	(7.45)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-21.17	21.17	0.00	0.00	-16.29	16.29	0.00	0.00
Total Load Effect	-23.52	23.52	0.00	0.00	-18.64	18.64	0.00	0.00
Resistance - Dead	-21.65	21.65	0.00	0.00	-21.65	21.65	0.00	0.00
Design Ratio	1.02	1.02	N/A	N/A	1.29	1.29	N/A	N/A
Rating Factor	1.02	1.02	N/A	N/A	1.33	1.33	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-21.17	21.17	0.00	0.00	-16.29	16.29	0.00	0.00
Total Load Effect	-23.52	23.52	0.00	0.00	-18.64	18.64	0.00	0.00
Resistance - Dead	-27.65	N/A	0.00	0.00	-27.65	N/A	0.00	0.00
Design Ratio	1.28	N/A	N/A	N/A	1.61	N/A	N/A	N/A
Rating Factor	1.31	N/A	N/A	N/A	1.70	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.3	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Live Load Effect	73.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	89.6	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Resistance - Dead	148.4	0.0	148.4	0.0	148.4	0.0	145.1	0.0
Design Ratio	1.84	N/A	10.12	N/A	(10.12)	(N/A)	(8.44)	(N/A)
Rating Factor	2.02	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Live Load Effect	13.0	-9.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	13.6	-9.1	0.6	0.6	0.6	0.6	0.7	0.7
Resistance - Dead	112.0	-113.1	112.0	112.0	112.0	112.0	111.9	111.9
Design Ratio	8.30	12.43	201.04	201.04	(201.04)	(201.04)	(167.53)	(167.53)
Rating Factor	8.62	11.77	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-13.25	13.25	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.60	15.60	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-21.65	21.65	0.00	0.00	26.35	21.65	0.00	0.00
Design Ratio	1.54	1.54	N/A	N/A	N/A	10.20	N/A	N/A
Rating Factor	1.63	1.63	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-13.25	13.25	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.60	15.60	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-27.65	N/A	0.00	0.00	-27.65	N/A	0.00	0.00
Design Ratio	1.92	N/A	N/A	N/A	12.75	N/A	N/A	N/A
Rating Factor	2.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.3	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Live Load Effect	66.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	83.1	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Resistance - Dead	148.4	0.0	148.4	0.0	148.4	0.0	145.1	0.0
Design Ratio	1.98	N/A	10.12	N/A	(10.12)	(N/A)	(8.44)	(N/A)
Rating Factor	2.22	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Live Load Effect	11.8	-8.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	12.3	-8.1	0.6	0.6	0.6	0.6	0.7	0.7
Resistance - Dead	112.0	-113.1	112.0	112.0	112.0	112.0	111.9	111.9
Design Ratio	9.13	13.87	201.04	201.04	(201.04)	(201.04)	(167.53)	(167.53)
Rating Factor	9.52	13.04	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-12.09	12.09	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.45	14.45	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-21.65	21.65	0.00	0.00	26.35	21.65	0.00	0.00
Design Ratio	1.66	1.66	N/A	N/A	N/A	10.20	N/A	N/A
Rating Factor	1.79	1.79	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-12.09	12.09	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.45	14.45	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-27.65	N/A	0.00	0.00	-27.65	N/A	0.00	0.00
Design Ratio	2.08	N/A	N/A	N/A	12.75	N/A	N/A	N/A
Rating Factor	2.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.3	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Live Load Effect	60.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	76.7	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Resistance - Dead	148.4	0.0	148.4	0.0	148.4	0.0	145.1	0.0
Design Ratio	2.15	N/A	10.12	N/A	(10.12)	(N/A)	(8.44)	(N/A)
Rating Factor	2.45	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Live Load Effect	10.6	-7.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	11.2	-7.3	0.6	0.6	0.6	0.6	0.7	0.7
Resistance - Dead	112.0	-113.1	112.0	112.0	112.0	112.0	111.9	111.9
Design Ratio	10.05	15.44	201.04	201.04	(201.04)	(201.04)	(167.53)	(167.53)
Rating Factor	10.53	14.41	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-10.93	10.93	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.28	13.28	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-21.65	21.65	0.00	0.00	26.35	21.65	0.00	0.00
Design Ratio	1.81	1.81	N/A	N/A	N/A	10.20	N/A	N/A
Rating Factor	1.98	1.98	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-10.93	10.93	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.28	13.28	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-27.65	N/A	0.00	0.00	-27.65	N/A	0.00	0.00
Design Ratio	2.26	N/A	N/A	N/A	12.75	N/A	N/A	N/A
Rating Factor	2.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.3	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Live Load Effect	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	96.3	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Resistance - Dead	148.4	0.0	148.4	0.0	148.4	0.0	145.1	0.0
Design Ratio	1.71	N/A	10.12	N/A	(10.12)	(N/A)	(8.44)	(N/A)
Rating Factor	1.85	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Live Load Effect	12.8	-9.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	13.3	-8.8	0.6	0.6	0.6	0.6	0.7	0.7
Resistance - Dead	112.0	-113.1	112.0	112.0	112.0	112.0	111.9	111.9
Design Ratio	8.45	12.76	201.04	201.04	(201.04)	(201.04)	(167.53)	(167.53)
Rating Factor	8.77	12.06	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-14.47	14.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.83	16.83	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-21.65	21.65	0.00	0.00	26.35	21.65	0.00	0.00
Design Ratio	1.43	1.43	N/A	N/A	N/A	10.20	N/A	N/A
Rating Factor	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-14.47	14.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.83	16.83	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-27.65	N/A	0.00	0.00	-27.65	N/A	0.00	0.00
Design Ratio	1.78	N/A	N/A	N/A	12.75	N/A	N/A	N/A
Rating Factor	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.3	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Live Load Effect	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	96.3	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Resistance - Dead	148.4	0.0	148.4	0.0	148.4	0.0	145.1	0.0
Design Ratio	1.71	N/A	10.12	N/A	(10.12)	(N/A)	(8.44)	(N/A)
Rating Factor	1.85	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Live Load Effect	13.0	-9.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	13.5	-9.0	0.6	0.6	0.6	0.6	0.7	0.7
Resistance - Dead	112.0	-113.1	112.0	112.0	112.0	112.0	111.9	111.9
Design Ratio	8.33	12.49	201.04	201.04	(201.04)	(201.04)	(167.53)	(167.53)
Rating Factor	8.64	11.82	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-14.47	14.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.82	16.82	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-21.65	21.65	0.00	0.00	26.35	21.65	0.00	0.00
Design Ratio	1.43	1.43	N/A	N/A	N/A	10.20	N/A	N/A
Rating Factor	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-14.47	14.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.82	16.82	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-27.65	N/A	0.00	0.00	-27.65	N/A	0.00	0.00
Design Ratio	1.78	N/A	N/A	N/A	12.75	N/A	N/A	N/A
Rating Factor	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.3	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Live Load Effect	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	96.2	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Resistance - Dead	148.4	0.0	148.4	0.0	148.4	0.0	145.1	0.0
Design Ratio	1.71	N/A	10.12	N/A	(10.12)	(N/A)	(8.44)	(N/A)
Rating Factor	1.86	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Live Load Effect	12.0	-7.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	12.5	-7.2	0.6	0.6	0.6	0.6	0.7	0.7
Resistance - Dead	112.0	-113.1	112.0	112.0	112.0	112.0	111.9	111.9
Design Ratio	8.99	15.58	201.04	201.04	(201.04)	(201.04)	(167.53)	(167.53)
Rating Factor	9.36	14.53	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-14.46	14.46	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.81	16.81	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-21.65	21.65	0.00	0.00	26.35	21.65	0.00	0.00
Design Ratio	1.43	1.43	N/A	N/A	N/A	10.20	N/A	N/A
Rating Factor	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-14.46	14.46	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.81	16.81	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-27.65	N/A	0.00	0.00	-27.65	N/A	0.00	0.00
Design Ratio	1.78	N/A	N/A	N/A	12.75	N/A	N/A	N/A
Rating Factor	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.3	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Live Load Effect	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	96.2	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Resistance - Dead	148.4	0.0	148.4	0.0	148.4	0.0	145.1	0.0
Design Ratio	1.71	N/A	10.12	N/A	(10.12)	(N/A)	(8.44)	(N/A)
Rating Factor	1.86	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Live Load Effect	12.0	-7.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	12.5	-7.2	0.6	0.6	0.6	0.6	0.7	0.7
Resistance - Dead	112.0	-113.1	112.0	112.0	112.0	112.0	111.9	111.9
Design Ratio	8.99	15.58	201.04	201.04	(201.04)	(201.04)	(167.53)	(167.53)
Rating Factor	9.36	14.53	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-14.46	14.46	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.81	16.81	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-21.65	21.65	0.00	0.00	26.35	21.65	0.00	0.00
Design Ratio	1.43	1.43	N/A	N/A	N/A	10.20	N/A	N/A
Rating Factor	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-14.46	14.46	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.81	16.81	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-27.65	N/A	0.00	0.00	-27.65	N/A	0.00	0.00
Design Ratio	1.78	N/A	N/A	N/A	12.75	N/A	N/A	N/A
Rating Factor	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.3	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Live Load Effect	80.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	96.3	0.0	16.3	0.0	16.3	0.0	19.5	0.0
Resistance - Dead	148.4	0.0	148.4	0.0	148.4	0.0	145.1	0.0
Design Ratio	1.71	N/A	10.12	N/A	(10.12)	(N/A)	(8.44)	(N/A)
Rating Factor	1.85	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	112.6	112.6	112.6	112.6	112.6
Dead Load Effect	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Live Load Effect	12.9	-9.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	13.5	-9.0	0.6	0.6	0.6	0.6	0.7	0.7
Resistance - Dead	112.0	-113.1	112.0	112.0	112.0	112.0	111.9	111.9
Design Ratio	8.34	12.52	201.04	201.04	(201.04)	(201.04)	(167.53)	(167.53)
Rating Factor	8.66	11.84	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-14.47	14.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.83	16.83	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-21.65	21.65	0.00	0.00	26.35	21.65	0.00	0.00
Design Ratio	1.43	1.43	N/A	N/A	N/A	10.20	N/A	N/A
Rating Factor	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.35	2.35	0.00	0.00	-2.35	2.35	0.00	0.00
Live Load Effect	-14.47	14.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.83	16.83	0.00	0.00	-2.35	2.35	0.00	0.00
Resistance - Dead	-27.65	N/A	0.00	0.00	-27.65	N/A	0.00	0.00
Design Ratio	1.78	N/A	N/A	N/A	12.75	N/A	N/A	N/A
Rating Factor	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 105.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	18.0000			
Top Flange Thickness	=	0.3750	Top Flange Width	=	7.5000
Web Depth	=	17.2500	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3750	Bottom Flange Width	=	7.5000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 6.250 ft
Maximum distance to Right Brace Point = 6.250 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.4	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Live Load Effect	143.8	0.0	110.9	0.0	110.9	0.0	0.0	0.0
Total Load Effect	160.2	0.0	127.4	0.0	127.4	0.0	19.7	0.0
Resistance - Dead	148.2	0.0	148.2	0.0	148.2	0.0	144.9	0.0
Design Ratio	1.03	N/A	1.29	N/A	(1.29)	(N/A)	(8.34)	(N/A)
Rating Factor	1.03	N/A	1.34	N/A	(1.34)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	-112.6	112.6	-112.6	-112.6	-112.6
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Live Load Effect	22.0	-22.0	17.0	-17.0	17.0	-17.0	0.0	0.0
Total Load Effect	22.0	-22.1	16.9	-17.0	16.9	-17.0	-0.1	-0.1
Resistance - Dead	112.6	-112.5	112.6	-112.5	112.6	-112.5	-112.5	-112.5
Design Ratio	5.12	5.10	6.65	6.61	(6.65)	(6.61)	(2239.93)	(2239.93)
Rating Factor	5.12	5.11	6.63	6.63	(6.63)	(6.63)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-19.31	19.31	0.00	0.00	-14.86	14.86	0.00	0.00
Total Load Effect	-21.69	21.69	0.00	0.00	-17.24	17.24	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	-21.62	21.62	0.00	0.00
Design Ratio	1.11	1.11	N/A	N/A	1.39	1.39	N/A	N/A
Rating Factor	1.12	1.12	N/A	N/A	1.46	1.46	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-19.31	19.31	0.00	0.00	-14.86	14.86	0.00	0.00
Total Load Effect	-21.69	21.69	0.00	0.00	-17.24	17.24	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	1.38	N/A	N/A	N/A	1.74	N/A	N/A	N/A
Rating Factor	1.43	N/A	N/A	N/A	1.86	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.4	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Live Load Effect	153.4	0.0	118.4	0.0	118.4	0.0	0.0	0.0
Total Load Effect	169.9	0.0	134.8	0.0	134.8	0.0	19.7	0.0
Resistance - Dead	148.2	0.0	148.2	0.0	148.2	0.0	144.9	0.0
Design Ratio	0.97	N/A	1.22	N/A	(1.22)	(N/A)	(8.34)	(N/A)
Rating Factor	0.97	N/A	1.25	N/A	(1.25)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	112.6	-112.6	112.6	-112.6	-112.6	-112.6
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Live Load Effect	23.2	-23.2	17.9	-17.9	17.9	-17.9	0.0	0.0
Total Load Effect	23.2	-23.3	17.9	-18.0	17.9	-18.0	-0.1	-0.1
Resistance - Dead	112.6	-112.5	112.6	-112.5	112.6	-112.5	-112.5	-112.5
Design Ratio	4.86	4.84	6.30	6.27	(6.30)	(6.27)	(2239.93)	(2239.93)
Rating Factor	4.85	4.85	6.29	6.28	(6.29)	(6.28)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-20.61	20.61	0.00	0.00	-15.85	15.85	0.00	0.00
Total Load Effect	-22.99	22.99	0.00	0.00	-18.23	18.23	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	-21.62	21.62	0.00	0.00
Design Ratio	1.04	1.04	N/A	N/A	1.32	1.32	N/A	N/A
Rating Factor	1.05	1.05	N/A	N/A	1.36	1.36	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-20.61	20.61	0.00	0.00	-15.85	15.85	0.00	0.00
Total Load Effect	-22.99	22.99	0.00	0.00	-18.23	18.23	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	1.31	N/A	N/A	N/A	1.65	N/A	N/A	N/A
Rating Factor	1.34	N/A	N/A	N/A	1.74	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.4	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Live Load Effect	71.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	87.7	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Resistance - Dead	148.2	0.0	148.2	0.0	148.2	0.0	144.9	0.0
Design Ratio	1.88	N/A	10.01	N/A	(10.01)	(N/A)	(8.34)	(N/A)
Rating Factor	2.08	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Live Load Effect	11.3	-11.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	11.3	-11.3	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Resistance - Dead	112.6	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5
Design Ratio	9.99	9.92	2687.91	2687.91	(2687.91)	(2687.91)	(2239.93)	(2239.93)
Rating Factor	9.96	9.95	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-12.87	12.87	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.25	15.25	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	1.57	1.57	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	1.68	1.68	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-12.87	12.87	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.25	15.25	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	1.97	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	2.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.4	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Live Load Effect	64.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	81.4	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Resistance - Dead	148.2	0.0	148.2	0.0	148.2	0.0	144.9	0.0
Design Ratio	2.02	N/A	10.01	N/A	(10.01)	(N/A)	(8.34)	(N/A)
Rating Factor	2.28	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Live Load Effect	10.2	-10.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	10.2	-10.3	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Resistance - Dead	112.6	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5
Design Ratio	11.06	10.97	2687.91	2687.91	(2687.91)	(2687.91)	(2239.93)	(2239.93)
Rating Factor	11.02	11.01	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-11.74	11.74	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.12	14.12	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	1.70	1.70	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	1.84	1.84	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-11.74	11.74	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.12	14.12	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	2.12	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	2.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.4	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Live Load Effect	58.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	75.1	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Resistance - Dead	148.2	0.0	148.2	0.0	148.2	0.0	144.9	0.0
Design Ratio	2.19	N/A	10.01	N/A	(10.01)	(N/A)	(8.34)	(N/A)
Rating Factor	2.53	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Live Load Effect	9.2	-9.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	9.2	-9.3	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Resistance - Dead	112.6	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5
Design Ratio	12.24	12.12	2687.91	2687.91	(2687.91)	(2687.91)	(2239.93)	(2239.93)
Rating Factor	12.18	12.17	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-10.60	10.60	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.98	12.98	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	1.85	1.85	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	2.04	2.04	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-10.60	10.60	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.98	12.98	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	2.31	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	2.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.4	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Live Load Effect	79.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	96.2	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Resistance - Dead	148.2	0.0	148.2	0.0	148.2	0.0	144.9	0.0
Design Ratio	1.71	N/A	10.01	N/A	(10.01)	(N/A)	(8.34)	(N/A)
Rating Factor	1.86	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Live Load Effect	11.1	-11.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	11.0	-11.1	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Resistance - Dead	112.6	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5
Design Ratio	10.20	10.12	2687.91	2687.91	(2687.91)	(2687.91)	(2239.93)	(2239.93)
Rating Factor	10.17	10.16	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-14.42	14.42	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.80	16.80	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	1.43	1.43	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-14.42	14.42	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.80	16.80	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	1.79	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	1.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.4	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Live Load Effect	79.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	96.1	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Resistance - Dead	148.2	0.0	148.2	0.0	148.2	0.0	144.9	0.0
Design Ratio	1.71	N/A	10.01	N/A	(10.01)	(N/A)	(8.34)	(N/A)
Rating Factor	1.86	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Live Load Effect	11.3	-11.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	11.2	-11.3	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Resistance - Dead	112.6	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5
Design Ratio	10.03	9.95	2687.91	2687.91	(2687.91)	(2687.91)	(2239.93)	(2239.93)
Rating Factor	10.00	9.99	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-14.39	14.39	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.77	16.77	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	1.43	1.43	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-14.39	14.39	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.77	16.77	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	1.79	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	1.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.4	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Live Load Effect	79.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	96.2	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Resistance - Dead	148.2	0.0	148.2	0.0	148.2	0.0	144.9	0.0
Design Ratio	1.71	N/A	10.01	N/A	(10.01)	(N/A)	(8.34)	(N/A)
Rating Factor	1.86	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Live Load Effect	9.9	-9.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	9.8	-9.9	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Resistance - Dead	112.6	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5
Design Ratio	11.45	11.35	2687.91	2687.91	(2687.91)	(2687.91)	(2239.93)	(2239.93)
Rating Factor	11.40	11.40	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-14.41	14.41	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.79	16.79	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	1.43	1.43	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-14.41	14.41	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.79	16.79	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	1.79	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	1.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.4	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Live Load Effect	79.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	96.2	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Resistance - Dead	148.2	0.0	148.2	0.0	148.2	0.0	144.9	0.0
Design Ratio	1.71	N/A	10.01	N/A	(10.01)	(N/A)	(8.34)	(N/A)
Rating Factor	1.86	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Live Load Effect	9.9	-9.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	9.8	-9.9	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Resistance - Dead	112.6	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5
Design Ratio	11.45	11.35	2687.91	2687.91	(2687.91)	(2687.91)	(2239.93)	(2239.93)
Rating Factor	11.40	11.40	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-14.41	14.41	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.79	16.79	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	1.43	1.43	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-14.41	14.41	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.79	16.79	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	1.79	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	1.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	164.6	0.0	164.6	0.0	164.6	0.0	164.6	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	16.4	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Live Load Effect	79.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	96.2	0.0	16.4	0.0	16.4	0.0	19.7	0.0
Resistance - Dead	148.2	0.0	148.2	0.0	148.2	0.0	144.9	0.0
Design Ratio	1.71	N/A	10.01	N/A	(10.01)	(N/A)	(8.34)	(N/A)
Rating Factor	1.86	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6	-112.6
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Live Load Effect	11.2	-11.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	11.2	-11.3	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Resistance - Dead	112.6	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5	-112.5
Design Ratio	10.05	9.97	2687.91	2687.91	(2687.91)	(2687.91)	(2239.93)	(2239.93)
Rating Factor	10.01	10.01	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-14.42	14.42	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.80	16.80	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-21.62	21.62	0.00	0.00	26.38	21.62	0.00	0.00
Design Ratio	1.43	1.43	N/A	N/A	N/A	10.09	N/A	N/A
Rating Factor	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.38	2.38	0.00	0.00	-2.38	2.38	0.00	0.00
Live Load Effect	-14.42	14.42	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-16.80	16.80	0.00	0.00	-2.38	2.38	0.00	0.00
Resistance - Dead	-27.62	N/A	0.00	0.00	-27.62	N/A	0.00	0.00
Design Ratio	1.79	N/A	N/A	N/A	12.61	N/A	N/A	N/A
Rating Factor	1.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

RATING FACTOR SUMMARY: Design Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.31	N/A	3.00	N/A	3.00	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.80	N/A	2.33	N/A	2.33	N/A	N/A	N/A
Critical	1.80	N/A	2.33	N/A	(2.33)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A		N/A		N/A		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	3.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.45	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.04	N/A	3.95	N/A	3.95	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.41	N/A	3.13	N/A	3.13	N/A	N/A	N/A
Critical	2.41	N/A	3.13	N/A	(3.13) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.62	N/A	3.39	N/A	3.39	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.07	N/A	2.69	N/A	2.69	N/A	N/A	N/A
Critical	2.07	N/A	2.69	N/A	(2.69) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.31	3.31	N/A	N/A	4.30	4.30	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.62	2.62	N/A	N/A	3.41	3.41	N/A	N/A
Critical	2.62		N/A		3.41		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	4.16	N/A	N/A	N/A	5.41	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.30	N/A	N/A	N/A	4.29	N/A	N/A	N/A
Critical	3.30		N/A		4.29		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	5.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.76	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	4.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.03	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	4.17	4.17	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.54	4.54	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.02	5.02	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.85	3.85	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.86	3.86	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.86	3.86	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.86	3.86	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.84	3.84	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.84		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	5.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.84		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.67	N/A	2.16	N/A	2.16	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.35	N/A	1.76	N/A	1.76	N/A	N/A	N/A
Critical	1.35	N/A	1.76	N/A	(1.76)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.00	13.94	3.89	18.07	3.89	18.07	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.44	17.75	3.16	23.00	3.16	23.00	N/A	N/A
Critical	2.44	13.94	3.16	18.07	(3.16)	(18.07)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.81	1.81	N/A	N/A	2.35	2.35	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.47	1.47	N/A	N/A	1.91	1.91	N/A	N/A
Critical	1.47		N/A		1.91		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.29	N/A	N/A	N/A	2.98	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.86	N/A	N/A	N/A	2.42	N/A	N/A	N/A
Critical	1.86		N/A		2.42		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	2.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	3.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	3.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.73	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	5.10	35.98	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.82	35.98	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.83	35.98	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.81	35.98	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	2.33	2.33	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.55	2.55	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.83	2.83	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.21	2.21	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.21	2.21	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.21	2.21	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.21	2.21	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.20	2.20	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.20		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	2.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	3.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	3.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.79		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.24	N/A	1.61	N/A	1.61	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.05	N/A	1.36	N/A	1.36	N/A	N/A	N/A
Critical	1.05	N/A	1.36	N/A	(1.36)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.50	8.97	4.54	11.62	4.54	11.62	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.94	11.39	3.81	14.76	3.81	14.76	N/A	N/A
Critical	2.94	8.97	3.81	11.62	(3.81)	(11.62)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.35	1.35	N/A	N/A	1.76	1.76	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.14	1.14	N/A	N/A	1.48	1.48	N/A	N/A
Critical	1.14		N/A		1.48		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.72	N/A	N/A	N/A	2.24	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.45	N/A	N/A	N/A	1.88	N/A	N/A	N/A
Critical	1.45		N/A		1.88		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.18	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	6.11	23.36	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	6.74	25.66	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	7.45	24.83	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	6.05	23.72	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	5.97	23.36	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	5.95	34.54	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	5.95	34.54	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	5.98	23.36	N/A	N/A	N/A	N/A	N/A	N/A
Critical		5.95	23.36	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	1.81	1.81	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	1.98	1.98	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.19	2.19	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.76	1.76	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.76	1.76	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.76	1.76	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.76	1.76	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.76	1.76	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.76		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	2.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.24		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.08	N/A	1.39	N/A	1.39	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	0.95	N/A	1.23	N/A	1.23	N/A	N/A	N/A
Critical	0.95	N/A	1.23	N/A	(1.23)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	4.17	6.55	5.40	8.49	5.40	8.49	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.67	7.03	4.76	9.12	4.76	9.12	N/A	N/A
Critical	3.67	6.55	4.76	8.49	(4.76)	(8.49)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.17	1.17	N/A	N/A	1.52	1.52	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.03	1.03	N/A	N/A	1.34	1.34	N/A	N/A
Critical	1.03		N/A		1.34		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.49	N/A	N/A	N/A	1.94	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.31	N/A	N/A	N/A	1.70	N/A	N/A	N/A
Critical	1.31		N/A		1.70		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	2.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.91	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	7.59	14.35	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	8.38	15.93	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	9.27	17.61	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	7.71	14.78	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	7.61	14.42	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	7.93	19.96	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	7.93	19.96	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	7.62	14.46	N/A	N/A	N/A	N/A	N/A	N/A
Critical		7.59	14.35	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	1.64	1.64	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	1.80	1.80	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	1.99	1.99	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.54	1.54	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.54	1.54	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.54	1.54	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.54	1.54	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.54	1.54	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.54		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	2.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.97		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.04	N/A	1.35	N/A	1.35	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	0.94	N/A	1.22	N/A	1.22	N/A	N/A	N/A
Critical	0.94	N/A	1.22	N/A	(1.22)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	4.60	5.75	5.96	7.45	5.96	7.45	N/A	N/A
2 - HL-93-TANDEM (TRK)	4.18	5.75	5.42	7.45	5.42	7.45	N/A	N/A
Critical	4.18	5.75	5.42	7.45	(5.42)	(7.45)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.13	1.13	N/A	N/A	1.47	1.47	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.02	1.02	N/A	N/A	1.33	1.33	N/A	N/A
Critical	1.02		N/A		1.33		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.44	N/A	N/A	N/A	1.88	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.31	N/A	N/A	N/A	1.70	N/A	N/A	N/A
Critical	1.31		N/A		1.70		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	2.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.85	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	8.62	11.77	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	9.52	13.04	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	10.53	14.41	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	8.77	12.06	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	8.64	11.82	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	9.36	14.53	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	9.36	14.53	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	8.66	11.84	N/A	N/A	N/A	N/A	N/A	N/A
Critical		8.62	11.77	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	1.63	1.63	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	1.79	1.79	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	1.98	1.98	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.50		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	2.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.91		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.03	N/A	1.34	N/A	1.34	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	0.97	N/A	1.25	N/A	1.25	N/A	N/A	N/A
Critical	0.97	N/A	1.25	N/A	(1.25)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	5.12	5.11	6.63	6.63	6.63	6.63	N/A	N/A
2 - HL-93-TANDEM (TRK)	4.85	4.85	6.29	6.28	6.29	6.28	N/A	N/A
Critical	4.85	4.85	6.29	6.28	(6.29)	(6.28)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.12	1.12	N/A	N/A	1.46	1.46	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.05	1.05	N/A	N/A	1.36	1.36	N/A	N/A
Critical	1.05		N/A		1.36		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.43	N/A	N/A	N/A	1.86	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.34	N/A	N/A	N/A	1.74	N/A	N/A	N/A
Critical	1.34		N/A		1.74		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	2.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.86	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	9.96	9.95	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	11.02	11.01	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	12.18	12.17	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	10.17	10.16	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	10.00	9.99	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	11.40	11.40	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	11.40	11.40	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	10.01	10.01	N/A	N/A	N/A	N/A	N/A	N/A
Critical		9.96	9.95	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	1.68	1.68	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	1.84	1.84	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.04	2.04	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.50		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	2.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	2.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	2.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.92		N/A		N/A		N/A	

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load Combination No.	Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I	1.03	37.09
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I	0.94	23.53
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I	0.94	23.53

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I-O	1.34	48.09
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I-O	1.22	30.50
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.5000	STRENGTH I-O	1.22	30.50

CRITICAL RATING FACTOR SUMMARY: Legal Load

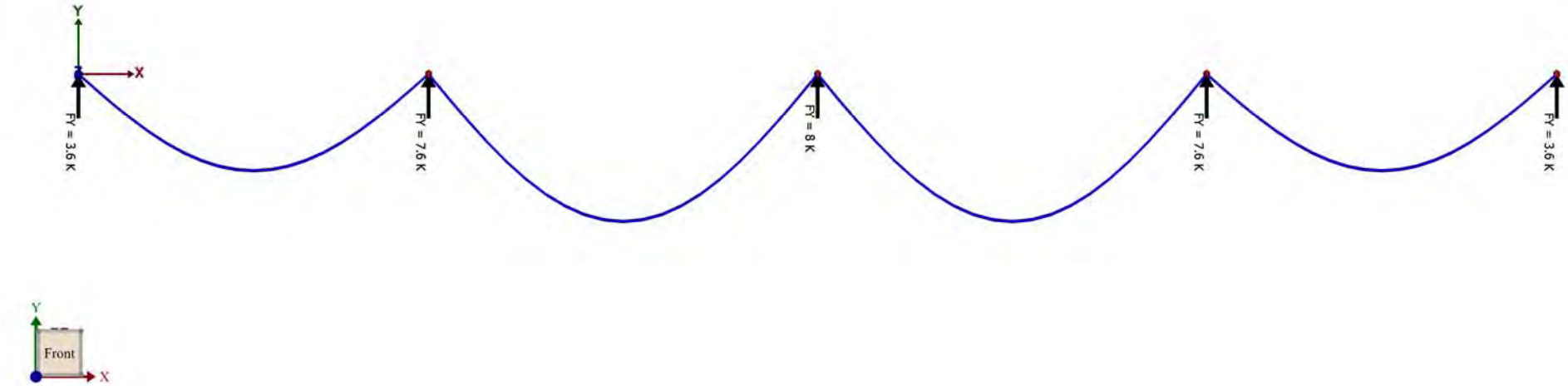
Legal Load							
3	TYPE3	(TRK)	25.00	104.5000	SERVICE II	1.63	40.84
4	TYPE3S2	(TRK)	36.00	104.5000	SERVICE II	1.79	64.44
5	TYPE3-3	(TRK)	40.00	104.5000	SERVICE II	1.98	79.24
6	SU4	(TRK)	27.00	104.5000	SERVICE II	1.50	40.38
7	SU5	(TRK)	31.00	104.5000	SERVICE II	1.50	46.38
8	SU6	(TRK)	34.75	104.5000	SERVICE II	1.50	52.04
9	SU7	(TRK)	38.75	104.5000	SERVICE II	1.50	58.03
10	NRL	(TRK)	40.00	104.5000	SERVICE II	1.50	59.82
Crit	NRL	(TRK)	40.00	104.5000	SERVICE II	1.50	59.82

LIMIT STATE LEGEND:

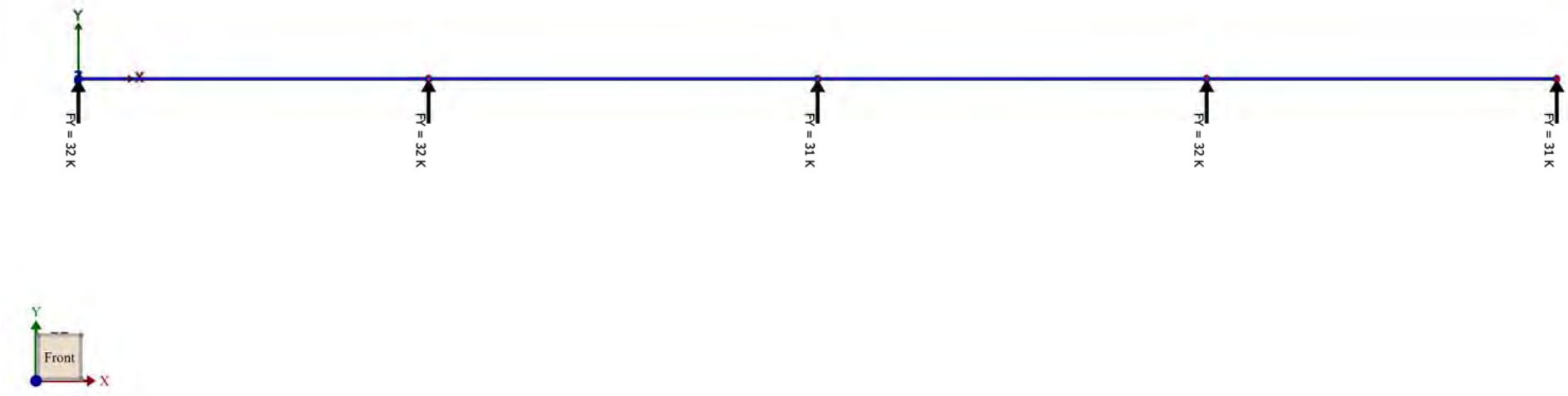
BRASS	Specifications
STRENGTH I	Strength I Inventory
STRENGTH I-O	Strength I Operating
STRENGTH II	Strength II
STRENGTH IV	Strength IV
SERVICE I	Service I
SERVICE II	Service II Inventory
SERVICE II-O	Service II Operating
FATIGUE I	Fatigue I
FATIGUE II	Fatigue II

Visual Analysis Results – Floor Beam

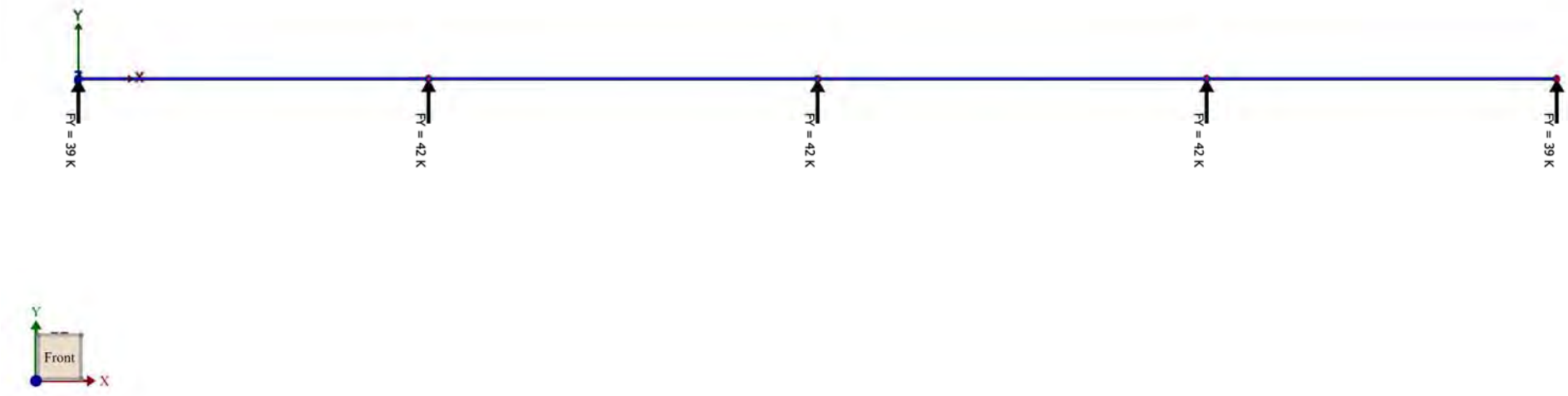
Floor Beam Loads - 35-1-5.91.vap
Result Case: Lane
IES VisualAnalysis 18.00.0008
Monday, April 29, 2019



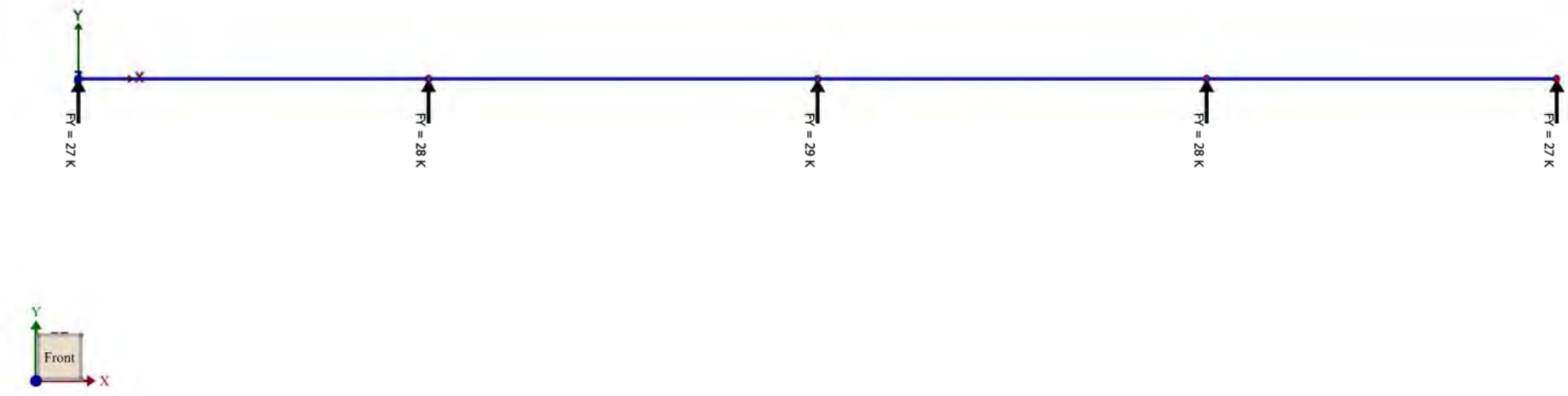
Floor Beam Loads - 35-1-5.91.vap
Result Case: HL-93 High Extreme
IES VisualAnalysis 18.00.0008
Monday, April 29, 2019



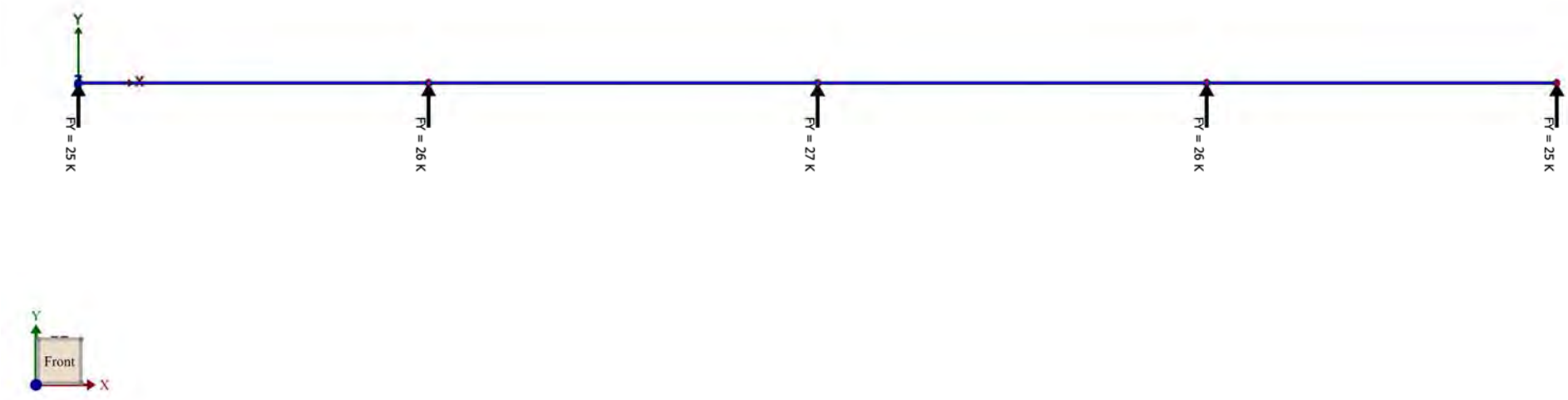
Floor Beam Loads - 35-1-5.91.vap
Result Case: Tandem High Extreme
IES VisualAnalysis 18.00.0008
Monday, April 29, 2019



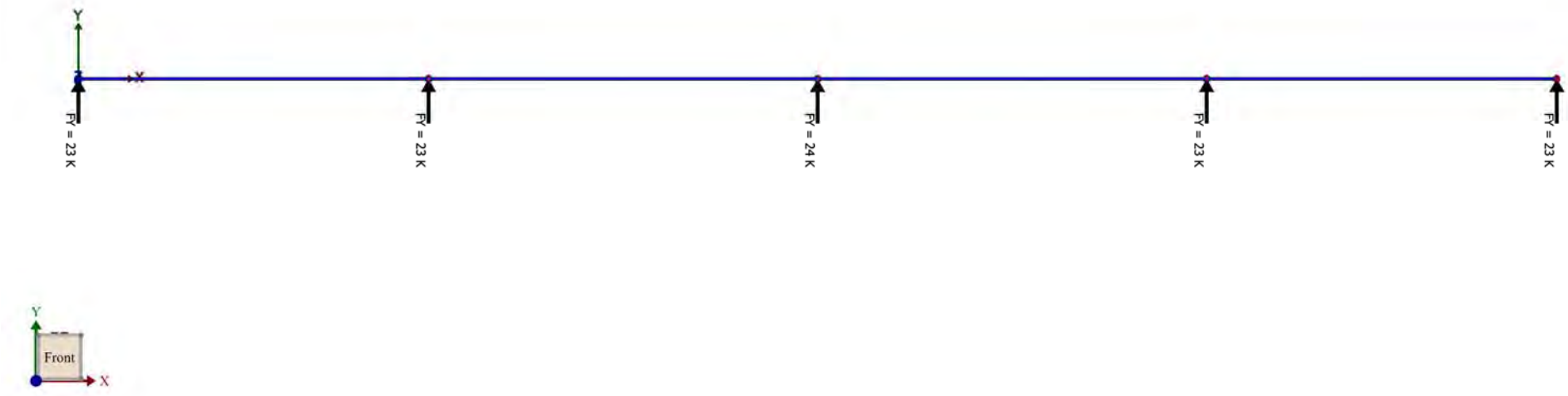
Floor Beam Loads - 35-1-5.91.vap
Result Case: Type 3 High Extreme
IES VisualAnalysis 18.00.0008
Monday, April 29, 2019



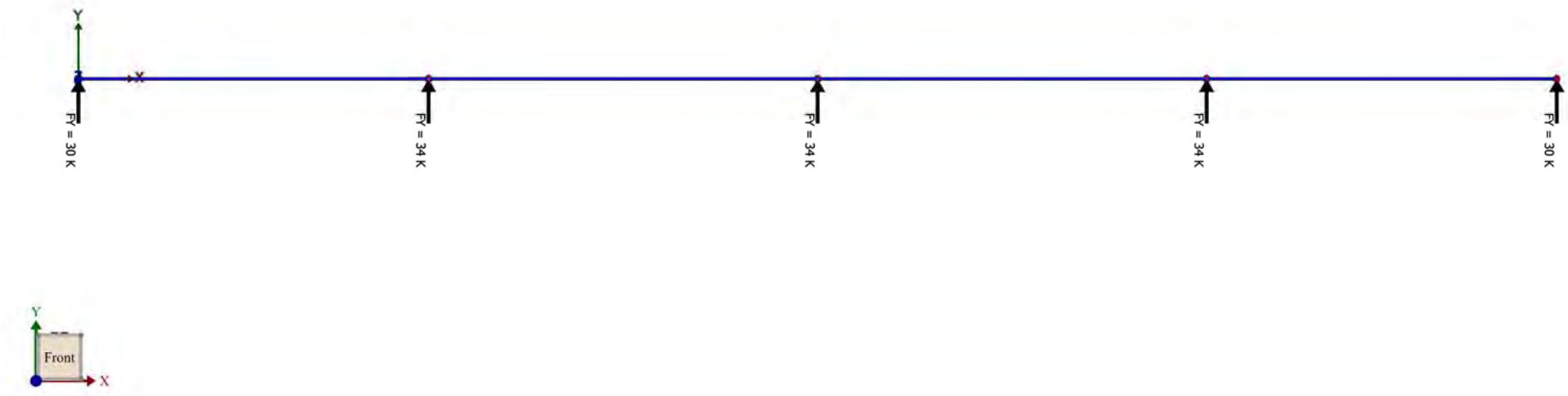
Floor Beam Loads - 35-1-5.91.vap
Result Case: Type 3S2 High Extreme
IES VisualAnalysis 18.00.0008
Monday, April 29, 2019



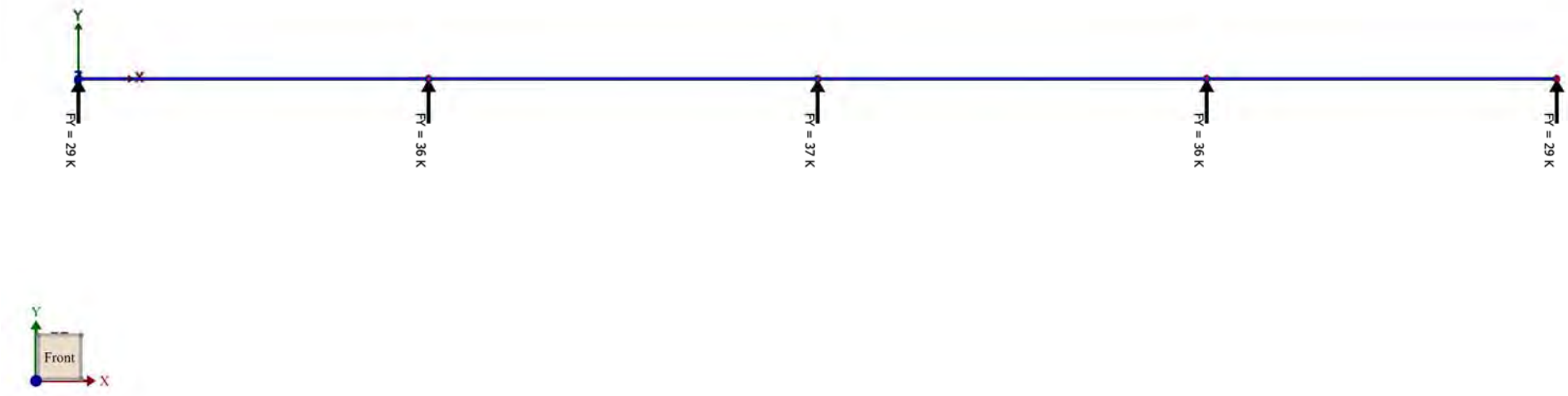
Floor Beam Loads - 35-1-5.91.vap
Result Case: Type 3-3 High Extreme
IES VisualAnalysis 18.00.0008
Monday, April 29, 2019



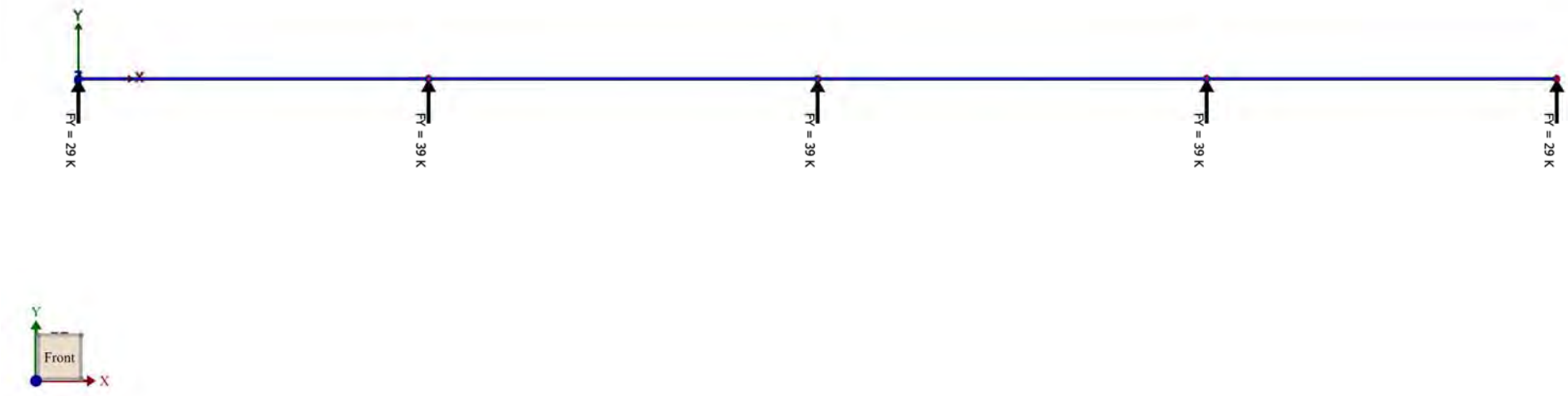
Floor Beam Loads - 35-1-5.91.vap
Result Case: SU4 High Extreme
IES VisualAnalysis 18.00.0008
Monday, April 29, 2019



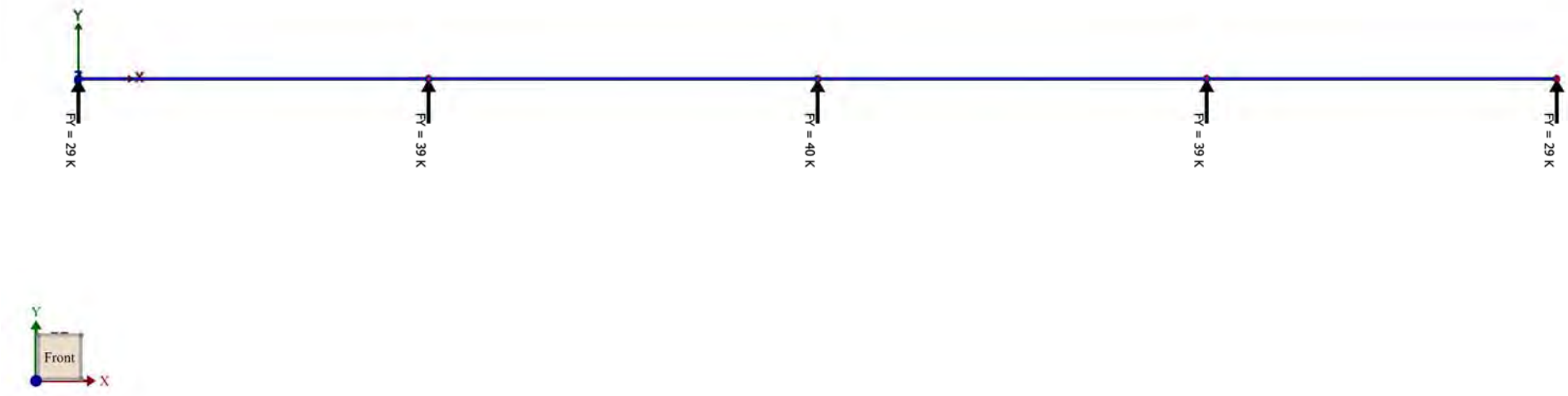
Floor Beam Loads - 35-1-5.91.vap
Result Case: SU5 High Extreme
IES VisualAnalysis 18.00.0008
Monday, April 29, 2019



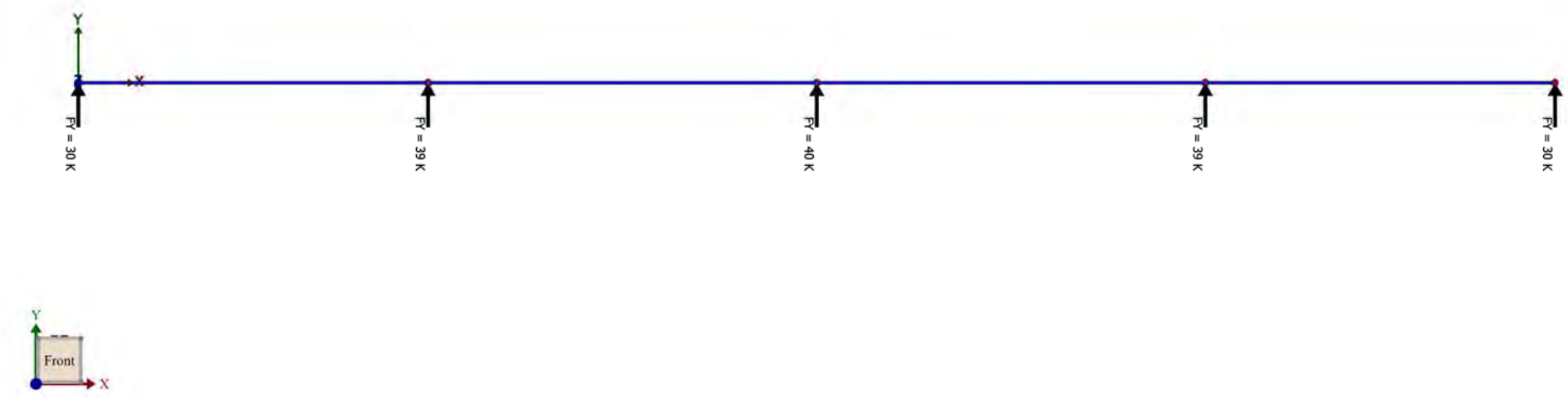
Floor Beam Loads - 35-1-5.91.vap
Result Case: SU6 High Extreme
IES VisualAnalysis 18.00.0008
Monday, April 29, 2019



Floor Beam Loads - 35-1-5.91.vap
Result Case: SU7 High Extreme
IES VisualAnalysis 18.00.0008
Monday, April 29, 2019



Floor Beam Loads - 35-1-5.91.vap
Result Case: NRL High Extreme
IES VisualAnalysis 18.00.0008
Monday, April 29, 2019



BRASS Input – Steel Floor Beam

Wyoming Department of Transportation

BRASS-GIRDER™ Input Parameters

Version Information

Girder UI:	8.0.0.3001
Girder XML:	8.0.0.3001
BRASS™ XML:	1.8.0.3001

Administration

Project ID:	6856
Project Title:	R8 Bridge Load Ratings 2018
Bridge ID:	35-1-5.91
Bridge Name:	Citico Creek
Route Name:	35-1
Reference Marker:	5.91
Title 1:	Floor Beam
Title 2:	
Date:	2019 4 30
Agency:	USDA Forest Service
Designer/Rater:	Ammon Groesbeck
Reviewer:	Brad Miller
Comments:	

Bridge Notes

No bridge notes have been defined.

Control

Structure

Structure Type:	FloorbeamLine
Define Deck Cross Section:	No
Analysis Model Type:	Beam
Number of Top Spans:	1

Spans

Span	Length
1	13.5 ft

Structure Material:	Steel
Beam Type:	Plate
Composite Structure:	No

Number of Stages: 1

Analysis

Unit System:	US
Analysis Method:	LRFD
Analysis Type:	Rating
Member of Interest:	1
Model Element Type:	Stepped
Point of Interest Generation Control:	User
Live-load Distribution Factor Application:	AnalysisPoint
Interpolate Reinforcement:	No
Calculate Effective Width:	No

Input

Symmetry

Component	Symmetric
Beam Profile	Yes
Deck Profile	Yes
Shear Connectors	Yes
Transverse Stiffeners	Yes
Bearing Stiffeners	Yes
Longitudinal Stiffeners	Yes
Bracing (Member)	No
Lateral Support	No
Cb Factors (LRFD)	Yes

Merge Beam/Deck Profile Schedules: Yes

Libraries

Section Library: N:\BRASS\Libraries\BRASS-Sections.BLS
Vehicle Library: N:\BRASS\Libraries\BRASS-Vehicles.BLV

Output

Primary Output

Action Output Level: DL+LL
Action Locations: 10th+SpecialPoints

General

Member Properties:	Yes
Load Combinations:	Yes
Load and Resistance Factors:	Yes
Warnings:	Yes
Camber:	No
Critical Design Ratios / Rating Factors:	Condensed

Live Load

Truck Positions:	No
Variable Axle Spacing:	No
Live Load Settings:	Yes
Live Load Combinations:	Yes
Live Load Details:	Yes
Impact (LFD):	No

Stage

Stage	Output
1	Yes

Dead Load

Member Self Load: Yes
Distributed Dead Loads: Yes
Concentrated Dead Loads: Yes
Temperature Change: No
Settlements: No

Intermediate Output

Intermediate Output Level: Full
Effective Width: No
Floorbeam Lane Position: No

Points of Interest

Specification Checks: Yes
Load Factoring/Combinations: Yes

Limit State Output (LRFD)

Limit State	Specification Check	Load Combination
Strength I	Yes	Yes
Strength II	No	No
Strength IV	No	No
Service I	No	No
Service II	Yes	Yes
Fatigue I	No	No
Fatigue II	No	No

Intermediate Output (cont.)

Steel

Transverse Stiffeners: No
Bearing Stiffeners: No
Longitudinal Stiffeners: No

Results Tables

X-Y Plot Action Tables: No
Specification Check Results Tables: No
Mesh Plot Files: No

BRASS-PAD™ Data Transfer File: No

Influence

Output influence lines for: None
Ordinate Divisor: 1

Factors

Load Factors (LRFD)

Limit State	DC		DW		DU		TU	
	max	min	max	min	max	min	max	min

Strength I	1.25	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Strength II	1.25	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Strength IV	1.5	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Service I	1	1	1	1	1	1	1.2	1
Service II	1	1	1	1	1	1	1.2	1
Fatigue I	0	0	0	0	0	0	0	0
Fatigue II	0	0	0	0	0	0	0	0

Load Factors (LRFD) (continued)

Limit State	LL				SE		PS		DS	
	Design		Legal	Permit						
	Inventory	Operating			max	min	max	min	max	min
Strength I	1.75	1.35	1.3	0	1	1	1	1	1.25	0.9
Strength II	1.35		0	0	1	1	1	1	1.25	0.9
Strength IV	0		0	0	0	0	1	1	1.5	0.9
Service I	1		0	1	1	1	1	1	1	1
Service II	1.3	1	1.3	1	0	0	1	1	1	1
Fatigue I	1.75		0	0	0	0	1	1	0	0
Fatigue II	0.8		0	0	0	0	1	1	0	0

Load Modifiers (LRFD)

Limit State	Ductility	Redundancy	Importance	Combined Product	
				max	min
Strength I	1	1	1	-	-
Strength II	1	1	1	-	-
Strength IV	1	1	1	-	-
Service I	1	1	1	-	-
Service II	1	1	1	-	-
Fatigue I	1	1	1	-	-
Fatigue II	1	1	1	-	-

Resistance Factors (LRFD)

Resistance Factors

Type	Value
φ Flexure	1
φ Shear	1
φ Bearing	1
φ Compression	0.95
φ Shear Connectors	0.85
φ Fatigue	1

System/Total Modifiers

Limit State	Resistance Type	System	Total
Strength	Flexure	1	-

Strength	Shear	1	-
Strength	Bearing	1	-
Strength	Compression	1	-
Strength	Shear Connectors	1	-
Strength	Longitudinal Reinforcement	1	-
Service	Flexure	1	-
Fatigue	Fatigue	1	-

Condition Modifiers

Limit State	Condition
Strength	0.95
Service	1
Fatigue	1

Materials

Steel

ID	Name	Yield Stress	Tensile Strength	Modulus of Elasticity	Density	Thermal Expansion Coefficient
1	Grade 50	50 ksi	65 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
2	Grade 50W	50 ksi	70 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
3	Grade 36	36 ksi	58 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
4	Grade HPS 70W	70 ksi	85 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
5	Grade 30	30 ksi	60 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}

Dead Load Groups

Groups

No dead load groups have been defined.

Live Loads

Live Load Control

Traffic Lane Increment:	12 in.
Design Lane Increment:	12 in.
Unit Load Advancement Denominator:	100
ADTT:	999
ADTT for Single Lane:	999
Multiple Presence Adjustment:	95 %
% of Dynamic Load Allowance (Impact):	100 %
Fixed Impact (STD):	-

Dynamic Load Allowance (LRFD)

Design/Rating Procedure	Truck	Lane	Fatigue
Design	33 %	0 %	15 %

Legal	33 %	0 %	0 %
Permit	33 %	0 %	0 %

Travelways

Start Distance	Travelway Width
1.75 ft	10 ft

Definitions (LRFD)

Vehicle 1

Name: HL-93
Description: HL-93 + LANE
Type: Truck+Lane
% Load from Truck: 80 %
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	20 kip	0 ft
2	20 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 2

Name: TANDEM
Description: TANDEM + LANE
Type: Truck+Lane
% Load from Truck: 84 %
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	25 kip	0 ft
2	25 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-

Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 3

Name: TYPE 3
Description: TYPE 3
Type: Truck
% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	14.5 kip	0 ft
2	14.5 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 4

Name: TYPE 3S2
Description: TYPE 3S2
Type: Truck
% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	13.5 kip	0 ft
2	13.5 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-

Fatigue I	-	-
Fatigue II	-	-

Vehicle 5

Name: TYPE 3-3
Description: TYPE 3-3
Type: Truck
% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	12 kip	0 ft
2	12 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 6

Name: SU4
Description: SU4
Type: Truck
% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	17 kip	0 ft
2	17 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 7

Name: SU5
Description: SU5
Type: Truck
% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	18.5 kip	0 ft
2	18.5 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 8

Name: SU6
Description: SU6
Type: Truck
% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	19.5 kip	0 ft
2	19.5 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 9

Name: SU7
Description: SU7
Type: Truck

% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	20 kip	0 ft
2	20 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Vehicle 10

Name: NRL
Description: NRL
Type: Truck
% Load from Truck: -
% of Dynamic Load Allowance: -
Design Lane Width: -
Traffic Lane Width: 10 ft
Fixed DLA: -

Wheel Line Details

Wheel Line #	Wheel Line Reaction	Gage
1	20 kip	0 ft
2	20 kip	6 ft

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Combinations (Standard)

No standard live load combinations have been defined.

Combinations (LRFD)

Primary Vehicle	Procedure	Primary Vehicle Weight	Multiple-Presence Vehicle	Maximum Number of Lanes	Fixed Axle Positions
HL-93	Design	72 kip	**HL-93**	-	*None defined.*

TANDEM	Design	50 kip	**TANDEM**	-	*None defined.*
TYPE 3	Legal	50 kip	**TYPE 3**	-	*None defined.*
TYPE 3S2	Legal	72 kip	**TYPE 3S2**	-	*None defined.*
TYPE 3-3	Legal	80 kip	**TYPE 3-3**	-	*None defined.*
SU4	Legal	54 kip	**SU4**	-	*None defined.*
SU5	Legal	62 kip	**SU5**	-	*None defined.*
SU6	Legal	69.5 kip	**SU6**	-	*None defined.*
SU7	Legal	77.5 kip	**SU7**	-	*None defined.*
NRL	Legal	80 kip	**NRL**	-	*None defined.*

Component Groups

Transverse Stiffeners

No transverse stiffener groups have been defined.

Bearing Stiffeners

No bearing stiffener groups have been defined.

Longitudinal Stiffeners

No longitudinal stiffener groups have been defined.

Specification Control

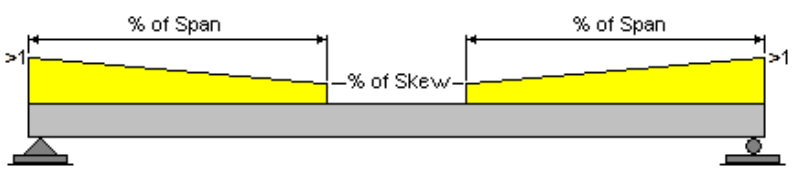
General

Lane Geometry

Design Vehicle Lane Width: 12 ft
Vehicle Width: 10 ft
Wheel Spacing: 6 ft
Encroachment Distance: -

Load Factors Control (LRFD): Use load factors per analysis type (Review = max/min; Rating = max only)

Skew Factors



Span #	% of Span	% of Skew
1	-	-

Steel

Use Appendix A6 (LRFD): Yes
Allow Plastic Analysis: Yes
Override Longitudinal Stiffeners: No
Slab thickness for longitudinal shear force: Structural
Slab thickness for minimum negative flexure concrete deck reinforcement: Structural

Fatigue

AASHTO LRFD Table 6.6.1.2.5-2

% of Span: 10
Span Length: 40 ft

Stress Range in Longitudinal Reinforcement Over the Piers: 10 ksi

Detail Categories (LRFD)

Detail Category	Constant, A x 10^8	Constant Amplitude Fatigue Threshold
A	250 kip^3	24 ksi
B	120 kip^3	16 ksi
B'	61 kip^3	12 ksi
C	44 kip^3	10 ksi
C'	44 kip^3	12 ksi
D	22 kip^3	7 ksi
E	11 kip^3	4.5 ksi
E'	3.9 kip^3	2.6 ksi

Limit State Map

Limit State Maps (LRFD)

Limit State	Design Review			Rating		
	Design Load	Legal Load	Permit Load	Design Load	Legal Load	Permit Load
Strength I	No	No	No	Inventory/Operating	Yes	No
Strength II	No	No	No	Exclude	No	No
Strength IV	No	No	No	Exclude	No	No
Service I	No	No	No	Exclude	No	No
Service II	No	No	No	Inventory/Operating	Yes	No
Service III	No	No	No	Exclude	No	No
Fatigue I	No	No	No	Inventory	No	No
Fatigue II	No	No	No	Inventory	No	No

Spec. Check Map (Strength)

LRFD Specification Check Maps

Design Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Legal Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Permit Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Design Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	Yes	No	No
Shear	Yes	No	No
Bearing	Yes	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Legal Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	Yes	No	No
Shear	Yes	No	No
Bearing	Yes	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Permit Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Spec. Check Map (Service)

LRFD Specification Check Maps

Design Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Legal Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Permit Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Design Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	Yes
Live Load Deflection	No	No

Legal Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	Yes
Live Load Deflection	No	No

Permit Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Spec. Check Map (Fatigue)

LRFD Specification Check Maps

Design Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No

Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Legal Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Permit Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Design Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Legal Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Permit Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Member

Member Notes

No member notes have been defined.

Member Materials

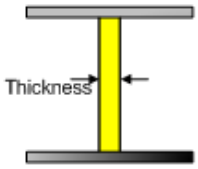
Beam

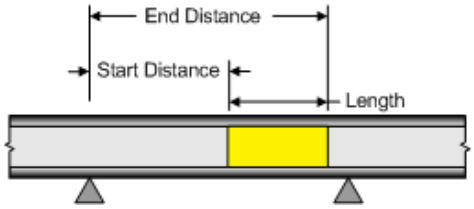
Beam Material: **Grade 30**

Beam Profile

Web

Apply to Entire Structure: Yes
Web Angle: -

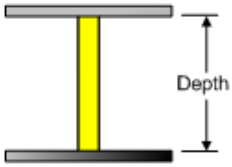


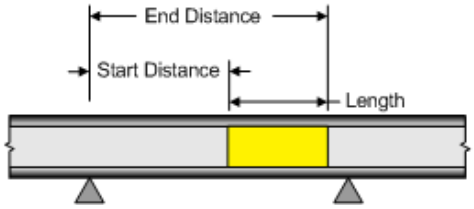


Thickness	Material	Support Number	Start Distance	Length
0.5 in.	**Grade 30**	1	0 ft	6.75 ft

Web Depth

Apply to Entire Structure: Yes

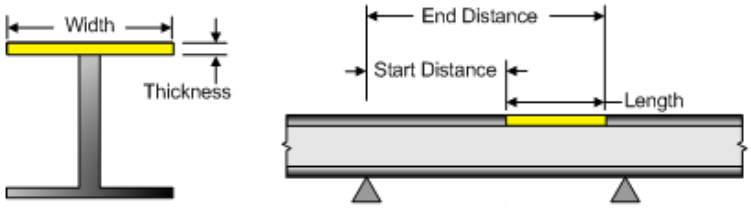




Start Depth	Web Variation	End Depth	Support Number	Start Distance	Length
22.75 in.	Linear	22.75 in.	1	0 ft	6.75 ft

Top Flange

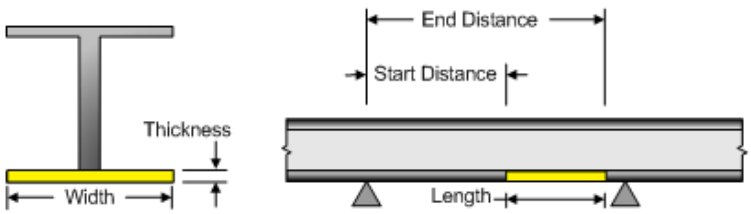
Apply to Entire Structure: Yes



Start of Range		End of Range		Material	Support Number	Start Distance	Length
Width	Thickness	Width	Thickness				
7 in.	0.625 in.	-	-	**Grade 30**	1	0 ft	6.75 ft

Bottom Flange

Apply to Entire Structure: Yes



Start of Range		End of Range		Material	Support Number	Start Distance	Length
Width	Thickness	Width	Thickness				
7 in.	0.625 in.	-	-	**Grade 30**	1	0 ft	6.75 ft

Top Cover Plate

No top cover plate schedules have been defined.

Bottom Cover Plate

No bottom cover plate schedules have been defined.

Hinges

No hinges have been defined.

Special Locations

No special locations have been defined.

Splice Locations

No splice locations have been defined.

Supports

Support Conditions

Support	Support Restraint		
	Horizontal	Vertical	Rotational
1	Restrained	Restrained	Free
2	Free	Restrained	Free

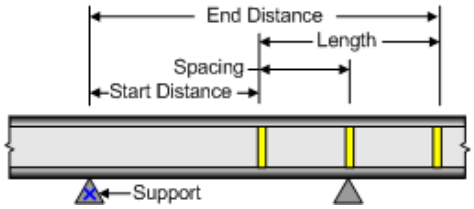
Spring Constants

Support	Spring Constants		
	Horizontal	Vertical	Rotational
1	-	-	-
2	-	-	-

Schedules

Bracing

Apply to Entire Structure: No



Spacing	Support	Start Distance	Length
3.5 ft	1	0 ft	3.5 ft
6.5 ft	1	3.5 ft	6.5 ft
3.5 ft	1	10 ft	3.5 ft

Transverse Stiffeners

No transverse stiffener schedules have been defined.

Bearing Stiffeners

Apply to Entire Structure: No

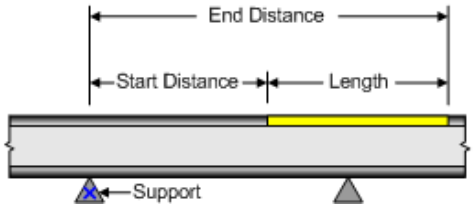
Support	Stiffener Group
1	Not Assigned

Longitudinal Stiffeners

No longitudinal stiffener schedules have been defined.

Lateral Support

Apply to Entire Structure: Yes



Support	Start Distance	Length
1	0 ft	13.5 ft

Cb Factors (Standard)

No Cb factors (LRFD) have been defined.

Cb Factors (LRFD)

No Cb factors (LRFD) have been defined.

Fatigue Stress (Standard)

No fatigue stress (standard) schedules have been defined.

Member Control

Steel

Flexural Resistance

Span	Ignore Eq. 6.10.7.1.2-3 (LRFD)
1	No

End Panel Distances

Top Span

Left of Top Span: -
Right of Top Span: -

Flange Local Buckling Resistance Adjustment

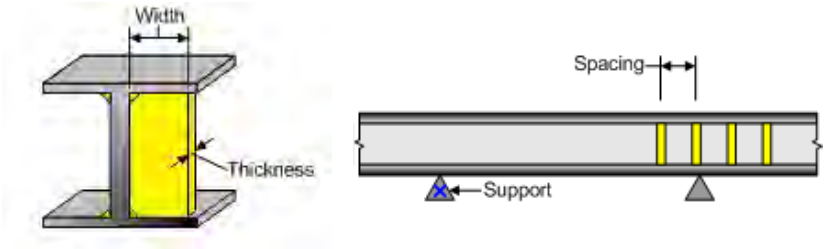
Standard Specifications: -
LRFD Specifications: -

Points of Interest

Points

Point of Interest	Output Specification Checks	Output Load Combinations
100	Yes	Yes
101	Yes	Yes
102	Yes	Yes
103	Yes	Yes
104	Yes	Yes
104.5	Yes	Yes
105	Yes	Yes

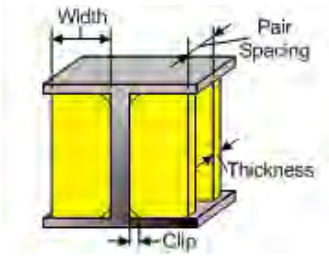
Transverse Stiffeners

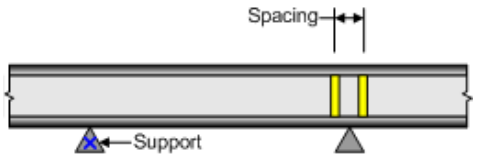


Point of Interest	Override	Width	Thickness	Spacing	Type	Type Factor	Material
100	No	-	-	-	-	-	-
101	No	-	-	-	-	-	-
102	No	-	-	-	-	-	-

103	No	-	-	-	-	-	-
104	No	-	-	-	-	-	-
104.5	No	-	-	-	-	-	-
105	No	-	-	-	-	-	-

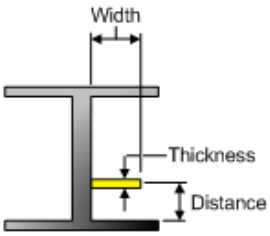
Bearing Stiffeners





Point of Interest	Override	Width	Thickness	Clip	Number of Pairs	Pair Spacing	Attachment	Material
100	No	-	-	-	-	-	-	-
101	No	-	-	-	-	-	-	-
102	No	-	-	-	-	-	-	-
103	No	-	-	-	-	-	-	-
104	No	-	-	-	-	-	-	-
104.5	No	-	-	-	-	-	-	-
105	No	-	-	-	-	-	-	-

Longitudinal Stiffeners

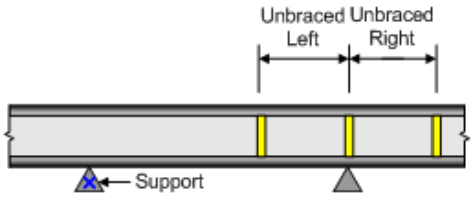


Point of Interest	Main Stiffener					
	Override	Width	Thickness	Distance	Web Reference	Material
100	No	-	-	-	-	-
101	No	-	-	-	-	-
102	No	-	-	-	-	-
103	No	-	-	-	-	-
104	No	-	-	-	-	-
104.5	No	-	-	-	-	-
105	No	-	-	-	-	-

Point of Interest	Second Stiffener					
	Override	Width	Thickness	Distance	Web Reference	Material
100	No	-	-	-	-	-
101	No	-	-	-	-	-
102	No	-	-	-	-	-

103	No	-	-	-	-	-
104	No	-	-	-	-	-
104.5	No	-	-	-	-	-
105	No	-	-	-	-	-

Bracing



Point of Interest	Override	Lateral Support	Point Braced	Unbraced Length	
				Left	Right
100	No	-	-	-	-
101	No	-	-	-	-
102	No	-	-	-	-
103	No	-	-	-	-
104	No	-	-	-	-
104.5	No	-	-	-	-
105	No	-	-	-	-

Cb Factors

LRFD

Point of Interest	Override	Cb Method	Cb Factor	
			Top Flange	Bottom Flange
100	No	-	-	-
101	No	-	-	-
102	No	-	-	-
103	No	-	-	-
104	No	-	-	-
104.5	No	-	-	-
105	No	-	-	-

Fatigue

No fatigue detail categories have been defined.

Point of Interest	N Cycles	Zr (LRFD)
100	-	-
101	-	-
102	-	-
103	-	-
104	-	-
104.5	-	-
105	-	-

Point of Interest	r/h (Top Reinf.)	r/h (Bottom Reinf.)
100	-	-
101	-	-
102	-	-
103	-	-
104	-	-
104.5	-	-
105	-	-

Output

Point of Interest	Flexure	Shear	Bearing	Flexural Stress in Longitudinal Stiffener	Crack Control	Flexural Stress in Flanges
100	Yes	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes	Yes

Point of Interest	Live Load Deflection	Fatigue of Reinforcement	Fatigue of Shear Connectors	Fatigue Shear Range of Shear Connectors	Fatigue of Special Points	Fatigue Shear
100	Yes	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes	Yes

Point of Interest	Details	Compactness and Bracing	Transverse Stiffeners	Bearing Stiffeners	Longitudinal Stiffeners
100	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes

Dead Loads

Uniform

Dead Load Type	Stage	Uniform Load
DC	1	1.218 kip / ft
DW	1	-
DU	1	-

Additional Self-weight

No additional self-weight dead loads have been defined.

Distributed

No distributed dead loads have been defined.

Concentrated

No concentrated dead loads have been defined.

Temperature

No temperature dead loads have been defined.

Settlement

Stage: 1

No settlement loads have been defined.

Pedestrian Load

Pedestrian Load: -

Distribution Factors (LRFD)

Moment

No moment distribution factors have been defined.

Shear

No shear distribution factors have been defined.

Deflection

No deflection distribution factors have been defined.

Reaction

Apply to entire structure: No

Support	mg Single-Lane			mg Multi-Lane		
	Moment	Shear	Deflection	Moment	Shear	Deflection
1	-	-	-	-	-	-
2	-	-	-	-	-	-

BRASS Results – Steel Floor Beam

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**                                                                                          **
**                            WYOMING DEPARTMENT OF TRANSPORTATION                          **
**                       BRIDGE RATING AND ANALYSIS OF STRUCTURAL SYSTEMS                   **
**                                                                                          **
**                                                                                          **
**             BBBBBBBBBB   RRRRRRRRRRR    AAAAAAAAAA    SSSSSSSSSS    SSSSSSSSSS          **
**             BBBBBBBBBBB  RRRRRRRRRRRR  AAAAAAAAAAAA  SSSSSSSSSSS  SSSSSSSSSSS          **
**             BB        BB  RR        RR  AA        AA  SS        SS  SS        SS          **
**             BB        BB  RR        RR  AA        AA  SS            SS                  **
**             BB       BB   RR        RR  AA        AA  SSS           SSS                 **
**             BBBBBBBBBB    RRRRRRRRRRRR  AAAAAAAAAAAA   SSSSSSSSS     SSSSSSSSS          **
**             BBBBBBBBBB    RRRRRRRRRRR   AAAAAAAAAAAA    SSSSSSSSS     SSSSSSSSS         **
**             BB       BB   RR    RR      AA        AA           SSS           SSS         **
**             BB        BB  RR     RR     AA        AA            SS            SS         **
**             BB        BB  RR      RR    AA        AA  SS        SS  SS        SS          **
**             BBBBBBBBBBBB  RR       RR   AA        AA  SSSSSSSSSSS  SSSSSSSSSSS          **
**             BBBBBBBBBB   RR        RR  AA        AA   SSSSSSSSSS    SSSSSSSSSS          **
**                                                                                          **
**                                                                                          **
**        GGGGGGGGGG   IIIIIIIIIIII  RRRRRRRRRRR   DDDDDDDD      EEEEEEEEEEEE  RRRRRRRRRRR  **
**       GGGGGGGGGGGG  IIIIIIIIIIII  RRRRRRRRRRRR  DDDDDDDDD     EEEEEEEEEEEE  RRRRRRRRRRRR **
**       GG        GG       II       RR        RR  DD      DD    EE            RR        RR **
**       GG                 II       RR        RR  DD       DD   EE            RR        RR **
**       GG                 II       RR        RR  DD        DD  EE            RR        RR **
**       GG    GGGGGG       II       RRRRRRRRRRRR  DD        DD  EEEEEEEEEE    RRRRRRRRRRRR **
**       GG    GGGGGG       II       RRRRRRRRRRR   DD        DD  EEEEEEEEEE    RRRRRRRRRRR  **
**       GG        GG       II       RR    RR      DD        DD  EE            RR    RR     **
**       GG        GG       II       RR     RR     DD       DD   EE            RR     RR    **
**       GG        GG       II       RR      RR    DD      DD    EE            RR      RR   **
**       GGGGGGGGGGGG  IIIIIIIIIIII  RR       RR   DDDDDDDDD     EEEEEEEEEEEE  RR       RR  **
**        GGGGGGGGGG   IIIIIIIIIIII  RR        RR  DDDDDDDD      EEEEEEEEEEEE  RR        RR **
**                                                                                          **
**                                                                                          **
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**                                                                                          **
**                           Version  8   Release  0   Service Pack  0                      **
**                                    ** Release Version **                                 **
**                                 Release Date: Oct. 05, 2017                              **
**                                                                                          **
**                        For user assistance and system information contact:               **
**                                      Phone: (307) 777-4489                               **
**                                 E-mail: BRASSTechSupport@wyo.gov                         **
**                                                                                          **
**     The source version is maintained by BridgeTech, Inc.                                 **
**                                                                                          **
**     Disclaimer:                                                                          **
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**        The Wyoming Department of Transportation assumes no liability or responsibility  **
**        for and make no representations or warranties as to applicability or suitability **
**        of this computer program.  Anyone making use thereof or relying thereon assumes   **
**        all responsibility and liability arising from such use or reliance.               **
**                                                                                          **
**     AASHTO LRFD Specifications:                                                          **
**                                                                                          **
**        BRASS-GIRDER™ is current with the AASHTO LRFD Bridge Design Specifications, 8th   **
**        Edition, 2017.  Load and Resistance Factor Ratings are current with the AASHTO    **
**        Manual for Bridge Evaluation, 3rd Edition, 2017.                                  **
**                                                                                          **
**     AASHTO Standard Specifications (LFD):                                                **
**                                                                                          **
**        BRASS-GIRDER is current with the AASHTO Standard Specifications for Highway       **
**        Bridges, 17th Edition, 2002.  Load Factor Ratings are current with the AASHTO     **
**        Manual for Bridge Evaluation, 3rd Edition, 2017.                                  **
**                                                                                          **
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** STRUCTURE/ANALYSIS SUMMARY **

Structure Type : Beam
Material Type : Steel
Number of Stages: 1
Element Type : Stepped
Analysis Type : Rating

Span No.	Length (ft)	Angle (deg)
1	13.5000	N/A

Supports:

Support No.	Fixity Horizontal	Fixity Vertical	Fixity Rotational	Spring Constants Horizontal (k/ft)	Spring Constants Vertical (k/ft)	Spring Constants Rotational (ft-k/rad)
1	Restrained	Restrained	Free	Infinity	Infinity	N/A
2	Free	Restrained	Free	N/A	Infinity	N/A

Beam Material Properties:
Unit Weight : 0.490 k/ft^3
Modulus of Elasticity (E) : 29000.000 ksi
Thermal Expansion Coefficient : 0.0000065 / deg. F

** OUTPUT CONTROL SUMMARY **

Action Output Locations	Actions at tenth points and special analysis points
Dead Load Actions	YES
Live Load Actions	YES
Concurrent Actions	NO
Girder Properties	YES
Truck Position	NO
Variable Axle Spacing	NO
Live Load Settings	YES
Live Load Combinations	YES
Live Load Details	YES
Load Combinations	YES
Load and Resistance Factors	YES
Warnings	YES
Member Self-Load	YES
Distributed Dead Loads	YES
Concentrated Dead Loads	YES
Temperature Change	NO
Settlements	NO
Camber Summary	NO
Influence Summary	NO
Critical Design Ratios or Rating Factors	YES (Condensed)
Dyn. Load Allowance Summary	NO
Intermediate Output Level	Expanded
Stage 1	YES

Limit State	Intermediate Output	Load Combinations
STRENGTH I	YES	YES
STRENGTH I-O	YES	YES
STRENGTH II	NO	NO
STRENGTH IV	NO	NO
SERVICE I	NO	NO
SERVICE II	YES	YES
SERVICE II-O	YES	YES
SERVICE III	NO	NO
FATIGUE I	NO	NO
FATIGUE II	NO	NO

Dead Load Distribution (Intermediate)	NO
Dead Load Distribution (Standard)	YES
Live Load Distribution (Intermediate)	NO
Live Load Distribution (Standard)	YES
Transverse Stiffeners (Intermediate)	NO
Bearing Stiffeners (Intermediate)	NO
Longitudinal Stiffeners (Intermediate)	NO
Shear Connectors (Intermediate)	NO
Shear Connectors (Standard)	NO
Floorbeam (Intermediate)	NO
Effective Width (Intermediate)	NO
Action X-Y Plot Tables	NO
Specification Check Results Tables	NO
Mesh Plot Files	NO

Floor Beam

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 1 Span Length = 13.500 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Input Dimensions and Cross-Section Geometry: (in)

Point No.	Dist (ft)	Web Depth	Web Width top	Web Width bot	Flange Thickness top	Flange Thickness bot	Flange Width top	Flange Width bot
1-0.000	0.000	22.75	0.500	0.500	0.625	0.625	7.00	7.00
1-0.100	1.350	22.75	0.500	0.500	0.625	0.625	7.00	7.00
1-0.200	2.700	22.75	0.500	0.500	0.625	0.625	7.00	7.00
1-0.259	3.500	22.75	0.500	0.500	0.625	0.625	7.00	7.00
1-0.300	4.050	22.75	0.500	0.500	0.625	0.625	7.00	7.00
1-0.400	5.400	22.75	0.500	0.500	0.625	0.625	7.00	7.00
1-0.450	6.075	22.75	0.500	0.500	0.625	0.625	7.00	7.00
1-0.500	6.750	22.75	0.500	0.500	0.625	0.625	7.00	7.00
1-0.600	8.100	22.75	0.500	0.500	0.625	0.625	7.00	7.00
1-0.700	9.450	22.75	0.500	0.500	0.625	0.625	7.00	7.00
1-0.741	10.000	22.75	0.500	0.500	0.625	0.625	7.00	7.00
1-0.800	10.800	22.75	0.500	0.500	0.625	0.625	7.00	7.00
1-0.900	12.150	22.75	0.500	0.500	0.625	0.625	7.00	7.00
1-1.000	13.500	22.75	0.500	0.500	0.625	0.625	7.00	7.00

Calculated Properties:

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)	Standard Section Name
1-0.000	0.000	20.12	1686.1	12.00	-
1-0.100	1.350	20.12	1686.1	12.00	-
1-0.200	2.700	20.12	1686.1	12.00	-
1-0.259	3.500	20.12	1686.1	12.00	-
1-0.300	4.050	20.12	1686.1	12.00	-
1-0.400	5.400	20.12	1686.1	12.00	-
1-0.450	6.075	20.12	1686.1	12.00	-
1-0.500	6.750	20.12	1686.1	12.00	-
1-0.600	8.100	20.12	1686.1	12.00	-
1-0.700	9.450	20.12	1686.1	12.00	-
1-0.741	10.000	20.12	1686.1	12.00	-
1-0.800	10.800	20.12	1686.1	12.00	-
1-0.900	12.150	20.12	1686.1	12.00	-
1-1.000	13.500	20.12	1686.1	12.00	-

Note: The calculated properties reported above are based on the entire cross section geometry, which may include the slab if it was input. These properties are used only for the structural analysis to obtain moments, shears, etc. When specification and stress checks are performed, BRASS calculates the section properties for both positive and negative bending, and uses them in accordance with the sign of the factored moments. The section properties used for the section analysis are tabulated in a later report.

Note: The distance to the centroid (X-bar) references the bottom of the bottom flange.

Self-Load Summary:

Span No.	Beginning of Load Distance, ft	Beginning of Load Magnitude, k/ft	End of Load Distance, ft	End of Load Magnitude, k/ft
1	0.000	0.0685	13.500	0.0685

Load Groups:

Distributed Dead Load Summary:

Load Group	Span No.	Beginning of Load Distance, ft	Beginning of Load Magnitude, k/ft	End of Load Distance, ft	End of Load Magnitude, k/ft
DC 1	All		1.2180		1.2180

Note: A span number denoted as "*" indicates the distances reference the left end of the bridge and the load may extend over one or more spans.
Note: A span number denoted as "All" indicates all TOP spans.

Deck Loads and Schedules Summary:
No loads are present.

Concentrated Dead Load Summary:
No loads are present.

** LIVE LOAD DISTRIBUTION FACTORS SUMMARY **

Beam Distribution Factor Schedule: Shear

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	13.500	1.000 (USER)	1.000 (M,USER)

Beam Distribution Factor Schedule: Moment

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	13.500	1.000 (USER)	1.000 (M,USER)

Beam Distribution Factor Schedule: Deflection

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	13.500	1.000 (USER)	1.000 (M,USER)

Reaction Distribution Factors: Shear

Support No.	mg(1-lane)	mg(M-lanes)
1	1.000 (USER)	1.000 (M,USER)
2	1.000 (USER)	1.000 (M,USER)

Reaction Distribution Factors: Moment

Support No.	mg(1-lane)	mg(M-lanes)
1	1.000 (USER)	1.000 (M,USER)
2	1.000 (USER)	1.000 (M,USER)

Reaction Distribution Factors: Deflection

Support No.	mg(1-lane)	mg(M-lanes)
1	1.000 (USER)	1.000 (M,USER)
2	1.000 (USER)	1.000 (M,USER)

Notes:
=> The controlling method is included in parenthesis next to each distribution factor.
USER = User Input LR-T = Lever Rule Specified in AASHTO LRFD Table
LRFD = AASHTO LRFD Formulas LR-O = Lever Rule Override
LR = Lever Rule Method RG-O = Rigid Method Override
=> Additionally, for multiple-lanes loaded, the number of lanes loaded is shown. An 'M' is used with the USER and LRFD methods because the number of multiple lanes is unknown.
=> The Lever Rule Override is invoked when the ranges of applicability are not satisfied for the AASHTO LRFD distribution factor formulas.

LIVE LOAD SETTINGS SUMMARY:

No.	Name	Description	Lane Widths, ft Design	Lane Widths, ft Traffic	Axle Wt. (kips)
1	HL-93	HL-93 + LANE	10.000	10.000	40.000
2	TANDEM	TANDEM + LANE	10.000	10.000	50.000
3	TYPE 3	TYPE 3	10.000	10.000	29.000
4	TYPE 3S2	TYPE 3S2	10.000	10.000	27.000
5	TYPE 3-3	TYPE 3-3	10.000	10.000	24.000
6	SU4	SU4	10.000	10.000	34.000
7	SU5	SU5	10.000	10.000	37.000
8	SU6	SU6	10.000	10.000	39.000
9	SU7	SU7	10.000	10.000	40.000
10	NRL	NRL	10.000	10.000	40.000

LIVE LOAD COMBINATIONS SUMMARY:

Comb. No.	Name	Description	Live Load Numbers Primary	Mult. Pres.	Max No. Lanes	Percent Impact	Fixed Impact	Rating Procedure
1	HL-93	HL-93 + HL-93	1	1	1	100.000	0.33	Design Load
2	TANDEM	TANDEM + TANDEM	2	2	1	100.000	0.33	Design Load
3	TYPE 3	TYPE 3 + TYPE 3	3	3	1	100.000	0.33	Legal Load
4	TYPE 3S2	TYPE 3S2 + TYPE 3S2	4	4	1	100.000	0.33	Legal Load
5	TYPE 3-3	TYPE 3-3 + TYPE 3-3	5	5	1	100.000	0.33	Legal Load
6	SU4	SU4 + SU4	6	6	1	100.000	0.33	Legal Load
7	SU5	SU5 + SU5	7	7	1	100.000	0.33	Legal Load
8	SU6	SU6 + SU6	8	8	1	100.000	0.33	Legal Load
9	SU7	SU7 + SU7	9	9	1	100.000	0.33	Legal Load
10	NRL	NRL + NRL	10	10	1	100.000	0.33	Legal Load

LIVE LOAD DETAILS SUMMARY:

Wheel Line No.	Weight (kips)	Gage (ft)	Wheel Line No.	Weight (kips)	Gage (ft)	Wheel Line No.	Weight (kips)	Gage (ft)	Wheel Line No.	Weight (kips)	Gage (ft)
Live Load 1: HL-93			: HL-93 + LANE								
1	20.000	0.000	2	20.000	6.000						
Live Load 2: TANDEM			: TANDEM + LANE								
1	25.000	0.000	2	25.000	6.000						
Live Load 3: TYPE 3			: TYPE 3								
1	14.500	0.000	2	14.500	6.000						
Live Load 4: TYPE 3S2			: TYPE 3S2								
1	13.500	0.000	2	13.500	6.000						
Live Load 5: TYPE 3-3			: TYPE 3-3								
1	12.000	0.000	2	12.000	6.000						

LIVE LOAD DETAILS SUMMARY:

Wheel Line No.	Weight (kips)	Gage (ft)	Wheel Line No.	Weight (kips)	Gage (ft)	Wheel Line No.	Weight (kips)	Gage (ft)	Wheel Line No.	Weight (kips)	Gage (ft)
Live Load 6: SU4			: SU4								
1	17.000	0.000	2	17.000	6.000						
Live Load 7: SU5			: SU5								
1	18.500	0.000	2	18.500	6.000						
Live Load 8: SU6			: SU6								
1	19.500	0.000	2	19.500	6.000						
Live Load 9: SU7			: SU7								
1	20.000	0.000	2	20.000	6.000						
Live Load 10: NRL			: NRL								
1	20.000	0.000	2	20.000	6.000						

LOAD FACTORS SUMMARY:

Limit State	eta D	eta R	eta I	eta T MAX	eta T MIN
STRENGTH I	1.00	1.00	1.00	1.00	1.00
STRENGTH II	1.00	1.00	1.00	1.00	1.00
STRENGTH IV	1.00	1.00	1.00	1.00	1.00
SERVICE I	1.00	1.00	1.00	1.00	1.00
SERVICE II	1.00	1.00	1.00	1.00	1.00
SERVICE III	1.00	1.00	1.00	1.00	1.00
FATIGUE I	1.00	1.00	1.00	1.00	1.00
FATIGUE II	1.00	1.00	1.00	1.00	1.00

Limit State	DC		DW		DU		LL (Design)		LL	LL
	MAX	MIN	MAX	MIN	MAX	MIN	Inventory	Operating	Legal	Permit
STRENGTH I	1.25	1.25	1.50	1.50	1.50	1.50	1.75	1.35	1.30	0.00
STRENGTH II	1.25	1.25	1.50	1.50	1.50	1.50	1.35	0.00	0.00	0.00
STRENGTH IV	1.50	1.50	1.50	1.50	1.50	1.50	0.00	0.00	0.00	0.00
SERVICE I	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00
SERVICE II	1.00	1.00	1.00	1.00	1.00	1.00	1.30	1.00	1.30	1.00
SERVICE III	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.00	1.00	0.00
FATIGUE I	0.00	0.00	0.00	0.00	0.00	0.00	1.75	0.00	0.00	0.00
FATIGUE II	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00

Limit State	TU		SE		PS		DS	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
STRENGTH I	1.20	1.20	1.00	1.00	1.00	1.00	1.25	1.25
STRENGTH II	1.20	1.20	1.00	1.00	1.00	1.00	1.25	1.25
STRENGTH IV	1.20	1.20	0.00	0.00	1.00	1.00	1.50	1.50
SERVICE I	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
SERVICE II	1.20	1.20	0.00	0.00	1.00	1.00	1.00	1.00
SERVICE III	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
FATIGUE I	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
FATIGUE II	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00

Notes:
=> DU = Utilities
=> PS = Prestress
=> DS = Differential Deck Shrinkage

RESISTANCE FACTORS SUMMARY:

Limit State	phi C
STRENGTH	0.95
SERVICE	1.00
FATIGUE	1.00

Resistance Type	phi* (Base)	STRENGTH phi S	STRENGTH phi T	SERVICE phi S	SERVICE phi T	FATIGUE phi S	FATIGUE phi T
Flexure	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Shear	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Bearing	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Shear Connectors	0.85	1.00	0.95	1.00	1.00	1.00	1.00
Compression	0.95	1.00	0.95	1.00	1.00	1.00	1.00
Fatigue	1.00	1.00	0.95	1.00	1.00	1.00	1.00

* Base phi factors are not adjusted by phi C * phi S.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR GIRDER WEIGHT
Length of Span No. 1 = 13.500 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	0.0	0.0	0.5	0.5	0.00	0.00
1-0.100	0.6	0.0	0.4		0.00	0.00
1-0.200	1.0	0.0	0.3		0.00	0.00
1-0.300	1.3	0.0	0.2		0.00	0.00
1-0.400	1.5	0.0	0.1		0.00	0.00
1-0.450	1.5	0.0	0.0		0.00	0.00
1-0.500	1.6	0.0	-0.0		0.00	0.00
1-0.600	1.5	0.0	-0.1		0.00	0.00
1-0.700	1.3	0.0	-0.2		0.00	0.00
1-0.800	1.0	0.0	-0.3		0.00	0.00
1-0.900	0.6	0.0	-0.4		0.00	0.00
1-1.000	0.0	0.0	-0.5	0.5	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000021 rad Right End = -0.000021 rad

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD OF 1.218000 k/ft **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR SUPERIMPOSED UNIFORM DEAD LOAD (DC) ON TOP SPANS
Length of Span No. 1 = 13.500 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	0.0	0.0	8.2	8.2	0.00	0.00
1-0.100	10.0	0.0	6.6		0.00	0.01
1-0.200	17.8	0.0	4.9		0.00	0.01
1-0.300	23.3	0.0	3.3		0.00	0.02
1-0.400	26.6	0.0	1.6		0.00	0.02
1-0.450	27.5	0.0	0.8		0.00	0.02
1-0.500	27.7	0.0	-0.0		0.00	0.02
1-0.600	26.6	0.0	-1.6		0.00	0.02
1-0.700	23.3	0.0	-3.3		0.00	0.02
1-0.800	17.8	0.0	-4.9		0.00	0.01
1-0.900	10.0	0.0	-6.6		0.00	0.01
1-1.000	-0.0	0.0	-8.2	8.2	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000368 rad Right End = -0.000368 rad

Floor Beam

** COMBINED UNFACTORED DEAD LOAD ACTIONS **
** CONSTRUCTION STAGE 1 **

Length of Span No. 1 = 13.500 ft

POINT NO.	Dead Loads of Structural Components (DC) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)	Dead Loads of Wearing Surfaces (DW) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
1-0.000	0.0	0.0	8.7	8.7	0.00	0.0	0.0	0.0	0.0	0.00
1-0.100	10.6	0.0	6.9		0.01	0.0	0.0	0.0		0.00
1-0.200	18.8	0.0	5.2		0.01	0.0	0.0	0.0		0.00
1-0.300	24.6	0.0	3.5		0.02	0.0	0.0	0.0		0.00
1-0.400	28.1	0.0	1.7		0.02	0.0	0.0	0.0		0.00
1-0.450	29.0	0.0	0.9		0.02	0.0	0.0	0.0		0.00
1-0.500	29.3	0.0	-0.0		0.02	0.0	0.0	0.0		0.00
1-0.600	28.1	0.0	-1.7		0.02	0.0	0.0	0.0		0.00
1-0.700	24.6	0.0	-3.5		0.02	0.0	0.0	0.0		0.00
1-0.800	18.8	0.0	-5.2		0.01	0.0	0.0	0.0		0.00
1-0.900	10.6	0.0	-6.9		0.01	0.0	0.0	0.0		0.00
1-1.000	-0.0	0.0	-8.7	8.7	0.00	0.0	0.0	0.0	0.0	0.00

Rotations (DC): Left End = 0.000388 rad
(+) Clockwise Right End = -0.000388 rad

Rotations (DW): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

POINT NO.	Dead Loads of Utilities (DU) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
1-0.000	0.0	0.0	0.0	0.0	0.00
1-0.100	0.0	0.0	0.0		0.00
1-0.200	0.0	0.0	0.0		0.00
1-0.300	0.0	0.0	0.0		0.00
1-0.400	0.0	0.0	0.0		0.00
1-0.450	0.0	0.0	0.0		0.00
1-0.500	0.0	0.0	0.0		0.00
1-0.600	0.0	0.0	0.0		0.00
1-0.700	0.0	0.0	0.0		0.00
1-0.800	0.0	0.0	0.0		0.00
1-0.900	0.0	0.0	0.0		0.00
1-1.000	0.0	0.0	0.0	0.0	0.00

Rotations (DU): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 1: HL-93 + HL-93
Length of Span No. 1 = 13.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	30.3	0.0	30.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	41.0	0.0	0.0	0.0	30.3	0.0			0.00	0.00	0.03	0.00		
1-0.200	81.9	0.0	0.0	0.0	30.3	0.0			0.00	0.00	0.05	0.00		
1-0.300	113.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.07	0.00		
1-0.400	113.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.450	113.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.500	113.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.600	113.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.700	113.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.07	0.00		
1-0.800	81.9	0.0	0.0	0.0	0.0	-30.3			0.00	0.00	0.05	0.00		
1-0.900	41.0	0.0	0.0	0.0	0.0	-30.3			0.00	0.00	0.03	0.00		
1-1.000	0.0	0.0	0.0	0.0	0.0	-30.3	30.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001633 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 22.809 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001633 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 22.809 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 2: TANDEM + TANDEM
Length of Span No. 1 = 13.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	38.3	0.0	38.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	51.7	0.0	0.0	0.0	38.3	0.0			0.00	0.00	0.03	0.00		
1-0.200	103.5	0.0	0.0	0.0	38.3	0.0			0.00	0.00	0.06	0.00		
1-0.300	143.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.09	0.00		
1-0.400	143.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.10	0.00		
1-0.450	143.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.10	0.00		
1-0.500	143.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.10	0.00		
1-0.600	143.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.10	0.00		
1-0.700	143.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.09	0.00		
1-0.800	103.5	0.0	0.0	0.0	0.0	-38.3			0.00	0.00	0.06	0.00		
1-0.900	51.7	0.0	0.0	0.0	0.0	-38.3			0.00	0.00	0.03	0.00		
1-1.000	0.0	0.0	0.0	0.0	0.0	-38.3	38.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.002063 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 28.809 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.002063 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 28.809 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 3: TYPE 3 + TYPE 3
Length of Span No. 1 = 13.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	23.1	0.0	23.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	31.2	0.0	0.0	0.0	23.1	0.0			0.00	0.00	0.02	0.00		
1-0.200	62.5	0.0	0.0	0.0	23.1	0.0			0.00	0.00	0.04	0.00		
1-0.300	86.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.05	0.00		
1-0.400	86.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.06	0.00		
1-0.450	86.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.06	0.00		
1-0.500	86.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.06	0.00		
1-0.600	86.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.06	0.00		
1-0.700	86.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.05	0.00		
1-0.800	62.5	0.0	0.0	0.0	0.0	-23.1			0.00	0.00	0.04	0.00		
1-0.900	31.2	0.0	0.0	0.0	0.0	-23.1			0.00	0.00	0.02	0.00		
1-1.000	0.0	0.0	0.0	0.0	0.0	-23.1	23.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001246 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 17.400 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001246 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 17.400 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 4: TYPE 3S2 + TYPE 3S2
Length of Span No. 1 = 13.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	21.5	0.0	21.5	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	29.1	0.0	0.0	0.0	21.5	0.0			0.00	0.00	0.02	0.00		
1-0.200	58.2	0.0	0.0	0.0	21.5	0.0			0.00	0.00	0.04	0.00		
1-0.300	80.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.05	0.00		
1-0.400	80.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.06	0.00		
1-0.450	80.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.06	0.00		
1-0.500	80.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.06	0.00		
1-0.600	80.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.06	0.00		
1-0.700	80.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.05	0.00		
1-0.800	58.2	0.0	0.0	0.0	0.0	-21.5			0.00	0.00	0.04	0.00		
1-0.900	29.1	0.0	0.0	0.0	0.0	-21.5			0.00	0.00	0.02	0.00		
1-1.000	0.0	0.0	0.0	0.0	0.0	-21.5	21.5	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001160 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 16.200 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001160 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 16.200 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 5: TYPE 3-3 + TYPE 3-3
Length of Span No. 1 = 13.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	19.2	0.0	19.2	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	25.9	0.0	0.0	0.0	19.2	0.0			0.00	0.00	0.02	0.00		
1-0.200	51.7	0.0	0.0	0.0	19.2	0.0			0.00	0.00	0.03	0.00		
1-0.300	71.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.04	0.00		
1-0.400	71.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.05	0.00		
1-0.450	71.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.05	0.00		
1-0.500	71.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.05	0.00		
1-0.600	71.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.05	0.00		
1-0.700	71.8	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.04	0.00		
1-0.800	51.7	0.0	0.0	0.0	0.0	-19.2			0.00	0.00	0.03	0.00		
1-0.900	25.9	0.0	0.0	0.0	0.0	-19.2			0.00	0.00	0.02	0.00		
1-1.000	0.0	0.0	0.0	0.0	0.0	-19.2	19.2	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001031 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 14.400 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001031 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 14.400 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 6: SU4 + SU4
Length of Span No. 1 = 13.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	27.1	0.0	27.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	36.6	0.0	0.0	0.0	27.1	0.0			0.00	0.00	0.02	0.00		
1-0.200	73.3	0.0	0.0	0.0	27.1	0.0			0.00	0.00	0.04	0.00		
1-0.300	101.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.06	0.00		
1-0.400	101.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.07	0.00		
1-0.450	101.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.07	0.00		
1-0.500	101.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.07	0.00		
1-0.600	101.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.07	0.00		
1-0.700	101.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.06	0.00		
1-0.800	73.3	0.0	0.0	0.0	0.0	-27.1			0.00	0.00	0.04	0.00		
1-0.900	36.6	0.0	0.0	0.0	0.0	-27.1			0.00	0.00	0.02	0.00		
1-1.000	0.0	0.0	0.0	0.0	0.0	-27.1	27.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001461 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 20.400 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001461 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 20.400 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 7: SU5 + SU5
Length of Span No. 1 = 13.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	29.5	0.0	29.5	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	39.9	0.0	0.0	0.0	29.5	0.0			0.00	0.00	0.03	0.00		
1-0.200	79.7	0.0	0.0	0.0	29.5	0.0			0.00	0.00	0.05	0.00		
1-0.300	110.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.07	0.00		
1-0.400	110.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.450	110.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.500	110.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.600	110.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.700	110.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.07	0.00		
1-0.800	79.7	0.0	0.0	0.0	0.0	-29.5			0.00	0.00	0.05	0.00		
1-0.900	39.9	0.0	0.0	0.0	0.0	-29.5			0.00	0.00	0.03	0.00		
1-1.000	0.0	0.0	0.0	0.0	0.0	-29.5	29.5	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001589 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 22.200 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001589 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 22.200 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 8: SU6 + SU6
Length of Span No. 1 = 13.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	31.1	0.0	31.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	42.0	0.0	0.0	0.0	31.1	0.0			0.00	0.00	0.03	0.00		
1-0.200	84.0	0.0	0.0	0.0	31.1	0.0			0.00	0.00	0.05	0.00		
1-0.300	116.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.07	0.00		
1-0.400	116.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.450	116.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.500	116.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.600	116.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.700	116.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.07	0.00		
1-0.800	84.0	0.0	0.0	0.0	0.0	-31.1			0.00	0.00	0.05	0.00		
1-0.900	42.0	0.0	0.0	0.0	0.0	-31.1			0.00	0.00	0.03	0.00		
1-1.000	0.0	0.0	0.0	0.0	0.0	-31.1	31.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001675 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 23.400 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001675 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 23.400 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 9: SU7 + SU7
Length of Span No. 1 = 13.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	31.9	0.0	31.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	43.1	0.0	0.0	0.0	31.9	0.0			0.00	0.00	0.03	0.00		
1-0.200	86.2	0.0	0.0	0.0	31.9	0.0			0.00	0.00	0.05	0.00		
1-0.300	119.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.07	0.00		
1-0.400	119.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.450	119.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.09	0.00		
1-0.500	119.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.09	0.00		
1-0.600	119.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.700	119.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.07	0.00		
1-0.800	86.2	0.0	0.0	0.0	0.0	-31.9			0.00	0.00	0.05	0.00		
1-0.900	43.1	0.0	0.0	0.0	0.0	-31.9			0.00	0.00	0.03	0.00		
1-1.000	0.0	0.0	0.0	0.0	0.0	-31.9	31.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001718 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 24.000 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001718 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 24.000 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Floor Beam

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD COMBO NO. 10: NRL + NRL
Length of Span No. 1 = 13.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	0.0	0.0	0.0	31.9	0.0	31.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	43.1	0.0	0.0	0.0	31.9	0.0			0.00	0.00	0.03	0.00		
1-0.200	86.2	0.0	0.0	0.0	31.9	0.0			0.00	0.00	0.05	0.00		
1-0.300	119.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.07	0.00		
1-0.400	119.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.450	119.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.09	0.00		
1-0.500	119.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.09	0.00		
1-0.600	119.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.08	0.00		
1-0.700	119.7	0.0	0.0	0.0	0.0	-0.0			0.00	0.00	0.07	0.00		
1-0.800	86.2	0.0	0.0	0.0	0.0	-31.9			0.00	0.00	0.05	0.00		
1-0.900	43.1	0.0	0.0	0.0	0.0	-31.9			0.00	0.00	0.03	0.00		
1-1.000	0.0	0.0	0.0	0.0	0.0	-31.9	31.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001718 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 24.000 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001718 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 24.000 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I
Length of Span No. 1 = 13.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	0.0	0.0	0.0	77.9	10.9	77.9	10.9	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	103.7	13.2	0.0	0.0	75.7	8.7			0.07	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	204.5	23.4	0.0	0.0	73.6	6.5			0.12	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	282.2	30.8	0.0	0.0	4.3	4.3			0.17	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.400	286.6	35.2	0.0	0.0	2.2	2.2			0.20	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.450	287.7	36.3	0.0	0.0	1.1	1.1			0.20	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.500	288.1	36.6	0.0	0.0	-0.0	-0.0			0.21	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	286.6	35.2	0.0	0.0	-2.2	-2.2			0.20	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	282.2	30.8	0.0	0.0	-4.3	-4.3			0.17	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	204.5	23.4	0.0	0.0	-6.5	-73.6			0.12	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	103.7	13.2	0.0	0.0	-8.7	-75.7			0.07	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-10.9	-77.9	77.9	10.9	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I-O
Length of Span No. 1 = 13.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	0.0	0.0	0.0	62.6	10.9	62.6	10.9	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	83.0	13.2	0.0	0.0	60.4	8.7			0.05	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	163.1	23.4	0.0	0.0	58.2	6.5			0.10	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	224.7	30.8	0.0	0.0	4.3	4.3			0.14	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.400	229.1	35.2	0.0	0.0	2.2	2.2			0.16	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.450	230.2	36.3	0.0	0.0	1.1	1.1			0.16	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.500	230.6	36.6	0.0	0.0	-0.0	-0.0			0.16	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	229.1	35.2	0.0	0.0	-2.2	-2.2			0.16	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	224.7	30.8	0.0	0.0	-4.3	-4.3			0.14	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	163.1	23.4	0.0	0.0	-6.5	-58.2			0.10	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	83.0	13.2	0.0	0.0	-8.7	-60.4			0.05	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-10.9	-62.6	62.6	10.9	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II
Length of Span No. 1 = 13.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	0.0	0.0	0.0	58.5	8.7	58.5	8.7	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	77.8	10.6	0.0	0.0	56.8	6.9			0.05	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	153.2	18.8	0.0	0.0	55.0	5.2			0.09	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	211.4	24.6	0.0	0.0	3.5	3.5			0.13	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.400	214.9	28.1	0.0	0.0	1.7	1.7			0.15	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.450	215.8	29.0	0.0	0.0	0.9	0.9			0.15	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.500	216.1	29.3	0.0	0.0	-0.0	-0.0			0.15	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	214.9	28.1	0.0	0.0	-1.7	-1.7			0.15	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	211.4	24.6	0.0	0.0	-3.5	-3.5			0.13	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	153.2	18.8	0.0	0.0	-5.2	-55.0			0.09	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	77.8	10.6	0.0	0.0	-6.9	-56.8			0.05	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-8.7	-58.5	58.5	8.7	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

Floor Beam

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II-O
Length of Span No. 1 = 13.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	0.0	0.0	0.0	47.0	8.7	47.0	8.7	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	62.3	10.6	0.0	0.0	45.3	6.9			0.04	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.200	122.2	18.8	0.0	0.0	43.5	5.2			0.07	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(1, 1)
1-0.300	168.3	24.6	0.0	0.0	3.5	3.5			0.10	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.400	171.8	28.1	0.0	0.0	1.7	1.7			0.12	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.450	172.7	29.0	0.0	0.0	0.9	0.9			0.12	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.500	173.0	29.3	0.0	0.0	-0.0	-0.0			0.12	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.600	171.8	28.1	0.0	0.0	-1.7	-1.7			0.12	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.700	168.3	24.6	0.0	0.0	-3.5	-3.5			0.10	0.02
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.800	122.2	18.8	0.0	0.0	-5.2	-43.5			0.07	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-0.900	62.3	10.6	0.0	0.0	-6.9	-45.3			0.04	0.01
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-8.7	-47.0	47.0	8.7	0.00	0.00
	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

LIMIT STATE LEGEND:

BRASS	Specifications
STRENGTH I	Strength I Inventory
STRENGTH I-O	Strength I Operating
STRENGTH II	Strength II
STRENGTH IV	Strength IV
SERVICE I	Service I
SERVICE II	Service II Inventory
SERVICE II-O	Service II Operating
FATIGUE I	Fatigue I
FATIGUE II	Fatigue II

Floor Beam

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 1 Span Length = 13.500 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Calculated Properties: Section Analysis (Positive Bending)

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)
1-0.000	0.000	20.12	1686.1	12.00
1-0.100	1.350	20.12	1686.1	12.00
1-0.200	2.700	20.12	1686.1	12.00
1-0.259	3.500	*	*	*
1-0.300	4.050	20.12	1686.1	12.00
1-0.400	5.400	20.12	1686.1	12.00
1-0.450	6.075	20.12	1686.1	12.00
1-0.500	6.750	20.12	1686.1	12.00
1-0.600	8.100	*	*	*
1-0.700	9.450	*	*	*
1-0.741	10.000	*	*	*
1-0.800	10.800	*	*	*
1-0.900	12.150	*	*	*
1-1.000	13.500	*	*	*

* Note: Section properties for section analysis are only calculated at
points of interest either specified by the user or generated by BRASS.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 100.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	24.0000			
Top Flange Thickness	=	0.6250	Top Flange Width	=	7.0000
Web Depth	=	22.7500	Web Thickness	=	0.5000
Bottom Flange Thickness	=	0.6250	Bottom Flange Width	=	7.0000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 0.000 ft
Maximum distance to Right Brace Point = 3.500 ft
Is analysis point braced? YES

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93	+ HL-93			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - TANDEM	+ TANDEM			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE 3	+ TYPE 3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE 3S2	+ TYPE 3S2			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE 3-3	+ TYPE 3-3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4	+ SU4			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5	+ SU5			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6	+ SU6			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7	+ SU7			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo	10 - NRL + NRL			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	10.9	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Live Load Effect	53.1	0.0	41.0	0.0	41.0	0.0	0.0	0.0
Total Load Effect	63.9	10.9	51.8	10.9	51.8	10.9	13.0	13.0
Resistance - Dead	177.2	177.2	177.2	177.2	177.2	177.2	175.0	175.0
Design Ratio	2.94	17.32	3.63	17.32	(3.63)	(17.32)	(14.44)	(14.44)
Rating Factor	3.34	N/A	4.33	N/A	(4.33)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	10.9	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Live Load Effect	67.1	0.0	51.7	0.0	51.7	0.0	0.0	0.0
Total Load Effect	77.9	10.9	62.6	10.9	62.6	10.9	13.0	13.0
Resistance - Dead	177.2	177.2	177.2	177.2	177.2	177.2	175.0	175.0
Design Ratio	2.41	17.32	3.00	17.32	(3.00)	(17.32)	(14.44)	(14.44)
Rating Factor	2.64	N/A	3.43	N/A	(3.43)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	10.9	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Live Load Effect	30.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	40.9	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Resistance - Dead	177.2	177.2	177.2	177.2	177.2	177.2	175.0	175.0
Design Ratio	4.59	17.32	17.32	17.32	(17.32)	(17.32)	(14.44)	(14.44)
Rating Factor	5.89	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	10.9	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Live Load Effect	28.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	38.9	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Resistance - Dead	177.2	177.2	177.2	177.2	177.2	177.2	175.0	175.0
Design Ratio	4.84	17.32	17.32	17.32	(17.32)	(17.32)	(14.44)	(14.44)
Rating Factor	6.33	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	10.9	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Live Load Effect	24.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	35.8	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Resistance - Dead	177.2	177.2	177.2	177.2	177.2	177.2	175.0	175.0
Design Ratio	5.26	17.32	17.32	17.32	(17.32)	(17.32)	(14.44)	(14.44)
Rating Factor	7.12	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	10.9	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Live Load Effect	35.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	46.1	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Resistance - Dead	177.2	177.2	177.2	177.2	177.2	177.2	175.0	175.0
Design Ratio	4.08	17.32	17.32	17.32	(17.32)	(17.32)	(14.44)	(14.44)
Rating Factor	5.02	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	10.9	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Live Load Effect	38.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	49.2	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Resistance - Dead	177.2	177.2	177.2	177.2	177.2	177.2	175.0	175.0
Design Ratio	3.82	17.32	17.32	17.32	(17.32)	(17.32)	(14.44)	(14.44)
Rating Factor	4.62	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	10.9	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Live Load Effect	40.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	51.3	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Resistance - Dead	177.2	177.2	177.2	177.2	177.2	177.2	175.0	175.0
Design Ratio	3.66	17.32	17.32	17.32	(17.32)	(17.32)	(14.44)	(14.44)
Rating Factor	4.38	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	10.9	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Live Load Effect	41.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	52.4	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Resistance - Dead	177.2	177.2	177.2	177.2	177.2	177.2	175.0	175.0
Design Ratio	3.59	17.32	17.32	17.32	(17.32)	(17.32)	(14.44)	(14.44)
Rating Factor	4.27	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	10.9	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Live Load Effect	41.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	52.4	10.9	10.9	10.9	10.9	10.9	13.0	13.0
Resistance - Dead	177.2	177.2	177.2	177.2	177.2	177.2	175.0	175.0
Design Ratio	3.59	17.32	17.32	17.32	(17.32)	(17.32)	(14.44)	(14.44)
Rating Factor	4.27	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 101.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	24.0000			
Top Flange Thickness	=	0.6250	Top Flange Width	=	7.0000
Web Depth	=	22.7500	Web Thickness	=	0.5000
Bottom Flange Thickness	=	0.6250	Bottom Flange Width	=	7.0000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 1.350 ft
Maximum distance to Right Brace Point = 2.150 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93	+ HL-93			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - TANDEM	+ TANDEM			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE 3	+ TYPE 3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE 3S2	+ TYPE 3S2			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE 3-3	+ TYPE 3-3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4	+ SU4			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5	+ SU5			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6	+ SU6			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7	+ SU7			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo	10 - NRL + NRL			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.2	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Live Load Effect	71.7	0.0	55.3	0.0	55.3	0.0	0.0	0.0
Total Load Effect	84.9	0.0	68.5	0.0	68.5	0.0	15.8	0.0
Resistance - Dead	383.3	0.0	383.3	0.0	383.3	0.0	380.7	0.0
Design Ratio	4.67	N/A	5.79	N/A	(5.79)	(N/A)	(25.06)	(N/A)
Rating Factor	5.35	N/A	6.93	N/A	(6.93)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	8.7	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Live Load Effect	53.1	0.0	41.0	0.0	41.0	0.0	0.0	0.0
Total Load Effect	61.8	8.7	49.6	8.7	49.6	8.7	10.4	10.4
Resistance - Dead	179.3	179.3	179.3	179.3	179.3	179.3	177.6	177.6
Design Ratio	3.04	21.65	3.79	21.65	(3.79)	(21.65)	(18.04)	(18.04)
Rating Factor	3.38	N/A	4.38	N/A	(4.38)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-4.55	4.55	0.00	0.00	-3.50	3.50	0.00	0.00
Total Load Effect	-5.45	5.45	0.00	0.00	-4.40	4.40	0.00	0.00
Resistance - Dead	-23.10	23.10	0.00	0.00	-23.10	23.10	0.00	0.00
Design Ratio	4.41	4.41	N/A	N/A	5.46	5.46	N/A	N/A
Rating Factor	5.08	5.08	N/A	N/A	6.60	6.60	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-4.55	4.55	0.00	0.00	-3.50	3.50	0.00	0.00
Total Load Effect	-5.45	5.45	0.00	0.00	-4.40	4.40	0.00	0.00
Resistance - Dead	-29.10	N/A	0.00	0.00	-29.10	N/A	0.00	0.00
Design Ratio	5.51	N/A	N/A	N/A	6.82	N/A	N/A	N/A
Rating Factor	6.40	N/A	N/A	N/A	8.32	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.2	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Live Load Effect	90.5	0.0	69.8	0.0	69.8	0.0	0.0	0.0
Total Load Effect	103.7	0.0	83.0	0.0	83.0	0.0	15.8	0.0
Resistance - Dead	383.3	0.0	383.3	0.0	383.3	0.0	380.7	0.0
Design Ratio	3.82	N/A	4.78	N/A	(4.78)	(N/A)	(25.06)	(N/A)
Rating Factor	4.23	N/A	5.49	N/A	(5.49)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	8.7	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Live Load Effect	67.1	0.0	51.7	0.0	51.7	0.0	0.0	0.0
Total Load Effect	75.7	8.7	60.4	8.7	60.4	8.7	10.4	10.4
Resistance - Dead	179.3	179.3	179.3	179.3	179.3	179.3	177.6	177.6
Design Ratio	2.48	21.65	3.11	21.65	(3.11)	(21.65)	(18.04)	(18.04)
Rating Factor	2.67	N/A	3.47	N/A	(3.47)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-5.74	5.74	0.00	0.00	-4.42	4.42	0.00	0.00
Total Load Effect	-6.64	6.64	0.00	0.00	-5.32	5.32	0.00	0.00
Resistance - Dead	-23.10	23.10	0.00	0.00	-23.10	23.10	0.00	0.00
Design Ratio	3.61	3.61	N/A	N/A	4.51	4.51	N/A	N/A
Rating Factor	4.02	4.02	N/A	N/A	5.23	5.23	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-5.74	5.74	0.00	0.00	-4.42	4.42	0.00	0.00
Total Load Effect	-6.64	6.64	0.00	0.00	-5.32	5.32	0.00	0.00
Resistance - Dead	-29.10	N/A	0.00	0.00	-29.10	N/A	0.00	0.00
Design Ratio	4.52	N/A	N/A	N/A	5.64	N/A	N/A	N/A
Rating Factor	5.07	N/A	N/A	N/A	6.59	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.2	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Live Load Effect	40.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	53.8	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Resistance - Dead	383.3	0.0	383.3	0.0	383.3	0.0	380.7	0.0
Design Ratio	7.37	N/A	30.07	N/A	(30.07)	(N/A)	(25.06)	(N/A)
Rating Factor	9.44	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	8.7	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Live Load Effect	30.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	38.8	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Resistance - Dead	179.3	179.3	179.3	179.3	179.3	179.3	177.6	177.6
Design Ratio	4.85	21.65	21.65	21.65	(21.65)	(21.65)	(18.04)	(18.04)
Rating Factor	5.96	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-3.47	3.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.37	4.37	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-23.10	23.10	0.00	0.00	24.90	23.10	0.00	0.00
Design Ratio	5.49	5.49	N/A	N/A	N/A	26.64	N/A	N/A
Rating Factor	6.66	6.66	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-3.47	3.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.37	4.37	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-29.10	N/A	0.00	0.00	-29.10	N/A	0.00	0.00
Design Ratio	6.87	N/A	N/A	N/A	33.29	N/A	N/A	N/A
Rating Factor	8.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.2	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Live Load Effect	37.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	51.0	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Resistance - Dead	383.3	0.0	383.3	0.0	383.3	0.0	380.7	0.0
Design Ratio	7.77	N/A	30.07	N/A	(30.07)	(N/A)	(25.06)	(N/A)
Rating Factor	10.14	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	8.7	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Live Load Effect	28.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	36.7	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Resistance - Dead	179.3	179.3	179.3	179.3	179.3	179.3	177.6	177.6
Design Ratio	5.12	21.65	21.65	21.65	(21.65)	(21.65)	(18.04)	(18.04)
Rating Factor	6.40	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-3.23	3.23	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.13	4.13	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-23.10	23.10	0.00	0.00	24.90	23.10	0.00	0.00
Design Ratio	5.81	5.81	N/A	N/A	N/A	26.64	N/A	N/A
Rating Factor	7.15	7.15	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-3.23	3.23	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.13	4.13	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-29.10	N/A	0.00	0.00	-29.10	N/A	0.00	0.00
Design Ratio	7.26	N/A	N/A	N/A	33.29	N/A	N/A	N/A
Rating Factor	9.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.2	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Live Load Effect	33.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	46.8	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Resistance - Dead	383.3	0.0	383.3	0.0	383.3	0.0	380.7	0.0
Design Ratio	8.47	N/A	30.07	N/A	(30.07)	(N/A)	(25.06)	(N/A)
Rating Factor	11.41	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	8.7	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Live Load Effect	24.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	33.6	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Resistance - Dead	179.3	179.3	179.3	179.3	179.3	179.3	177.6	177.6
Design Ratio	5.60	21.65	21.65	21.65	(21.65)	(21.65)	(18.04)	(18.04)
Rating Factor	7.20	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-2.87	2.87	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.77	3.77	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-23.10	23.10	0.00	0.00	24.90	23.10	0.00	0.00
Design Ratio	6.36	6.36	N/A	N/A	N/A	26.64	N/A	N/A
Rating Factor	8.05	8.05	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-2.87	2.87	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.77	3.77	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-29.10	N/A	0.00	0.00	-29.10	N/A	0.00	0.00
Design Ratio	7.95	N/A	N/A	N/A	33.29	N/A	N/A	N/A
Rating Factor	10.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.2	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Live Load Effect	47.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	60.8	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Resistance - Dead	383.3	0.0	383.3	0.0	383.3	0.0	380.7	0.0
Design Ratio	6.52	N/A	30.07	N/A	(30.07)	(N/A)	(25.06)	(N/A)
Rating Factor	8.05	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	8.7	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Live Load Effect	35.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	44.0	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Resistance - Dead	179.3	179.3	179.3	179.3	179.3	179.3	177.6	177.6
Design Ratio	4.28	21.65	21.65	21.65	(21.65)	(21.65)	(18.04)	(18.04)
Rating Factor	5.08	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-4.07	4.07	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.97	4.97	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-23.10	23.10	0.00	0.00	24.90	23.10	0.00	0.00
Design Ratio	4.83	4.83	N/A	N/A	N/A	26.64	N/A	N/A
Rating Factor	5.68	5.68	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-4.07	4.07	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-4.97	4.97	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-29.10	N/A	0.00	0.00	-29.10	N/A	0.00	0.00
Design Ratio	6.04	N/A	N/A	N/A	33.29	N/A	N/A	N/A
Rating Factor	7.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.2	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Live Load Effect	51.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	65.0	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Resistance - Dead	383.3	0.0	383.3	0.0	383.3	0.0	380.7	0.0
Design Ratio	6.10	N/A	30.07	N/A	(30.07)	(N/A)	(25.06)	(N/A)
Rating Factor	7.40	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	8.7	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Live Load Effect	38.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	47.1	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Resistance - Dead	179.3	179.3	179.3	179.3	179.3	179.3	177.6	177.6
Design Ratio	3.99	21.65	21.65	21.65	(21.65)	(21.65)	(18.04)	(18.04)
Rating Factor	4.67	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-4.43	4.43	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.33	5.33	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-23.10	23.10	0.00	0.00	24.90	23.10	0.00	0.00
Design Ratio	4.51	4.51	N/A	N/A	N/A	26.64	N/A	N/A
Rating Factor	5.22	5.22	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-4.43	4.43	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.33	5.33	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-29.10	N/A	0.00	0.00	-29.10	N/A	0.00	0.00
Design Ratio	5.63	N/A	N/A	N/A	33.29	N/A	N/A	N/A
Rating Factor	6.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.2	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Live Load Effect	54.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	67.8	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Resistance - Dead	383.3	0.0	383.3	0.0	383.3	0.0	380.7	0.0
Design Ratio	5.85	N/A	30.07	N/A	(30.07)	(N/A)	(25.06)	(N/A)
Rating Factor	7.02	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	8.7	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Live Load Effect	40.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	49.1	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Resistance - Dead	179.3	179.3	179.3	179.3	179.3	179.3	177.6	177.6
Design Ratio	3.83	21.65	21.65	21.65	(21.65)	(21.65)	(18.04)	(18.04)
Rating Factor	4.43	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-4.66	4.66	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.57	5.57	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-23.10	23.10	0.00	0.00	24.90	23.10	0.00	0.00
Design Ratio	4.31	4.31	N/A	N/A	N/A	26.64	N/A	N/A
Rating Factor	4.95	4.95	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-4.66	4.66	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.57	5.57	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-29.10	N/A	0.00	0.00	-29.10	N/A	0.00	0.00
Design Ratio	5.39	N/A	N/A	N/A	33.29	N/A	N/A	N/A
Rating Factor	6.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.2	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Live Load Effect	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	69.2	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Resistance - Dead	383.3	0.0	383.3	0.0	383.3	0.0	380.7	0.0
Design Ratio	5.73	N/A	30.07	N/A	(30.07)	(N/A)	(25.06)	(N/A)
Rating Factor	6.84	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	8.7	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Live Load Effect	41.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	50.2	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Resistance - Dead	179.3	179.3	179.3	179.3	179.3	179.3	177.6	177.6
Design Ratio	3.75	21.65	21.65	21.65	(21.65)	(21.65)	(18.04)	(18.04)
Rating Factor	4.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-4.78	4.78	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.69	5.69	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-23.10	23.10	0.00	0.00	24.90	23.10	0.00	0.00
Design Ratio	4.22	4.22	N/A	N/A	N/A	26.64	N/A	N/A
Rating Factor	4.83	4.83	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-4.78	4.78	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.69	5.69	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-29.10	N/A	0.00	0.00	-29.10	N/A	0.00	0.00
Design Ratio	5.28	N/A	N/A	N/A	33.29	N/A	N/A	N/A
Rating Factor	6.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	13.2	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Live Load Effect	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	69.2	0.0	13.2	0.0	13.2	0.0	15.8	0.0
Resistance - Dead	383.3	0.0	383.3	0.0	383.3	0.0	380.7	0.0
Design Ratio	5.73	N/A	30.07	N/A	(30.07)	(N/A)	(25.06)	(N/A)
Rating Factor	6.84	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	8.7	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Live Load Effect	41.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	50.2	8.7	8.7	8.7	8.7	8.7	10.4	10.4
Resistance - Dead	179.3	179.3	179.3	179.3	179.3	179.3	177.6	177.6
Design Ratio	3.75	21.65	21.65	21.65	(21.65)	(21.65)	(18.04)	(18.04)
Rating Factor	4.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-4.78	4.78	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.69	5.69	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-23.10	23.10	0.00	0.00	24.90	23.10	0.00	0.00
Design Ratio	4.22	4.22	N/A	N/A	N/A	26.64	N/A	N/A
Rating Factor	4.83	4.83	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-0.90	0.90	0.00	0.00	-0.90	0.90	0.00	0.00
Live Load Effect	-4.78	4.78	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.69	5.69	0.00	0.00	-0.90	0.90	0.00	0.00
Resistance - Dead	-29.10	N/A	0.00	0.00	-29.10	N/A	0.00	0.00
Design Ratio	5.28	N/A	N/A	N/A	33.29	N/A	N/A	N/A
Rating Factor	6.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 102.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	24.0000			
Top Flange Thickness	=	0.6250	Top Flange Width	=	7.0000
Web Depth	=	22.7500	Web Thickness	=	0.5000
Bottom Flange Thickness	=	0.6250	Bottom Flange Width	=	7.0000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 2.700 ft
Maximum distance to Right Brace Point = 0.800 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93	+ HL-93			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - TANDEM	+ TANDEM			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE 3	+ TYPE 3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE 3S2	+ TYPE 3S2			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE 3-3	+ TYPE 3-3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4	+ SU4			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5	+ SU5			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6	+ SU6			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7	+ SU7			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo	10 - NRL	+ NRL			(TRK)				
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	23.4	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Live Load Effect	143.3	0.0	110.6	0.0	110.6	0.0	0.0	0.0
Total Load Effect	166.8	0.0	134.0	0.0	134.0	0.0	28.1	0.0
Resistance - Dead	373.1	0.0	373.1	0.0	373.1	0.0	368.4	0.0
Design Ratio	2.38	N/A	2.96	N/A	(2.96)	(N/A)	(14.09)	(N/A)
Rating Factor	2.60	N/A	3.37	N/A	(3.37)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	53.1	0.0	41.0	0.0	41.0	0.0	0.0	0.0
Total Load Effect	59.6	6.5	47.5	6.5	47.5	6.5	7.8	7.8
Resistance - Dead	181.5	181.5	181.5	181.5	181.5	181.5	180.2	180.2
Design Ratio	3.15	28.87	3.96	28.87	(3.96)	(28.87)	(24.06)	(24.06)
Rating Factor	3.42	N/A	4.43	N/A	(4.43)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-9.09	9.09	0.00	0.00	-7.00	7.00	0.00	0.00
Total Load Effect	-10.70	10.70	0.00	0.00	-8.60	8.60	0.00	0.00
Resistance - Dead	-22.40	22.40	0.00	0.00	-22.40	22.40	0.00	0.00
Design Ratio	2.24	2.24	N/A	N/A	2.79	2.79	N/A	N/A
Rating Factor	2.46	2.46	N/A	N/A	3.20	3.20	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-9.09	9.09	0.00	0.00	-7.00	7.00	0.00	0.00
Total Load Effect	-10.70	10.70	0.00	0.00	-8.60	8.60	0.00	0.00
Resistance - Dead	-28.40	N/A	0.00	0.00	-28.40	N/A	0.00	0.00
Design Ratio	2.80	N/A	N/A	N/A	3.49	N/A	N/A	N/A
Rating Factor	3.12	N/A	N/A	N/A	4.06	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	23.4	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Live Load Effect	181.0	0.0	139.7	0.0	139.7	0.0	0.0	0.0
Total Load Effect	204.5	0.0	163.1	0.0	163.1	0.0	28.1	0.0
Resistance - Dead	373.1	0.0	373.1	0.0	373.1	0.0	368.4	0.0
Design Ratio	1.94	N/A	2.43	N/A	(2.43)	(N/A)	(14.09)	(N/A)
Rating Factor	2.06	N/A	2.67	N/A	(2.67)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	67.1	0.0	51.7	0.0	51.7	0.0	0.0	0.0
Total Load Effect	73.6	6.5	58.2	6.5	58.2	6.5	7.8	7.8
Resistance - Dead	181.5	181.5	181.5	181.5	181.5	181.5	180.2	180.2
Design Ratio	2.56	28.87	3.23	28.87	(3.23)	(28.87)	(24.06)	(24.06)
Rating Factor	2.71	N/A	3.51	N/A	(3.51)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-11.49	11.49	0.00	0.00	-8.84	8.84	0.00	0.00
Total Load Effect	-13.09	13.09	0.00	0.00	-10.44	10.44	0.00	0.00
Resistance - Dead	-22.40	22.40	0.00	0.00	-22.40	22.40	0.00	0.00
Design Ratio	1.83	1.83	N/A	N/A	2.30	2.30	N/A	N/A
Rating Factor	1.95	1.95	N/A	N/A	2.54	2.54	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-11.49	11.49	0.00	0.00	-8.84	8.84	0.00	0.00
Total Load Effect	-13.09	13.09	0.00	0.00	-10.44	10.44	0.00	0.00
Resistance - Dead	-28.40	N/A	0.00	0.00	-28.40	N/A	0.00	0.00
Design Ratio	2.29	N/A	N/A	N/A	2.87	N/A	N/A	N/A
Rating Factor	2.47	N/A	N/A	N/A	3.21	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	23.4	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Live Load Effect	81.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	104.7	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Resistance - Dead	373.1	0.0	373.1	0.0	373.1	0.0	368.4	0.0
Design Ratio	3.79	N/A	16.91	N/A	(16.91)	(N/A)	(14.09)	(N/A)
Rating Factor	4.59	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	30.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	36.6	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	181.5	181.5	181.5	181.5	181.5	181.5	180.2	180.2
Design Ratio	5.14	28.87	28.87	28.87	(28.87)	(28.87)	(24.06)	(24.06)
Rating Factor	6.03	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-6.94	6.94	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.54	8.54	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-22.40	22.40	0.00	0.00	25.60	22.40	0.00	0.00
Design Ratio	2.81	2.81	N/A	N/A	N/A	14.98	N/A	N/A
Rating Factor	3.23	3.23	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-6.94	6.94	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.54	8.54	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-28.40	N/A	0.00	0.00	-28.40	N/A	0.00	0.00
Design Ratio	3.51	N/A	N/A	N/A	18.73	N/A	N/A	N/A
Rating Factor	4.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	23.4	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Live Load Effect	75.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	99.1	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Resistance - Dead	373.1	0.0	373.1	0.0	373.1	0.0	368.4	0.0
Design Ratio	4.00	N/A	16.91	N/A	(16.91)	(N/A)	(14.09)	(N/A)
Rating Factor	4.93	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	28.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	34.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	181.5	181.5	181.5	181.5	181.5	181.5	180.2	180.2
Design Ratio	5.45	28.87	28.87	28.87	(28.87)	(28.87)	(24.06)	(24.06)
Rating Factor	6.48	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-6.46	6.46	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.06	8.06	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-22.40	22.40	0.00	0.00	25.60	22.40	0.00	0.00
Design Ratio	2.98	2.98	N/A	N/A	N/A	14.98	N/A	N/A
Rating Factor	3.47	3.47	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-6.46	6.46	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.06	8.06	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-28.40	N/A	0.00	0.00	-28.40	N/A	0.00	0.00
Design Ratio	3.72	N/A	N/A	N/A	18.73	N/A	N/A	N/A
Rating Factor	4.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	23.4	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Live Load Effect	67.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	90.7	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Resistance - Dead	373.1	0.0	373.1	0.0	373.1	0.0	368.4	0.0
Design Ratio	4.37	N/A	16.91	N/A	(16.91)	(N/A)	(14.09)	(N/A)
Rating Factor	5.55	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	24.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	31.4	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	181.5	181.5	181.5	181.5	181.5	181.5	180.2	180.2
Design Ratio	5.99	28.87	28.87	28.87	(28.87)	(28.87)	(24.06)	(24.06)
Rating Factor	7.29	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-5.74	5.74	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.34	7.34	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-22.40	22.40	0.00	0.00	25.60	22.40	0.00	0.00
Design Ratio	3.27	3.27	N/A	N/A	N/A	14.98	N/A	N/A
Rating Factor	3.90	3.90	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-5.74	5.74	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.34	7.34	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-28.40	N/A	0.00	0.00	-28.40	N/A	0.00	0.00
Design Ratio	4.09	N/A	N/A	N/A	18.73	N/A	N/A	N/A
Rating Factor	4.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	23.4	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Live Load Effect	95.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	118.7	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Resistance - Dead	373.1	0.0	373.1	0.0	373.1	0.0	368.4	0.0
Design Ratio	3.34	N/A	16.91	N/A	(16.91)	(N/A)	(14.09)	(N/A)
Rating Factor	3.92	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	35.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	41.8	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	181.5	181.5	181.5	181.5	181.5	181.5	180.2	180.2
Design Ratio	4.50	28.87	28.87	28.87	(28.87)	(28.87)	(24.06)	(24.06)
Rating Factor	5.15	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-8.13	8.13	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.74	9.74	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-22.40	22.40	0.00	0.00	25.60	22.40	0.00	0.00
Design Ratio	2.47	2.47	N/A	N/A	N/A	14.98	N/A	N/A
Rating Factor	2.75	2.75	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-8.13	8.13	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.74	9.74	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-28.40	N/A	0.00	0.00	-28.40	N/A	0.00	0.00
Design Ratio	3.08	N/A	N/A	N/A	18.73	N/A	N/A	N/A
Rating Factor	3.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	23.4	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Live Load Effect	103.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	127.1	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Resistance - Dead	373.1	0.0	373.1	0.0	373.1	0.0	368.4	0.0
Design Ratio	3.12	N/A	16.91	N/A	(16.91)	(N/A)	(14.09)	(N/A)
Rating Factor	3.60	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	38.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	44.9	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	181.5	181.5	181.5	181.5	181.5	181.5	180.2	180.2
Design Ratio	4.19	28.87	28.87	28.87	(28.87)	(28.87)	(24.06)	(24.06)
Rating Factor	4.73	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-8.85	8.85	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.45	10.45	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-22.40	22.40	0.00	0.00	25.60	22.40	0.00	0.00
Design Ratio	2.30	2.30	N/A	N/A	N/A	14.98	N/A	N/A
Rating Factor	2.53	2.53	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-8.85	8.85	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.45	10.45	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-28.40	N/A	0.00	0.00	-28.40	N/A	0.00	0.00
Design Ratio	2.87	N/A	N/A	N/A	18.73	N/A	N/A	N/A
Rating Factor	3.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	23.4	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Live Load Effect	109.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	132.7	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Resistance - Dead	373.1	0.0	373.1	0.0	373.1	0.0	368.4	0.0
Design Ratio	2.99	N/A	16.91	N/A	(16.91)	(N/A)	(14.09)	(N/A)
Rating Factor	3.42	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	40.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	47.0	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	181.5	181.5	181.5	181.5	181.5	181.5	180.2	180.2
Design Ratio	4.00	28.87	28.87	28.87	(28.87)	(28.87)	(24.06)	(24.06)
Rating Factor	4.49	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-9.33	9.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.93	10.93	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-22.40	22.40	0.00	0.00	25.60	22.40	0.00	0.00
Design Ratio	2.20	2.20	N/A	N/A	N/A	14.98	N/A	N/A
Rating Factor	2.40	2.40	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-9.33	9.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.93	10.93	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-28.40	N/A	0.00	0.00	-28.40	N/A	0.00	0.00
Design Ratio	2.74	N/A	N/A	N/A	18.73	N/A	N/A	N/A
Rating Factor	3.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	23.4	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Live Load Effect	112.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	135.5	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Resistance - Dead	373.1	0.0	373.1	0.0	373.1	0.0	368.4	0.0
Design Ratio	2.93	N/A	16.91	N/A	(16.91)	(N/A)	(14.09)	(N/A)
Rating Factor	3.33	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	41.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	48.0	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	181.5	181.5	181.5	181.5	181.5	181.5	180.2	180.2
Design Ratio	3.92	28.87	28.87	28.87	(28.87)	(28.87)	(24.06)	(24.06)
Rating Factor	4.37	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-9.57	9.57	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.17	11.17	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-22.40	22.40	0.00	0.00	25.60	22.40	0.00	0.00
Design Ratio	2.15	2.15	N/A	N/A	N/A	14.98	N/A	N/A
Rating Factor	2.34	2.34	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-9.57	9.57	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.17	11.17	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-28.40	N/A	0.00	0.00	-28.40	N/A	0.00	0.00
Design Ratio	2.69	N/A	N/A	N/A	18.73	N/A	N/A	N/A
Rating Factor	2.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	23.4	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Live Load Effect	112.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	135.5	0.0	23.4	0.0	23.4	0.0	28.1	0.0
Resistance - Dead	373.1	0.0	373.1	0.0	373.1	0.0	368.4	0.0
Design Ratio	2.93	N/A	16.91	N/A	(16.91)	(N/A)	(14.09)	(N/A)
Rating Factor	3.33	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	41.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	48.0	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	181.5	181.5	181.5	181.5	181.5	181.5	180.2	180.2
Design Ratio	3.92	28.87	28.87	28.87	(28.87)	(28.87)	(24.06)	(24.06)
Rating Factor	4.37	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-9.57	9.57	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.17	11.17	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-22.40	22.40	0.00	0.00	25.60	22.40	0.00	0.00
Design Ratio	2.15	2.15	N/A	N/A	N/A	14.98	N/A	N/A
Rating Factor	2.34	2.34	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.60	1.60	0.00	0.00	-1.60	1.60	0.00	0.00
Live Load Effect	-9.57	9.57	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.17	11.17	0.00	0.00	-1.60	1.60	0.00	0.00
Resistance - Dead	-28.40	N/A	0.00	0.00	-28.40	N/A	0.00	0.00
Design Ratio	2.69	N/A	N/A	N/A	18.73	N/A	N/A	N/A
Rating Factor	2.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 103.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	24.0000			
Top Flange Thickness	=	0.6250	Top Flange Width	=	7.0000
Web Depth	=	22.7500	Web Thickness	=	0.5000
Bottom Flange Thickness	=	0.6250	Bottom Flange Width	=	7.0000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 0.550 ft
Maximum distance to Right Brace Point = 5.950 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93	+ HL-93			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - TANDEM	+ TANDEM			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE 3	+ TYPE 3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE 3S2	+ TYPE 3S2			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE 3-3	+ TYPE 3-3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4	+ SU4			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5	+ SU5			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6	+ SU6			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7	+ SU7			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo	10 - NRL + NRL			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	30.8	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Live Load Effect	199.1	0.0	153.6	0.0	153.6	0.0	0.0	0.0
Total Load Effect	229.9	0.0	184.4	0.0	184.4	0.0	36.9	0.0
Resistance - Dead	365.8	0.0	365.8	0.0	365.8	0.0	359.6	0.0
Design Ratio	1.73	N/A	2.15	N/A	(2.15)	(N/A)	(10.74)	(N/A)
Rating Factor	1.84	N/A	2.38	N/A	(2.38)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Live Load Effect	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0
Total Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Resistance - Dead	183.7	183.7	183.7	183.7	183.7	183.7	182.8	182.8
Design Ratio	43.31	43.31	43.31	43.31	(43.31)	(43.31)	(36.09)	(36.09)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-12.63	12.63	0.00	0.00	-9.72	9.72	0.00	0.00
Total Load Effect	-14.73	14.73	0.00	0.00	-11.82	11.82	0.00	0.00
Resistance - Dead	-21.90	21.90	0.00	0.00	-21.90	21.90	0.00	0.00
Design Ratio	1.63	1.63	N/A	N/A	2.03	2.03	N/A	N/A
Rating Factor	1.73	1.73	N/A	N/A	2.25	2.25	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-12.63	12.63	0.00	0.00	-9.72	9.72	0.00	0.00
Total Load Effect	-14.73	14.73	0.00	0.00	-11.82	11.82	0.00	0.00
Resistance - Dead	-27.90	N/A	0.00	0.00	-27.90	N/A	0.00	0.00
Design Ratio	2.04	N/A	N/A	N/A	2.54	N/A	N/A	N/A
Rating Factor	2.21	N/A	N/A	N/A	2.87	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	30.8	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Live Load Effect	251.5	0.0	194.0	0.0	194.0	0.0	0.0	0.0
Total Load Effect	282.2	0.0	224.7	0.0	224.7	0.0	36.9	0.0
Resistance - Dead	365.8	0.0	365.8	0.0	365.8	0.0	359.6	0.0
Design Ratio	1.41	N/A	1.76	N/A	(1.76)	(N/A)	(10.74)	(N/A)
Rating Factor	1.45	N/A	1.89	N/A	(1.89)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Live Load Effect	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0
Total Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Resistance - Dead	183.7	183.7	183.7	183.7	183.7	183.7	182.8	182.8
Design Ratio	43.31	43.31	43.31	43.31	(43.31)	(43.31)	(36.09)	(36.09)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-15.95	15.95	0.00	0.00	-12.27	12.27	0.00	0.00
Total Load Effect	-18.06	18.06	0.00	0.00	-14.37	14.37	0.00	0.00
Resistance - Dead	-21.90	21.90	0.00	0.00	-21.90	21.90	0.00	0.00
Design Ratio	1.33	1.33	N/A	N/A	1.67	1.67	N/A	N/A
Rating Factor	1.37	1.37	N/A	N/A	1.78	1.78	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-15.95	15.95	0.00	0.00	-12.27	12.27	0.00	0.00
Total Load Effect	-18.06	18.06	0.00	0.00	-14.37	14.37	0.00	0.00
Resistance - Dead	-27.90	N/A	0.00	0.00	-27.90	N/A	0.00	0.00
Design Ratio	1.66	N/A	N/A	N/A	2.09	N/A	N/A	N/A
Rating Factor	1.75	N/A	N/A	N/A	2.27	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	30.8	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Live Load Effect	112.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	143.6	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Resistance - Dead	365.8	0.0	365.8	0.0	365.8	0.0	359.6	0.0
Design Ratio	2.76	N/A	12.89	N/A	(12.89)	(N/A)	(10.74)	(N/A)
Rating Factor	3.24	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Resistance - Dead	183.7	183.7	183.7	183.7	183.7	183.7	182.8	182.8
Design Ratio	43.31	43.31	43.31	43.31	(43.31)	(43.31)	(36.09)	(36.09)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-9.64	9.64	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.74	11.74	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-21.90	21.90	0.00	0.00	26.10	21.90	0.00	0.00
Design Ratio	2.04	2.04	N/A	N/A	N/A	11.42	N/A	N/A
Rating Factor	2.27	2.27	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-9.64	9.64	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.74	11.74	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-27.90	N/A	0.00	0.00	-27.90	N/A	0.00	0.00
Design Ratio	2.56	N/A	N/A	N/A	14.27	N/A	N/A	N/A
Rating Factor	2.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	30.8	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Live Load Effect	105.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	135.8	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Resistance - Dead	365.8	0.0	365.8	0.0	365.8	0.0	359.6	0.0
Design Ratio	2.92	N/A	12.89	N/A	(12.89)	(N/A)	(10.74)	(N/A)
Rating Factor	3.48	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Resistance - Dead	183.7	183.7	183.7	183.7	183.7	183.7	182.8	182.8
Design Ratio	43.31	43.31	43.31	43.31	(43.31)	(43.31)	(36.09)	(36.09)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-8.97	8.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.07	11.07	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-21.90	21.90	0.00	0.00	26.10	21.90	0.00	0.00
Design Ratio	2.17	2.17	N/A	N/A	N/A	11.42	N/A	N/A
Rating Factor	2.44	2.44	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-8.97	8.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.07	11.07	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-27.90	N/A	0.00	0.00	-27.90	N/A	0.00	0.00
Design Ratio	2.71	N/A	N/A	N/A	14.27	N/A	N/A	N/A
Rating Factor	3.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	30.8	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Live Load Effect	93.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	124.1	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Resistance - Dead	365.8	0.0	365.8	0.0	365.8	0.0	359.6	0.0
Design Ratio	3.19	N/A	12.89	N/A	(12.89)	(N/A)	(10.74)	(N/A)
Rating Factor	3.92	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Resistance - Dead	183.7	183.7	183.7	183.7	183.7	183.7	182.8	182.8
Design Ratio	43.31	43.31	43.31	43.31	(43.31)	(43.31)	(36.09)	(36.09)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-7.97	7.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.08	10.08	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-21.90	21.90	0.00	0.00	26.10	21.90	0.00	0.00
Design Ratio	2.38	2.38	N/A	N/A	N/A	11.42	N/A	N/A
Rating Factor	2.75	2.75	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-7.97	7.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.08	10.08	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-27.90	N/A	0.00	0.00	-27.90	N/A	0.00	0.00
Design Ratio	2.98	N/A	N/A	N/A	14.27	N/A	N/A	N/A
Rating Factor	3.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	30.8	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Live Load Effect	132.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	163.0	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Resistance - Dead	365.8	0.0	365.8	0.0	365.8	0.0	359.6	0.0
Design Ratio	2.43	N/A	12.89	N/A	(12.89)	(N/A)	(10.74)	(N/A)
Rating Factor	2.77	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Resistance - Dead	183.7	183.7	183.7	183.7	183.7	183.7	182.8	182.8
Design Ratio	43.31	43.31	43.31	43.31	(43.31)	(43.31)	(36.09)	(36.09)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-11.30	11.30	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.40	13.40	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-21.90	21.90	0.00	0.00	26.10	21.90	0.00	0.00
Design Ratio	1.79	1.79	N/A	N/A	N/A	11.42	N/A	N/A
Rating Factor	1.94	1.94	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-11.30	11.30	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.40	13.40	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-27.90	N/A	0.00	0.00	-27.90	N/A	0.00	0.00
Design Ratio	2.24	N/A	N/A	N/A	14.27	N/A	N/A	N/A
Rating Factor	2.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	30.8	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Live Load Effect	143.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	174.7	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Resistance - Dead	365.8	0.0	365.8	0.0	365.8	0.0	359.6	0.0
Design Ratio	2.27	N/A	12.89	N/A	(12.89)	(N/A)	(10.74)	(N/A)
Rating Factor	2.54	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Resistance - Dead	183.7	183.7	183.7	183.7	183.7	183.7	182.8	182.8
Design Ratio	43.31	43.31	43.31	43.31	(43.31)	(43.31)	(36.09)	(36.09)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-12.29	12.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.40	14.40	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-21.90	21.90	0.00	0.00	26.10	21.90	0.00	0.00
Design Ratio	1.67	1.67	N/A	N/A	N/A	11.42	N/A	N/A
Rating Factor	1.78	1.78	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-12.29	12.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.40	14.40	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-27.90	N/A	0.00	0.00	-27.90	N/A	0.00	0.00
Design Ratio	2.08	N/A	N/A	N/A	14.27	N/A	N/A	N/A
Rating Factor	2.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	30.8	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Live Load Effect	151.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	182.5	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Resistance - Dead	365.8	0.0	365.8	0.0	365.8	0.0	359.6	0.0
Design Ratio	2.17	N/A	12.89	N/A	(12.89)	(N/A)	(10.74)	(N/A)
Rating Factor	2.41	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Resistance - Dead	183.7	183.7	183.7	183.7	183.7	183.7	182.8	182.8
Design Ratio	43.31	43.31	43.31	43.31	(43.31)	(43.31)	(36.09)	(36.09)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-12.96	12.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.06	15.06	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-21.90	21.90	0.00	0.00	26.10	21.90	0.00	0.00
Design Ratio	1.59	1.59	N/A	N/A	N/A	11.42	N/A	N/A
Rating Factor	1.69	1.69	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-12.96	12.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.06	15.06	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-27.90	N/A	0.00	0.00	-27.90	N/A	0.00	0.00
Design Ratio	1.99	N/A	N/A	N/A	14.27	N/A	N/A	N/A
Rating Factor	2.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	30.8	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Live Load Effect	155.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	186.4	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Resistance - Dead	365.8	0.0	365.8	0.0	365.8	0.0	359.6	0.0
Design Ratio	2.13	N/A	12.89	N/A	(12.89)	(N/A)	(10.74)	(N/A)
Rating Factor	2.35	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Resistance - Dead	183.7	183.7	183.7	183.7	183.7	183.7	182.8	182.8
Design Ratio	43.31	43.31	43.31	43.31	(43.31)	(43.31)	(36.09)	(36.09)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.39	15.39	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-21.90	21.90	0.00	0.00	26.10	21.90	0.00	0.00
Design Ratio	1.56	1.56	N/A	N/A	N/A	11.42	N/A	N/A
Rating Factor	1.65	1.65	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.39	15.39	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-27.90	N/A	0.00	0.00	-27.90	N/A	0.00	0.00
Design Ratio	1.95	N/A	N/A	N/A	14.27	N/A	N/A	N/A
Rating Factor	2.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	30.8	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Live Load Effect	155.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	186.4	0.0	30.8	0.0	30.8	0.0	36.9	0.0
Resistance - Dead	365.8	0.0	365.8	0.0	365.8	0.0	359.6	0.0
Design Ratio	2.13	N/A	12.89	N/A	(12.89)	(N/A)	(10.74)	(N/A)
Rating Factor	2.35	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2
Resistance - Dead	183.7	183.7	183.7	183.7	183.7	183.7	182.8	182.8
Design Ratio	43.31	43.31	43.31	43.31	(43.31)	(43.31)	(36.09)	(36.09)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.39	15.39	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-21.90	21.90	0.00	0.00	26.10	21.90	0.00	0.00
Design Ratio	1.56	1.56	N/A	N/A	N/A	11.42	N/A	N/A
Rating Factor	1.65	1.65	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.10	2.10	0.00	0.00	-2.10	2.10	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.39	15.39	0.00	0.00	-2.10	2.10	0.00	0.00
Resistance - Dead	-27.90	N/A	0.00	0.00	-27.90	N/A	0.00	0.00
Design Ratio	1.95	N/A	N/A	N/A	14.27	N/A	N/A	N/A
Rating Factor	2.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 104.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	24.0000			
Top Flange Thickness	=	0.6250	Top Flange Width	=	7.0000
Web Depth	=	22.7500	Web Thickness	=	0.5000
Bottom Flange Thickness	=	0.6250	Bottom Flange Width	=	7.0000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 1.900 ft
Maximum distance to Right Brace Point = 4.600 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93	+ HL-93			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - TANDEM	+ TANDEM			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE 3	+ TYPE 3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE 3S2	+ TYPE 3S2			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE 3-3	+ TYPE 3-3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4	+ SU4			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5	+ SU5			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6	+ SU6			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7	+ SU7			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo	10 - NRL	+ NRL			(TRK)				
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	35.2	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Live Load Effect	199.1	0.0	153.6	0.0	153.6	0.0	0.0	0.0
Total Load Effect	234.3	0.0	188.7	0.0	188.7	0.0	42.2	0.0
Resistance - Dead	361.4	0.0	361.4	0.0	361.4	0.0	354.3	0.0
Design Ratio	1.69	N/A	2.10	N/A	(2.10)	(N/A)	(9.40)	(N/A)
Rating Factor	1.82	N/A	2.35	N/A	(2.35)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Live Load Effect	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0
Total Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Resistance - Dead	185.9	185.9	185.9	185.9	185.9	185.9	185.4	185.4
Design Ratio	86.61	86.64	86.61	86.63	(86.61)	(86.63)	(72.18)	(72.18)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-12.63	12.63	0.00	0.00	-9.72	9.72	0.00	0.00
Total Load Effect	-15.03	15.03	0.00	0.00	-12.12	12.12	0.00	0.00
Resistance - Dead	-21.60	21.60	0.00	0.00	-21.60	21.60	0.00	0.00
Design Ratio	1.60	1.60	N/A	N/A	1.98	1.98	N/A	N/A
Rating Factor	1.71	1.71	N/A	N/A	2.22	2.22	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-12.63	12.63	0.00	0.00	-9.72	9.72	0.00	0.00
Total Load Effect	-15.03	15.03	0.00	0.00	-12.12	12.12	0.00	0.00
Resistance - Dead	-27.60	N/A	0.00	0.00	-27.60	N/A	0.00	0.00
Design Ratio	2.00	N/A	N/A	N/A	2.48	N/A	N/A	N/A
Rating Factor	2.19	N/A	N/A	N/A	2.84	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	35.2	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Live Load Effect	251.4	0.0	194.0	0.0	194.0	0.0	0.0	0.0
Total Load Effect	286.6	0.0	229.1	0.0	229.1	0.0	42.2	0.0
Resistance - Dead	361.4	0.0	361.4	0.0	361.4	0.0	354.3	0.0
Design Ratio	1.38	N/A	1.73	N/A	(1.73)	(N/A)	(9.40)	(N/A)
Rating Factor	1.44	N/A	1.86	N/A	(1.86)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Live Load Effect	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0
Total Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Resistance - Dead	185.9	185.9	185.9	185.9	185.9	185.9	185.4	185.4
Design Ratio	86.61	86.65	86.61	86.64	(86.61)	(86.64)	(72.18)	(72.18)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-15.95	15.95	0.00	0.00	-12.27	12.27	0.00	0.00
Total Load Effect	-18.36	18.36	0.00	0.00	-14.67	14.67	0.00	0.00
Resistance - Dead	-21.60	21.60	0.00	0.00	-21.60	21.60	0.00	0.00
Design Ratio	1.31	1.31	N/A	N/A	1.64	1.64	N/A	N/A
Rating Factor	1.35	1.35	N/A	N/A	1.76	1.76	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-15.95	15.95	0.00	0.00	-12.27	12.27	0.00	0.00
Total Load Effect	-18.36	18.36	0.00	0.00	-14.67	14.67	0.00	0.00
Resistance - Dead	-27.60	N/A	0.00	0.00	-27.60	N/A	0.00	0.00
Design Ratio	1.63	N/A	N/A	N/A	2.04	N/A	N/A	N/A
Rating Factor	1.73	N/A	N/A	N/A	2.25	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	35.2	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Live Load Effect	112.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	148.0	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Resistance - Dead	361.4	0.0	361.4	0.0	361.4	0.0	354.3	0.0
Design Ratio	2.68	N/A	11.27	N/A	(11.27)	(N/A)	(9.40)	(N/A)
Rating Factor	3.20	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Resistance - Dead	185.9	185.9	185.9	185.9	185.9	185.9	185.4	185.4
Design Ratio	86.61	86.63	86.61	86.61	(86.61)	(86.61)	(72.18)	(72.18)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-9.63	9.63	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.04	12.04	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-21.60	21.60	0.00	0.00	26.40	21.60	0.00	0.00
Design Ratio	1.99	1.99	N/A	N/A	N/A	9.99	N/A	N/A
Rating Factor	2.24	2.24	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-9.63	9.63	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.04	12.04	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-27.60	N/A	0.00	0.00	-27.60	N/A	0.00	0.00
Design Ratio	2.49	N/A	N/A	N/A	12.49	N/A	N/A	N/A
Rating Factor	2.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	35.2	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Live Load Effect	105.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	140.2	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Resistance - Dead	361.4	0.0	361.4	0.0	361.4	0.0	354.3	0.0
Design Ratio	2.83	N/A	11.27	N/A	(11.27)	(N/A)	(9.40)	(N/A)
Rating Factor	3.44	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Resistance - Dead	185.9	185.9	185.9	185.9	185.9	185.9	185.4	185.4
Design Ratio	86.61	86.63	86.61	86.61	(86.61)	(86.61)	(72.18)	(72.18)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-8.97	8.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.37	11.37	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-21.60	21.60	0.00	0.00	26.40	21.60	0.00	0.00
Design Ratio	2.11	2.11	N/A	N/A	N/A	9.99	N/A	N/A
Rating Factor	2.41	2.41	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-8.97	8.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.37	11.37	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-27.60	N/A	0.00	0.00	-27.60	N/A	0.00	0.00
Design Ratio	2.64	N/A	N/A	N/A	12.49	N/A	N/A	N/A
Rating Factor	3.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	35.2	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Live Load Effect	93.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	128.5	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Resistance - Dead	361.4	0.0	361.4	0.0	361.4	0.0	354.3	0.0
Design Ratio	3.08	N/A	11.27	N/A	(11.27)	(N/A)	(9.40)	(N/A)
Rating Factor	3.87	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Resistance - Dead	185.9	185.9	185.9	185.9	185.9	185.9	185.4	185.4
Design Ratio	86.61	86.63	86.61	86.61	(86.61)	(86.61)	(72.18)	(72.18)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-7.97	7.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.38	10.38	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-21.60	21.60	0.00	0.00	26.40	21.60	0.00	0.00
Design Ratio	2.31	2.31	N/A	N/A	N/A	9.99	N/A	N/A
Rating Factor	2.71	2.71	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-7.97	7.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.38	10.38	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-27.60	N/A	0.00	0.00	-27.60	N/A	0.00	0.00
Design Ratio	2.89	N/A	N/A	N/A	12.49	N/A	N/A	N/A
Rating Factor	3.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	35.2	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Live Load Effect	132.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	167.4	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Resistance - Dead	361.4	0.0	361.4	0.0	361.4	0.0	354.3	0.0
Design Ratio	2.37	N/A	11.27	N/A	(11.27)	(N/A)	(9.40)	(N/A)
Rating Factor	2.73	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Resistance - Dead	185.9	185.9	185.9	185.9	185.9	185.9	185.4	185.4
Design Ratio	86.61	86.63	86.61	86.61	(86.61)	(86.61)	(72.18)	(72.18)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-11.30	11.30	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.70	13.70	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-21.60	21.60	0.00	0.00	26.40	21.60	0.00	0.00
Design Ratio	1.75	1.75	N/A	N/A	N/A	9.99	N/A	N/A
Rating Factor	1.91	1.91	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-11.30	11.30	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.70	13.70	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-27.60	N/A	0.00	0.00	-27.60	N/A	0.00	0.00
Design Ratio	2.19	N/A	N/A	N/A	12.49	N/A	N/A	N/A
Rating Factor	2.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	35.2	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Live Load Effect	143.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	179.1	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Resistance - Dead	361.4	0.0	361.4	0.0	361.4	0.0	354.3	0.0
Design Ratio	2.21	N/A	11.27	N/A	(11.27)	(N/A)	(9.40)	(N/A)
Rating Factor	2.51	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Resistance - Dead	185.9	185.9	185.9	185.9	185.9	185.9	185.4	185.4
Design Ratio	86.61	86.63	86.61	86.61	(86.61)	(86.61)	(72.18)	(72.18)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-12.29	12.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.70	14.70	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-21.60	21.60	0.00	0.00	26.40	21.60	0.00	0.00
Design Ratio	1.63	1.63	N/A	N/A	N/A	9.99	N/A	N/A
Rating Factor	1.76	1.76	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-12.29	12.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.70	14.70	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-27.60	N/A	0.00	0.00	-27.60	N/A	0.00	0.00
Design Ratio	2.04	N/A	N/A	N/A	12.49	N/A	N/A	N/A
Rating Factor	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	35.2	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Live Load Effect	151.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	186.9	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Resistance - Dead	361.4	0.0	361.4	0.0	361.4	0.0	354.3	0.0
Design Ratio	2.12	N/A	11.27	N/A	(11.27)	(N/A)	(9.40)	(N/A)
Rating Factor	2.38	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Resistance - Dead	185.9	185.9	185.9	185.9	185.9	185.9	185.4	185.4
Design Ratio	86.61	86.63	86.61	86.61	(86.61)	(86.61)	(72.18)	(72.18)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-12.96	12.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.36	15.36	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-21.60	21.60	0.00	0.00	26.40	21.60	0.00	0.00
Design Ratio	1.56	1.56	N/A	N/A	N/A	9.99	N/A	N/A
Rating Factor	1.67	1.67	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-12.96	12.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.36	15.36	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-27.60	N/A	0.00	0.00	-27.60	N/A	0.00	0.00
Design Ratio	1.95	N/A	N/A	N/A	12.49	N/A	N/A	N/A
Rating Factor	2.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	35.2	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Live Load Effect	155.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	190.8	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Resistance - Dead	361.4	0.0	361.4	0.0	361.4	0.0	354.3	0.0
Design Ratio	2.08	N/A	11.27	N/A	(11.27)	(N/A)	(9.40)	(N/A)
Rating Factor	2.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Resistance - Dead	185.9	185.9	185.9	185.9	185.9	185.9	185.4	185.4
Design Ratio	86.61	86.63	86.61	86.61	(86.61)	(86.61)	(72.18)	(72.18)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.69	15.69	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-21.60	21.60	0.00	0.00	26.40	21.60	0.00	0.00
Design Ratio	1.53	1.53	N/A	N/A	N/A	9.99	N/A	N/A
Rating Factor	1.63	1.63	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.69	15.69	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-27.60	N/A	0.00	0.00	-27.60	N/A	0.00	0.00
Design Ratio	1.91	N/A	N/A	N/A	12.49	N/A	N/A	N/A
Rating Factor	2.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	35.2	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Live Load Effect	155.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	190.8	0.0	35.2	0.0	35.2	0.0	42.2	0.0
Resistance - Dead	361.4	0.0	361.4	0.0	361.4	0.0	354.3	0.0
Design Ratio	2.08	N/A	11.27	N/A	(11.27)	(N/A)	(9.40)	(N/A)
Rating Factor	2.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6
Resistance - Dead	185.9	185.9	185.9	185.9	185.9	185.9	185.4	185.4
Design Ratio	86.61	86.63	86.61	86.61	(86.61)	(86.61)	(72.18)	(72.18)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.69	15.69	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-21.60	21.60	0.00	0.00	26.40	21.60	0.00	0.00
Design Ratio	1.53	1.53	N/A	N/A	N/A	9.99	N/A	N/A
Rating Factor	1.63	1.63	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.40	2.40	0.00	0.00	-2.40	2.40	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.69	15.69	0.00	0.00	-2.40	2.40	0.00	0.00
Resistance - Dead	-27.60	N/A	0.00	0.00	-27.60	N/A	0.00	0.00
Design Ratio	1.91	N/A	N/A	N/A	12.49	N/A	N/A	N/A
Rating Factor	2.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 104.500
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	24.0000			
Top Flange Thickness	=	0.6250	Top Flange Width	=	7.0000
Web Depth	=	22.7500	Web Thickness	=	0.5000
Bottom Flange Thickness	=	0.6250	Bottom Flange Width	=	7.0000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 2.575 ft
Maximum distance to Right Brace Point = 3.925 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93	+ HL-93			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - TANDEM	+ TANDEM			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE 3	+ TYPE 3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE 3S2	+ TYPE 3S2			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE 3-3	+ TYPE 3-3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4	+ SU4			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5	+ SU5			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6	+ SU6			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7	+ SU7			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo	10 - NRL	+ NRL			(TRK)				
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.3	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Live Load Effect	199.1	0.0	153.6	0.0	153.6	0.0	0.0	0.0
Total Load Effect	235.3	0.0	189.8	0.0	189.8	0.0	43.5	0.0
Resistance - Dead	360.3	0.0	360.3	0.0	360.3	0.0	353.0	0.0
Design Ratio	1.68	N/A	2.09	N/A	(2.09)	(N/A)	(9.11)	(N/A)
Rating Factor	1.81	N/A	2.35	N/A	(2.35)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0
Total Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	186.9	186.9	186.9	186.9	186.9	186.9	186.7	186.7
Design Ratio	173.22	173.34	173.22	173.31	(173.22)	(173.31)	(144.35)	(144.35)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-12.63	12.63	0.00	0.00	-9.72	9.72	0.00	0.00
Total Load Effect	-15.11	15.11	0.00	0.00	-12.19	12.19	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	-21.52	21.52	0.00	0.00
Design Ratio	1.59	1.59	N/A	N/A	1.97	1.97	N/A	N/A
Rating Factor	1.70	1.70	N/A	N/A	2.22	2.22	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-12.63	12.63	0.00	0.00	-9.72	9.72	0.00	0.00
Total Load Effect	-15.11	15.11	0.00	0.00	-12.19	12.19	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	1.99	N/A	N/A	N/A	2.46	N/A	N/A	N/A
Rating Factor	2.18	N/A	N/A	N/A	2.83	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.3	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Live Load Effect	251.4	0.0	194.0	0.0	194.0	0.0	0.0	0.0
Total Load Effect	287.7	0.0	230.2	0.0	230.2	0.0	43.5	0.0
Resistance - Dead	360.3	0.0	360.3	0.0	360.3	0.0	353.0	0.0
Design Ratio	1.38	N/A	1.72	N/A	(1.72)	(N/A)	(9.11)	(N/A)
Rating Factor	1.43	N/A	1.86	N/A	(1.86)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0
Total Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	186.9	186.9	186.9	186.9	186.9	186.9	186.7	186.7
Design Ratio	173.22	173.37	173.22	173.34	(173.22)	(173.34)	(144.35)	(144.35)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-15.95	15.95	0.00	0.00	-12.27	12.27	0.00	0.00
Total Load Effect	-18.43	18.43	0.00	0.00	-14.75	14.75	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	-21.52	21.52	0.00	0.00
Design Ratio	1.30	1.30	N/A	N/A	1.63	1.63	N/A	N/A
Rating Factor	1.35	1.35	N/A	N/A	1.75	1.75	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-15.95	15.95	0.00	0.00	-12.27	12.27	0.00	0.00
Total Load Effect	-18.43	18.43	0.00	0.00	-14.75	14.75	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	1.63	N/A	N/A	N/A	2.03	N/A	N/A	N/A
Rating Factor	1.73	N/A	N/A	N/A	2.24	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.3	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Live Load Effect	112.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	149.1	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Resistance - Dead	360.3	0.0	360.3	0.0	360.3	0.0	353.0	0.0
Design Ratio	2.66	N/A	10.93	N/A	(10.93)	(N/A)	(9.11)	(N/A)
Rating Factor	3.19	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	186.9	186.9	186.9	186.9	186.9	186.9	186.7	186.7
Design Ratio	173.22	173.29	173.22	173.22	(173.22)	(173.22)	(144.35)	(144.35)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-9.63	9.63	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.11	12.11	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	1.98	1.98	N/A	N/A	N/A	9.69	N/A	N/A
Rating Factor	2.23	2.23	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-9.63	9.63	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.11	12.11	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	2.48	N/A	N/A	N/A	12.11	N/A	N/A	N/A
Rating Factor	2.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.3	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Live Load Effect	105.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	141.3	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Resistance - Dead	360.3	0.0	360.3	0.0	360.3	0.0	353.0	0.0
Design Ratio	2.81	N/A	10.93	N/A	(10.93)	(N/A)	(9.11)	(N/A)
Rating Factor	3.43	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	186.9	186.9	186.9	186.9	186.9	186.9	186.7	186.7
Design Ratio	173.22	173.28	173.22	173.22	(173.22)	(173.22)	(144.35)	(144.35)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-8.97	8.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.45	11.45	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	2.10	2.10	N/A	N/A	N/A	9.69	N/A	N/A
Rating Factor	2.40	2.40	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-8.97	8.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.45	11.45	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	2.62	N/A	N/A	N/A	12.11	N/A	N/A	N/A
Rating Factor	3.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.3	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Live Load Effect	93.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	129.6	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Resistance - Dead	360.3	0.0	360.3	0.0	360.3	0.0	353.0	0.0
Design Ratio	3.06	N/A	10.93	N/A	(10.93)	(N/A)	(9.11)	(N/A)
Rating Factor	3.86	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	186.9	186.9	186.9	186.9	186.9	186.9	186.7	186.7
Design Ratio	173.22	173.28	173.22	173.22	(173.22)	(173.22)	(144.35)	(144.35)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-7.97	7.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.45	10.45	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	2.30	2.30	N/A	N/A	N/A	9.69	N/A	N/A
Rating Factor	2.70	2.70	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-7.97	7.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.45	10.45	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	2.87	N/A	N/A	N/A	12.11	N/A	N/A	N/A
Rating Factor	3.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.3	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Live Load Effect	132.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	168.5	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Resistance - Dead	360.3	0.0	360.3	0.0	360.3	0.0	353.0	0.0
Design Ratio	2.35	N/A	10.93	N/A	(10.93)	(N/A)	(9.11)	(N/A)
Rating Factor	2.72	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	186.9	186.9	186.9	186.9	186.9	186.9	186.7	186.7
Design Ratio	173.22	173.30	173.22	173.22	(173.22)	(173.22)	(144.35)	(144.35)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-11.30	11.30	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.77	13.77	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	1.74	1.74	N/A	N/A	N/A	9.69	N/A	N/A
Rating Factor	1.91	1.91	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-11.30	11.30	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.77	13.77	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	2.18	N/A	N/A	N/A	12.11	N/A	N/A	N/A
Rating Factor	2.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.3	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Live Load Effect	143.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	180.2	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Resistance - Dead	360.3	0.0	360.3	0.0	360.3	0.0	353.0	0.0
Design Ratio	2.20	N/A	10.93	N/A	(10.93)	(N/A)	(9.11)	(N/A)
Rating Factor	2.50	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	186.9	186.9	186.9	186.9	186.9	186.9	186.7	186.7
Design Ratio	173.22	173.31	173.22	173.22	(173.22)	(173.22)	(144.35)	(144.35)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-12.29	12.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.77	14.77	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	1.62	1.62	N/A	N/A	N/A	9.69	N/A	N/A
Rating Factor	1.75	1.75	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-12.29	12.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.77	14.77	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	2.03	N/A	N/A	N/A	12.11	N/A	N/A	N/A
Rating Factor	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.3	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Live Load Effect	151.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	188.0	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Resistance - Dead	360.3	0.0	360.3	0.0	360.3	0.0	353.0	0.0
Design Ratio	2.11	N/A	10.93	N/A	(10.93)	(N/A)	(9.11)	(N/A)
Rating Factor	2.37	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	186.9	186.9	186.9	186.9	186.9	186.9	186.7	186.7
Design Ratio	173.22	173.31	173.22	173.22	(173.22)	(173.22)	(144.35)	(144.35)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-12.96	12.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.44	15.44	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	1.55	1.55	N/A	N/A	N/A	9.69	N/A	N/A
Rating Factor	1.66	1.66	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-12.96	12.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.44	15.44	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	1.94	N/A	N/A	N/A	12.11	N/A	N/A	N/A
Rating Factor	2.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.3	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Live Load Effect	155.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	191.9	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Resistance - Dead	360.3	0.0	360.3	0.0	360.3	0.0	353.0	0.0
Design Ratio	2.07	N/A	10.93	N/A	(10.93)	(N/A)	(9.11)	(N/A)
Rating Factor	2.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	186.9	186.9	186.9	186.9	186.9	186.9	186.7	186.7
Design Ratio	173.22	173.31	173.22	173.22	(173.22)	(173.22)	(144.35)	(144.35)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.77	15.77	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	1.52	1.52	N/A	N/A	N/A	9.69	N/A	N/A
Rating Factor	1.62	1.62	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.77	15.77	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	1.90	N/A	N/A	N/A	12.11	N/A	N/A	N/A
Rating Factor	2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.3	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Live Load Effect	155.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	191.9	0.0	36.3	0.0	36.3	0.0	43.5	0.0
Resistance - Dead	360.3	0.0	360.3	0.0	360.3	0.0	353.0	0.0
Design Ratio	2.07	N/A	10.93	N/A	(10.93)	(N/A)	(9.11)	(N/A)
Rating Factor	2.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	186.9	186.9	186.9	186.9	186.9	186.9	186.7	186.7
Design Ratio	173.22	173.31	173.22	173.22	(173.22)	(173.22)	(144.35)	(144.35)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.77	15.77	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-21.52	21.52	0.00	0.00	26.48	21.52	0.00	0.00
Design Ratio	1.52	1.52	N/A	N/A	N/A	9.69	N/A	N/A
Rating Factor	1.62	1.62	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.48	2.48	0.00	0.00	-2.48	2.48	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.77	15.77	0.00	0.00	-2.48	2.48	0.00	0.00
Resistance - Dead	-27.52	N/A	0.00	0.00	-27.52	N/A	0.00	0.00
Design Ratio	1.90	N/A	N/A	N/A	12.11	N/A	N/A	N/A
Rating Factor	2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 105.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	24.0000			
Top Flange Thickness	=	0.6250	Top Flange Width	=	7.0000
Web Depth	=	22.7500	Web Thickness	=	0.5000
Bottom Flange Thickness	=	0.6250	Bottom Flange Width	=	7.0000

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 3.250 ft
Maximum distance to Right Brace Point = 3.250 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93	+ HL-93			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - TANDEM	+ TANDEM			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE 3	+ TYPE 3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE 3S2	+ TYPE 3S2			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE 3-3	+ TYPE 3-3			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4	+ SU4			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

Floor Beam

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5	+ SU5			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6	+ SU6			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7	+ SU7			(TRK)					
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo	10 - NRL	+ NRL			(TRK)				
	Is section compact?	YES	YES	YES	YES	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.6	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Live Load Effect	199.1	0.0	153.6	0.0	153.6	0.0	0.0	0.0
Total Load Effect	235.7	0.0	190.2	0.0	190.2	0.0	44.0	0.0
Resistance - Dead	359.9	0.0	359.9	0.0	359.9	0.0	352.6	0.0
Design Ratio	1.68	N/A	2.08	N/A	(2.08)	(N/A)	(9.02)	(N/A)
Rating Factor	1.81	N/A	2.34	N/A	(2.34)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Live Load Effect	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0
Total Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Resistance - Dead	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 1 - HL-93 + HL-93 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-12.63	12.63	0.00	0.00	-9.72	9.72	0.00	0.00
Total Load Effect	-15.13	15.13	0.00	0.00	-12.22	12.22	0.00	0.00
Resistance - Dead	-21.50	21.50	0.00	0.00	-21.50	21.50	0.00	0.00
Design Ratio	1.59	1.59	N/A	N/A	1.96	1.96	N/A	N/A
Rating Factor	1.70	1.70	N/A	N/A	2.21	2.21	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-12.63	12.63	0.00	0.00	-9.72	9.72	0.00	0.00
Total Load Effect	-15.13	15.13	0.00	0.00	-12.22	12.22	0.00	0.00
Resistance - Dead	-27.50	N/A	0.00	0.00	-27.50	N/A	0.00	0.00
Design Ratio	1.98	N/A	N/A	N/A	2.46	N/A	N/A	N/A
Rating Factor	2.18	N/A	N/A	N/A	2.83	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.6	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Live Load Effect	251.4	0.0	194.0	0.0	194.0	0.0	0.0	0.0
Total Load Effect	288.1	0.0	230.6	0.0	230.6	0.0	44.0	0.0
Resistance - Dead	359.9	0.0	359.9	0.0	359.9	0.0	352.6	0.0
Design Ratio	1.38	N/A	1.72	N/A	(1.72)	(N/A)	(9.02)	(N/A)
Rating Factor	1.43	N/A	1.86	N/A	(1.86)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Live Load Effect	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0
Total Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Resistance - Dead	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 2 - TANDEM + TANDEM (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-15.95	15.95	0.00	0.00	-12.27	12.27	0.00	0.00
Total Load Effect	-18.46	18.46	0.00	0.00	-14.77	14.77	0.00	0.00
Resistance - Dead	-21.50	21.50	0.00	0.00	-21.50	21.50	0.00	0.00
Design Ratio	1.30	1.30	N/A	N/A	1.62	1.62	N/A	N/A
Rating Factor	1.35	1.35	N/A	N/A	1.75	1.75	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-15.95	15.95	0.00	0.00	-12.27	12.27	0.00	0.00
Total Load Effect	-18.46	18.46	0.00	0.00	-14.77	14.77	0.00	0.00
Resistance - Dead	-27.50	N/A	0.00	0.00	-27.50	N/A	0.00	0.00
Design Ratio	1.63	N/A	N/A	N/A	2.03	N/A	N/A	N/A
Rating Factor	1.72	N/A	N/A	N/A	2.24	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.6	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Live Load Effect	112.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	149.5	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Resistance - Dead	359.9	0.0	359.9	0.0	359.9	0.0	352.6	0.0
Design Ratio	2.65	N/A	10.82	N/A	(10.82)	(N/A)	(9.02)	(N/A)
Rating Factor	3.19	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Resistance - Dead	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 3 - TYPE 3 + TYPE 3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-9.63	9.63	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.14	12.14	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-21.50	21.50	0.00	0.00	26.50	21.50	0.00	0.00
Design Ratio	1.98	1.98	N/A	N/A	N/A	9.59	N/A	N/A
Rating Factor	2.23	2.23	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-9.63	9.63	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-12.14	12.14	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-27.50	N/A	0.00	0.00	-27.50	N/A	0.00	0.00
Design Ratio	2.47	N/A	N/A	N/A	11.99	N/A	N/A	N/A
Rating Factor	2.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.6	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Live Load Effect	105.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	141.7	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Resistance - Dead	359.9	0.0	359.9	0.0	359.9	0.0	352.6	0.0
Design Ratio	2.80	N/A	10.82	N/A	(10.82)	(N/A)	(9.02)	(N/A)
Rating Factor	3.43	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Resistance - Dead	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 4 - TYPE 3S2 + TYPE 3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-8.97	8.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.47	11.47	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-21.50	21.50	0.00	0.00	26.50	21.50	0.00	0.00
Design Ratio	2.09	2.09	N/A	N/A	N/A	9.59	N/A	N/A
Rating Factor	2.40	2.40	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-8.97	8.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.47	11.47	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-27.50	N/A	0.00	0.00	-27.50	N/A	0.00	0.00
Design Ratio	2.61	N/A	N/A	N/A	11.99	N/A	N/A	N/A
Rating Factor	3.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.6	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Live Load Effect	93.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	130.0	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Resistance - Dead	359.9	0.0	359.9	0.0	359.9	0.0	352.6	0.0
Design Ratio	3.05	N/A	10.82	N/A	(10.82)	(N/A)	(9.02)	(N/A)
Rating Factor	3.85	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Resistance - Dead	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 5 - TYPE 3-3 + TYPE 3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-7.97	7.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.48	10.48	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-21.50	21.50	0.00	0.00	26.50	21.50	0.00	0.00
Design Ratio	2.29	2.29	N/A	N/A	N/A	9.59	N/A	N/A
Rating Factor	2.70	2.70	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-7.97	7.97	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.48	10.48	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-27.50	N/A	0.00	0.00	-27.50	N/A	0.00	0.00
Design Ratio	2.86	N/A	N/A	N/A	11.99	N/A	N/A	N/A
Rating Factor	3.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.6	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Live Load Effect	132.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	168.9	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Resistance - Dead	359.9	0.0	359.9	0.0	359.9	0.0	352.6	0.0
Design Ratio	2.35	N/A	10.82	N/A	(10.82)	(N/A)	(9.02)	(N/A)
Rating Factor	2.72	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Resistance - Dead	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 6 - SU4 + SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-11.30	11.30	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.80	13.80	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-21.50	21.50	0.00	0.00	26.50	21.50	0.00	0.00
Design Ratio	1.74	1.74	N/A	N/A	N/A	9.59	N/A	N/A
Rating Factor	1.90	1.90	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-11.30	11.30	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-13.80	13.80	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-27.50	N/A	0.00	0.00	-27.50	N/A	0.00	0.00
Design Ratio	2.17	N/A	N/A	N/A	11.99	N/A	N/A	N/A
Rating Factor	2.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.6	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Live Load Effect	143.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	180.6	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Resistance - Dead	359.9	0.0	359.9	0.0	359.9	0.0	352.6	0.0
Design Ratio	2.20	N/A	10.82	N/A	(10.82)	(N/A)	(9.02)	(N/A)
Rating Factor	2.50	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Resistance - Dead	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 7 - SU5 + SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-12.29	12.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.80	14.80	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-21.50	21.50	0.00	0.00	26.50	21.50	0.00	0.00
Design Ratio	1.62	1.62	N/A	N/A	N/A	9.59	N/A	N/A
Rating Factor	1.75	1.75	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-12.29	12.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-14.80	14.80	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-27.50	N/A	0.00	0.00	-27.50	N/A	0.00	0.00
Design Ratio	2.03	N/A	N/A	N/A	11.99	N/A	N/A	N/A
Rating Factor	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.6	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Live Load Effect	151.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	188.4	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Resistance - Dead	359.9	0.0	359.9	0.0	359.9	0.0	352.6	0.0
Design Ratio	2.11	N/A	10.82	N/A	(10.82)	(N/A)	(9.02)	(N/A)
Rating Factor	2.37	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Resistance - Dead	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 8 - SU6 + SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-12.96	12.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.46	15.46	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-21.50	21.50	0.00	0.00	26.50	21.50	0.00	0.00
Design Ratio	1.55	1.55	N/A	N/A	N/A	9.59	N/A	N/A
Rating Factor	1.66	1.66	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-12.96	12.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.46	15.46	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-27.50	N/A	0.00	0.00	-27.50	N/A	0.00	0.00
Design Ratio	1.94	N/A	N/A	N/A	11.99	N/A	N/A	N/A
Rating Factor	2.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.6	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Live Load Effect	155.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	192.2	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Resistance - Dead	359.9	0.0	359.9	0.0	359.9	0.0	352.6	0.0
Design Ratio	2.06	N/A	10.82	N/A	(10.82)	(N/A)	(9.02)	(N/A)
Rating Factor	2.31	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Resistance - Dead	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 9 - SU7 + SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.79	15.79	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-21.50	21.50	0.00	0.00	26.50	21.50	0.00	0.00
Design Ratio	1.52	1.52	N/A	N/A	N/A	9.59	N/A	N/A
Rating Factor	1.62	1.62	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.79	15.79	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-27.50	N/A	0.00	0.00	-27.50	N/A	0.00	0.00
Design Ratio	1.90	N/A	N/A	N/A	11.99	N/A	N/A	N/A
Rating Factor	2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

Floor Beam

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	396.5	0.0	396.5	0.0	396.5	0.0	396.5	0.0
6.10. or Appendix A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A	A.4-1	N/A
Dead Load Effect	36.6	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Live Load Effect	155.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	192.2	0.0	36.6	0.0	36.6	0.0	44.0	0.0
Resistance - Dead	359.9	0.0	359.9	0.0	359.9	0.0	352.6	0.0
Design Ratio	2.06	N/A	10.82	N/A	(10.82)	(N/A)	(9.02)	(N/A)
Rating Factor	2.31	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Dead Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Resistance - Dead	188.0	188.0	188.0	188.0	188.0	188.0	188.0	188.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 10 - NRL + NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.79	15.79	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-21.50	21.50	0.00	0.00	26.50	21.50	0.00	0.00
Design Ratio	1.52	1.52	N/A	N/A	N/A	9.59	N/A	N/A
Rating Factor	1.62	1.62	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.50	2.50	0.00	0.00	-2.50	2.50	0.00	0.00
Live Load Effect	-13.29	13.29	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-15.79	15.79	0.00	0.00	-2.50	2.50	0.00	0.00
Resistance - Dead	-27.50	N/A	0.00	0.00	-27.50	N/A	0.00	0.00
Design Ratio	1.90	N/A	N/A	N/A	11.99	N/A	N/A	N/A
Rating Factor	2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

RATING FACTOR SUMMARY: Design Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - TANDEM	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	3.34	N/A	4.33	N/A	4.33	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.64	N/A	3.43	N/A	3.43	N/A	N/A	N/A
Critical		2.64	N/A	3.43	N/A	(3.43) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - TANDEM	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - TANDEM	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	5.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	6.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	7.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.27	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	5.35	N/A	6.93	N/A	6.93	N/A	N/A	N/A
2 - TANDEM	(TRK)	4.23	N/A	5.49	N/A	5.49	N/A	N/A	N/A
Critical		4.23	N/A	5.49	N/A	(5.49) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	3.38	N/A	4.38	N/A	4.38	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.67	N/A	3.47	N/A	3.47	N/A	N/A	N/A
Critical		2.67	N/A	3.47	N/A	(3.47) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	5.08	5.08	N/A	N/A	6.60	6.60	N/A	N/A
2 - TANDEM	(TRK)	4.02	4.02	N/A	N/A	5.23	5.23	N/A	N/A
Critical		4.02		N/A		5.23		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	6.40	N/A	N/A	N/A	8.32	N/A	N/A	N/A
2 - TANDEM	(TRK)	5.07	N/A	N/A	N/A	6.59	N/A	N/A	N/A
Critical		5.07		N/A		6.59		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	9.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	10.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	11.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	8.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	7.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	7.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	6.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	6.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		6.84	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	5.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	6.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	7.20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	6.66	6.66	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	7.15	7.15	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	8.05	8.05	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.68	5.68	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	5.22	5.22	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.95	4.95	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.83	4.83	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.83	4.83	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.83		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	8.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	9.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	10.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	7.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	6.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	6.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	6.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	6.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		6.08		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	2.60	N/A	3.37	N/A	3.37	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.06	N/A	2.67	N/A	2.67	N/A	N/A	N/A
Critical		2.06	N/A	2.67	N/A	(2.67) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	3.42	N/A	4.43	N/A	4.43	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.71	N/A	3.51	N/A	3.51	N/A	N/A	N/A
Critical		2.71	N/A	3.51	N/A	(3.51) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	2.46	2.46	N/A	N/A	3.20	3.20	N/A	N/A
2 - TANDEM	(TRK)	1.95	1.95	N/A	N/A	2.54	2.54	N/A	N/A
Critical		1.95		N/A		2.54		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	3.12	N/A	N/A	N/A	4.06	N/A	N/A	N/A
2 - TANDEM	(TRK)	2.47	N/A	N/A	N/A	3.21	N/A	N/A	N/A
Critical		2.47		N/A		3.21		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	4.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	4.93	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	5.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.33	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	6.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	6.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	7.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.37	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	3.23	3.23	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	3.47	3.47	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	3.90	3.90	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.75	2.75	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.53	2.53	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.40	2.40	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.34	2.34	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.34	2.34	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.34		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	4.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	4.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	4.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.97		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	1.84	N/A	2.38	N/A	2.38	N/A	N/A	N/A
2 - TANDEM	(TRK)	1.45	N/A	1.89	N/A	1.89	N/A	N/A	N/A
Critical		1.45	N/A	1.89	N/A	(1.89) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - TANDEM	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	1.73	1.73	N/A	N/A	2.25	2.25	N/A	N/A
2 - TANDEM	(TRK)	1.37	1.37	N/A	N/A	1.78	1.78	N/A	N/A
Critical		1.37		N/A		1.78		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	2.21	N/A	N/A	N/A	2.87	N/A	N/A	N/A
2 - TANDEM	(TRK)	1.75	N/A	N/A	N/A	2.27	N/A	N/A	N/A
Critical		1.75		N/A		2.27		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	3.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	3.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	3.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.35	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	2.27	2.27	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	2.44	2.44	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	2.75	2.75	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.94	1.94	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.78	1.78	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.69	1.69	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.65	1.65	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.65	1.65	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.65		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	2.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	3.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	3.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.10		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	1.82	N/A	2.35	N/A	2.35	N/A	N/A	N/A
2 - TANDEM	(TRK)	1.44	N/A	1.86	N/A	1.86	N/A	N/A	N/A
Critical		1.44	N/A	1.86	N/A	(1.86) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - TANDEM	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	1.71	1.71	N/A	N/A	2.22	2.22	N/A	N/A
2 - TANDEM	(TRK)	1.35	1.35	N/A	N/A	1.76	1.76	N/A	N/A
Critical		1.35		N/A		1.76		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	2.19	N/A	N/A	N/A	2.84	N/A	N/A	N/A
2 - TANDEM	(TRK)	1.73	N/A	N/A	N/A	2.25	N/A	N/A	N/A
Critical		1.73		N/A		2.25		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	3.20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	3.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	3.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	2.24	2.24	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	2.41	2.41	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	2.71	2.71	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.91	1.91	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.76	1.76	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.67	1.67	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.63	1.63	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.63	1.63	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.63		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	2.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	3.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	3.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.08		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	1.81	N/A	2.35	N/A	2.35	N/A	N/A	N/A
2 - TANDEM	(TRK)	1.43	N/A	1.86	N/A	1.86	N/A	N/A	N/A
Critical		1.43	N/A	1.86	N/A	(1.86) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - TANDEM	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	1.70	1.70	N/A	N/A	2.22	2.22	N/A	N/A
2 - TANDEM	(TRK)	1.35	1.35	N/A	N/A	1.75	1.75	N/A	N/A
Critical		1.35		N/A		1.75		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	2.18	N/A	N/A	N/A	2.83	N/A	N/A	N/A
2 - TANDEM	(TRK)	1.73	N/A	N/A	N/A	2.24	N/A	N/A	N/A
Critical		1.73		N/A		2.24		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	3.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	3.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	3.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	2.23	2.23	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	2.40	2.40	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	2.70	2.70	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.91	1.91	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.75	1.75	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.66	1.66	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.62	1.62	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.62	1.62	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.62		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	2.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	3.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	3.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.07		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	1.81	N/A	2.34	N/A	2.34	N/A	N/A	N/A
2 - TANDEM	(TRK)	1.43	N/A	1.86	N/A	1.86	N/A	N/A	N/A
Critical		1.43	N/A	1.86	N/A	(1.86) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
1 - HL-93	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - TANDEM	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	1.70	1.70	N/A	N/A	2.21	2.21	N/A	N/A
2 - TANDEM	(TRK)	1.35	1.35	N/A	N/A	1.75	1.75	N/A	N/A
Critical		1.35		N/A		1.75		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
1 - HL-93	(TRK)	2.18	N/A	N/A	N/A	2.83	N/A	N/A	N/A
2 - TANDEM	(TRK)	1.72	N/A	N/A	N/A	2.24	N/A	N/A	N/A
Critical		1.72		N/A		2.24		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	3.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	3.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	3.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.31	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE 3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	2.23	2.23	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	2.40	2.40	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	2.70	2.70	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	1.90	1.90	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	1.75	1.75	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	1.66	1.66	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	1.62	1.62	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	1.62	1.62	N/A	N/A	N/A	N/A	N/A	N/A
Critical		1.62		N/A		N/A		N/A	

Floor Beam

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE 3	(TRK)	2.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE 3S2	(TRK)	3.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE 3-3	(TRK)	3.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	2.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.07		N/A		N/A		N/A	

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load Combination No.	Description			Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory								
1	HL-93	+ HL-93	(TRK)	20.00	105.0000	SERVICE II	1.70	34.04
2	TANDEM	+ TANDEM	(TRK)	25.00	105.0000	SERVICE II	1.35	33.69
Crit	TANDEM	+ TANDEM	(TRK)	25.00	105.0000	SERVICE II	1.35	33.69

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating								
1	HL-93	+ HL-93	(TRK)	20.00	105.0000	SERVICE II-O	2.21	44.25
2	TANDEM	+ TANDEM	(TRK)	25.00	105.0000	SERVICE II-O	1.75	43.80
Crit	TANDEM	+ TANDEM	(TRK)	25.00	105.0000	SERVICE II-O	1.75	43.80

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load								
3	TYPE 3	+ TYPE 3	(TRK)	14.50	105.0000	SERVICE II	2.23	32.35
4	TYPE 3S2	+ TYPE 3S2	(TRK)	13.50	105.0000	SERVICE II	2.40	32.35
5	TYPE 3-3	+ TYPE 3-3	(TRK)	12.00	105.0000	SERVICE II	2.70	32.35
6	SU4	+ SU4	(TRK)	17.00	105.0000	SERVICE II	1.90	32.35
7	SU5	+ SU5	(TRK)	18.50	105.0000	SERVICE II	1.75	32.35
8	SU6	+ SU6	(TRK)	19.50	105.0000	SERVICE II	1.66	32.35
9	SU7	+ SU7	(TRK)	20.00	105.0000	SERVICE II	1.62	32.35
10	NRL	+ NRL	(TRK)	20.00	105.0000	SERVICE II	1.62	32.35
Crit	SU7	+ SU7	(TRK)	20.00	105.0000	SERVICE II	1.62	32.35

LIMIT STATE LEGEND:

BRASS	Specifications
STRENGTH I	Strength I Inventory
STRENGTH I-O	Strength I Operating
STRENGTH II	Strength II
STRENGTH IV	Strength IV
SERVICE I	Service I
SERVICE II	Service II Inventory
SERVICE II-O	Service II Operating
FATIGUE I	Fatigue I
FATIGUE II	Fatigue II

BRASS Input – Steel Girder

Wyoming Department of Transportation

BRASS-GIRDER™ Input Parameters

Version Information

Girder UI:	8.0.0.3001
Girder XML:	8.0.0.3001
BRASS™ XML:	1.8.0.3001

Administration

Project ID:	6856
Project Title:	R8 Bridge Load Ratings 2018
Bridge ID:	35-1-5.91
Bridge Name:	Citico Creek
Route Name:	35-1
Reference Marker:	5.91
Title 1:	Girder
Title 2:	
Date:	2019 4 29
Agency:	USDA Forest Service
Designer/Rater:	Ammon Groesbeck
Reviewer:	Brad Miller
Comments:	

Bridge Notes

No bridge notes have been defined.

Control

Structure

Structure Type:	GirderLine
Define Deck Cross Section:	No
Analysis Model Type:	Beam
Number of Top Spans:	1

Spans

Span	Length
1	47.5 ft

Structure Material:	Steel
Beam Type:	Builtup
Composite Structure:	No

Number of Stages: 1

Analysis

Unit System:	US
Analysis Method:	LRFD
Analysis Type:	Rating
Member of Interest:	1
Model Element Type:	Stepped
Point of Interest Generation Control:	User
Live-load Distribution Factor Application:	AnalysisPoint
Interpolate Reinforcement:	No
Calculate Effective Width:	No

Input

Symmetry

Component	Symmetric
Beam Profile	Yes
Deck Profile	No
Shear Connectors	Yes
Transverse Stiffeners	Yes
Bearing Stiffeners	Yes
Longitudinal Stiffeners	Yes
Bracing (Member)	No
Lateral Support	Yes
Cb Factors (LRFD)	Yes
Beam Distribution Factors (LRFD)	Yes
Reaction Distribution Factors (LRFD)	Yes

Merge Beam/Deck Profile Schedules: Yes

Libraries

Section Library: N:\BRASS\Libraries\BRASS-Sections.BLS
Vehicle Library: N:\BRASS\Libraries\BRASS-Vehicles.BLV

Output

Primary Output

Action Output Level: DL+LL
Action Locations: 10th+SpecialPoints

General

Member Properties:	Yes
Load Combinations:	Yes
Load and Resistance Factors:	Yes
Warnings:	Yes
Camber:	No
Critical Design Ratios / Rating Factors:	Condensed

Live Load

Truck Positions:	No
Variable Axle Spacing:	No
Live Load Settings:	Yes
Live Load Combinations:	Yes
Live Load Details:	Yes

Impact (LFD): No

Stage

Stage	Output
1	Yes

Dead Load

Member Self Load: Yes
Distributed Dead Loads: Yes
Concentrated Dead Loads: Yes
Temperature Change: No
Settlements: No

Intermediate Output

Intermediate Output Level: Full
Effective Width: No
Floorbeam Lane Position: No

Points of Interest

Specification Checks: Yes
Load Factoring/Combinations: Yes

Limit State Output (LRFD)

Limit State	Specification Check	Load Combination
Strength I	Yes	Yes
Strength II	No	No
Strength IV	No	No
Service I	No	No
Service II	Yes	Yes
Fatigue I	No	No
Fatigue II	No	No

Intermediate Output (cont.)

Steel

Transverse Stiffeners: No
Bearing Stiffeners: No
Longitudinal Stiffeners: No

Results Tables

X-Y Plot Action Tables: No
Specification Check Results Tables: No
Mesh Plot Files: No

BRASS-PAD™ Data Transfer File: No

Influence

Output influence lines for: None
Ordinate Divisor: 1

Factors

Load Factors (LRFD)

Limit State	DC		DW		DU		TU	
	max	min	max	min	max	min	max	min
Strength I	1.25	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Strength II	1.25	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Strength IV	1.5	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Service I	1	1	1	1	1	1	1.2	1
Service II	1	1	1	1	1	1	1.2	1
Fatigue I	0	0	0	0	0	0	0	0
Fatigue II	0	0	0	0	0	0	0	0

Load Factors (LRFD) (continued)

Limit State	LL				SE		PS		DS	
	Design		Legal	Permit						
	Inventory	Operating			max	min	max	min	max	min
Strength I	1.75	1.35	1.3	0	1	1	1	1	1.25	0.9
Strength II	1.35		0	0	1	1	1	1	1.25	0.9
Strength IV	0		0	0	0	0	1	1	1.5	0.9
Service I	1		0	1	1	1	1	1	1	1
Service II	1.3	1	1.3	1	0	0	1	1	1	1
Fatigue I	1.75		0	0	0	0	1	1	0	0
Fatigue II	0.8		0	0	0	0	1	1	0	0

Load Modifiers (LRFD)

Limit State	Ductility	Redundancy	Importance	Combined Product	
				max	min
Strength I	1	1	1	-	-
Strength II	1	1	1	-	-
Strength IV	1	1	1	-	-
Service I	1	1	1	-	-
Service II	1	1	1	-	-
Fatigue I	1	1	1	-	-
Fatigue II	1	1	1	-	-

Resistance Factors (LRFD)

Resistance Factors

Type	Value
φ Flexure	1
φ Shear	1
φ Bearing	1
φ Compression	0.95
φ Shear Connectors	0.85
φ Fatigue	1

System/Total Modifiers

Limit State	Resistance Type	System	Total

Strength	Flexure	0.85	-
Strength	Shear	1	-
Strength	Bearing	1	-
Strength	Compression	1	-
Strength	Shear Connectors	1	-
Strength	Longitudinal Reinforcement	1	-
Service	Flexure	1	-
Fatigue	Fatigue	1	-

Condition Modifiers

Limit State	Condition
Strength	0.95
Service	1
Fatigue	1

Materials

Steel

ID	Name	Yield Stress	Tensile Strength	Modulus of Elasticity	Density	Thermal Expansion Coefficient
1	Grade 50	50 ksi	65 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
2	Grade 50W	50 ksi	70 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
3	Grade 36	36 ksi	58 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
4	Grade HPS 70W	70 ksi	85 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
5	Grade 30	30 ksi	60 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}

Dead Load Groups

Groups

No dead load groups have been defined.

Live Loads

Live Load Control

Direction Control:	Up+Down
Standard Live Loads:	None
Wheel Advancement Denominator:	100
ADTT:	999
ADTT for Single Lane:	999
Multiple Presence Adjustment:	95 %
% of Dynamic Load Allowance (Impact):	100 %

Dynamic Load Allowance (LRFD)

Design/Rating Procedure	Truck	Lane	Fatigue
Design	33 %	0 %	15 %

Legal	33 %	0 %	0 %
Permit	33 %	0 %	0 %

Special Vehicles

Axle Vehicles

No axle vehicles have been defined.

Lane Vehicles

No lane vehicles have been defined.

Definitions (LRFD)

Definition 1

Code: HL-93-TRUCK
Type: GeneralTruck
Design Rating: Design
% of Dynamic Load Allowance: -
Scale Factor: -
Lanes Loaded: Critical
Notional Load: No
Fixed DLA: -

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 2

Code: HL-93-TANDEM
Type: GeneralTruck
Design Rating: Design
% of Dynamic Load Allowance: -
Scale Factor: -
Lanes Loaded: Critical
Notional Load: No
Fixed DLA: -

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 3

Code: HL-93-LANE
Type: GeneralLane
Design Rating: Design
% of Dynamic Load Allowance: -
Scale Factor: -
Lanes Loaded: Critical
Notional Load: No
Fixed DLA: -

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 4

Code: TYPE3
Type: GeneralTruck
Design Rating: Legal

Live Load Factor Overrides

Limit State	gamma LL	gamma LL

% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

		Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 5

Code:	TYPE3S2
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 6

Code:	TYPE3-3
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 7

Code:	SU4
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 8

Code:	SU5
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-

Notional Load:	No
Fixed DLA:	-

Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 9

Code:	SU6
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 10

Code:	SU7
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 11

Code:	NRL
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	Yes
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

General Combinations (LRFD)

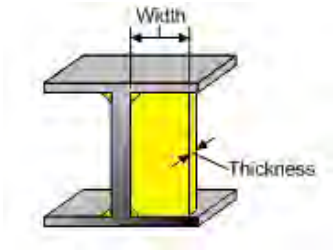
Standard Combo	Truck	Lane	Combination Factors	
			Truck	Lane
No	**HL-93-TRUCK**	**HL-93-LANE**	1	1
No	**HL-93-TANDEM**	**HL-93-LANE**	1	1

Deflection Combinations (LRFD)

No Deflection Combinations (LRFD) have been defined.

Component Groups

Transverse Stiffeners



ID	Name	Width	Thickness	Type	Type Factor	Material
1	L5x3x3/8 Stiffener (2 Legs)	5 in.	0.375 in.	Stiffener Pairs	-	**Grade 30**

Bearing Stiffeners

No bearing stiffener groups have been defined.

Longitudinal Stiffeners

No longitudinal stiffener groups have been defined.

Specification Control

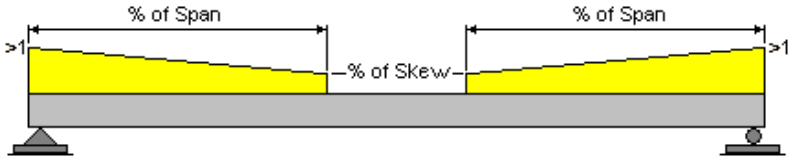
General

Lane Geometry

Design Vehicle Lane Width: 12 ft
Vehicle Width: 10 ft
Wheel Spacing: 6 ft
Encroachment Distance: -

Load Factors Control (LRFD): Use load factors per analysis type (Review = max/min; Rating = max only)

Skew Factors



Span #	% of Span	% of Skew
1	-	-

Steel

Use Appendix A6 (LRFD): Yes
Allow Plastic Analysis: Yes
Override Longitudinal Stiffeners: No
Slab thickness for longitudinal shear force: Structural
Slab thickness for minimum negative flexure concrete deck reinforcement: Structural

Fatigue

AASHTO LRFD Table 6.6.1.2.5-2

% of Span: 10
Span Length: 40 ft

Stress Range in Longitudinal Reinforcement Over the Piers: 10 ksi

Detail Categories (LRFD)

Detail Category	Constant, A x 10^8	Constant Amplitude Fatigue Threshold
A	250 kip^3	24 ksi
B	120 kip^3	16 ksi
B'	61 kip^3	12 ksi
C	44 kip^3	10 ksi
C'	44 kip^3	12 ksi
D	22 kip^3	7 ksi
E	11 kip^3	4.5 ksi
E'	3.9 kip^3	2.6 ksi

Limit State Map

Limit State Maps (LRFD)

Limit State	Design Review			Rating		
	Design Load	Legal Load	Permit Load	Design Load	Legal Load	Permit Load
Strength I	No	No	No	Inventory/Operating	Yes	No
Strength II	No	No	No	Exclude	No	No
Strength IV	No	No	No	Exclude	No	No
Service I	No	No	No	Exclude	No	No
Service II	No	No	No	Inventory/Operating	Yes	No
Service III	No	No	No	Exclude	No	No
Fatigue I	No	No	No	Inventory	No	No
Fatigue II	No	No	No	Inventory	No	No

Spec. Check Map (Strength)

LRFD Specification Check Maps

Design Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Legal Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Permit Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Design Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	Yes	No	No
Shear	Yes	No	No
Bearing	Yes	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Legal Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	Yes	No	No
Shear	Yes	No	No
Bearing	Yes	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Permit Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Spec. Check Map (Service)

LRFD Specification Check Maps

Design Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Legal Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Permit Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Design Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	Yes
Live Load Deflection	No	No

Legal Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	Yes
Live Load Deflection	No	No

Permit Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Spec. Check Map (Fatigue)

LRFD Specification Check Maps

Design Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No

Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Legal Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Permit Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Design Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Legal Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Permit Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Member

Member Notes

No member notes have been defined.

Member Materials

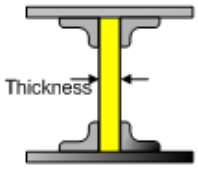
Beam

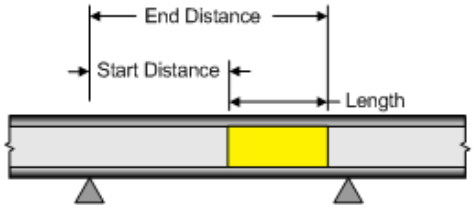
Beam Material: **Grade 30**

Beam Profile

Web

Apply to Entire Structure: Yes
Web Angle: -

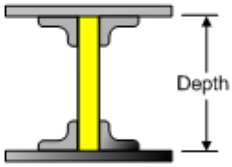


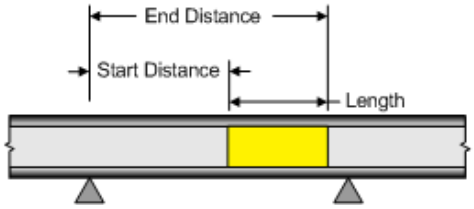


Thickness	Material	Support Number	Start Distance	Length
0.375 in.	**Grade 30**	1	0 ft	23.75 ft

Web Depth

Apply to Entire Structure: Yes





Start Depth	Web Variation	End Depth	Support Number	Start Distance	Length
58.5 in.	Linear	58.5 in.	1	0 ft	23.75 ft

Top Cover Plate

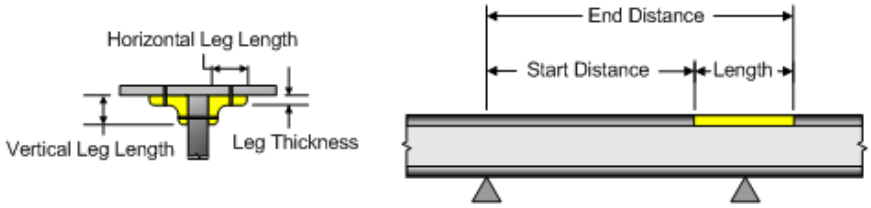
No top cover plate schedules have been defined.

Bottom Cover Plate

No bottom cover plate schedules have been defined.

Top Angles

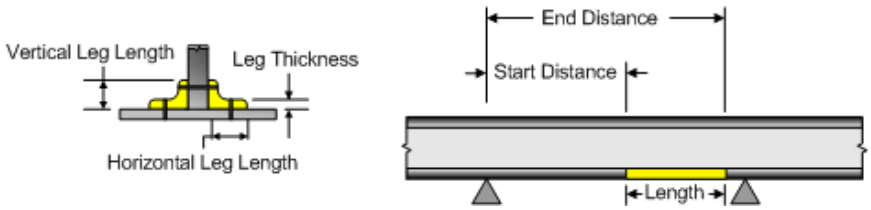
Apply to Entire Structure: Yes



Vertical Leg Length	Horizontal Leg Length	Leg Thickness	Material	Support Number	Start Distance	Length
6 in.	6 in.	0.625 in.	**Grade 30**	1	0 ft	23.75 ft

Bottom Angles

Apply to Entire Structure: Yes



Vertical Leg Length	Horizontal Leg Length	Leg Thickness	Material	Support Number	Start Distance	Length
6 in.	6 in.	0.625 in.	**Grade 30**	1	0 ft	23.75 ft

Hinges

No hinges have been defined.

Special Locations

No special locations have been defined.

Splice Locations

No splice locations have been defined.

Supports

Support Conditions

Support	Support Restraint		
	Horizontal	Vertical	Rotational
1	Restrained	Restrained	Free
2	Free	Restrained	Free

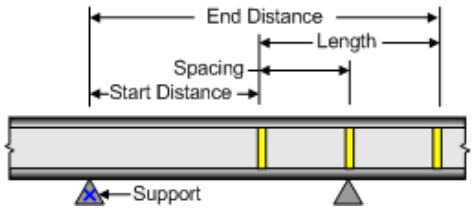
Spring Constants

Support	Spring Constants		
	Horizontal	Vertical	Rotational
1	-	-	-
2	-	-	-

Schedules

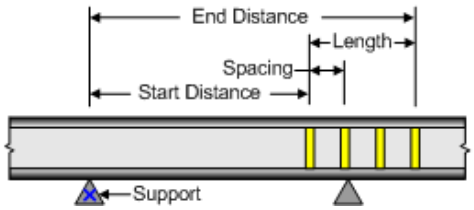
Bracing

Apply to Entire Structure: No



Spacing	Support	Start Distance	Length
11.25 ft	1	0 ft	11.25 ft
12.5 ft	1	11.25 ft	25 ft
11.25 ft	1	36.25 ft	11.25 ft

Transverse Stiffeners



Stiffener Group	Spacing	Support	Start Distance	Length
L5x3x3/8 Stiffener (2 Legs)	3.75 ft	1	0 ft	11.25 ft
L5x3x3/8 Stiffener (2 Legs)	4.167 ft	1	11.25 ft	12.5 ft

Bearing Stiffeners

Apply to Entire Structure: No

Support	Stiffener Group
1	Not Assigned
2	Not Assigned

Longitudinal Stiffeners

No longitudinal stiffener schedules have been defined.

Lateral Support

No lateral support schedules have been defined.

Cb Factors (Standard)

No Cb factors (LRFD) have been defined.

Cb Factors (LRFD)

No Cb factors (LRFD) have been defined.

Fatigue Stress (Standard)

No fatigue stress (standard) schedules have been defined.

Member Control

Steel

Flexural Resistance

Span	Ignore Eq. 6.10.7.1.2-3 (LRFD)
1	No

End Panel Distances

Top Span

Left of Top Span: -
Right of Top Span: -

Flange Local Buckling Resistance Adjustment

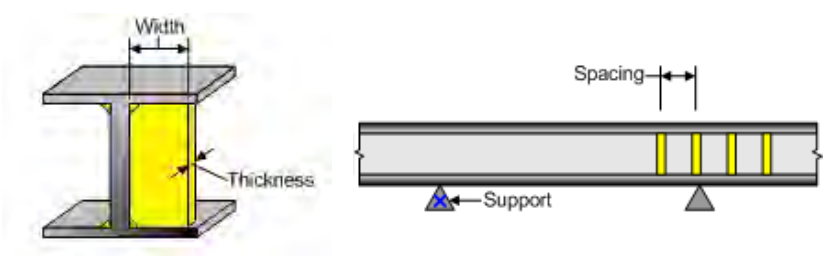
Standard Specifications: -
LRFD Specifications: -

Points of Interest

Points

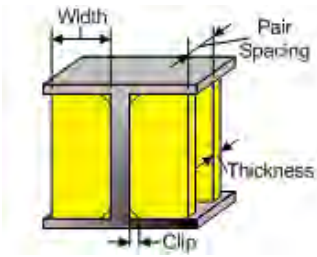
Point of Interest	Output Specification Checks	Output Load Combinations
100	Yes	Yes
101	Yes	Yes
102	Yes	Yes
103	Yes	Yes
104	Yes	Yes
104.5	Yes	Yes
105	Yes	Yes

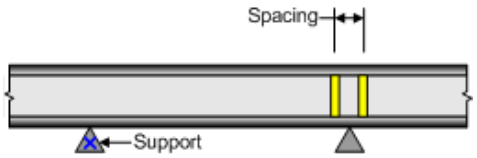
Transverse Stiffeners



Point of Interest	Override	Width	Thickness	Spacing	Type	Type Factor	Material
100	No	-	-	-	-	-	-
101	No	-	-	-	-	-	-
102	No	-	-	-	-	-	-
103	No	-	-	-	-	-	-
104	No	-	-	-	-	-	-
104.5	No	-	-	-	-	-	-
105	No	-	-	-	-	-	-

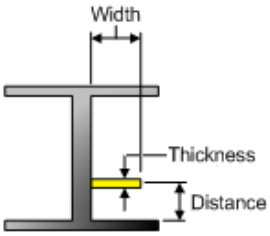
Bearing Stiffeners





Point of Interest	Override	Width	Thickness	Clip	Number of Pairs	Pair Spacing	Attachment	Material
100	No	-	-	-	-	-	-	-
101	No	-	-	-	-	-	-	-
102	No	-	-	-	-	-	-	-
103	No	-	-	-	-	-	-	-
104	No	-	-	-	-	-	-	-
104.5	No	-	-	-	-	-	-	-
105	No	-	-	-	-	-	-	-

Longitudinal Stiffeners

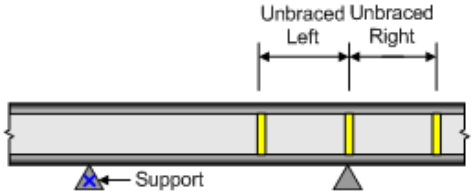


Point of Interest	Main Stiffener					
	Override	Width	Thickness	Distance	Web Reference	Material
100	No	-	-	-	-	-
101	No	-	-	-	-	-
102	No	-	-	-	-	-
103	No	-	-	-	-	-
104	No	-	-	-	-	-
104.5	No	-	-	-	-	-
105	No	-	-	-	-	-

Point of Interest	Second Stiffener					
	Override	Width	Thickness	Distance	Web Reference	Material
100	No	-	-	-	-	-
101	No	-	-	-	-	-
102	No	-	-	-	-	-
103	No	-	-	-	-	-
104	No	-	-	-	-	-
104.5	No	-	-	-	-	-

105	No	-	-	-	-	-

Bracing



Point of Interest	Override	Lateral Support	Point Braced	Unbraced Length	
				Left	Right
100	No	-	-	-	-
101	No	-	-	-	-
102	No	-	-	-	-
103	No	-	-	-	-
104	No	-	-	-	-
104.5	No	-	-	-	-
105	No	-	-	-	-

Cb Factors

LRFD

Point of Interest	Override	Cb Method	Cb Factor	
			Top Flange	Bottom Flange
100	No	-	-	-
101	No	-	-	-
102	No	-	-	-
103	No	-	-	-
104	No	-	-	-
104.5	No	-	-	-
105	No	-	-	-

Fatigue

No fatigue detail categories have been defined.

Point of Interest	N Cycles	Zr (LRFD)
100	-	-
101	-	-
102	-	-
103	-	-
104	-	-
104.5	-	-
105	-	-

Point of Interest	r/h (Top Reinf.)	r/h (Bottom Reinf.)
100	-	-
101	-	-
102	-	-
103	-	-
104	-	-
104.5	-	-
105	-	-

Output

Point of Interest	Flexure	Shear	Bearing	Flexural Stress in Longitudinal Stiffener	Crack Control	Flexural Stress in Flanges
100	Yes	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes	Yes

Point of Interest	Live Load Deflection	Fatigue of Reinforcement	Fatigue of Shear Connectors	Fatigue Shear Range of Shear Connectors	Fatigue of Special Points	Fatigue Shear
100	Yes	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes	Yes

Point of Interest	Details	Compactness and Bracing	Transverse Stiffeners	Bearing Stiffeners	Longitudinal Stiffeners
100	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes
104.5	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes

Dead Loads

Uniform

Dead Load Type	Stage	Uniform Load
DC	1	0.015 kip / ft

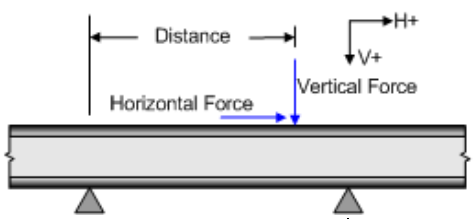
Additional Self-weight

No additional self-weight dead loads have been defined.

Distributed

No distributed dead loads have been defined.

Concentrated



Dead Load Group	Support	Concentrated Load		
		Distance	Horizontal Force	Vertical Force
Not Assigned	1	11.25 ft	-	8.96 kip
Not Assigned	1	23.75 ft	-	9.4 kip
Not Assigned	1	36.25 ft	-	8.96 kip

Temperature

No temperature dead loads have been defined.

Settlement

Stage: 1

No settlement loads have been defined.

Pedestrian Load

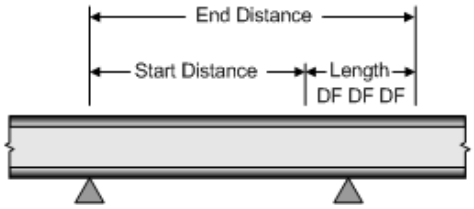
Pedestrian Load: -

Distribution Factors (LRFD)

Moment

Moment

Apply to entire structure: Yes



mg Single-Lane	mg Multi-Lane	Support	Start	Length
0.57	0.57	1	0 ft	23.75 ft

Shear

Apply to entire structure: Yes

mg Single-Lane	mg Multi-Lane	Support	Start	Length
0.57	0.57	1	0 ft	23.75 ft

Deflection

Apply to entire structure: Yes

mg Single-Lane	mg Multi-Lane	Support	Start	Length
0.57	0.57	1	0 ft	23.75 ft

Reaction

Apply to entire structure: Yes

Support	mg Single-Lane			mg Multi-Lane		
	Moment	Shear	Deflection	Moment	Shear	Deflection
1	0.57	0.57	0.57	0.57	0.57	0.57
2	0.57	0.57	0.57	0.57	0.57	0.57

BRASS Results – Steel Girder

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**                                                                                          **
**                            WYOMING DEPARTMENT OF TRANSPORTATION                          **
**                       BRIDGE RATING AND ANALYSIS OF STRUCTURAL SYSTEMS                   **
**                                                                                          **
**                                                                                          **
**             BBBBBBBBBB   RRRRRRRRRRR    AAAAAAAAAA    SSSSSSSSSS    SSSSSSSSSS           **
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**             BB        BB  RR        RR  AA        AA  SS            SS                   **
**             BB       BB   RR        RR  AA        AA  SSS           SSS                  **
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**             BB        BB  RR     RR     AA        AA            SS            SS          **
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**                                                                                          **
**                                                                                          **
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**                                                                                          **
**                                                                                          **
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**                           Version  8   Release  0   Service Pack  0                      **
**                                    ** Release Version **                                 **
**                                 Release Date: Oct. 05, 2017                              **
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**     AASHTO LRFD Specifications:                                                          **
**                                                                                          **
**        BRASS-GIRDER™ is current with the AASHTO LRFD Bridge Design Specifications, 8th   **
**        Edition, 2017.  Load and Resistance Factor Ratings are current with the AASHTO    **
**        Manual for Bridge Evaluation, 3rd Edition, 2017.                                  **
**                                                                                          **
**     AASHTO Standard Specifications (LFD):                                                **
**                                                                                          **
**        BRASS-GIRDER is current with the AASHTO Standard Specifications for Highway       **
**        Bridges, 17th Edition, 2002.  Load Factor Ratings are current with the AASHTO     **
**        Manual for Bridge Evaluation, 3rd Edition, 2017.                                  **
**                                                                                          **
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** STRUCTURE/ANALYSIS SUMMARY **

Structure Type : Beam
Material Type : Steel
Number of Stages: 1
Element Type : Stepped
Analysis Type : Rating

Span No.	Length (ft)	Angle (deg)
1	47.5000	N/A

Supports:

Support No.	Fixity: Horizontal	Fixity: Vertical	Fixity: Rotational	Spring Constants: Horizontal (k/ft)	Spring Constants: Vertical (k/ft)	Spring Constants: Rotational (ft-k/rad)
1	Restrained	Restrained	Free	Infinity	Infinity	N/A
2	Free	Restrained	Free	N/A	Infinity	N/A

Beam Material Properties:
Unit Weight : 0.490 k/ft^3
Modulus of Elasticity (E) : 29000.000 ksi
Thermal Expansion Coefficient : 0.0000065 / deg. F

** OUTPUT CONTROL SUMMARY **

Action Output Locations	Actions at tenth points and special analysis points
Dead Load Actions	YES
Live Load Actions	YES
Concurrent Actions	NO
Girder Properties	YES
Truck Position	NO
Variable Axle Spacing	NO
Live Load Settings	YES
Live Load Combinations	YES
Live Load Details	YES
Load Combinations	YES
Load and Resistance Factors	YES
Warnings	YES
Member Self-Load	YES
Distributed Dead Loads	YES
Concentrated Dead Loads	YES
Temperature Change	NO
Settlements	NO
Camber Summary	NO
Influence Summary	NO
Critical Design Ratios or Rating Factors	YES (Condensed)
Dyn. Load Allowance Summary	NO
Intermediate Output Level	Expanded
Stage 1	YES

Limit State	Intermediate Output	Load Combinations
STRENGTH I	YES	YES
STRENGTH I-O	YES	YES
STRENGTH II	NO	NO
STRENGTH IV	NO	NO
SERVICE I	NO	NO
SERVICE II	YES	YES
SERVICE II-O	YES	YES
SERVICE III	NO	NO
FATIGUE I	NO	NO
FATIGUE II	NO	NO

Dead Load Distribution (Intermediate)	NO
Dead Load Distribution (Standard)	YES
Live Load Distribution (Intermediate)	NO
Live Load Distribution (Standard)	YES
Transverse Stiffeners (Intermediate)	NO
Bearing Stiffeners (Intermediate)	NO
Longitudinal Stiffeners (Intermediate)	NO
Shear Connectors (Intermediate)	NO
Shear Connectors (Standard)	NO
Floorbeam (Intermediate)	NO
Effective Width (Intermediate)	NO
Action X-Y Plot Tables	NO
Specification Check Results Tables	NO
Mesh Plot Files	NO

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 1 Span Length = 47.500 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Input Dimensions and Cross-Section Geometry: (in)

Point No.	Dist (ft)	Web Depth	Web Width top	Web Width bot	Flange Thickness top	Flange Thickness bot	Flange Width top	Flange Width bot
1-0.000	0.000	58.50	0.375	0.375	0.625	0.625	12.38	12.38
1-0.100	4.750	58.50	0.375	0.375	0.625	0.625	12.38	12.38
1-0.200	9.500	58.50	0.375	0.375	0.625	0.625	12.38	12.38
1-0.237	11.250	58.50	0.375	0.375	0.625	0.625	12.38	12.38
1-0.300	14.250	58.50	0.375	0.375	0.625	0.625	12.38	12.38
1-0.400	19.000	58.50	0.375	0.375	0.625	0.625	12.38	12.38
1-0.450	21.375	58.50	0.375	0.375	0.625	0.625	12.38	12.38
1-0.500	23.750	58.50	0.375	0.375	0.625	0.625	12.38	12.38
1-0.600	28.500	58.50	0.375	0.375	0.625	0.625	12.38	12.38
1-0.700	33.250	58.50	0.375	0.375	0.625	0.625	12.38	12.38
1-0.763	36.250	58.50	0.375	0.375	0.625	0.625	12.38	12.38
1-0.800	38.000	58.50	0.375	0.375	0.625	0.625	12.38	12.38
1-0.900	42.750	58.50	0.375	0.375	0.625	0.625	12.38	12.38
1-1.000	47.500	58.50	0.375	0.375	0.625	0.625	12.38	12.38

Calculated Properties:

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)	Standard Section Name
1-0.000	0.000	50.84	29305.2	29.88	-
1-0.100	4.750	50.84	29305.2	29.88	-
1-0.200	9.500	50.84	29305.2	29.88	-
1-0.237	11.250	50.84	29305.2	29.88	-
1-0.300	14.250	50.84	29305.2	29.88	-
1-0.400	19.000	50.84	29305.2	29.88	-
1-0.450	21.375	50.84	29305.2	29.88	-
1-0.500	23.750	50.84	29305.2	29.88	-
1-0.600	28.500	50.84	29305.2	29.88	-
1-0.700	33.250	50.84	29305.2	29.88	-
1-0.763	36.250	50.84	29305.2	29.88	-
1-0.800	38.000	50.84	29305.2	29.88	-
1-0.900	42.750	50.84	29305.2	29.88	-
1-1.000	47.500	50.84	29305.2	29.88	-

Note: The calculated properties reported above are based on the entire cross section geometry, which may include the slab if it was input. These properties are used only for the structural analysis to obtain moments, shears, etc. When specification and stress checks are performed, BRASS calculates the section properties for both positive and negative bending, and uses them in accordance with the sign of the factored moments. The section properties used for the section analysis are tabulated in a later report.

Note: The distance to the centroid (X-bar) references the bottom of the bottom flange.

Self-Load Summary:

Span No.	Beginning of Load Distance, ft	Beginning of Load Magnitude, k/ft	End of Load Distance, ft	End of Load Magnitude, k/ft
1	0.000	0.1730	47.500	0.1730

Load Groups:
SW. Self-weight

Distributed Dead Load Summary:

Load Group	Span No.	Beginning of Load Distance, ft	Beginning of Load Magnitude, k/ft	End of Load Distance, ft	End of Load Magnitude, k/ft
DC 1	All		0.0150		0.0150

Note: A span number denoted as "*" indicates the distances reference the left end of the bridge and the load may extend over one or more spans.
Note: A span number denoted as "All" indicates all TOP spans.

Deck Loads and Schedules Summary:
No loads are present.

Concentrated Dead Load Summary:

Load Group	Span No.	Distance ft	Load Magnitude, kips Horizontal	Load Magnitude, kips Vertical
SW	*	11.250	0.000	8.960
SW	*	23.750	0.000	9.400
SW	*	36.250	0.000	8.960

Note: A span number denoted as "*" indicates the distance references the left end of the bridge.

** LIVE LOAD DISTRIBUTION FACTORS SUMMARY **

Beam Distribution Factor Schedule: Shear

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	23.750	0.570 (USER)	0.570 (M,USER)
1	23.750	47.500	0.570 (USER)	0.570 (M,USER)

Beam Distribution Factor Schedule: Moment

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	23.750	0.570 (USER)	0.570 (M,USER)
1	23.750	47.500	0.570 (USER)	0.570 (M,USER)

Beam Distribution Factor Schedule: Deflection

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	23.750	0.570 (USER)	0.570 (M,USER)
1	23.750	47.500	0.570 (USER)	0.570 (M,USER)

Reaction Distribution Factors: Shear

Support No.	mg(1-lane)	mg(M-lanes)
1	0.570 (USER)	0.570 (M,USER)
2	0.570 (USER)	0.570 (M,USER)

Reaction Distribution Factors: Moment

Support No.	mg(1-lane)	mg(M-lanes)
1	0.570 (USER)	0.570 (M,USER)
2	0.570 (USER)	0.570 (M,USER)

Reaction Distribution Factors: Deflection

Support No.	mg(1-lane)	mg(M-lanes)
1	0.570 (USER)	0.570 (M,USER)
2	0.570 (USER)	0.570 (M,USER)

Notes:
=> The controlling method is included in parenthesis next to each distribution factor.
USER = User Input LR-T = Lever Rule Specified in AASHTO LRFD Table
LRFD = AASHTO LRFD Formulas LR-O = Lever Rule Override
LR = Lever Rule Method RG-O = Rigid Method Override
=> Additionally, for multiple-lanes loaded, the number of lanes loaded is shown. An 'M' is used with the USER and LRFD methods because the number of multiple lanes is unknown.
=> The Lever Rule Override is invoked when the ranges of applicability are not satisfied for the AASHTO LRFD distribution factor formulas.

LIVE LOAD SETTINGS SUMMARY:

Direction Control : Up & Down Reference Marker
Pedestrian Load : 0.000 k/ft
Wheel Advancement Denominator: 100
ADTT : 999
ADTT (Single Lane) : 999
Multiple Presence Adjustment : 95.000 %

Design/Rating Procedure	Dynamic Load Allowance (%) Truck	Lane	Fatigue
Design Load	33.00	0.00	15.00
Legal Load	33.00	0.00	0.00
Permit Load	33.00	0.00	0.00

No.	Name	Description	Scale Factor	Percent Impact	Fixed Impact	Live Load Type	Rating Procedure	Lanes Loaded
1	HL-93-TRUCK	AASHTO LRFD HL-93 Design Truck (US)	1.000	100.000	0.33	TRK	Design Load	Critical
2	HL-93-TANDEM	AASHTO LRFD HL-93 Design Tandem (US)	1.000	100.000	0.33	TRK	Design Load	Critical
3	HL-93-LANE	AASHTO LRFD HL-93 Design Lane (US)	1.000	100.000	0.00	LAN	Design Load	Critical
4	TYPE3	AASHTO Type 3 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
5	TYPE3S2	AASHTO Type 3S2 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
6	TYPE3-3	AASHTO Type 3-3 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
7	SU4	AASHTO Specialized Hauling Vehicle SU4	1.000	100.000	0.33	TRK	Legal Load	Critical
8	SU5	AASHTO Specialized Hauling Vehicle SU5	1.000	100.000	0.33	TRK	Legal Load	Critical
9	SU6	AASHTO Specialized Hauling Vehicle SU6	1.000	100.000	0.33	TRK	Legal Load	Critical
10	SU7	AASHTO Specialized Hauling Vehicle SU7	1.000	100.000	0.33	TRK	Legal Load	Critical
11	NRL	AASHTO Notional Rating Load	1.000	100.000	0.33	TRK	Legal Load	Critical

LIVE LOAD COMBINATIONS SUMMARY:

Comb. No.	Name	Description	Truck No.	Lane No.	Combination Factors Truck	Lane
1	HL-93-TRUCK	HL-93-TRUCK + HL-93-LANE	1	3	1.000	1.000
2	HL-93-TANDEM	HL-93-TANDEM + HL-93-LANE	2	3	1.000	1.000
3	TYPE3	TYPE3	4	N/A	1.000	N/A
4	TYPE3S2	TYPE3S2	5	N/A	1.000	N/A
5	TYPE3-3	TYPE3-3	6	N/A	1.000	N/A
6	SU4	SU4	7	N/A	1.000	N/A
7	SU5	SU5	8	N/A	1.000	N/A
8	SU6	SU6	9	N/A	1.000	N/A
9	SU7	SU7	10	N/A	1.000	N/A
10	NRL	NRL	11	N/A	1.000	N/A

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Moment (kips)	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 1: HL-93-TRUCK : AASHTO LRFD HL-93 Design Truck (US)												
0.000	0.000	0.000	72.000	1	8.000	0.000	2	32.000	14.000	3	32.000	14.000
Live Load 2: HL-93-TANDEM: AASHTO LRFD HL-93 Design Tandem (US)												
0.000	0.000	0.000	50.000	1	25.000	0.000	2	25.000	4.000			
Live Load 3: HL-93-LANE : AASHTO LRFD HL-93 Design Lane (US)												
0.640	0.000	0.000	36.000									
Live Load 4: TYPE3 : AASHTO Type 3 Rating Truck (US)												
0.000	0.000	0.000	50.000	1	16.000	0.000	2	17.000	15.000	3	17.000	4.000
Live Load 5: TYPE3S2 : AASHTO Type 3S2 Rating Truck (US)												
0.000	0.000	0.000	72.000	1	10.000	0.000	2	15.500	11.000	3	15.500	4.000
				4	15.500	22.000	5	15.500	4.000			

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Moment (kips)	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 6: TYPE3-3 : AASHTO Type 3-3 Rating Truck (US)												
0.000	0.000	0.000	80.000	1	12.000	0.000	2	12.000	15.000	3	12.000	4.000
				4	16.000	15.000	5	14.000	16.000	6	14.000	4.000
Live Load 7: SU4 : AASHTO Specialized Hauling Vehicle SU4												
0.000	0.000	0.000	54.000	1	12.000	0.000	2	8.000	10.000	3	17.000	4.000
				4	17.000	4.000						
Live Load 8: SU5 : AASHTO Specialized Hauling Vehicle SU5												
0.000	0.000	0.000	62.000	1	12.000	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000			
Live Load 9: SU6 : AASHTO Specialized Hauling Vehicle SU6												
0.000	0.000	0.000	69.500	1	11.500	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
Live Load 10: SU7 : AASHTO Specialized Hauling Vehicle SU7												
0.000	0.000	0.000	77.500	1	11.500	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
				7	8.000	4.000						

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Concentrated Loads Moment (kips)	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 11: NRL : AASHTO Notional Rating Load												
0.000	0.000	0.000	80.000	1	6.000	0.000	2	8.000	6.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
				7	8.000	4.000	8	8.000	4.000			

LOAD FACTORS SUMMARY:

Limit State	eta D	eta R	eta I	eta T MAX	eta T MIN
STRENGTH I	1.00	1.00	1.00	1.00	1.00
STRENGTH II	1.00	1.00	1.00	1.00	1.00
STRENGTH IV	1.00	1.00	1.00	1.00	1.00
SERVICE I	1.00	1.00	1.00	1.00	1.00
SERVICE II	1.00	1.00	1.00	1.00	1.00
SERVICE III	1.00	1.00	1.00	1.00	1.00
FATIGUE I	1.00	1.00	1.00	1.00	1.00
FATIGUE II	1.00	1.00	1.00	1.00	1.00

Limit State	DC		DW		DU		LL (Design)		LL	LL
	MAX	MIN	MAX	MIN	MAX	MIN	Inventory	Operating	Legal	Permit
STRENGTH I	1.25	1.25	1.50	1.50	1.50	1.50	1.75	1.35	1.30	0.00
STRENGTH II	1.25	1.25	1.50	1.50	1.50	1.50	1.35	0.00	0.00	0.00
STRENGTH IV	1.50	1.50	1.50	1.50	1.50	1.50	0.00	0.00	0.00	0.00
SERVICE I	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00
SERVICE II	1.00	1.00	1.00	1.00	1.00	1.00	1.30	1.00	1.30	1.00
SERVICE III	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.00	1.00	0.00
FATIGUE I	0.00	0.00	0.00	0.00	0.00	0.00	1.75	0.00	0.00	0.00
FATIGUE II	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00

Limit State	TU		SE		PS		DS	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
STRENGTH I	1.20	1.20	1.00	1.00	1.00	1.00	1.25	1.25
STRENGTH II	1.20	1.20	1.00	1.00	1.00	1.00	1.25	1.25
STRENGTH IV	1.20	1.20	0.00	0.00	1.00	1.00	1.50	1.50
SERVICE I	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
SERVICE II	1.20	1.20	0.00	0.00	1.00	1.00	1.00	1.00
SERVICE III	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
FATIGUE I	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
FATIGUE II	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00

Notes:
=> DU = Utilities
=> PS = Prestress
=> DS = Differential Deck Shrinkage

RESISTANCE FACTORS SUMMARY:

Limit State	phi C
STRENGTH	0.95
SERVICE	1.00
FATIGUE	1.00

Resistance Type	phi* (Base)	STRENGTH phi S	STRENGTH phi T	SERVICE phi S	SERVICE phi T	FATIGUE phi S	FATIGUE phi T
Flexure	1.00	0.85	0.85	1.00	1.00	1.00	1.00
Shear	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Bearing	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Shear Connectors	0.85	1.00	0.95	1.00	1.00	1.00	1.00
Compression	0.95	1.00	0.95	1.00	1.00	1.00	1.00
Fatigue	1.00	1.00	0.95	1.00	1.00	1.00	1.00

* Base phi factors are not adjusted by phi C * phi S.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR GIRDER WEIGHT
Length of Span No. 1 = 47.500 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	0.0	0.0	17.8	17.8	0.00	0.00
1-0.100	82.5	0.0	16.9		0.00	0.04
1-0.200	161.0	0.0	16.1		0.00	0.07
1-0.300	208.8	0.0	6.3		0.00	0.10
1-0.400	236.9	0.0	5.5		0.00	0.11
1-0.450	249.6	0.0	5.1		0.00	0.12
1-0.500	261.2	0.0	-4.7		0.00	0.12
1-0.600	236.9	0.0	-5.5		0.00	0.11
1-0.700	208.8	0.0	-6.3		0.00	0.10
1-0.800	161.0	0.0	-16.1		0.00	0.07
1-0.900	82.5	0.0	-16.9		0.00	0.04
1-1.000	-0.0	0.0	-17.8	17.8	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000665 rad Right End = -0.000665 rad

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD OF 0.015000 k/ft **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR SUPERIMPOSED UNIFORM DEAD LOAD (DC) ON TOP SPANS
Length of Span No. 1 = 47.500 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	0.0	0.0	0.4	0.4	0.00	0.00
1-0.100	1.5	0.0	0.3		0.00	0.00
1-0.200	2.7	0.0	0.2		0.00	0.00
1-0.300	3.6	0.0	0.1		0.00	0.00
1-0.400	4.1	0.0	0.1		0.00	0.00
1-0.450	4.2	0.0	0.0		0.00	0.00
1-0.500	4.2	0.0	0.0		0.00	0.00
1-0.600	4.1	0.0	-0.1		0.00	0.00
1-0.700	3.6	0.0	-0.1		0.00	0.00
1-0.800	2.7	0.0	-0.2		0.00	0.00
1-0.900	1.5	0.0	-0.3		0.00	0.00
1-1.000	0.0	0.0	-0.4	0.4	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000011 rad Right End = -0.000011 rad

Girder

** COMBINED UNFACTORED DEAD LOAD ACTIONS **
** CONSTRUCTION STAGE 1 **

Length of Span No. 1 = 47.500 ft

POINT NO.	Dead Loads of Structural Components (DC) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)	Dead Loads of Wearing Surfaces (DW) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
1-0.000	0.0	0.0	18.1	18.1	0.00	0.0	0.0	0.0	0.0	0.00
1-0.100	84.0	0.0	17.2		0.04	0.0	0.0	0.0		0.00
1-0.200	163.7	0.0	16.3		0.07	0.0	0.0	0.0		0.00
1-0.300	212.3	0.0	6.5		0.10	0.0	0.0	0.0		0.00
1-0.400	241.0	0.0	5.6		0.12	0.0	0.0	0.0		0.00
1-0.450	253.8	0.0	5.1		0.12	0.0	0.0	0.0		0.00
1-0.500	265.4	0.0	-4.7		0.12	0.0	0.0	0.0		0.00
1-0.600	241.0	0.0	-5.6		0.12	0.0	0.0	0.0		0.00
1-0.700	212.3	0.0	-6.5		0.10	0.0	0.0	0.0		0.00
1-0.800	163.7	0.0	-16.3		0.07	0.0	0.0	0.0		0.00
1-0.900	84.0	0.0	-17.2		0.04	0.0	0.0	0.0		0.00
1-1.000	-0.0	0.0	-18.1	18.1	0.00	0.0	0.0	0.0	0.0	0.00

Rotations (DC): Left End = 0.000676 rad
(+) Clockwise Right End = -0.000676 rad

Rotations (DW): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

POINT NO.	Dead Loads of Utilities (DU) MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
1-0.000	0.0	0.0	0.0	0.0	0.00
1-0.100	0.0	0.0	0.0		0.00
1-0.200	0.0	0.0	0.0		0.00
1-0.300	0.0	0.0	0.0		0.00
1-0.400	0.0	0.0	0.0		0.00
1-0.450	0.0	0.0	0.0		0.00
1-0.500	0.0	0.0	0.0		0.00
1-0.600	0.0	0.0	0.0		0.00
1-0.700	0.0	0.0	0.0		0.00
1-0.800	0.0	0.0	0.0		0.00
1-0.900	0.0	0.0	0.0		0.00
1-1.000	0.0	0.0	0.0	0.0	0.00

Rotations (DU): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 1: AASHTO LRFD HL-93 Design Truck (US) (TRK)
Length of Span No. 1 = 47.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	43.5	0.0	43.5	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	180.5	0.0	0.0	0.0	38.5	-2.2			0.00	0.00	0.06	0.00		
1-0.200	310.4	0.0	0.0	0.0	32.9	-4.7			0.00	0.00	0.12	0.00		
1-0.300	389.2	0.0	0.0	0.0	27.4	-7.2			0.00	0.00	0.16	0.00		
1-0.400	432.9	0.0	0.0	0.0	21.9	-12.1			0.00	0.00	0.19	0.00		
1-0.450	440.2	0.0	0.0	0.0	19.4	-14.5			0.00	0.00	0.20	0.00		
1-0.500	434.4	0.0	0.0	0.0	17.0	-17.0			0.00	0.00	0.20	0.00		
1-0.600	432.9	0.0	0.0	0.0	12.1	-21.9			0.00	0.00	0.19	0.00		
1-0.700	389.2	0.0	0.0	0.0	7.2	-27.4			0.00	0.00	0.16	0.00		
1-0.800	310.4	0.0	0.0	0.0	4.7	-32.9			0.00	0.00	0.12	0.00		
1-0.900	180.5	0.0	0.0	0.0	2.2	-38.5			0.00	0.00	0.06	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-43.5	43.5	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001125 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 22.761 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001126 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 21.932 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 2: AASHTO LRFD HL-93 Design Tandem (US) (TRK)
Length of Span No. 1 = 47.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	36.3	0.0	36.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	154.3	0.0	0.0	0.0	32.5	-1.9			0.00	0.00	0.05	0.00		
1-0.200	272.2	0.0	0.0	0.0	28.7	-5.7			0.00	0.00	0.10	0.00		
1-0.300	353.4	0.0	0.0	0.0	24.9	-9.6			0.00	0.00	0.14	0.00		
1-0.400	400.7	0.0	0.0	0.0	21.1	-13.4			0.00	0.00	0.16	0.00		
1-0.450	410.7	0.0	0.0	0.0	19.1	-15.3			0.00	0.00	0.17	0.00		
1-0.500	412.2	0.0	0.0	0.0	17.2	-17.2			0.00	0.00	0.17	0.00		
1-0.600	400.7	0.0	0.0	0.0	13.4	-21.1			0.00	0.00	0.16	0.00		
1-0.700	353.7	0.0	0.0	0.0	9.6	-24.9			0.00	0.00	0.14	0.00		
1-0.800	272.2	0.0	0.0	0.0	5.7	-28.7			0.00	0.00	0.10	0.00		
1-0.900	154.3	0.0	0.0	0.0	1.9	-32.5			0.00	0.00	0.05	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-36.3	36.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000922 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 16.745 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000922 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 16.073 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 3: AASHTO LRFD HL-93 Design Lane (US) (LAN)
Length of Span No. 1 = 47.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	8.7	0.0	8.7	0.0	0.00	0.00	0.00	0.00	0.00	0.00
1-0.100	37.0	0.0	0.0	0.0	7.1	-0.1			0.00	0.00	0.02	0.00		
1-0.200	65.8	0.0	0.0	0.0	5.6	-0.3			0.00	0.00	0.03	0.00		
1-0.300	86.4	0.0	0.0	0.0	4.3	-0.8			0.00	0.00	0.04	0.00		
1-0.400	98.8	0.0	0.0	0.0	3.1	-1.4			0.00	0.00	0.05	0.00		
1-0.450	101.8	0.0	0.0	0.0	2.6	-1.8			0.00	0.00	0.05	0.00		
1-0.500	102.9	0.0	0.0	0.0	2.2	-2.2			0.00	0.00	0.05	0.00		
1-0.600	98.8	0.0	0.0	0.0	1.4	-3.1			0.00	0.00	0.05	0.00		
1-0.700	86.4	0.0	0.0	0.0	0.8	-4.3			0.00	0.00	0.04	0.00		
1-0.800	65.8	0.0	0.0	0.0	0.3	-5.6			0.00	0.00	0.03	0.00		
1-0.900	37.0	0.0	0.0	0.0	0.1	-7.1			0.00	0.00	0.02	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-8.7	8.7	0.0	0.00	0.00	0.00	0.00	0.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000276 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 8.664 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000276 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 8.664 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 4: AASHTO Type 3 Rating Truck (US) (TRK)
Length of Span No. 1 = 47.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	31.8	0.0	31.8	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	132.9	0.0	0.0	0.0	28.0	-1.2			0.00	0.00	0.05	0.00		
1-0.200	230.2	0.0	0.0	0.0	24.2	-3.8			0.00	0.00	0.09	0.00		
1-0.300	292.6	0.0	0.0	0.0	20.3	-6.4			0.00	0.00	0.12	0.00		
1-0.400	327.3	0.0	0.0	0.0	16.5	-9.0			0.00	0.00	0.14	0.00		
1-0.450	334.1	0.0	0.0	0.0	14.6	-10.8			0.00	0.00	0.15	0.00		
1-0.500	331.9	0.0	0.0	0.0	12.7	-12.7			0.00	0.00	0.15	0.00		
1-0.600	327.2	0.0	0.0	0.0	9.0	-16.5			0.00	0.00	0.14	0.00		
1-0.700	292.5	0.0	0.0	0.0	6.4	-20.3			0.00	0.00	0.12	0.00		
1-0.800	230.2	0.0	0.0	0.0	3.8	-24.2			0.00	0.00	0.09	0.00		
1-0.900	132.9	0.0	0.0	0.0	1.2	-28.0			0.00	0.00	0.05	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-31.8	31.8	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000817 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 16.148 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000818 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 15.860 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 5: AASHTO Type 3S2 Rating Truck (US) (TRK)
Length of Span No. 1 = 47.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	32.9	0.0	32.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	130.4	0.0	0.0	0.0	27.9	-1.2			0.00	0.00	0.04	0.00		
1-0.200	215.3	0.0	0.0	0.0	22.8	-3.6			0.00	0.00	0.08	0.00		
1-0.300	273.5	0.0	0.0	0.0	18.3	-5.9			0.00	0.00	0.11	0.00		
1-0.400	299.4	0.0	0.0	0.0	15.2	-8.3			0.00	0.00	0.13	0.00		
1-0.450	301.5	0.0	0.0	0.0	13.6	-9.5			0.00	0.00	0.13	0.00		
1-0.500	302.9	0.0	0.0	0.0	11.6	-11.6			0.00	0.00	0.13	0.00		
1-0.600	299.4	0.0	0.0	0.0	8.3	-15.2			0.00	0.00	0.13	0.00		
1-0.700	273.3	0.0	0.0	0.0	5.9	-18.3			0.00	0.00	0.11	0.00		
1-0.800	215.3	0.0	0.0	0.0	3.6	-22.8			0.00	0.00	0.08	0.00		
1-0.900	130.4	0.0	0.0	0.0	1.2	-27.9			0.00	0.00	0.04	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-32.9	32.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000778 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 18.273 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000779 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 17.781 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 6: AASHTO Type 3-3 Rating Truck (US) (TRK)
Length of Span No. 1 = 47.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	31.1	0.0	31.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	123.2	0.0	0.0	0.0	25.9	-0.9			0.00	0.00	0.04	0.00		
1-0.200	201.1	0.0	0.0	0.0	21.0	-3.1			0.00	0.00	0.08	0.00		
1-0.300	250.1	0.0	0.0	0.0	17.1	-5.2			0.00	0.00	0.10	0.00		
1-0.400	276.3	0.0	0.0	0.0	13.7	-7.4			0.00	0.00	0.12	0.00		
1-0.450	280.4	0.0	0.0	0.0	12.0	-8.7			0.00	0.00	0.12	0.00		
1-0.500	276.3	0.0	0.0	0.0	10.4	-10.4			0.00	0.00	0.12	0.00		
1-0.600	276.3	0.0	0.0	0.0	7.4	-13.7			0.00	0.00	0.12	0.00		
1-0.700	250.1	0.0	0.0	0.0	5.2	-17.1			0.00	0.00	0.10	0.00		
1-0.800	201.1	0.0	0.0	0.0	3.1	-21.0			0.00	0.00	0.08	0.00		
1-0.900	123.2	0.0	0.0	0.0	0.9	-25.9			0.00	0.00	0.04	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-31.1	31.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000727 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 18.717 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000727 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 18.325 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 7: AASHTO Specialized Hauling Vehicle SU4 (TRK)
Length of Span No. 1 = 47.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	35.2	0.0	35.2	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	147.5	0.0	0.0	0.0	31.0	-1.1			0.00	0.00	0.05	0.00		
1-0.200	257.0	0.0	0.0	0.0	26.9	-3.8			0.00	0.00	0.10	0.00		
1-0.300	328.9	0.0	0.0	0.0	22.8	-7.1			0.00	0.00	0.14	0.00		
1-0.400	374.1	0.0	0.0	0.0	18.6	-10.4			0.00	0.00	0.16	0.00		
1-0.450	383.4	0.0	0.0	0.0	16.6	-12.4			0.00	0.00	0.16	0.00		
1-0.500	382.8	0.0	0.0	0.0	14.5	-14.5			0.00	0.00	0.17	0.00		
1-0.600	374.1	0.0	0.0	0.0	10.4	-18.6			0.00	0.00	0.16	0.00		
1-0.700	328.9	0.0	0.0	0.0	7.1	-22.8			0.00	0.00	0.14	0.00		
1-0.800	257.0	0.0	0.0	0.0	3.8	-26.9			0.00	0.00	0.10	0.00		
1-0.900	147.5	0.0	0.0	0.0	1.1	-31.0			0.00	0.00	0.05	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-35.2	35.2	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000921 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 17.437 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.000921 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 16.815 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 8: AASHTO Specialized Hauling Vehicle SU5 (TRK)
Length of Span No. 1 = 47.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	39.1	0.0	39.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	163.1	0.0	0.0	0.0	34.3	-1.2			0.00	0.00	0.06	0.00		
1-0.200	281.3	0.0	0.0	0.0	29.6	-4.0			0.00	0.00	0.11	0.00		
1-0.300	361.3	0.0	0.0	0.0	24.8	-7.4			0.00	0.00	0.15	0.00		
1-0.400	408.7	0.0	0.0	0.0	20.1	-11.2			0.00	0.00	0.18	0.00		
1-0.450	416.3	0.0	0.0	0.0	17.7	-13.2			0.00	0.00	0.18	0.00		
1-0.500	413.0	0.0	0.0	0.0	15.3	-15.3			0.00	0.00	0.18	0.00		
1-0.600	408.7	0.0	0.0	0.0	11.2	-20.1			0.00	0.00	0.18	0.00		
1-0.700	361.3	0.0	0.0	0.0	7.4	-24.8			0.00	0.00	0.15	0.00		
1-0.800	281.3	0.0	0.0	0.0	4.0	-29.6			0.00	0.00	0.11	0.00		
1-0.900	163.1	0.0	0.0	0.0	1.2	-34.3			0.00	0.00	0.06	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-39.1	39.1	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001024 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 19.745 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001023 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 19.031 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 9: AASHTO Specialized Hauling Vehicle SU6 (TRK)
Length of Span No. 1 = 47.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	40.7	0.0	40.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	169.7	0.0	0.0	0.0	35.9	-0.8			0.00	0.00	0.06	0.00		
1-0.200	307.3	0.0	0.0	0.0	30.5	-2.9			0.00	0.00	0.12	0.00		
1-0.300	398.1	0.0	0.0	0.0	25.2	-6.4			0.00	0.00	0.17	0.00		
1-0.400	447.8	0.0	0.0	0.0	19.9	-10.6			0.00	0.00	0.19	0.00		
1-0.450	459.4	0.0	0.0	0.0	17.2	-12.8			0.00	0.00	0.20	0.00		
1-0.500	459.2	0.0	0.0	0.0	15.0	-15.0			0.00	0.00	0.20	0.00		
1-0.600	447.8	0.0	0.0	0.0	10.6	-19.9			0.00	0.00	0.19	0.00		
1-0.700	398.1	0.0	0.0	0.0	6.4	-25.2			0.00	0.00	0.17	0.00		
1-0.800	307.3	0.0	0.0	0.0	2.9	-30.5			0.00	0.00	0.12	0.00		
1-0.900	169.9	0.0	0.0	0.0	0.8	-35.9			0.00	0.00	0.06	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-40.7	40.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001134 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 22.163 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001134 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 21.363 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 10: AASHTO Specialized Hauling Vehicle SU7 (TRK)
Length of Span No. 1 = 47.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	42.4	0.0	42.4	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	174.8	0.0	0.0	0.0	36.5	-0.8			0.00	0.00	0.07	0.00		
1-0.200	316.5	0.0	0.0	0.0	30.6	-2.0			0.00	0.00	0.13	0.00		
1-0.300	424.5	0.0	0.0	0.0	24.6	-5.0			0.00	0.00	0.18	0.00		
1-0.400	479.2	0.0	0.0	0.0	19.0	-9.1			0.00	0.00	0.21	0.00		
1-0.450	491.6	0.0	0.0	0.0	16.5	-11.5			0.00	0.00	0.22	0.00		
1-0.500	494.9	0.0	0.0	0.0	14.0	-14.0			0.00	0.00	0.22	0.00		
1-0.600	479.6	0.0	0.0	0.0	9.1	-19.0			0.00	0.00	0.21	0.00		
1-0.700	424.5	0.0	0.0	0.0	5.0	-24.6			0.00	0.00	0.18	0.00		
1-0.800	316.4	0.0	0.0	0.0	2.0	-30.6			0.00	0.00	0.13	0.00		
1-0.900	174.8	0.0	0.0	0.0	0.8	-36.5			0.00	0.00	0.07	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-42.4	42.4	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001231 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 24.318 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001231 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 23.872 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

Girder

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 11: AASHTO Notional Rating Load (TRK)
Length of Span No. 1 = 47.500 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT (ft-kips) POS	MOMENT (ft-kips) NEG	AXIAL (kips) POS	AXIAL (kips) NEG	SHEAR (kips) POS	SHEAR (kips) NEG	REACTION (kips) POS	REACTION (kips) NEG	X DEFLECTION (in) POS	X DEFLECTION (in) NEG	Y DEFLECTION (in) POS	Y DEFLECTION (in) NEG	REACTION %IMP. POS	REACTION %IMP. NEG
1-0.000	0.0	-0.0	0.0	0.0	42.7	0.0	42.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00
1-0.100	175.6	0.0	0.0	0.0	37.1	-1.2			0.00	0.00	0.07	0.00		
1-0.200	317.8	0.0	0.0	0.0	31.4	-3.9			0.00	0.00	0.14	0.00		
1-0.300	428.1	0.0	0.0	0.0	25.8	-7.4			0.00	0.00	0.19	0.00		
1-0.400	500.6	0.0	0.0	0.0	20.5	-11.6			0.00	0.00	0.22	0.00		
1-0.450	516.4	0.0	0.0	0.0	18.2	-13.8			0.00	0.00	0.23	0.00		
1-0.500	519.7	0.0	0.0	0.0	16.0	-16.0			0.00	0.00	0.23	0.00		
1-0.600	500.6	0.0	0.0	0.0	11.6	-20.5			0.00	0.00	0.22	0.00		
1-0.700	428.1	0.0	0.0	0.0	7.4	-25.8			0.00	0.00	0.19	0.00		
1-0.800	317.8	0.0	0.0	0.0	3.9	-31.4			0.00	0.00	0.14	0.00		
1-0.900	175.4	0.0	0.0	0.0	1.2	-37.1			0.00	0.00	0.07	0.00		
1-1.000	0.0	-0.0	0.0	0.0	0.0	-42.7	42.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.001293 rad Right End = 0.000000 rad
Concurrent Reactions (without impact): Left End = 25.685 kips Right End = 0.000 kips
Negative Rotations (+) Clockwise: Left End = 0.000000 rad Right End = -0.001293 rad
Concurrent Reactions (without impact): Left End = 0.000 kips Right End = 24.764 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I
Length of Span No. 1 = 47.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	-0.0	0.0	0.0	114.0	22.7	114.0	22.7	0.00	0.00
	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	485.6	105.0	0.0	0.0	101.2	17.5			0.18	0.05
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.200	863.1	204.6	0.0	0.0	87.8	9.8			0.35	0.09
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.300	1097.7	265.4	0.0	0.0	63.6	-10.0			0.48	0.12
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.400	1231.7	301.3	0.0	0.0	50.8	-18.9			0.56	0.14
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.450	1265.8	317.2	0.0	0.0	45.0	-23.4			0.58	0.15
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.500	1272.0	331.8	0.0	0.0	28.1	-39.8			0.59	0.15
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.600	1231.7	301.3	0.0	0.0	18.9	-50.8			0.56	0.14
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.700	1097.7	265.4	0.0	0.0	10.0	-63.6			0.48	0.12
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.800	863.1	204.6	0.0	0.0	-9.8	-87.8			0.35	0.09
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.900	485.6	105.0	0.0	0.0	-17.5	-101.2			0.18	0.05
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-22.7	-114.0	114.0	22.7	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I-O
Length of Span No. 1 = 47.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	-0.0	0.0	0.0	93.1	22.7	93.1	22.7	0.00	0.00
	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	398.6	105.0	0.0	0.0	83.0	18.5			0.15	0.05
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.200	712.6	204.6	0.0	0.0	72.4	12.2			0.29	0.09
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.300	907.4	265.4	0.0	0.0	50.9	-5.9			0.40	0.12
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.400	1019.0	301.3	0.0	0.0	40.8	-13.0			0.47	0.14
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.450	1049.0	317.2	0.0	0.0	36.2	-16.6			0.48	0.15
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.500	1057.1	331.8	0.0	0.0	20.3	-32.1			0.49	0.15
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.600	1019.0	301.3	0.0	0.0	13.0	-40.8			0.47	0.14
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.700	907.4	265.4	0.0	0.0	5.9	-50.9			0.40	0.12
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.800	712.6	204.6	0.0	0.0	-12.2	-72.4			0.29	0.09
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.900	398.6	105.0	0.0	0.0	-18.5	-83.0			0.15	0.05
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-22.7	-93.1	93.1	22.7	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II
Length of Span No. 1 = 47.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	-0.0	0.0	0.0	85.9	18.1	85.9	18.1	0.00	0.00
	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	366.7	84.0	0.0	0.0	76.4	14.3			0.14	0.04
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.200	652.9	163.7	0.0	0.0	66.4	8.4			0.27	0.07
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.300	830.6	212.3	0.0	0.0	47.7	-7.0			0.36	0.10
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.400	932.2	241.0	0.0	0.0	38.1	-13.6			0.43	0.12
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.450	958.4	253.8	0.0	0.0	33.8	-17.0			0.44	0.12
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.500	963.9	265.4	0.0	0.0	20.5	-29.9			0.45	0.12
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.600	932.2	241.0	0.0	0.0	13.6	-38.1			0.43	0.12
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.700	830.6	212.3	0.0	0.0	7.0	-47.7			0.36	0.10
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.800	652.9	163.7	0.0	0.0	-8.4	-66.4			0.27	0.07
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.900	366.7	84.0	0.0	0.0	-14.3	-76.4			0.14	0.04
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-18.1	-85.9	85.9	18.1	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II-O
Length of Span No. 1 = 47.500 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
1-0.000	0.0	-0.0	0.0	0.0	70.3	18.1	70.3	18.1	0.00	0.00
	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)
1-0.100	301.5	84.0	0.0	0.0	62.8	14.9			0.12	0.04
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.200	540.0	163.7	0.0	0.0	54.9	10.3			0.22	0.07
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.300	687.9	212.3	0.0	0.0	38.2	-3.9			0.30	0.10
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.400	772.7	241.0	0.0	0.0	30.6	-9.2			0.35	0.12
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.450	795.8	253.8	0.0	0.0	27.2	-11.9			0.37	0.12
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.500	802.7	265.4	0.0	0.0	14.7	-24.1			0.37	0.12
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)			(1, 1)	(1, 1)
1-0.600	772.7	241.0	0.0	0.0	9.2	-30.6			0.35	0.12
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.700	687.9	212.3	0.0	0.0	3.9	-38.2			0.30	0.10
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.800	540.0	163.7	0.0	0.0	-10.3	-54.9			0.22	0.07
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(1, 1)	(1, 1)
1-0.900	301.5	84.0	0.0	0.0	-14.9	-62.8			0.12	0.04
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)			(1, 1)	(1, 1)
1-1.000	0.0	-0.0	0.0	0.0	-18.1	-70.3	70.3	18.1	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
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=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

LIMIT STATE LEGEND:

BRASS	Specifications
STRENGTH I	Strength I Inventory
STRENGTH I-O	Strength I Operating
STRENGTH II	Strength II
STRENGTH IV	Strength IV
SERVICE I	Service I
SERVICE II	Service II Inventory
SERVICE II-O	Service II Operating
FATIGUE I	Fatigue I
FATIGUE II	Fatigue II

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 1 Span Length = 47.500 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Calculated Properties: Section Analysis (Positive Bending)

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)
1-0.000	0.000	50.84	29305.2	29.88
1-0.100	4.750	50.84	29305.2	29.88
1-0.200	9.500	50.84	29305.2	29.88
1-0.237	11.250	*	*	*
1-0.300	14.250	50.84	29305.2	29.88
1-0.400	19.000	50.84	29305.2	29.88
1-0.450	21.375	50.84	29305.2	29.88
1-0.500	23.750	50.84	29305.2	29.88
1-0.600	28.500	*	*	*
1-0.700	33.250	*	*	*
1-0.763	36.250	*	*	*
1-0.800	38.000	*	*	*
1-0.900	42.750	*	*	*
1-1.000	47.500	*	*	*

* Note: Section properties for section analysis are only calculated at
points of interest either specified by the user or generated by BRASS.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 100.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	59.7500			
Top Flange Thickness	=	0.6250	Top Flange Width	=	12.3750
Web Depth	=	58.5000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.6250	Bottom Flange Width	=	12.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners:
Fy = 30.000 ksi
Width = 5.000 in
Thickness = 0.375 in
Spacing = 45.000 in
B = 1.000 (Type Factor)
Singles or Pairs? PAIRS

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 0.000 ft
Maximum distance to Right Brace Point = 11.250 ft
Is analysis point braced? YES

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION STIFFENER CHECKS:

Point of Interest : 100.000
Construction Stage: 1

No longitudinal stiffeners are present.

Transverse Stiffeners:

6.10.9.3.3	Spacing	PASS
6.10.11.1.2-1	Projecting Width	PASS
6.10.11.1.2-2	Projecting Width	PASS
6.10.11.1.3-*	Moment of Inertia	PASS
6.10.11.1.3-11	Moment of Inertia	N/A

No bearing stiffeners are present.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	296.9	296.9	296.9	296.9	296.9	296.9	296.9	296.9
Dead Load Effect	22.7	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Live Load Effect	91.3	0.0	70.4	0.0	70.4	0.0	0.0	0.0
Total Load Effect	114.0	22.7	93.1	22.7	93.1	22.7	27.2	27.2
Resistance - Dead	274.2	274.2	274.2	274.2	274.2	274.2	269.7	269.7
Design Ratio	2.61	13.10	3.19	13.10	(3.19)	(13.10)	(10.92)	(10.92)
Rating Factor	3.00	N/A	3.89	N/A	(3.89)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	296.9	296.9	296.9	296.9	296.9	296.9	296.9	296.9
Dead Load Effect	22.7	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Live Load Effect	78.7	0.0	60.7	0.0	60.7	0.0	0.0	0.0
Total Load Effect	101.4	22.7	83.4	22.7	83.4	22.7	27.2	27.2
Resistance - Dead	274.2	274.2	274.2	274.2	274.2	274.2	269.7	269.7
Design Ratio	2.93	13.10	3.56	13.10	(3.56)	(13.10)	(10.92)	(10.92)
Rating Factor	3.48	N/A	4.52	N/A	(4.52)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	296.9	296.9	296.9	296.9	296.9	296.9	296.9	296.9
Dead Load Effect	22.7	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Live Load Effect	41.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	64.0	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Resistance - Dead	274.2	274.2	274.2	274.2	274.2	274.2	269.7	269.7
Design Ratio	4.64	13.10	13.10	13.10	(13.10)	(13.10)	(10.92)	(10.92)
Rating Factor	6.63	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	296.9	296.9	296.9	296.9	296.9	296.9	296.9	296.9
Dead Load Effect	22.7	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Live Load Effect	42.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	65.4	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Resistance - Dead	274.2	274.2	274.2	274.2	274.2	274.2	269.7	269.7
Design Ratio	4.54	13.10	13.10	13.10	(13.10)	(13.10)	(10.92)	(10.92)
Rating Factor	6.41	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	296.9	296.9	296.9	296.9	296.9	296.9	296.9	296.9
Dead Load Effect	22.7	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Live Load Effect	40.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	63.1	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Resistance - Dead	274.2	274.2	274.2	274.2	274.2	274.2	269.7	269.7
Design Ratio	4.70	13.10	13.10	13.10	(13.10)	(13.10)	(10.92)	(10.92)
Rating Factor	6.77	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	296.9	296.9	296.9	296.9	296.9	296.9	296.9	296.9
Dead Load Effect	22.7	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Live Load Effect	45.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	68.4	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Resistance - Dead	274.2	274.2	274.2	274.2	274.2	274.2	269.7	269.7
Design Ratio	4.34	13.10	13.10	13.10	(13.10)	(13.10)	(10.92)	(10.92)
Rating Factor	6.00	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	296.9	296.9	296.9	296.9	296.9	296.9	296.9	296.9
Dead Load Effect	22.7	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Live Load Effect	50.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	73.5	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Resistance - Dead	274.2	274.2	274.2	274.2	274.2	274.2	269.7	269.7
Design Ratio	4.04	13.10	13.10	13.10	(13.10)	(13.10)	(10.92)	(10.92)
Rating Factor	5.40	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	296.9	296.9	296.9	296.9	296.9	296.9	296.9	296.9
Dead Load Effect	22.7	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Live Load Effect	52.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	75.5	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Resistance - Dead	274.2	274.2	274.2	274.2	274.2	274.2	269.7	269.7
Design Ratio	3.93	13.10	13.10	13.10	(13.10)	(13.10)	(10.92)	(10.92)
Rating Factor	5.19	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	296.9	296.9	296.9	296.9	296.9	296.9	296.9	296.9
Dead Load Effect	22.7	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Live Load Effect	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	77.8	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Resistance - Dead	274.2	274.2	274.2	274.2	274.2	274.2	269.7	269.7
Design Ratio	3.81	13.10	13.10	13.10	(13.10)	(13.10)	(10.92)	(10.92)
Rating Factor	4.97	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	296.9	296.9	296.9	296.9	296.9	296.9	296.9	296.9
Dead Load Effect	22.7	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Live Load Effect	55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	78.2	22.7	22.7	22.7	22.7	22.7	27.2	27.2
Resistance - Dead	274.2	274.2	274.2	274.2	274.2	274.2	269.7	269.7
Design Ratio	3.80	13.10	13.10	13.10	(13.10)	(13.10)	(10.92)	(10.92)
Rating Factor	4.94	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Dead Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00
Resistance - Dead	N/A	-30.00	0.00	0.00	N/A	-30.00	0.00	0.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 101.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	59.7500			
Top Flange Thickness	=	0.6250	Top Flange Width	=	12.3750
Web Depth	=	58.5000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.6250	Bottom Flange Width	=	12.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners:
Fy = 30.000 ksi
Width = 5.000 in
Thickness = 0.375 in
Spacing = 45.000 in
B = 1.000 (Type Factor)
Singles or Pairs? PAIRS

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 4.750 ft
Maximum distance to Right Brace Point = 6.500 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION STIFFENER CHECKS:

Point of Interest : 101.000
Construction Stage: 1

No longitudinal stiffeners are present.

Transverse Stiffeners:

6.10.9.3.3	Spacing	N/A
6.10.11.1.2-1	Projecting Width	PASS
6.10.11.1.2-2	Projecting Width	PASS
6.10.11.1.3-*	Moment of Inertia	PASS
6.10.11.1.3-11	Moment of Inertia	N/A

No bearing stiffeners are present.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	105.0	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Live Load Effect	380.6	0.0	293.6	0.0	293.6	0.0	0.0	0.0
Total Load Effect	485.6	0.0	398.6	0.0	398.6	0.0	126.0	0.0
Resistance - Dead	1979.5	0.0	1979.5	0.0	1979.5	0.0	1958.5	0.0
Design Ratio	4.29	N/A	5.23	N/A	(5.23)	(N/A)	(16.55)	(N/A)
Rating Factor	5.20	N/A	6.74	N/A	(6.74)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	21.5	21.5	21.5	21.5	21.5	21.5	25.8	25.8
Live Load Effect	79.7	-4.0	61.5	-3.1	61.5	-3.1	0.0	0.0
Total Load Effect	101.2	17.5	83.0	18.5	83.0	18.5	25.8	25.8
Resistance - Dead	303.5	303.5	303.5	303.5	303.5	303.5	299.2	299.2
Design Ratio	3.21	18.53	3.92	17.61	(3.92)	(17.61)	(12.57)	(12.57)
Rating Factor	3.81	N/A	4.94	N/A	(4.94)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-3.46	3.46	0.00	0.00	-2.66	2.66	0.00	0.00
Total Load Effect	-4.49	4.49	0.00	0.00	-3.69	3.69	0.00	0.00
Resistance - Dead	-22.97	22.97	0.00	0.00	-22.97	22.97	0.00	0.00
Design Ratio	5.35	5.35	N/A	N/A	6.51	6.51	N/A	N/A
Rating Factor	6.64	6.64	N/A	N/A	8.63	8.63	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-3.46	3.46	0.00	0.00	-2.66	2.66	0.00	0.00
Total Load Effect	-4.49	4.49	0.00	0.00	-3.69	3.69	0.00	0.00
Resistance - Dead	-28.97	N/A	0.00	0.00	-28.97	N/A	0.00	0.00
Design Ratio	6.69	N/A	N/A	N/A	8.13	N/A	N/A	N/A
Rating Factor	8.38	N/A	N/A	N/A	10.89	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	105.0	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Live Load Effect	334.8	0.0	258.3	0.0	258.3	0.0	0.0	0.0
Total Load Effect	439.8	0.0	363.2	0.0	363.2	0.0	126.0	0.0
Resistance - Dead	1979.5	0.0	1979.5	0.0	1979.5	0.0	1958.5	0.0
Design Ratio	4.74	N/A	5.74	N/A	(5.74)	(N/A)	(16.55)	(N/A)
Rating Factor	5.91	N/A	7.66	N/A	(7.66)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	21.5	21.5	21.5	21.5	21.5	21.5	25.8	25.8
Live Load Effect	69.3	-3.5	53.5	-2.7	53.5	-2.7	0.0	0.0
Total Load Effect	90.9	18.1	75.0	18.8	75.0	18.8	25.8	25.8
Resistance - Dead	303.5	303.5	303.5	303.5	303.5	303.5	299.2	299.2
Design Ratio	3.58	18.01	4.33	17.24	(4.33)	(17.24)	(12.57)	(12.57)
Rating Factor	4.38	N/A	5.67	N/A	(5.67)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-3.04	3.04	0.00	0.00	-2.34	2.34	0.00	0.00
Total Load Effect	-4.07	4.07	0.00	0.00	-3.37	3.37	0.00	0.00
Resistance - Dead	-22.97	22.97	0.00	0.00	-22.97	22.97	0.00	0.00
Design Ratio	5.90	5.90	N/A	N/A	7.13	7.13	N/A	N/A
Rating Factor	7.55	7.55	N/A	N/A	9.82	9.82	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-3.04	3.04	0.00	0.00	-2.34	2.34	0.00	0.00
Total Load Effect	-4.07	4.07	0.00	0.00	-3.37	3.37	0.00	0.00
Resistance - Dead	-28.97	N/A	0.00	0.00	-28.97	N/A	0.00	0.00
Design Ratio	7.37	N/A	N/A	N/A	8.91	N/A	N/A	N/A
Rating Factor	9.52	N/A	N/A	N/A	12.38	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	105.0	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Live Load Effect	172.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	277.8	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Resistance - Dead	1979.5	0.0	1979.5	0.0	1979.5	0.0	1958.5	0.0
Design Ratio	7.50	N/A	19.86	N/A	(19.86)	(N/A)	(16.55)	(N/A)
Rating Factor	11.45	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	21.5	21.5	21.5	21.5	21.5	21.5	25.8	25.8
Live Load Effect	36.4	-1.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	57.9	20.0	21.5	21.5	21.5	21.5	25.8	25.8
Resistance - Dead	303.5	303.5	303.5	303.5	303.5	303.5	299.2	299.2
Design Ratio	5.61	16.22	15.09	15.09	(15.09)	(15.09)	(12.57)	(12.57)
Rating Factor	8.34	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-2.11	2.11	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.14	3.14	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-22.97	22.97	0.00	0.00	25.03	22.97	0.00	0.00
Design Ratio	7.64	7.64	N/A	N/A	N/A	23.36	N/A	N/A
Rating Factor	10.87	10.87	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-2.11	2.11	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.14	3.14	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-28.97	N/A	0.00	0.00	-28.97	N/A	0.00	0.00
Design Ratio	9.55	N/A	N/A	N/A	29.20	N/A	N/A	N/A
Rating Factor	13.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	105.0	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Live Load Effect	169.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	274.5	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Resistance - Dead	1979.5	0.0	1979.5	0.0	1979.5	0.0	1958.5	0.0
Design Ratio	7.59	N/A	19.86	N/A	(19.86)	(N/A)	(16.55)	(N/A)
Rating Factor	11.68	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	21.5	21.5	21.5	21.5	21.5	21.5	25.8	25.8
Live Load Effect	36.2	-1.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	57.8	20.0	21.5	21.5	21.5	21.5	25.8	25.8
Resistance - Dead	303.5	303.5	303.5	303.5	303.5	303.5	299.2	299.2
Design Ratio	5.63	16.27	15.09	15.09	(15.09)	(15.09)	(12.57)	(12.57)
Rating Factor	8.37	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-2.07	2.07	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.10	3.10	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-22.97	22.97	0.00	0.00	25.03	22.97	0.00	0.00
Design Ratio	7.74	7.74	N/A	N/A	N/A	23.36	N/A	N/A
Rating Factor	11.08	11.08	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-2.07	2.07	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.10	3.10	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-28.97	N/A	0.00	0.00	-28.97	N/A	0.00	0.00
Design Ratio	9.67	N/A	N/A	N/A	29.20	N/A	N/A	N/A
Rating Factor	13.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	105.0	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Live Load Effect	160.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	265.1	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Resistance - Dead	1979.5	0.0	1979.5	0.0	1979.5	0.0	1958.5	0.0
Design Ratio	7.86	N/A	19.86	N/A	(19.86)	(N/A)	(16.55)	(N/A)
Rating Factor	12.36	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	21.5	21.5	21.5	21.5	21.5	21.5	25.8	25.8
Live Load Effect	33.7	-1.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	55.3	20.3	21.5	21.5	21.5	21.5	25.8	25.8
Resistance - Dead	303.5	303.5	303.5	303.5	303.5	303.5	299.2	299.2
Design Ratio	5.88	16.00	15.09	15.09	(15.09)	(15.09)	(12.57)	(12.57)
Rating Factor	9.00	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-1.96	1.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-2.99	2.99	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-22.97	22.97	0.00	0.00	25.03	22.97	0.00	0.00
Design Ratio	8.04	8.04	N/A	N/A	N/A	23.36	N/A	N/A
Rating Factor	11.73	11.73	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-1.96	1.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-2.99	2.99	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-28.97	N/A	0.00	0.00	-28.97	N/A	0.00	0.00
Design Ratio	10.05	N/A	N/A	N/A	29.20	N/A	N/A	N/A
Rating Factor	14.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	105.0	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Live Load Effect	191.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	296.7	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Resistance - Dead	1979.5	0.0	1979.5	0.0	1979.5	0.0	1958.5	0.0
Design Ratio	7.03	N/A	19.86	N/A	(19.86)	(N/A)	(16.55)	(N/A)
Rating Factor	10.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	21.5	21.5	21.5	21.5	21.5	21.5	25.8	25.8
Live Load Effect	40.4	-1.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	61.9	20.1	21.5	21.5	21.5	21.5	25.8	25.8
Resistance - Dead	303.5	303.5	303.5	303.5	303.5	303.5	299.2	299.2
Design Ratio	5.25	16.20	15.09	15.09	(15.09)	(15.09)	(12.57)	(12.57)
Rating Factor	7.52	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-2.35	2.35	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.37	3.37	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-22.97	22.97	0.00	0.00	25.03	22.97	0.00	0.00
Design Ratio	7.12	7.12	N/A	N/A	N/A	23.36	N/A	N/A
Rating Factor	9.79	9.79	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-2.35	2.35	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.37	3.37	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-28.97	N/A	0.00	0.00	-28.97	N/A	0.00	0.00
Design Ratio	8.90	N/A	N/A	N/A	29.20	N/A	N/A	N/A
Rating Factor	12.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	105.0	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Live Load Effect	212.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	317.0	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Resistance - Dead	1979.5	0.0	1979.5	0.0	1979.5	0.0	1958.5	0.0
Design Ratio	6.58	N/A	19.86	N/A	(19.86)	(N/A)	(16.55)	(N/A)
Rating Factor	9.34	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	21.5	21.5	21.5	21.5	21.5	21.5	25.8	25.8
Live Load Effect	44.6	-1.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	66.2	20.0	21.5	21.5	21.5	21.5	25.8	25.8
Resistance - Dead	303.5	303.5	303.5	303.5	303.5	303.5	299.2	299.2
Design Ratio	4.91	16.29	15.09	15.09	(15.09)	(15.09)	(12.57)	(12.57)
Rating Factor	6.80	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-2.59	2.59	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.62	3.62	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-22.97	22.97	0.00	0.00	25.03	22.97	0.00	0.00
Design Ratio	6.63	6.63	N/A	N/A	N/A	23.36	N/A	N/A
Rating Factor	8.86	8.86	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-2.59	2.59	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.62	3.62	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-28.97	N/A	0.00	0.00	-28.97	N/A	0.00	0.00
Design Ratio	8.29	N/A	N/A	N/A	29.20	N/A	N/A	N/A
Rating Factor	11.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	105.0	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Live Load Effect	220.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	325.6	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Resistance - Dead	1979.5	0.0	1979.5	0.0	1979.5	0.0	1958.5	0.0
Design Ratio	6.40	N/A	19.86	N/A	(19.86)	(N/A)	(16.55)	(N/A)
Rating Factor	8.97	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	21.5	21.5	21.5	21.5	21.5	21.5	25.8	25.8
Live Load Effect	46.6	-1.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	68.1	20.5	21.5	21.5	21.5	21.5	25.8	25.8
Resistance - Dead	303.5	303.5	303.5	303.5	303.5	303.5	299.2	299.2
Design Ratio	4.77	15.85	15.09	15.09	(15.09)	(15.09)	(12.57)	(12.57)
Rating Factor	6.51	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-2.70	2.70	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.73	3.73	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-22.97	22.97	0.00	0.00	25.03	22.97	0.00	0.00
Design Ratio	6.44	6.44	N/A	N/A	N/A	23.36	N/A	N/A
Rating Factor	8.51	8.51	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-2.70	2.70	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.73	3.73	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-28.97	N/A	0.00	0.00	-28.97	N/A	0.00	0.00
Design Ratio	8.05	N/A	N/A	N/A	29.20	N/A	N/A	N/A
Rating Factor	10.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	105.0	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Live Load Effect	227.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	332.3	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Resistance - Dead	1979.5	0.0	1979.5	0.0	1979.5	0.0	1958.5	0.0
Design Ratio	6.27	N/A	19.86	N/A	(19.86)	(N/A)	(16.55)	(N/A)
Rating Factor	8.71	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	21.5	21.5	21.5	21.5	21.5	21.5	25.8	25.8
Live Load Effect	47.4	-1.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	69.0	20.5	21.5	21.5	21.5	21.5	25.8	25.8
Resistance - Dead	303.5	303.5	303.5	303.5	303.5	303.5	299.2	299.2
Design Ratio	4.71	15.85	15.09	15.09	(15.09)	(15.09)	(12.57)	(12.57)
Rating Factor	6.40	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.81	3.81	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-22.97	22.97	0.00	0.00	25.03	22.97	0.00	0.00
Design Ratio	6.30	6.30	N/A	N/A	N/A	23.36	N/A	N/A
Rating Factor	8.26	8.26	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.81	3.81	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-28.97	N/A	0.00	0.00	-28.97	N/A	0.00	0.00
Design Ratio	7.88	N/A	N/A	N/A	29.20	N/A	N/A	N/A
Rating Factor	10.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	105.0	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Live Load Effect	228.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	333.2	0.0	105.0	0.0	105.0	0.0	126.0	0.0
Resistance - Dead	1979.5	0.0	1979.5	0.0	1979.5	0.0	1958.5	0.0
Design Ratio	6.26	N/A	19.86	N/A	(19.86)	(N/A)	(16.55)	(N/A)
Rating Factor	8.67	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	21.5	21.5	21.5	21.5	21.5	21.5	25.8	25.8
Live Load Effect	48.2	-1.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	69.8	19.9	21.5	21.5	21.5	21.5	25.8	25.8
Resistance - Dead	303.5	303.5	303.5	303.5	303.5	303.5	299.2	299.2
Design Ratio	4.66	16.31	15.09	15.09	(15.09)	(15.09)	(12.57)	(12.57)
Rating Factor	6.30	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-2.79	2.79	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.82	3.82	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-22.97	22.97	0.00	0.00	25.03	22.97	0.00	0.00
Design Ratio	6.28	6.28	N/A	N/A	N/A	23.36	N/A	N/A
Rating Factor	8.23	8.23	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-1.03	1.03	0.00	0.00	-1.03	1.03	0.00	0.00
Live Load Effect	-2.79	2.79	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-3.82	3.82	0.00	0.00	-1.03	1.03	0.00	0.00
Resistance - Dead	-28.97	N/A	0.00	0.00	-28.97	N/A	0.00	0.00
Design Ratio	7.85	N/A	N/A	N/A	29.20	N/A	N/A	N/A
Rating Factor	10.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 102.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	59.7500			
Top Flange Thickness	=	0.6250	Top Flange Width	=	12.3750
Web Depth	=	58.5000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.6250	Bottom Flange Width	=	12.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners:
Fy = 30.000 ksi
Width = 5.000 in
Thickness = 0.375 in
Spacing = 45.000 in
B = 1.000 (Type Factor)
Singles or Pairs? PAIRS

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 9.500 ft
Maximum distance to Right Brace Point = 1.750 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION STIFFENER CHECKS:

Point of Interest : 102.000
Construction Stage: 1

No longitudinal stiffeners are present.

Transverse Stiffeners:

6.10.9.3.3	Spacing	N/A
6.10.11.1.2-1	Projecting Width	PASS
6.10.11.1.2-2	Projecting Width	PASS
6.10.11.1.3-*	Moment of Inertia	PASS
6.10.11.1.3-11	Moment of Inertia	N/A

No bearing stiffeners are present.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	204.6	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Live Load Effect	658.5	0.0	508.0	0.0	508.0	0.0	0.0	0.0
Total Load Effect	863.1	0.0	712.6	0.0	712.6	0.0	245.6	0.0
Resistance - Dead	1879.8	0.0	1879.8	0.0	1879.8	0.0	1838.9	0.0
Design Ratio	2.42	N/A	2.93	N/A	(2.93)	(N/A)	(8.49)	(N/A)
Rating Factor	2.85	N/A	3.70	N/A	(3.70)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	20.4	20.4	20.4	20.4	20.4	20.4	24.5	24.5
Live Load Effect	67.4	-8.7	52.0	-6.7	52.0	-6.7	0.0	0.0
Total Load Effect	87.8	11.7	72.4	13.7	72.4	13.7	24.5	24.5
Resistance - Dead	304.6	304.6	304.6	304.6	304.6	304.6	300.5	300.5
Design Ratio	3.70	27.81	4.49	23.75	(4.49)	(23.75)	(13.26)	(13.26)
Rating Factor	4.52	N/A	5.86	N/A	(5.86)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-5.98	5.98	0.00	0.00	-4.60	4.60	0.00	0.00
Total Load Effect	-7.99	7.99	0.00	0.00	-6.61	6.61	0.00	0.00
Resistance - Dead	-22.00	22.00	0.00	0.00	-22.00	22.00	0.00	0.00
Design Ratio	3.00	3.00	N/A	N/A	3.63	3.63	N/A	N/A
Rating Factor	3.68	3.68	N/A	N/A	4.78	4.78	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-5.98	5.98	0.00	0.00	-4.60	4.60	0.00	0.00
Total Load Effect	-7.99	7.99	0.00	0.00	-6.61	6.61	0.00	0.00
Resistance - Dead	-28.00	N/A	0.00	0.00	-28.00	N/A	0.00	0.00
Design Ratio	3.76	N/A	N/A	N/A	4.54	N/A	N/A	N/A
Rating Factor	4.68	N/A	N/A	N/A	6.08	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	204.6	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Live Load Effect	591.5	0.0	456.3	0.0	456.3	0.0	0.0	0.0
Total Load Effect	796.2	0.0	661.0	0.0	661.0	0.0	245.6	0.0
Resistance - Dead	1879.8	0.0	1879.8	0.0	1879.8	0.0	1838.9	0.0
Design Ratio	2.62	N/A	3.15	N/A	(3.15)	(N/A)	(8.49)	(N/A)
Rating Factor	3.18	N/A	4.12	N/A	(4.12)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	20.4	20.4	20.4	20.4	20.4	20.4	24.5	24.5
Live Load Effect	60.0	-10.6	46.3	-8.2	46.3	-8.2	0.0	0.0
Total Load Effect	80.5	9.8	66.7	12.2	66.7	12.2	24.5	24.5
Resistance - Dead	304.6	304.6	304.6	304.6	304.6	304.6	300.5	300.5
Design Ratio	4.04	33.22	4.87	26.61	(4.87)	(26.61)	(13.26)	(13.26)
Rating Factor	5.07	N/A	6.58	N/A	(6.58)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-5.38	5.38	0.00	0.00	-4.14	4.14	0.00	0.00
Total Load Effect	-7.38	7.38	0.00	0.00	-6.14	6.14	0.00	0.00
Resistance - Dead	-22.00	22.00	0.00	0.00	-22.00	22.00	0.00	0.00
Design Ratio	3.25	3.25	N/A	N/A	3.91	3.91	N/A	N/A
Rating Factor	4.09	4.09	N/A	N/A	5.32	5.32	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-5.38	5.38	0.00	0.00	-4.14	4.14	0.00	0.00
Total Load Effect	-7.38	7.38	0.00	0.00	-6.14	6.14	0.00	0.00
Resistance - Dead	-28.00	N/A	0.00	0.00	-28.00	N/A	0.00	0.00
Design Ratio	4.07	N/A	N/A	N/A	4.89	N/A	N/A	N/A
Rating Factor	5.21	N/A	N/A	N/A	6.77	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	204.6	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Live Load Effect	299.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	503.8	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Resistance - Dead	1879.8	0.0	1879.8	0.0	1879.8	0.0	1838.9	0.0
Design Ratio	4.14	N/A	10.19	N/A	(10.19)	(N/A)	(8.49)	(N/A)
Rating Factor	6.28	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	20.4	20.4	20.4	20.4	20.4	20.4	24.5	24.5
Live Load Effect	31.4	-4.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	51.8	15.5	20.4	20.4	20.4	20.4	24.5	24.5
Resistance - Dead	304.6	304.6	304.6	304.6	304.6	304.6	300.5	300.5
Design Ratio	6.27	20.92	15.91	15.91	(15.91)	(15.91)	(13.26)	(13.26)
Rating Factor	9.70	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-3.66	3.66	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.66	5.66	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-22.00	22.00	0.00	0.00	26.00	22.00	0.00	0.00
Design Ratio	4.24	4.24	N/A	N/A	N/A	11.98	N/A	N/A
Rating Factor	6.01	6.01	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-3.66	3.66	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.66	5.66	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-28.00	N/A	0.00	0.00	-28.00	N/A	0.00	0.00
Design Ratio	5.30	N/A	N/A	N/A	14.98	N/A	N/A	N/A
Rating Factor	7.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	204.6	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Live Load Effect	279.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	484.5	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Resistance - Dead	1879.8	0.0	1879.8	0.0	1879.8	0.0	1838.9	0.0
Design Ratio	4.30	N/A	10.19	N/A	(10.19)	(N/A)	(8.49)	(N/A)
Rating Factor	6.72	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	20.4	20.4	20.4	20.4	20.4	20.4	24.5	24.5
Live Load Effect	29.7	-4.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	50.1	15.8	20.4	20.4	20.4	20.4	24.5	24.5
Resistance - Dead	304.6	304.6	304.6	304.6	304.6	304.6	300.5	300.5
Design Ratio	6.49	20.60	15.91	15.91	(15.91)	(15.91)	(13.26)	(13.26)
Rating Factor	10.27	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-3.42	3.42	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.43	5.43	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-22.00	22.00	0.00	0.00	26.00	22.00	0.00	0.00
Design Ratio	4.42	4.42	N/A	N/A	N/A	11.98	N/A	N/A
Rating Factor	6.42	6.42	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-3.42	3.42	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.43	5.43	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-28.00	N/A	0.00	0.00	-28.00	N/A	0.00	0.00
Design Ratio	5.53	N/A	N/A	N/A	14.98	N/A	N/A	N/A
Rating Factor	8.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	204.6	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Live Load Effect	261.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	466.1	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Resistance - Dead	1879.8	0.0	1879.8	0.0	1879.8	0.0	1838.9	0.0
Design Ratio	4.47	N/A	10.19	N/A	(10.19)	(N/A)	(8.49)	(N/A)
Rating Factor	7.19	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	20.4	20.4	20.4	20.4	20.4	20.4	24.5	24.5
Live Load Effect	27.3	-4.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	47.7	16.4	20.4	20.4	20.4	20.4	24.5	24.5
Resistance - Dead	304.6	304.6	304.6	304.6	304.6	304.6	300.5	300.5
Design Ratio	6.81	19.80	15.91	15.91	(15.91)	(15.91)	(13.26)	(13.26)
Rating Factor	11.17	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-3.20	3.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.20	5.20	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-22.00	22.00	0.00	0.00	26.00	22.00	0.00	0.00
Design Ratio	4.61	4.61	N/A	N/A	N/A	11.98	N/A	N/A
Rating Factor	6.88	6.88	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-3.20	3.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-5.20	5.20	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-28.00	N/A	0.00	0.00	-28.00	N/A	0.00	0.00
Design Ratio	5.77	N/A	N/A	N/A	14.98	N/A	N/A	N/A
Rating Factor	8.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	204.6	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Live Load Effect	334.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	538.8	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Resistance - Dead	1879.8	0.0	1879.8	0.0	1879.8	0.0	1838.9	0.0
Design Ratio	3.87	N/A	10.19	N/A	(10.19)	(N/A)	(8.49)	(N/A)
Rating Factor	5.63	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	20.4	20.4	20.4	20.4	20.4	20.4	24.5	24.5
Live Load Effect	35.0	-5.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	55.4	15.4	20.4	20.4	20.4	20.4	24.5	24.5
Resistance - Dead	304.6	304.6	304.6	304.6	304.6	304.6	300.5	300.5
Design Ratio	5.87	21.08	15.91	15.91	(15.91)	(15.91)	(13.26)	(13.26)
Rating Factor	8.71	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-4.09	4.09	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.09	6.09	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-22.00	22.00	0.00	0.00	26.00	22.00	0.00	0.00
Design Ratio	3.94	3.94	N/A	N/A	N/A	11.98	N/A	N/A
Rating Factor	5.38	5.38	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-4.09	4.09	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.09	6.09	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-28.00	N/A	0.00	0.00	-28.00	N/A	0.00	0.00
Design Ratio	4.93	N/A	N/A	N/A	14.98	N/A	N/A	N/A
Rating Factor	6.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	204.6	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Live Load Effect	365.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	570.4	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Resistance - Dead	1879.8	0.0	1879.8	0.0	1879.8	0.0	1838.9	0.0
Design Ratio	3.65	N/A	10.19	N/A	(10.19)	(N/A)	(8.49)	(N/A)
Rating Factor	5.14	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	20.4	20.4	20.4	20.4	20.4	20.4	24.5	24.5
Live Load Effect	38.5	-5.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	58.9	15.3	20.4	20.4	20.4	20.4	24.5	24.5
Resistance - Dead	304.6	304.6	304.6	304.6	304.6	304.6	300.5	300.5
Design Ratio	5.52	21.27	15.91	15.91	(15.91)	(15.91)	(13.26)	(13.26)
Rating Factor	7.92	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-4.47	4.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.48	6.48	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-22.00	22.00	0.00	0.00	26.00	22.00	0.00	0.00
Design Ratio	3.71	3.71	N/A	N/A	N/A	11.98	N/A	N/A
Rating Factor	4.92	4.92	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-4.47	4.47	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.48	6.48	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-28.00	N/A	0.00	0.00	-28.00	N/A	0.00	0.00
Design Ratio	4.63	N/A	N/A	N/A	14.98	N/A	N/A	N/A
Rating Factor	6.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	204.6	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Live Load Effect	399.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	604.2	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Resistance - Dead	1879.8	0.0	1879.8	0.0	1879.8	0.0	1838.9	0.0
Design Ratio	3.45	N/A	10.19	N/A	(10.19)	(N/A)	(8.49)	(N/A)
Rating Factor	4.70	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	20.4	20.4	20.4	20.4	20.4	20.4	24.5	24.5
Live Load Effect	39.7	-3.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	60.1	16.6	20.4	20.4	20.4	20.4	24.5	24.5
Resistance - Dead	304.6	304.6	304.6	304.6	304.6	304.6	300.5	300.5
Design Ratio	5.41	19.52	15.91	15.91	(15.91)	(15.91)	(13.26)	(13.26)
Rating Factor	7.67	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-4.89	4.89	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.89	6.89	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-22.00	22.00	0.00	0.00	26.00	22.00	0.00	0.00
Design Ratio	3.48	3.48	N/A	N/A	N/A	11.98	N/A	N/A
Rating Factor	4.50	4.50	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-4.89	4.89	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.89	6.89	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-28.00	N/A	0.00	0.00	-28.00	N/A	0.00	0.00
Design Ratio	4.35	N/A	N/A	N/A	14.98	N/A	N/A	N/A
Rating Factor	5.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	204.6	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Live Load Effect	411.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	616.1	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Resistance - Dead	1879.8	0.0	1879.8	0.0	1879.8	0.0	1838.9	0.0
Design Ratio	3.38	N/A	10.19	N/A	(10.19)	(N/A)	(8.49)	(N/A)
Rating Factor	4.57	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	20.4	20.4	20.4	20.4	20.4	20.4	24.5	24.5
Live Load Effect	39.7	-2.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	60.2	17.8	20.4	20.4	20.4	20.4	24.5	24.5
Resistance - Dead	304.6	304.6	304.6	304.6	304.6	304.6	300.5	300.5
Design Ratio	5.40	18.24	15.91	15.91	(15.91)	(15.91)	(13.26)	(13.26)
Rating Factor	7.67	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-5.03	5.03	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.04	7.04	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-22.00	22.00	0.00	0.00	26.00	22.00	0.00	0.00
Design Ratio	3.41	3.41	N/A	N/A	N/A	11.98	N/A	N/A
Rating Factor	4.37	4.37	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-5.03	5.03	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.04	7.04	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-28.00	N/A	0.00	0.00	-28.00	N/A	0.00	0.00
Design Ratio	4.26	N/A	N/A	N/A	14.98	N/A	N/A	N/A
Rating Factor	5.56	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2084.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	204.6	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Live Load Effect	413.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	617.8	0.0	204.6	0.0	204.6	0.0	245.6	0.0
Resistance - Dead	1879.8	0.0	1879.8	0.0	1879.8	0.0	1838.9	0.0
Design Ratio	3.37	N/A	10.19	N/A	(10.19)	(N/A)	(8.49)	(N/A)
Rating Factor	4.55	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Dead Load Effect	20.4	20.4	20.4	20.4	20.4	20.4	24.5	24.5
Live Load Effect	40.8	-5.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	61.3	15.3	20.4	20.4	20.4	20.4	24.5	24.5
Resistance - Dead	304.6	304.6	304.6	304.6	304.6	304.6	300.5	300.5
Design Ratio	5.31	21.25	15.91	15.91	(15.91)	(15.91)	(13.26)	(13.26)
Rating Factor	7.46	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-5.05	5.05	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.06	7.06	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-22.00	22.00	0.00	0.00	26.00	22.00	0.00	0.00
Design Ratio	3.40	3.40	N/A	N/A	N/A	11.98	N/A	N/A
Rating Factor	4.35	4.35	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.00	2.00	0.00	0.00	-2.00	2.00	0.00	0.00
Live Load Effect	-5.05	5.05	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.06	7.06	0.00	0.00	-2.00	2.00	0.00	0.00
Resistance - Dead	-28.00	N/A	0.00	0.00	-28.00	N/A	0.00	0.00
Design Ratio	4.25	N/A	N/A	N/A	14.98	N/A	N/A	N/A
Rating Factor	5.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 103.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	59.7500			
Top Flange Thickness	=	0.6250	Top Flange Width	=	12.3750
Web Depth	=	58.5000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.6250	Bottom Flange Width	=	12.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners:
Fy = 30.000 ksi
Width = 5.000 in
Thickness = 0.375 in
Spacing = 49.999 in
B = 1.000 (Type Factor)
Singles or Pairs? PAIRS

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 3.000 ft
Maximum distance to Right Brace Point = 9.500 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION STIFFENER CHECKS:

Point of Interest : 103.000
Construction Stage: 1

No longitudinal stiffeners are present.

Transverse Stiffeners:

6.10.9.3.3	Spacing	N/A
6.10.11.1.2-1	Projecting Width	PASS
6.10.11.1.2-2	Projecting Width	PASS
6.10.11.1.3-*	Moment of Inertia	PASS
6.10.11.1.3-11	Moment of Inertia	N/A

No bearing stiffeners are present.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	1971.7	0.0	1979.9	0.0	1979.9	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	A.3.3-2	N/A	A.3.3-2	N/A	6A6.9.6	N/A
Dead Load Effect	265.4	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Live Load Effect	832.3	0.0	642.0	0.0	642.0	0.0	0.0	0.0
Total Load Effect	1097.7	0.0	907.4	0.0	907.4	0.0	318.5	0.0
Resistance - Dead	1706.3	0.0	1714.5	0.0	1714.5	0.0	1766.0	0.0
Design Ratio	1.80	N/A	2.18	N/A	(2.18)	(N/A)	(6.55)	(N/A)
Rating Factor	2.05	N/A	2.67	N/A	(2.67)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	-305.9	305.9	-305.9	305.9	305.9
Dead Load Effect	8.1	8.1	8.1	8.1	8.1	8.1	9.7	9.7
Live Load Effect	55.5	-13.9	42.8	-10.7	42.8	-10.7	0.0	0.0
Total Load Effect	63.6	-5.8	50.9	-2.6	50.9	-2.6	9.7	9.7
Resistance - Dead	297.7	-314.0	297.7	-314.0	297.7	-314.0	296.1	296.1
Design Ratio	4.81	53.18	6.01	118.39	(6.01)	(118.39)	(31.44)	(31.44)
Rating Factor	5.37	22.65	6.96	29.37	(6.96)	(29.37)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-7.56	7.56	0.00	0.00	-5.82	5.82	0.00	0.00
Total Load Effect	-10.16	10.16	0.00	0.00	-8.42	8.42	0.00	0.00
Resistance - Dead	-21.40	21.40	0.00	0.00	-21.40	21.40	0.00	0.00
Design Ratio	2.36	2.36	N/A	N/A	2.85	2.85	N/A	N/A
Rating Factor	2.83	2.83	N/A	N/A	3.68	3.68	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-7.56	7.56	0.00	0.00	-5.82	5.82	0.00	0.00
Total Load Effect	-10.16	10.16	0.00	0.00	-8.42	8.42	0.00	0.00
Resistance - Dead	-27.40	N/A	0.00	0.00	-27.40	N/A	0.00	0.00
Design Ratio	2.95	N/A	N/A	N/A	3.56	N/A	N/A	N/A
Rating Factor	3.62	N/A	N/A	N/A	4.71	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2000.7	0.0	2007.2	0.0	2007.2	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	A.3.3-2	N/A	A.3.3-2	N/A	6A6.9.6	N/A
Dead Load Effect	265.4	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Live Load Effect	769.7	0.0	593.8	0.0	593.8	0.0	0.0	0.0
Total Load Effect	1035.1	0.0	859.2	0.0	859.2	0.0	318.5	0.0
Resistance - Dead	1735.3	0.0	1741.8	0.0	1741.8	0.0	1766.0	0.0
Design Ratio	1.93	N/A	2.34	N/A	(2.34)	(N/A)	(6.55)	(N/A)
Rating Factor	2.25	N/A	2.93	N/A	(2.93)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	-305.9	305.9	-305.9	305.9	305.9
Dead Load Effect	8.1	8.1	8.1	8.1	8.1	8.1	9.7	9.7
Live Load Effect	51.0	-18.1	39.4	-14.0	39.4	-14.0	0.0	0.0
Total Load Effect	59.1	-10.0	47.5	-5.9	47.5	-5.9	9.7	9.7
Resistance - Dead	297.7	-314.0	297.7	-314.0	297.7	-314.0	296.1	296.1
Design Ratio	5.17	30.62	6.44	52.26	(6.44)	(52.26)	(31.44)	(31.44)
Rating Factor	5.84	17.35	7.56	22.49	(7.56)	(22.49)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-6.99	6.99	0.00	0.00	-5.38	5.38	0.00	0.00
Total Load Effect	-9.59	9.59	0.00	0.00	-7.98	7.98	0.00	0.00
Resistance - Dead	-21.40	21.40	0.00	0.00	-21.40	21.40	0.00	0.00
Design Ratio	2.50	2.50	N/A	N/A	3.01	3.01	N/A	N/A
Rating Factor	3.06	3.06	N/A	N/A	3.98	3.98	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-6.99	6.99	0.00	0.00	-5.38	5.38	0.00	0.00
Total Load Effect	-9.59	9.59	0.00	0.00	-7.98	7.98	0.00	0.00
Resistance - Dead	-27.40	N/A	0.00	0.00	-27.40	N/A	0.00	0.00
Design Ratio	3.13	N/A	N/A	N/A	3.76	N/A	N/A	N/A
Rating Factor	3.92	N/A	N/A	N/A	5.09	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2002.4	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	265.4	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Live Load Effect	380.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	645.7	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Resistance - Dead	1737.0	0.0	1819.1	0.0	1819.1	0.0	1766.0	0.0
Design Ratio	3.10	N/A	7.85	N/A	(7.85)	(N/A)	(6.55)	(N/A)
Rating Factor	4.57	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	8.1	8.1	8.1	8.1	8.1	8.1	9.7	9.7
Live Load Effect	26.4	-8.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	34.5	-0.2	8.1	8.1	8.1	8.1	9.7	9.7
Resistance - Dead	297.7	-314.0	297.7	297.7	297.7	297.7	296.1	296.1
Design Ratio	8.86	1890.83	37.72	37.72	(37.72)	(37.72)	(31.44)	(31.44)
Rating Factor	11.27	37.97	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-4.65	4.65	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.25	7.25	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-21.40	21.40	0.00	0.00	26.60	21.40	0.00	0.00
Design Ratio	3.31	3.31	N/A	N/A	N/A	9.24	N/A	N/A
Rating Factor	4.60	4.60	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-4.65	4.65	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.25	7.25	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-27.40	N/A	0.00	0.00	-27.40	N/A	0.00	0.00
Design Ratio	4.14	N/A	N/A	N/A	11.55	N/A	N/A	N/A
Rating Factor	5.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2003.3	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	265.4	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Live Load Effect	355.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	620.9	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Resistance - Dead	1737.9	0.0	1819.1	0.0	1819.1	0.0	1766.0	0.0
Design Ratio	3.23	N/A	7.85	N/A	(7.85)	(N/A)	(6.55)	(N/A)
Rating Factor	4.89	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	8.1	8.1	8.1	8.1	8.1	8.1	9.7	9.7
Live Load Effect	23.8	-7.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	31.9	0.4	8.1	8.1	8.1	8.1	9.7	9.7
Resistance - Dead	297.7	297.7	297.7	297.7	297.7	297.7	296.1	296.1
Design Ratio	9.58	816.39	37.72	37.72	(37.72)	(37.72)	(31.44)	(31.44)
Rating Factor	12.49	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-4.35	4.35	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.95	6.95	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-21.40	21.40	0.00	0.00	26.60	21.40	0.00	0.00
Design Ratio	3.45	3.45	N/A	N/A	N/A	9.24	N/A	N/A
Rating Factor	4.92	4.92	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-4.35	4.35	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.95	6.95	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-27.40	N/A	0.00	0.00	-27.40	N/A	0.00	0.00
Design Ratio	4.32	N/A	N/A	N/A	11.55	N/A	N/A	N/A
Rating Factor	6.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	1995.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	265.4	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Live Load Effect	325.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	590.5	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Resistance - Dead	1730.1	0.0	1819.1	0.0	1819.1	0.0	1766.0	0.0
Design Ratio	3.38	N/A	7.85	N/A	(7.85)	(N/A)	(6.55)	(N/A)
Rating Factor	5.32	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	8.1	8.1	8.1	8.1	8.1	8.1	9.7	9.7
Live Load Effect	22.2	-6.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	30.3	1.3	8.1	8.1	8.1	8.1	9.7	9.7
Resistance - Dead	297.7	297.7	297.7	297.7	297.7	297.7	296.1	296.1
Design Ratio	10.08	233.10	37.72	37.72	(37.72)	(37.72)	(31.44)	(31.44)
Rating Factor	13.40	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-3.98	3.98	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.57	6.57	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-21.40	21.40	0.00	0.00	26.60	21.40	0.00	0.00
Design Ratio	3.65	3.65	N/A	N/A	N/A	9.24	N/A	N/A
Rating Factor	5.38	5.38	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-3.98	3.98	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-6.57	6.57	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-27.40	N/A	0.00	0.00	-27.40	N/A	0.00	0.00
Design Ratio	4.56	N/A	N/A	N/A	11.55	N/A	N/A	N/A
Rating Factor	6.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2007.7	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	265.4	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Live Load Effect	427.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	692.9	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Resistance - Dead	1742.3	0.0	1819.1	0.0	1819.1	0.0	1766.0	0.0
Design Ratio	2.90	N/A	7.85	N/A	(7.85)	(N/A)	(6.55)	(N/A)
Rating Factor	4.08	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	8.1	8.1	8.1	8.1	8.1	8.1	9.7	9.7
Live Load Effect	29.6	-9.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	37.7	-1.1	8.1	8.1	8.1	8.1	9.7	9.7
Resistance - Dead	297.7	-314.0	297.7	297.7	297.7	297.7	296.1	296.1
Design Ratio	8.11	284.15	37.72	37.72	(37.72)	(37.72)	(31.44)	(31.44)
Rating Factor	10.06	34.19	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-5.23	5.23	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.83	7.83	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-21.40	21.40	0.00	0.00	26.60	21.40	0.00	0.00
Design Ratio	3.07	3.07	N/A	N/A	N/A	9.24	N/A	N/A
Rating Factor	4.09	4.09	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-5.23	5.23	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.83	7.83	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-27.40	N/A	0.00	0.00	-27.40	N/A	0.00	0.00
Design Ratio	3.83	N/A	N/A	N/A	11.55	N/A	N/A	N/A
Rating Factor	5.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	1990.4	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	265.4	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Live Load Effect	469.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	735.1	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Resistance - Dead	1725.0	0.0	1819.1	0.0	1819.1	0.0	1766.0	0.0
Design Ratio	2.71	N/A	7.85	N/A	(7.85)	(N/A)	(6.55)	(N/A)
Rating Factor	3.67	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	8.1	8.1	8.1	8.1	8.1	8.1	9.7	9.7
Live Load Effect	32.3	-9.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	40.4	-1.5	8.1	8.1	8.1	8.1	9.7	9.7
Resistance - Dead	297.7	-314.0	297.7	297.7	297.7	297.7	296.1	296.1
Design Ratio	7.57	200.79	37.72	37.72	(37.72)	(37.72)	(31.44)	(31.44)
Rating Factor	9.22	32.60	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-5.75	5.75	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.34	8.34	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-21.40	21.40	0.00	0.00	26.60	21.40	0.00	0.00
Design Ratio	2.88	2.88	N/A	N/A	N/A	9.24	N/A	N/A
Rating Factor	3.72	3.72	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-5.75	5.75	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.34	8.34	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-27.40	N/A	0.00	0.00	-27.40	N/A	0.00	0.00
Design Ratio	3.60	N/A	N/A	N/A	11.55	N/A	N/A	N/A
Rating Factor	4.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2004.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	265.4	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Live Load Effect	517.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	782.9	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Resistance - Dead	1739.1	0.0	1819.1	0.0	1819.1	0.0	1766.0	0.0
Design Ratio	2.56	N/A	7.85	N/A	(7.85)	(N/A)	(6.55)	(N/A)
Rating Factor	3.36	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	8.1	8.1	8.1	8.1	8.1	8.1	9.7	9.7
Live Load Effect	32.8	-8.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	40.9	-0.2	8.1	8.1	8.1	8.1	9.7	9.7
Resistance - Dead	297.7	-314.0	297.7	297.7	297.7	297.7	296.1	296.1
Design Ratio	7.48	1681.08	37.72	37.72	(37.72)	(37.72)	(31.44)	(31.44)
Rating Factor	9.09	37.87	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-6.33	6.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.93	8.93	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-21.40	21.40	0.00	0.00	26.60	21.40	0.00	0.00
Design Ratio	2.69	2.69	N/A	N/A	N/A	9.24	N/A	N/A
Rating Factor	3.38	3.38	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-6.33	6.33	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.93	8.93	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-27.40	N/A	0.00	0.00	-27.40	N/A	0.00	0.00
Design Ratio	3.36	N/A	N/A	N/A	11.55	N/A	N/A	N/A
Rating Factor	4.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2010.9	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	265.4	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Live Load Effect	551.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	817.3	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Resistance - Dead	1745.5	0.0	1819.1	0.0	1819.1	0.0	1766.0	0.0
Design Ratio	2.46	N/A	7.85	N/A	(7.85)	(N/A)	(6.55)	(N/A)
Rating Factor	3.16	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	8.1	8.1	8.1	8.1	8.1	8.1	9.7	9.7
Live Load Effect	32.0	-6.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	40.1	1.6	8.1	8.1	8.1	8.1	9.7	9.7
Resistance - Dead	297.7	297.7	297.7	297.7	297.7	297.7	296.1	296.1
Design Ratio	7.62	188.00	37.72	37.72	(37.72)	(37.72)	(31.44)	(31.44)
Rating Factor	9.30	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-6.75	6.75	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.35	9.35	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-21.40	21.40	0.00	0.00	26.60	21.40	0.00	0.00
Design Ratio	2.57	2.57	N/A	N/A	N/A	9.24	N/A	N/A
Rating Factor	3.17	3.17	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-6.75	6.75	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.35	9.35	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-27.40	N/A	0.00	0.00	-27.40	N/A	0.00	0.00
Design Ratio	3.21	N/A	N/A	N/A	11.55	N/A	N/A	N/A
Rating Factor	4.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2016.4	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	265.4	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Live Load Effect	556.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	822.0	0.0	265.4	0.0	265.4	0.0	318.5	0.0
Resistance - Dead	1751.0	0.0	1819.1	0.0	1819.1	0.0	1766.0	0.0
Design Ratio	2.45	N/A	7.85	N/A	(7.85)	(N/A)	(6.55)	(N/A)
Rating Factor	3.15	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	8.1	8.1	8.1	8.1	8.1	8.1	9.7	9.7
Live Load Effect	33.5	-9.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	41.6	-1.5	8.1	8.1	8.1	8.1	9.7	9.7
Resistance - Dead	297.7	-314.0	297.7	297.7	297.7	297.7	296.1	296.1
Design Ratio	7.35	202.90	37.72	37.72	(37.72)	(37.72)	(31.44)	(31.44)
Rating Factor	8.89	32.65	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-6.81	6.81	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.41	9.41	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-21.40	21.40	0.00	0.00	26.60	21.40	0.00	0.00
Design Ratio	2.55	2.55	N/A	N/A	N/A	9.24	N/A	N/A
Rating Factor	3.14	3.14	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.60	2.60	0.00	0.00	-2.60	2.60	0.00	0.00
Live Load Effect	-6.81	6.81	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.41	9.41	0.00	0.00	-2.60	2.60	0.00	0.00
Resistance - Dead	-27.40	N/A	0.00	0.00	-27.40	N/A	0.00	0.00
Design Ratio	3.19	N/A	N/A	N/A	11.55	N/A	N/A	N/A
Rating Factor	4.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 104.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	59.7500			
Top Flange Thickness	=	0.6250	Top Flange Width	=	12.3750
Web Depth	=	58.5000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.6250	Bottom Flange Width	=	12.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners:
Fy = 30.000 ksi
Width = 5.000 in
Thickness = 0.375 in
Spacing = 49.999 in
B = 1.000 (Type Factor)
Singles or Pairs? PAIRS

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 7.750 ft
Maximum distance to Right Brace Point = 4.750 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION STIFFENER CHECKS:

Point of Interest : 104.000
Construction Stage: 1

No longitudinal stiffeners are present.

Transverse Stiffeners:

6.10.9.3.3	Spacing	N/A
6.10.11.1.2-1	Projecting Width	PASS
6.10.11.1.2-2	Projecting Width	PASS
6.10.11.1.3-*	Moment of Inertia	PASS
6.10.11.1.3-11	Moment of Inertia	N/A

No bearing stiffeners are present.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	1971.7	0.0	1979.9	0.0	1979.9	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	A.3.3-2	N/A	A.3.3-2	N/A	6A6.9.6	N/A
Dead Load Effect	301.3	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Live Load Effect	930.4	0.0	717.7	0.0	717.7	0.0	0.0	0.0
Total Load Effect	1231.7	0.0	1019.0	0.0	1019.0	0.0	361.5	0.0
Resistance - Dead	1670.5	0.0	1678.6	0.0	1678.6	0.0	1723.0	0.0
Design Ratio	1.60	N/A	1.94	N/A	(1.94)	(N/A)	(5.77)	(N/A)
Rating Factor	1.80	N/A	2.34	N/A	(2.34)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	-305.9	305.9	-305.9	305.9	305.9
Dead Load Effect	7.0	7.0	7.0	7.0	7.0	7.0	8.4	8.4
Live Load Effect	43.8	-23.5	33.8	-18.1	33.8	-18.1	0.0	0.0
Total Load Effect	50.8	-16.5	40.8	-11.1	40.8	-11.1	8.4	8.4
Resistance - Dead	298.9	-312.8	298.9	-312.8	298.9	-312.8	297.5	297.5
Design Ratio	6.02	18.52	7.50	27.46	(7.50)	(27.46)	(36.46)	(36.46)
Rating Factor	6.82	13.31	8.84	17.26	(8.84)	(17.26)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-8.46	8.46	0.00	0.00	-6.50	6.50	0.00	0.00
Total Load Effect	-11.40	11.40	0.00	0.00	-9.45	9.45	0.00	0.00
Resistance - Dead	-21.05	21.05	0.00	0.00	-21.05	21.05	0.00	0.00
Design Ratio	2.10	2.10	N/A	N/A	2.54	2.54	N/A	N/A
Rating Factor	2.49	2.49	N/A	N/A	3.24	3.24	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-8.46	8.46	0.00	0.00	-6.50	6.50	0.00	0.00
Total Load Effect	-11.40	11.40	0.00	0.00	-9.45	9.45	0.00	0.00
Resistance - Dead	-27.05	N/A	0.00	0.00	-27.05	N/A	0.00	0.00
Design Ratio	2.63	N/A	N/A	N/A	3.17	N/A	N/A	N/A
Rating Factor	3.20	N/A	N/A	N/A	4.16	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2000.7	0.0	2007.2	0.0	2007.2	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	A.3.3-2	N/A	A.3.3-2	N/A	6A6.9.6	N/A
Dead Load Effect	301.3	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Live Load Effect	874.1	0.0	674.3	0.0	674.3	0.0	0.0	0.0
Total Load Effect	1175.3	0.0	975.5	0.0	975.5	0.0	361.5	0.0
Resistance - Dead	1699.5	0.0	1705.9	0.0	1705.9	0.0	1723.0	0.0
Design Ratio	1.70	N/A	2.06	N/A	(2.06)	(N/A)	(5.77)	(N/A)
Rating Factor	1.94	N/A	2.53	N/A	(2.53)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	-305.9	305.9	-305.9	305.9	305.9
Dead Load Effect	7.0	7.0	7.0	7.0	7.0	7.0	8.4	8.4
Live Load Effect	42.3	-25.9	32.7	-20.0	32.7	-20.0	0.0	0.0
Total Load Effect	49.3	-18.9	39.6	-13.0	39.6	-13.0	8.4	8.4
Resistance - Dead	298.9	-312.8	298.9	-312.8	298.9	-312.8	297.5	297.5
Design Ratio	6.20	16.21	7.71	23.60	(7.71)	(23.60)	(36.46)	(36.46)
Rating Factor	7.06	12.10	9.15	15.68	(9.15)	(15.68)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-7.94	7.94	0.00	0.00	-6.11	6.11	0.00	0.00
Total Load Effect	-10.89	10.89	0.00	0.00	-9.06	9.06	0.00	0.00
Resistance - Dead	-21.05	21.05	0.00	0.00	-21.05	21.05	0.00	0.00
Design Ratio	2.20	2.20	N/A	N/A	2.65	2.65	N/A	N/A
Rating Factor	2.65	2.65	N/A	N/A	3.45	3.45	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-7.94	7.94	0.00	0.00	-6.11	6.11	0.00	0.00
Total Load Effect	-10.89	10.89	0.00	0.00	-9.06	9.06	0.00	0.00
Resistance - Dead	-27.05	N/A	0.00	0.00	-27.05	N/A	0.00	0.00
Design Ratio	2.75	N/A	N/A	N/A	3.31	N/A	N/A	N/A
Rating Factor	3.41	N/A	N/A	N/A	4.43	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2002.4	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	301.3	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Live Load Effect	425.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	726.7	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Resistance - Dead	1701.2	0.0	1783.2	0.0	1783.2	0.0	1723.0	0.0
Design Ratio	2.76	N/A	6.92	N/A	(6.92)	(N/A)	(5.77)	(N/A)
Rating Factor	4.00	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	7.0	7.0	7.0	7.0	7.0	7.0	8.4	8.4
Live Load Effect	21.4	-11.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	28.4	-4.7	7.0	7.0	7.0	7.0	8.4	8.4
Resistance - Dead	298.9	-312.8	298.9	298.9	298.9	298.9	297.5	297.5
Design Ratio	10.75	65.60	43.75	43.75	(43.75)	(43.75)	(36.46)	(36.46)
Rating Factor	13.93	26.84	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-5.20	5.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.15	8.15	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-21.05	21.05	0.00	0.00	26.95	21.05	0.00	0.00
Design Ratio	2.94	2.94	N/A	N/A	N/A	8.14	N/A	N/A
Rating Factor	4.04	4.04	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-5.20	5.20	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.15	8.15	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-27.05	N/A	0.00	0.00	-27.05	N/A	0.00	0.00
Design Ratio	3.68	N/A	N/A	N/A	10.18	N/A	N/A	N/A
Rating Factor	5.20	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2003.3	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	301.3	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Live Load Effect	389.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	690.5	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Resistance - Dead	1702.0	0.0	1783.2	0.0	1783.2	0.0	1723.0	0.0
Design Ratio	2.90	N/A	6.92	N/A	(6.92)	(N/A)	(5.77)	(N/A)
Rating Factor	4.37	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	7.0	7.0	7.0	7.0	7.0	7.0	8.4	8.4
Live Load Effect	19.7	-10.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	26.7	-3.8	7.0	7.0	7.0	7.0	8.4	8.4
Resistance - Dead	298.9	-312.8	298.9	298.9	298.9	298.9	297.5	297.5
Design Ratio	11.44	79.91	43.75	43.75	(43.75)	(43.75)	(36.46)	(36.46)
Rating Factor	15.13	28.92	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-4.76	4.76	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.71	7.71	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-21.05	21.05	0.00	0.00	26.95	21.05	0.00	0.00
Design Ratio	3.11	3.11	N/A	N/A	N/A	8.14	N/A	N/A
Rating Factor	4.42	4.42	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-4.76	4.76	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.71	7.71	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-27.05	N/A	0.00	0.00	-27.05	N/A	0.00	0.00
Design Ratio	3.89	N/A	N/A	N/A	10.18	N/A	N/A	N/A
Rating Factor	5.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	1995.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	301.3	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Live Load Effect	359.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	660.4	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Resistance - Dead	1694.2	0.0	1783.2	0.0	1783.2	0.0	1723.0	0.0
Design Ratio	3.02	N/A	6.92	N/A	(6.92)	(N/A)	(5.77)	(N/A)
Rating Factor	4.72	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	7.0	7.0	7.0	7.0	7.0	7.0	8.4	8.4
Live Load Effect	17.8	-9.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	24.8	-2.6	7.0	7.0	7.0	7.0	8.4	8.4
Resistance - Dead	298.9	-312.8	298.9	298.9	298.9	298.9	297.5	297.5
Design Ratio	12.32	118.02	43.75	43.75	(43.75)	(43.75)	(36.46)	(36.46)
Rating Factor	16.75	32.65	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-4.39	4.39	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.34	7.34	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-21.05	21.05	0.00	0.00	26.95	21.05	0.00	0.00
Design Ratio	3.27	3.27	N/A	N/A	N/A	8.14	N/A	N/A
Rating Factor	4.79	4.79	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-4.39	4.39	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.34	7.34	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-27.05	N/A	0.00	0.00	-27.05	N/A	0.00	0.00
Design Ratio	4.09	N/A	N/A	N/A	10.18	N/A	N/A	N/A
Rating Factor	6.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2007.7	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	301.3	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Live Load Effect	486.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	787.6	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Resistance - Dead	1706.4	0.0	1783.2	0.0	1783.2	0.0	1723.0	0.0
Design Ratio	2.55	N/A	6.92	N/A	(6.92)	(N/A)	(5.77)	(N/A)
Rating Factor	3.51	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	7.0	7.0	7.0	7.0	7.0	7.0	8.4	8.4
Live Load Effect	24.2	-13.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	31.2	-6.5	7.0	7.0	7.0	7.0	8.4	8.4
Resistance - Dead	298.9	-312.8	298.9	298.9	298.9	298.9	297.5	297.5
Design Ratio	9.79	47.10	43.75	43.75	(43.75)	(43.75)	(36.46)	(36.46)
Rating Factor	12.33	23.20	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.90	8.90	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-21.05	21.05	0.00	0.00	26.95	21.05	0.00	0.00
Design Ratio	2.70	2.70	N/A	N/A	N/A	8.14	N/A	N/A
Rating Factor	3.54	3.54	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.90	8.90	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-27.05	N/A	0.00	0.00	-27.05	N/A	0.00	0.00
Design Ratio	3.37	N/A	N/A	N/A	10.18	N/A	N/A	N/A
Rating Factor	4.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	1990.4	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	301.3	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Live Load Effect	531.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	832.6	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Resistance - Dead	1689.2	0.0	1783.2	0.0	1783.2	0.0	1723.0	0.0
Design Ratio	2.39	N/A	6.92	N/A	(6.92)	(N/A)	(5.77)	(N/A)
Rating Factor	3.18	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	7.0	7.0	7.0	7.0	7.0	7.0	8.4	8.4
Live Load Effect	26.1	-14.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	33.1	-7.6	7.0	7.0	7.0	7.0	8.4	8.4
Resistance - Dead	298.9	-312.8	298.9	298.9	298.9	298.9	297.5	297.5
Design Ratio	9.24	40.15	43.75	43.75	(43.75)	(43.75)	(36.46)	(36.46)
Rating Factor	11.44	21.42	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-6.50	6.50	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.45	9.45	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-21.05	21.05	0.00	0.00	26.95	21.05	0.00	0.00
Design Ratio	2.54	2.54	N/A	N/A	N/A	8.14	N/A	N/A
Rating Factor	3.24	3.24	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-6.50	6.50	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.45	9.45	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-27.05	N/A	0.00	0.00	-27.05	N/A	0.00	0.00
Design Ratio	3.18	N/A	N/A	N/A	10.18	N/A	N/A	N/A
Rating Factor	4.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2004.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	301.3	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Live Load Effect	582.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	883.4	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Resistance - Dead	1703.2	0.0	1783.2	0.0	1783.2	0.0	1723.0	0.0
Design Ratio	2.27	N/A	6.92	N/A	(6.92)	(N/A)	(5.77)	(N/A)
Rating Factor	2.93	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	7.0	7.0	7.0	7.0	7.0	7.0	8.4	8.4
Live Load Effect	25.9	-13.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	32.8	-6.7	7.0	7.0	7.0	7.0	8.4	8.4
Resistance - Dead	298.9	-312.8	298.9	298.9	298.9	298.9	297.5	297.5
Design Ratio	9.31	45.37	43.75	43.75	(43.75)	(43.75)	(36.46)	(36.46)
Rating Factor	11.56	22.78	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-7.12	7.12	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.07	10.07	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-21.05	21.05	0.00	0.00	26.95	21.05	0.00	0.00
Design Ratio	2.38	2.38	N/A	N/A	N/A	8.14	N/A	N/A
Rating Factor	2.96	2.96	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-7.12	7.12	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.07	10.07	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-27.05	N/A	0.00	0.00	-27.05	N/A	0.00	0.00
Design Ratio	2.98	N/A	N/A	N/A	10.18	N/A	N/A	N/A
Rating Factor	3.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2010.9	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	301.3	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Live Load Effect	623.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	924.2	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Resistance - Dead	1709.7	0.0	1783.2	0.0	1783.2	0.0	1723.0	0.0
Design Ratio	2.18	N/A	6.92	N/A	(6.92)	(N/A)	(5.77)	(N/A)
Rating Factor	2.74	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	7.0	7.0	7.0	7.0	7.0	7.0	8.4	8.4
Live Load Effect	24.8	-11.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	31.8	-4.9	7.0	7.0	7.0	7.0	8.4	8.4
Resistance - Dead	298.9	-312.8	298.9	298.9	298.9	298.9	297.5	297.5
Design Ratio	9.63	62.68	43.75	43.75	(43.75)	(43.75)	(36.46)	(36.46)
Rating Factor	12.07	26.35	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-7.62	7.62	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.57	10.57	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-21.05	21.05	0.00	0.00	26.95	21.05	0.00	0.00
Design Ratio	2.27	2.27	N/A	N/A	N/A	8.14	N/A	N/A
Rating Factor	2.76	2.76	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-7.62	7.62	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.57	10.57	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-27.05	N/A	0.00	0.00	-27.05	N/A	0.00	0.00
Design Ratio	2.84	N/A	N/A	N/A	10.18	N/A	N/A	N/A
Rating Factor	3.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2016.4	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	301.3	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Live Load Effect	650.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	952.0	0.0	301.3	0.0	301.3	0.0	361.5	0.0
Resistance - Dead	1715.1	0.0	1783.2	0.0	1783.2	0.0	1723.0	0.0
Design Ratio	2.12	N/A	6.92	N/A	(6.92)	(N/A)	(5.77)	(N/A)
Rating Factor	2.64	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	7.0	7.0	7.0	7.0	7.0	7.0	8.4	8.4
Live Load Effect	26.7	-15.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	33.6	-8.0	7.0	7.0	7.0	7.0	8.4	8.4
Resistance - Dead	298.9	-312.8	298.9	298.9	298.9	298.9	297.5	297.5
Design Ratio	9.09	38.06	43.75	43.75	(43.75)	(43.75)	(36.46)	(36.46)
Rating Factor	11.21	20.82	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-7.96	7.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.91	10.91	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-21.05	21.05	0.00	0.00	26.95	21.05	0.00	0.00
Design Ratio	2.20	2.20	N/A	N/A	N/A	8.14	N/A	N/A
Rating Factor	2.64	2.64	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-2.95	2.95	0.00	0.00	-2.95	2.95	0.00	0.00
Live Load Effect	-7.96	7.96	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.91	10.91	0.00	0.00	-2.95	2.95	0.00	0.00
Resistance - Dead	-27.05	N/A	0.00	0.00	-27.05	N/A	0.00	0.00
Design Ratio	2.75	N/A	N/A	N/A	10.18	N/A	N/A	N/A
Rating Factor	3.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 104.500
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	59.7500			
Top Flange Thickness	=	0.6250	Top Flange Width	=	12.3750
Web Depth	=	58.5000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.6250	Bottom Flange Width	=	12.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners:
Fy = 30.000 ksi
Width = 5.000 in
Thickness = 0.375 in
Spacing = 49.999 in
B = 1.000 (Type Factor)
Singles or Pairs? PAIRS

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 10.125 ft
Maximum distance to Right Brace Point = 2.375 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION STIFFENER CHECKS:

Point of Interest : 104.500
Construction Stage: 1

No longitudinal stiffeners are present.

Transverse Stiffeners:

6.10.9.3.3	Spacing	N/A
6.10.11.1.2-1	Projecting Width	PASS
6.10.11.1.2-2	Projecting Width	PASS
6.10.11.1.3-*	Moment of Inertia	PASS
6.10.11.1.3-11	Moment of Inertia	N/A

No bearing stiffeners are present.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.500
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	1971.7	0.0	1979.9	0.0	1979.9	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	A.3.3-2	N/A	A.3.3-2	N/A	6A6.9.6	N/A
Dead Load Effect	317.2	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Live Load Effect	948.6	0.0	731.8	0.0	731.8	0.0	0.0	0.0
Total Load Effect	1265.8	0.0	1049.0	0.0	1049.0	0.0	380.6	0.0
Resistance - Dead	1654.5	0.0	1662.7	0.0	1662.7	0.0	1703.8	0.0
Design Ratio	1.56	N/A	1.89	N/A	(1.89)	(N/A)	(5.48)	(N/A)
Rating Factor	1.74	N/A	2.27	N/A	(2.27)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	-305.9	305.9	-305.9	305.9	305.9
Dead Load Effect	6.4	6.4	6.4	6.4	6.4	6.4	7.7	7.7
Live Load Effect	38.5	-28.4	29.7	-21.9	29.7	-21.9	0.0	0.0
Total Load Effect	45.0	-22.0	36.2	-15.5	36.2	-15.5	7.7	7.7
Resistance - Dead	299.4	-312.3	299.4	-312.3	299.4	-312.3	298.1	298.1
Design Ratio	6.80	13.90	8.46	19.72	(8.46)	(19.72)	(39.62)	(39.62)
Rating Factor	7.77	10.98	10.07	14.23	(10.07)	(14.23)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-8.62	8.62	0.00	0.00	-6.63	6.63	0.00	0.00
Total Load Effect	-11.72	11.72	0.00	0.00	-9.74	9.74	0.00	0.00
Resistance - Dead	-20.90	20.90	0.00	0.00	-20.90	20.90	0.00	0.00
Design Ratio	2.05	2.05	N/A	N/A	2.47	2.47	N/A	N/A
Rating Factor	2.42	2.42	N/A	N/A	3.15	3.15	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-8.62	8.62	0.00	0.00	-6.63	6.63	0.00	0.00
Total Load Effect	-11.72	11.72	0.00	0.00	-9.74	9.74	0.00	0.00
Resistance - Dead	-26.90	N/A	0.00	0.00	-26.90	N/A	0.00	0.00
Design Ratio	2.56	N/A	N/A	N/A	3.08	N/A	N/A	N/A
Rating Factor	3.12	N/A	N/A	N/A	4.06	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2000.7	0.0	2007.2	0.0	2007.2	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	A.3.3-2	N/A	A.3.3-2	N/A	6A6.9.6	N/A
Dead Load Effect	317.2	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Live Load Effect	897.0	0.0	691.9	0.0	691.9	0.0	0.0	0.0
Total Load Effect	1214.2	0.0	1009.1	0.0	1009.1	0.0	380.6	0.0
Resistance - Dead	1683.5	0.0	1690.0	0.0	1690.0	0.0	1703.8	0.0
Design Ratio	1.65	N/A	1.99	N/A	(1.99)	(N/A)	(5.48)	(N/A)
Rating Factor	1.88	N/A	2.44	N/A	(2.44)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	-305.9	305.9	-305.9	305.9	305.9
Dead Load Effect	6.4	6.4	6.4	6.4	6.4	6.4	7.7	7.7
Live Load Effect	38.1	-29.9	29.4	-23.0	29.4	-23.0	0.0	0.0
Total Load Effect	44.5	-23.4	35.8	-16.6	35.8	-16.6	7.7	7.7
Resistance - Dead	299.4	-312.3	299.4	-312.3	299.4	-312.3	298.1	298.1
Design Ratio	6.87	13.05	8.54	18.42	(8.54)	(18.42)	(39.62)	(39.62)
Rating Factor	7.86	10.46	10.19	13.55	(10.19)	(13.55)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-8.15	8.15	0.00	0.00	-6.27	6.27	0.00	0.00
Total Load Effect	-11.26	11.26	0.00	0.00	-9.37	9.37	0.00	0.00
Resistance - Dead	-20.90	20.90	0.00	0.00	-20.90	20.90	0.00	0.00
Design Ratio	2.13	2.13	N/A	N/A	2.56	2.56	N/A	N/A
Rating Factor	2.56	2.56	N/A	N/A	3.33	3.33	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-8.15	8.15	0.00	0.00	-6.27	6.27	0.00	0.00
Total Load Effect	-11.26	11.26	0.00	0.00	-9.37	9.37	0.00	0.00
Resistance - Dead	-26.90	N/A	0.00	0.00	-26.90	N/A	0.00	0.00
Design Ratio	2.67	N/A	N/A	N/A	3.20	N/A	N/A	N/A
Rating Factor	3.30	N/A	N/A	N/A	4.29	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2002.4	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	317.2	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Live Load Effect	434.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	751.6	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Resistance - Dead	1685.2	0.0	1767.3	0.0	1767.3	0.0	1703.8	0.0
Design Ratio	2.66	N/A	6.57	N/A	(6.57)	(N/A)	(5.48)	(N/A)
Rating Factor	3.88	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	6.4	6.4	6.4	6.4	6.4	6.4	7.7	7.7
Live Load Effect	19.0	-14.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	25.4	-7.6	6.4	6.4	6.4	6.4	7.7	7.7
Resistance - Dead	299.4	-312.3	299.4	299.4	299.4	299.4	298.1	298.1
Design Ratio	12.04	40.51	47.54	47.54	(47.54)	(47.54)	(39.62)	(39.62)
Rating Factor	15.79	22.33	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-5.31	5.31	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.42	8.42	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-20.90	20.90	0.00	0.00	27.10	20.90	0.00	0.00
Design Ratio	2.85	2.85	N/A	N/A	N/A	7.73	N/A	N/A
Rating Factor	3.93	3.93	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-5.31	5.31	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.42	8.42	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-26.90	N/A	0.00	0.00	-26.90	N/A	0.00	0.00
Design Ratio	3.56	N/A	N/A	N/A	9.66	N/A	N/A	N/A
Rating Factor	5.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2003.3	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	317.2	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Live Load Effect	391.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	709.1	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Resistance - Dead	1686.1	0.0	1767.3	0.0	1767.3	0.0	1703.8	0.0
Design Ratio	2.83	N/A	6.57	N/A	(6.57)	(N/A)	(5.48)	(N/A)
Rating Factor	4.30	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	6.4	6.4	6.4	6.4	6.4	6.4	7.7	7.7
Live Load Effect	17.7	-12.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	24.1	-5.9	6.4	6.4	6.4	6.4	7.7	7.7
Resistance - Dead	299.4	-312.3	299.4	299.4	299.4	299.4	298.1	298.1
Design Ratio	12.67	51.59	47.54	47.54	(47.54)	(47.54)	(39.62)	(39.62)
Rating Factor	16.91	25.26	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-4.79	4.79	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.90	7.90	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-20.90	20.90	0.00	0.00	27.10	20.90	0.00	0.00
Design Ratio	3.04	3.04	N/A	N/A	N/A	7.73	N/A	N/A
Rating Factor	4.36	4.36	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-4.79	4.79	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.90	7.90	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-26.90	N/A	0.00	0.00	-26.90	N/A	0.00	0.00
Design Ratio	3.80	N/A	N/A	N/A	9.66	N/A	N/A	N/A
Rating Factor	5.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	1995.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	317.2	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Live Load Effect	364.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	681.7	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Resistance - Dead	1678.3	0.0	1767.3	0.0	1767.3	0.0	1703.8	0.0
Design Ratio	2.93	N/A	6.57	N/A	(6.57)	(N/A)	(5.48)	(N/A)
Rating Factor	4.60	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	6.4	6.4	6.4	6.4	6.4	6.4	7.7	7.7
Live Load Effect	15.7	-11.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	22.1	-4.8	6.4	6.4	6.4	6.4	7.7	7.7
Resistance - Dead	299.4	-312.3	299.4	299.4	299.4	299.4	298.1	298.1
Design Ratio	13.85	63.19	47.54	47.54	(47.54)	(47.54)	(39.62)	(39.62)
Rating Factor	19.13	27.70	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-4.46	4.46	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.56	7.56	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-20.90	20.90	0.00	0.00	27.10	20.90	0.00	0.00
Design Ratio	3.17	3.17	N/A	N/A	N/A	7.73	N/A	N/A
Rating Factor	4.69	4.69	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-4.46	4.46	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.56	7.56	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-26.90	N/A	0.00	0.00	-26.90	N/A	0.00	0.00
Design Ratio	3.97	N/A	N/A	N/A	9.66	N/A	N/A	N/A
Rating Factor	6.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2007.7	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	317.2	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Live Load Effect	498.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	815.6	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Resistance - Dead	1690.5	0.0	1767.3	0.0	1767.3	0.0	1703.8	0.0
Design Ratio	2.46	N/A	6.57	N/A	(6.57)	(N/A)	(5.48)	(N/A)
Rating Factor	3.39	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	6.4	6.4	6.4	6.4	6.4	6.4	7.7	7.7
Live Load Effect	21.5	-16.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	28.0	-9.7	6.4	6.4	6.4	6.4	7.7	7.7
Resistance - Dead	299.4	-312.3	299.4	299.4	299.4	299.4	298.1	298.1
Design Ratio	10.93	31.40	47.54	47.54	(47.54)	(47.54)	(39.62)	(39.62)
Rating Factor	13.90	19.31	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-6.10	6.10	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.20	9.20	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-20.90	20.90	0.00	0.00	27.10	20.90	0.00	0.00
Design Ratio	2.61	2.61	N/A	N/A	N/A	7.73	N/A	N/A
Rating Factor	3.43	3.43	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-6.10	6.10	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.20	9.20	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-26.90	N/A	0.00	0.00	-26.90	N/A	0.00	0.00
Design Ratio	3.26	N/A	N/A	N/A	9.66	N/A	N/A	N/A
Rating Factor	4.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	1990.4	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	317.2	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Live Load Effect	541.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	858.4	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Resistance - Dead	1673.2	0.0	1767.3	0.0	1767.3	0.0	1703.8	0.0
Design Ratio	2.32	N/A	6.57	N/A	(6.57)	(N/A)	(5.48)	(N/A)
Rating Factor	3.09	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	6.4	6.4	6.4	6.4	6.4	6.4	7.7	7.7
Live Load Effect	23.0	-17.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	29.5	-10.7	6.4	6.4	6.4	6.4	7.7	7.7
Resistance - Dead	299.4	-312.3	299.4	299.4	299.4	299.4	298.1	298.1
Design Ratio	10.38	28.68	47.54	47.54	(47.54)	(47.54)	(39.62)	(39.62)
Rating Factor	13.00	18.27	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-6.62	6.62	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.72	9.72	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-20.90	20.90	0.00	0.00	27.10	20.90	0.00	0.00
Design Ratio	2.47	2.47	N/A	N/A	N/A	7.73	N/A	N/A
Rating Factor	3.16	3.16	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-6.62	6.62	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.72	9.72	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-26.90	N/A	0.00	0.00	-26.90	N/A	0.00	0.00
Design Ratio	3.08	N/A	N/A	N/A	9.66	N/A	N/A	N/A
Rating Factor	4.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2004.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	317.2	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Live Load Effect	597.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	914.4	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Resistance - Dead	1687.3	0.0	1767.3	0.0	1767.3	0.0	1703.8	0.0
Design Ratio	2.19	N/A	6.57	N/A	(6.57)	(N/A)	(5.48)	(N/A)
Rating Factor	2.83	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	6.4	6.4	6.4	6.4	6.4	6.4	7.7	7.7
Live Load Effect	22.4	-16.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	28.8	-10.2	6.4	6.4	6.4	6.4	7.7	7.7
Resistance - Dead	299.4	-312.3	299.4	299.4	299.4	299.4	298.1	298.1
Design Ratio	10.61	30.03	47.54	47.54	(47.54)	(47.54)	(39.62)	(39.62)
Rating Factor	13.37	18.79	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-7.31	7.31	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.41	10.41	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-20.90	20.90	0.00	0.00	27.10	20.90	0.00	0.00
Design Ratio	2.31	2.31	N/A	N/A	N/A	7.73	N/A	N/A
Rating Factor	2.86	2.86	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-7.31	7.31	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.41	10.41	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-26.90	N/A	0.00	0.00	-26.90	N/A	0.00	0.00
Design Ratio	2.88	N/A	N/A	N/A	9.66	N/A	N/A	N/A
Rating Factor	3.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2010.9	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	317.2	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Live Load Effect	639.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	956.3	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Resistance - Dead	1693.7	0.0	1767.3	0.0	1767.3	0.0	1703.8	0.0
Design Ratio	2.10	N/A	6.57	N/A	(6.57)	(N/A)	(5.48)	(N/A)
Rating Factor	2.65	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	6.4	6.4	6.4	6.4	6.4	6.4	7.7	7.7
Live Load Effect	21.5	-14.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	27.9	-8.5	6.4	6.4	6.4	6.4	7.7	7.7
Resistance - Dead	299.4	-312.3	299.4	299.4	299.4	299.4	298.1	298.1
Design Ratio	10.96	36.11	47.54	47.54	(47.54)	(47.54)	(39.62)	(39.62)
Rating Factor	13.94	20.95	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-7.82	7.82	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.92	10.92	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-20.90	20.90	0.00	0.00	27.10	20.90	0.00	0.00
Design Ratio	2.20	2.20	N/A	N/A	N/A	7.73	N/A	N/A
Rating Factor	2.67	2.67	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-7.82	7.82	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.92	10.92	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-26.90	N/A	0.00	0.00	-26.90	N/A	0.00	0.00
Design Ratio	2.75	N/A	N/A	N/A	9.66	N/A	N/A	N/A
Rating Factor	3.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2016.4	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	317.2	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Live Load Effect	671.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	988.5	0.0	317.2	0.0	317.2	0.0	380.6	0.0
Resistance - Dead	1699.2	0.0	1767.3	0.0	1767.3	0.0	1703.8	0.0
Design Ratio	2.04	N/A	6.57	N/A	(6.57)	(N/A)	(5.48)	(N/A)
Rating Factor	2.53	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	305.9	305.9	305.9	305.9	305.9
Dead Load Effect	6.4	6.4	6.4	6.4	6.4	6.4	7.7	7.7
Live Load Effect	23.7	-17.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	30.1	-11.5	6.4	6.4	6.4	6.4	7.7	7.7
Resistance - Dead	299.4	-312.3	299.4	299.4	299.4	299.4	298.1	298.1
Design Ratio	10.15	26.64	47.54	47.54	(47.54)	(47.54)	(39.62)	(39.62)
Rating Factor	12.64	17.43	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.500
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-8.21	8.21	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.32	11.32	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-20.90	20.90	0.00	0.00	27.10	20.90	0.00	0.00
Design Ratio	2.12	2.12	N/A	N/A	N/A	7.73	N/A	N/A
Rating Factor	2.54	2.54	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.10	3.10	0.00	0.00	-3.10	3.10	0.00	0.00
Live Load Effect	-8.21	8.21	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.32	11.32	0.00	0.00	-3.10	3.10	0.00	0.00
Resistance - Dead	-26.90	N/A	0.00	0.00	-26.90	N/A	0.00	0.00
Design Ratio	2.65	N/A	N/A	N/A	9.66	N/A	N/A	N/A
Rating Factor	3.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 105.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	59.7500			
Top Flange Thickness	=	0.6250	Top Flange Width	=	12.3750
Web Depth	=	58.5000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.6250	Bottom Flange Width	=	12.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners:
Fy = 30.000 ksi
Width = 5.000 in
Thickness = 0.375 in
Spacing = 49.999 in
B = 1.000 (Type Factor)
Singles or Pairs? PAIRS

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 12.500 ft
Maximum distance to Right Brace Point = 12.500 ft
Is analysis point braced? YES

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION STIFFENER CHECKS:

Point of Interest : 105.000
Construction Stage: 1

No longitudinal stiffeners are present.

Transverse Stiffeners:

6.10.9.3.3	Spacing	N/A
6.10.11.1.2-1	Projecting Width	PASS
6.10.11.1.2-2	Projecting Width	PASS
6.10.11.1.3-*	Moment of Inertia	PASS
6.10.11.1.3-11	Moment of Inertia	N/A

No bearing stiffeners are present.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	FAIL
6.10.2.2 Flange Proportions (Top Flange)	PASS
6.10.2.2 Flange Proportions (Bottom Flange)	PASS

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	NO	NO	NO	NO	NO	NO	NO	NO
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	..	..	..	..
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	..	..	..	..
A6.2.1	Compact Web Slenderness	NSAT	NSAT	NSAT	NSAT	..	..	..	..
A6.2.2	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	..	..	..	..

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	1971.7	0.0	1979.9	0.0	1979.9	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	A.3.3-2	N/A	A.3.3-2	N/A	6A6.9.6	N/A
Dead Load Effect	331.8	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Live Load Effect	940.2	0.0	725.3	0.0	725.3	0.0	0.0	0.0
Total Load Effect	1272.0	0.0	1057.1	0.0	1057.1	0.0	398.2	0.0
Resistance - Dead	1639.9	0.0	1648.1	0.0	1648.1	0.0	1686.3	0.0
Design Ratio	1.55	N/A	1.87	N/A	(1.87)	(N/A)	(5.24)	(N/A)
Rating Factor	1.74	N/A	2.27	N/A	(2.27)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	-305.9	305.9	-305.9	-305.9	-305.9
Dead Load Effect	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Live Load Effect	33.5	-33.5	25.8	-25.8	25.8	-25.8	0.0	0.0
Total Load Effect	27.6	-39.3	19.9	-31.7	19.9	-31.7	-7.0	-7.0
Resistance - Dead	311.7	-300.0	311.7	-300.0	311.7	-300.0	-298.8	-298.8
Design Ratio	11.09	7.78	15.34	9.65	(15.34)	(9.65)	(43.38)	(43.38)
Rating Factor	9.32	8.97	12.08	11.62	(12.08)	(11.62)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-8.54	8.54	0.00	0.00	-6.57	6.57	0.00	0.00
Total Load Effect	-11.79	11.79	0.00	0.00	-9.82	9.82	0.00	0.00
Resistance - Dead	-20.75	20.75	0.00	0.00	-20.75	20.75	0.00	0.00
Design Ratio	2.04	2.04	N/A	N/A	2.44	2.44	N/A	N/A
Rating Factor	2.43	2.43	N/A	N/A	3.16	3.16	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-8.54	8.54	0.00	0.00	-6.57	6.57	0.00	0.00
Total Load Effect	-11.79	11.79	0.00	0.00	-9.82	9.82	0.00	0.00
Resistance - Dead	-26.75	N/A	0.00	0.00	-26.75	N/A	0.00	0.00
Design Ratio	2.54	N/A	N/A	N/A	3.05	N/A	N/A	N/A
Rating Factor	3.13	N/A	N/A	N/A	4.07	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2000.7	0.0	2007.2	0.0	2007.2	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	A.3.3-2	N/A	A.3.3-2	N/A	6A6.9.6	N/A
Dead Load Effect	331.8	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Live Load Effect	901.4	0.0	695.4	0.0	695.4	0.0	0.0	0.0
Total Load Effect	1233.2	0.0	1027.2	0.0	1027.2	0.0	398.2	0.0
Resistance - Dead	1668.9	0.0	1675.4	0.0	1675.4	0.0	1686.3	0.0
Design Ratio	1.62	N/A	1.95	N/A	(1.95)	(N/A)	(5.24)	(N/A)
Rating Factor	1.85	N/A	2.41	N/A	(2.41)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	305.9	-305.9	305.9	-305.9	-305.9	-305.9
Dead Load Effect	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Live Load Effect	33.9	-33.9	26.2	-26.2	26.2	-26.2	0.0	0.0
Total Load Effect	28.1	-39.8	20.3	-32.1	20.3	-32.1	-7.0	-7.0
Resistance - Dead	311.7	-300.0	311.7	-300.0	311.7	-300.0	-298.8	-298.8
Design Ratio	10.90	7.68	15.06	9.54	(15.06)	(9.54)	(43.38)	(43.38)
Rating Factor	9.18	8.84	11.91	11.46	(11.91)	(11.46)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	-24.00	24.00	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-8.19	8.19	0.00	0.00	-6.30	6.30	0.00	0.00
Total Load Effect	-11.44	11.44	0.00	0.00	-9.55	9.55	0.00	0.00
Resistance - Dead	-20.75	20.75	0.00	0.00	-20.75	20.75	0.00	0.00
Design Ratio	2.10	2.10	N/A	N/A	2.51	2.51	N/A	N/A
Rating Factor	2.53	2.53	N/A	N/A	3.29	3.29	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-8.19	8.19	0.00	0.00	-6.30	6.30	0.00	0.00
Total Load Effect	-11.44	11.44	0.00	0.00	-9.55	9.55	0.00	0.00
Resistance - Dead	-26.75	N/A	0.00	0.00	-26.75	N/A	0.00	0.00
Design Ratio	2.62	N/A	N/A	N/A	3.14	N/A	N/A	N/A
Rating Factor	3.27	N/A	N/A	N/A	4.25	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2002.4	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	331.8	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Live Load Effect	431.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	763.2	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Resistance - Dead	1670.6	0.0	1752.7	0.0	1752.7	0.0	1686.3	0.0
Design Ratio	2.62	N/A	6.28	N/A	(6.28)	(N/A)	(5.24)	(N/A)
Rating Factor	3.87	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9
Dead Load Effect	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Live Load Effect	16.5	-16.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	10.6	-22.3	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Resistance - Dead	311.7	-300.0	-300.0	-300.0	-300.0	-300.0	-298.8	-298.8
Design Ratio	28.86	13.69	52.06	52.06	(52.06)	(52.06)	(43.38)	(43.38)
Rating Factor	18.92	18.21	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-5.28	5.28	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.53	8.53	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-20.75	20.75	0.00	0.00	27.25	20.75	0.00	0.00
Design Ratio	2.82	2.82	N/A	N/A	N/A	7.39	N/A	N/A
Rating Factor	3.93	3.93	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-5.28	5.28	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.53	8.53	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-26.75	N/A	0.00	0.00	-26.75	N/A	0.00	0.00
Design Ratio	3.52	N/A	N/A	N/A	9.24	N/A	N/A	N/A
Rating Factor	5.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2003.3	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	331.8	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Live Load Effect	393.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	725.5	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Resistance - Dead	1671.5	0.0	1752.7	0.0	1752.7	0.0	1686.3	0.0
Design Ratio	2.76	N/A	6.28	N/A	(6.28)	(N/A)	(5.24)	(N/A)
Rating Factor	4.25	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9
Dead Load Effect	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Live Load Effect	15.1	-15.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	9.2	-20.9	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Resistance - Dead	311.7	-300.0	-300.0	-300.0	-300.0	-300.0	-298.8	-298.8
Design Ratio	33.27	14.60	52.06	52.06	(52.06)	(52.06)	(43.38)	(43.38)
Rating Factor	20.69	19.91	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-4.82	4.82	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.06	8.06	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-20.75	20.75	0.00	0.00	27.25	20.75	0.00	0.00
Design Ratio	2.98	2.98	N/A	N/A	N/A	7.39	N/A	N/A
Rating Factor	4.31	4.31	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-4.82	4.82	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-8.06	8.06	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-26.75	N/A	0.00	0.00	-26.75	N/A	0.00	0.00
Design Ratio	3.72	N/A	N/A	N/A	9.24	N/A	N/A	N/A
Rating Factor	5.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	1995.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	331.8	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Live Load Effect	359.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	691.0	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Resistance - Dead	1663.7	0.0	1752.7	0.0	1752.7	0.0	1686.3	0.0
Design Ratio	2.89	N/A	6.28	N/A	(6.28)	(N/A)	(5.24)	(N/A)
Rating Factor	4.63	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9
Dead Load Effect	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Live Load Effect	13.5	-13.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	7.6	-19.3	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Resistance - Dead	311.7	-300.0	-300.0	-300.0	-300.0	-300.0	-298.8	-298.8
Design Ratio	40.31	15.82	52.06	52.06	(52.06)	(52.06)	(43.38)	(43.38)
Rating Factor	23.15	22.28	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-4.39	4.39	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.64	7.64	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-20.75	20.75	0.00	0.00	27.25	20.75	0.00	0.00
Design Ratio	3.14	3.14	N/A	N/A	N/A	7.39	N/A	N/A
Rating Factor	4.72	4.72	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-4.39	4.39	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-7.64	7.64	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-26.75	N/A	0.00	0.00	-26.75	N/A	0.00	0.00
Design Ratio	3.93	N/A	N/A	N/A	9.24	N/A	N/A	N/A
Rating Factor	6.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2007.7	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	331.8	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Live Load Effect	497.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	829.5	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Resistance - Dead	1675.9	0.0	1752.7	0.0	1752.7	0.0	1686.3	0.0
Design Ratio	2.42	N/A	6.28	N/A	(6.28)	(N/A)	(5.24)	(N/A)
Rating Factor	3.37	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9
Dead Load Effect	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Live Load Effect	18.9	-18.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	13.0	-24.7	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Resistance - Dead	311.7	-300.0	-300.0	-300.0	-300.0	-300.0	-298.8	-298.8
Design Ratio	23.55	12.37	52.06	52.06	(52.06)	(52.06)	(43.38)	(43.38)
Rating Factor	16.53	15.91	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.34	9.34	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-20.75	20.75	0.00	0.00	27.25	20.75	0.00	0.00
Design Ratio	2.57	2.57	N/A	N/A	N/A	7.39	N/A	N/A
Rating Factor	3.41	3.41	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.34	9.34	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-26.75	N/A	0.00	0.00	-26.75	N/A	0.00	0.00
Design Ratio	3.21	N/A	N/A	N/A	9.24	N/A	N/A	N/A
Rating Factor	4.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	1990.4	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	331.8	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Live Load Effect	536.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	868.7	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Resistance - Dead	1658.6	0.0	1752.7	0.0	1752.7	0.0	1686.3	0.0
Design Ratio	2.29	N/A	6.28	N/A	(6.28)	(N/A)	(5.24)	(N/A)
Rating Factor	3.09	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9
Dead Load Effect	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Live Load Effect	19.9	-19.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	14.1	-25.8	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Resistance - Dead	311.7	-300.0	-300.0	-300.0	-300.0	-300.0	-298.8	-298.8
Design Ratio	21.74	11.85	52.06	52.06	(52.06)	(52.06)	(43.38)	(43.38)
Rating Factor	15.63	15.04	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-6.57	6.57	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.82	9.82	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-20.75	20.75	0.00	0.00	27.25	20.75	0.00	0.00
Design Ratio	2.45	2.45	N/A	N/A	N/A	7.39	N/A	N/A
Rating Factor	3.16	3.16	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-6.57	6.57	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-9.82	9.82	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-26.75	N/A	0.00	0.00	-26.75	N/A	0.00	0.00
Design Ratio	3.06	N/A	N/A	N/A	9.24	N/A	N/A	N/A
Rating Factor	4.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2004.5	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	331.8	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Live Load Effect	597.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	928.8	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Resistance - Dead	1672.6	0.0	1752.7	0.0	1752.7	0.0	1686.3	0.0
Design Ratio	2.16	N/A	6.28	N/A	(6.28)	(N/A)	(5.24)	(N/A)
Rating Factor	2.80	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9
Dead Load Effect	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Live Load Effect	19.5	-19.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	13.6	-25.4	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Resistance - Dead	311.7	-300.0	-300.0	-300.0	-300.0	-300.0	-298.8	-298.8
Design Ratio	22.44	12.05	52.06	52.06	(52.06)	(52.06)	(43.38)	(43.38)
Rating Factor	15.98	15.38	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-7.30	7.30	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.55	10.55	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-20.75	20.75	0.00	0.00	27.25	20.75	0.00	0.00
Design Ratio	2.27	2.27	N/A	N/A	N/A	7.39	N/A	N/A
Rating Factor	2.84	2.84	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-7.30	7.30	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-10.55	10.55	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-26.75	N/A	0.00	0.00	-26.75	N/A	0.00	0.00
Design Ratio	2.84	N/A	N/A	N/A	9.24	N/A	N/A	N/A
Rating Factor	3.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2010.0	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	331.8	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Live Load Effect	643.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	975.1	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Resistance - Dead	1678.2	0.0	1752.7	0.0	1752.7	0.0	1686.3	0.0
Design Ratio	2.06	N/A	6.28	N/A	(6.28)	(N/A)	(5.24)	(N/A)
Rating Factor	2.61	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9
Dead Load Effect	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Live Load Effect	18.2	-18.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	12.3	-24.1	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Resistance - Dead	311.7	-300.0	-300.0	-300.0	-300.0	-300.0	-298.8	-298.8
Design Ratio	24.84	12.71	52.06	52.06	(52.06)	(52.06)	(43.38)	(43.38)
Rating Factor	17.14	16.49	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-7.87	7.87	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.12	11.12	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-20.75	20.75	0.00	0.00	27.25	20.75	0.00	0.00
Design Ratio	2.16	2.16	N/A	N/A	N/A	7.39	N/A	N/A
Rating Factor	2.64	2.64	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-7.87	7.87	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.12	11.12	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-26.75	N/A	0.00	0.00	-26.75	N/A	0.00	0.00
Design Ratio	2.70	N/A	N/A	N/A	9.24	N/A	N/A	N/A
Rating Factor	3.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	2016.4	0.0	2084.5	0.0	2084.5	0.0	2084.5	0.0
6.10. or Appendix A	A.3.3-2	N/A	6A6.9.6	N/A	6A6.9.6	N/A	6A6.9.6	N/A
Dead Load Effect	331.8	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Live Load Effect	675.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	1007.4	0.0	331.8	0.0	331.8	0.0	398.2	0.0
Resistance - Dead	1684.6	0.0	1752.7	0.0	1752.7	0.0	1686.3	0.0
Design Ratio	2.00	N/A	6.28	N/A	(6.28)	(N/A)	(5.24)	(N/A)
Rating Factor	2.49	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9	-305.9
Dead Load Effect	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Live Load Effect	20.8	-20.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	14.9	-26.7	-5.9	-5.9	-5.9	-5.9	-7.0	-7.0
Resistance - Dead	311.7	-300.0	-300.0	-300.0	-300.0	-300.0	-298.8	-298.8
Design Ratio	20.49	11.46	52.06	52.06	(52.06)	(52.06)	(43.38)	(43.38)
Rating Factor	14.99	14.42	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	0.00	0.00	24.00	24.00	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-8.26	8.26	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.51	11.51	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-20.75	20.75	0.00	0.00	27.25	20.75	0.00	0.00
Design Ratio	2.08	2.08	N/A	N/A	N/A	7.39	N/A	N/A
Rating Factor	2.51	2.51	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	0.00	0.00	-30.00	N/A	0.00	0.00
Dead Load Effect	-3.25	3.25	0.00	0.00	-3.25	3.25	0.00	0.00
Live Load Effect	-8.26	8.26	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	-11.51	11.51	0.00	0.00	-3.25	3.25	0.00	0.00
Resistance - Dead	-26.75	N/A	0.00	0.00	-26.75	N/A	0.00	0.00
Design Ratio	2.61	N/A	N/A	N/A	9.24	N/A	N/A	N/A
Rating Factor	3.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

RATING FACTOR SUMMARY: Design Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.00	N/A	3.89	N/A	3.89	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.48	N/A	4.52	N/A	4.52	N/A	N/A	N/A
Critical	3.00	N/A	3.89	N/A	(3.89)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A		N/A		N/A		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	6.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	6.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	6.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	5.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	5.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.94	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	5.20	N/A	6.74	N/A	6.74	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	5.91	N/A	7.66	N/A	7.66	N/A	N/A	N/A
Critical	5.20	N/A	6.74	N/A	(6.74)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.81	N/A	4.94	N/A	4.94	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	4.38	N/A	5.67	N/A	5.67	N/A	N/A	N/A
Critical	3.81	N/A	4.94	N/A	(4.94)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	6.64	6.64	N/A	N/A	8.63	8.63	N/A	N/A
2 - HL-93-TANDEM (TRK)	7.55	7.55	N/A	N/A	9.82	9.82	N/A	N/A
Critical	6.64		N/A		8.63		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	8.38	N/A	N/A	N/A	10.89	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	9.52	N/A	N/A	N/A	12.38	N/A	N/A	N/A
Critical	8.38		N/A		10.89		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	11.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	11.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	12.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	10.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	9.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	8.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	8.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	8.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		8.67	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	8.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	8.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	9.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	7.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	6.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	6.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	6.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	6.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		6.30	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	10.87	10.87	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	11.08	11.08	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	11.73	11.73	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	9.79	9.79	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	8.86	8.86	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	8.51	8.51	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	8.26	8.26	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	8.23	8.23	N/A	N/A	N/A	N/A	N/A	N/A
Critical		8.23		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	13.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	13.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	14.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	12.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	11.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	10.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	10.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	10.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		10.38		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.85	N/A	3.70	N/A	3.70	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.18	N/A	4.12	N/A	4.12	N/A	N/A	N/A
Critical	2.85	N/A	3.70	N/A	(3.70) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	4.52	N/A	5.86	N/A	5.86	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	5.07	N/A	6.58	N/A	6.58	N/A	N/A	N/A
Critical	4.52	N/A	5.86	N/A	(5.86) (	N/A) (	N/A) (	N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.68	3.68	N/A	N/A	4.78	4.78	N/A	N/A
2 - HL-93-TANDEM (TRK)	4.09	4.09	N/A	N/A	5.32	5.32	N/A	N/A
Critical	3.68		N/A		4.78		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	4.68	N/A	N/A	N/A	6.08	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	5.21	N/A	N/A	N/A	6.77	N/A	N/A	N/A
Critical	4.68		N/A		6.08		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	6.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	6.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	7.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	5.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.55	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	9.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	10.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	11.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	8.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	7.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	7.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	7.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	7.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		7.46	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	6.01	6.01	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	6.42	6.42	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.88	6.88	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.38	5.38	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.92	4.92	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.50	4.50	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.37	4.37	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.35	4.35	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.35		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	7.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	8.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	8.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	6.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	6.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	5.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	5.56	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	5.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		5.54		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.05	N/A	2.67	N/A	2.67	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.25	N/A	2.93	N/A	2.93	N/A	N/A	N/A
Critical	2.05	N/A	2.67	N/A	(2.67)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	5.37	22.65	6.96	29.37	6.96	29.37	N/A	N/A
2 - HL-93-TANDEM (TRK)	5.84	17.35	7.56	22.49	7.56	22.49	N/A	N/A
Critical	5.37	17.35	6.96	22.49	(6.96)	(22.49)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.83	2.83	N/A	N/A	3.68	3.68	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.06	3.06	N/A	N/A	3.98	3.98	N/A	N/A
Critical	2.83		N/A		3.68		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.62	N/A	N/A	N/A	4.71	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.92	N/A	N/A	N/A	5.09	N/A	N/A	N/A
Critical	3.62		N/A		4.71		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	4.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.15	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	11.27	37.97	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	12.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	13.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	10.06	34.19	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	9.22	32.60	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	9.09	37.87	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	9.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	8.89	32.65	N/A	N/A	N/A	N/A	N/A	N/A
Critical		8.89	32.60	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	4.60	4.60	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.92	4.92	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.38	5.38	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.09	4.09	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.72	3.72	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.38	3.38	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.17	3.17	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.14	3.14	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.14		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	5.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	6.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.02		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.80	N/A	2.34	N/A	2.34	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.94	N/A	2.53	N/A	2.53	N/A	N/A	N/A
Critical	1.80	N/A	2.34	N/A	(2.34)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	6.82	13.31	8.84	17.26	8.84	17.26	N/A	N/A
2 - HL-93-TANDEM (TRK)	7.06	12.10	9.15	15.68	9.15	15.68	N/A	N/A
Critical	6.82	12.10	8.84	15.68	(8.84)	(15.68)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.49	2.49	N/A	N/A	3.24	3.24	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.65	2.65	N/A	N/A	3.45	3.45	N/A	N/A
Critical	2.49		N/A		3.24		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.20	N/A	N/A	N/A	4.16	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.41	N/A	N/A	N/A	4.43	N/A	N/A	N/A
Critical	3.20		N/A		4.16		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	4.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.93	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.64	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	13.93	26.84	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	15.13	28.92	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	16.75	32.65	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	12.33	23.20	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	11.44	21.42	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	11.56	22.78	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	12.07	26.35	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	11.21	20.82	N/A	N/A	N/A	N/A	N/A	N/A
Critical		11.21	20.82	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	4.04	4.04	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.42	4.42	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.79	4.79	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.54	3.54	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.24	3.24	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.96	2.96	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.76	2.76	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.64	2.64	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.64		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	5.20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.40		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.74	N/A	2.27	N/A	2.27	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.88	N/A	2.44	N/A	2.44	N/A	N/A	N/A
Critical	1.74	N/A	2.27	N/A	(2.27)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	7.77	10.98	10.07	14.23	10.07	14.23	N/A	N/A
2 - HL-93-TANDEM (TRK)	7.86	10.46	10.19	13.55	10.19	13.55	N/A	N/A
Critical	7.77	10.46	10.07	13.55	(10.07)	(13.55)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.42	2.42	N/A	N/A	3.15	3.15	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.56	2.56	N/A	N/A	3.33	3.33	N/A	N/A
Critical	2.42		N/A		3.15		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.12	N/A	N/A	N/A	4.06	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.30	N/A	N/A	N/A	4.29	N/A	N/A	N/A
Critical	3.12		N/A		4.06		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	3.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.53	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	15.79	22.33	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	16.91	25.26	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	19.13	27.70	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	13.90	19.31	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	13.00	18.27	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	13.37	18.79	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	13.94	20.95	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	12.64	17.43	N/A	N/A	N/A	N/A	N/A	N/A
Critical		12.64	17.43	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	3.93	3.93	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.36	4.36	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.69	4.69	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.43	3.43	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.16	3.16	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.86	2.86	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.67	2.67	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.54	2.54	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.54		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.500
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	5.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.28		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	1.74	N/A	2.27	N/A	2.27	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.85	N/A	2.41	N/A	2.41	N/A	N/A	N/A
Critical	1.74	N/A	2.27	N/A	(2.27)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	9.32	8.97	12.08	11.62	12.08	11.62	N/A	N/A
2 - HL-93-TANDEM (TRK)	9.18	8.84	11.91	11.46	11.91	11.46	N/A	N/A
Critical	9.18	8.84	11.91	11.46	(11.91)	(11.46)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.43	2.43	N/A	N/A	3.16	3.16	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.53	2.53	N/A	N/A	3.29	3.29	N/A	N/A
Critical	2.43		N/A		3.16		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.13	N/A	N/A	N/A	4.07	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.27	N/A	N/A	N/A	4.25	N/A	N/A	N/A
Critical	3.13		N/A		4.07		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	3.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.49	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	18.92	18.21	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	20.69	19.91	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	23.15	22.28	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	16.53	15.91	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	15.63	15.04	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	15.98	15.38	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	17.14	16.49	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	14.99	14.42	N/A	N/A	N/A	N/A	N/A	N/A
Critical		14.99	14.42	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	3.93	3.93	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.31	4.31	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.72	4.72	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.41	3.41	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.16	3.16	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	2.84	2.84	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	2.64	2.64	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	2.51	2.51	N/A	N/A	N/A	N/A	N/A	N/A
Critical		2.51		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	5.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.24		N/A		N/A		N/A	

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load Combination No.	Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I	1.74	62.79
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	105.0000	STRENGTH I	1.85	46.29
Crit	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	105.0000	STRENGTH I	1.74	62.79

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	104.5000	STRENGTH I-O	2.27	81.80
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	105.0000	STRENGTH I-O	2.41	60.23
Crit	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	104.5000	STRENGTH I-O	2.27	81.80

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load							
3	TYPE3	(TRK)	25.00	105.0000	STRENGTH I	3.87	96.81
4	TYPE3S2	(TRK)	36.00	105.0000	STRENGTH I	4.25	152.83
5	TYPE3-3	(TRK)	40.00	104.5000	STRENGTH I	4.60	184.19
6	SU4	(TRK)	27.00	105.0000	STRENGTH I	3.37	90.92
7	SU5	(TRK)	31.00	105.0000	STRENGTH I	3.09	95.76
8	SU6	(TRK)	34.75	105.0000	STRENGTH I	2.80	97.36
9	SU7	(TRK)	38.75	105.0000	STRENGTH I	2.61	101.09
10	NRL	(TRK)	40.00	105.0000	STRENGTH I	2.49	99.74
Crit	NRL	(TRK)	40.00	105.0000	STRENGTH I	2.49	99.74

LIMIT STATE LEGEND:

BRASS	Specifications
STRENGTH I	Strength I Inventory
STRENGTH I-O	Strength I Operating
STRENGTH II	Strength II
STRENGTH IV	Strength IV
SERVICE I	Service I
SERVICE II	Service II Inventory
SERVICE II-O	Service II Operating
FATIGUE I	Fatigue I
FATIGUE II	Fatigue II

BRIDGE LOAD RATING REPORT

BRIDGE 35-1-5.42, Structure No. 080404000003074

Single Lane Steel Bridge, (31'-0" Girder Length)

Cherokee National Forest
Tellico Ranger District
Southern Region, USFS

May 2019

PREPARED BY:
DJ&A, P.C. Engineers – Planners – Surveyors
3203 Russell Street
Missoula, MT 59801

RATED BY:
Ammon Groesbeck, P.E.

CHECKED BY:
Brad Miller, P.E.

RATING ENGINEER:
Ammon Groesbeck, P.E.

GENERAL COMMENTS:

Rating factors are calculated for the HL-93 design live loads (Inventory and Operating), Type 3, Type 3S2, Type 3-3, and SU4, SU5, SU6, SU7 legal vehicles, and the AASHTO Notional Rating Load (NRL).

BRASS 8.0, Microsoft Excel, MathCAD 15.0, and Visual Analysis 18.0 are used for bridge rating calculations.

BRASS output is furnished for the controlling girder line (interior or exterior) only.

See the calculation sheets immediately following the Rating Form for detailed rating assumption information.

DRAWING/DESIGN ASSUMPTIONS:

Available design drawings for the deck were used as a reference for this bridge load rating. All other information for this rating was field-measured by DJ&A at a site visit.

BRIDGE CONDITION ASSUMPTIONS:

This bridge is rated based on the latest USFS bridge inspection, available USFS design drawings, and DJ&A site visit measurements. This site was visited by DJ&A prior to completing rating calculations to verify dimensions and condition assumptions.

CONTROLLING RATING:

The rating factors for Type 3, Type 3S2, and Type 3-3 AASHTO legal vehicles are greater than 1.0; therefore load posting of the bridge is not required.

BRIDGE RATING FORM
USFS REGION 8 LOAD RATING REPORT

Forest:	Cherokee	Ranger District:	Tellico
Bridge Name:	35-1-5.42	Structure No.:	080404000003074
Rated By:	Ammon Groesbeck	Date:	May 2019
Firm:	DJ&A P.C.	Drawing No.	-

==========

SUMMARY OF CONTROLLING RATING

(Rating Factors)

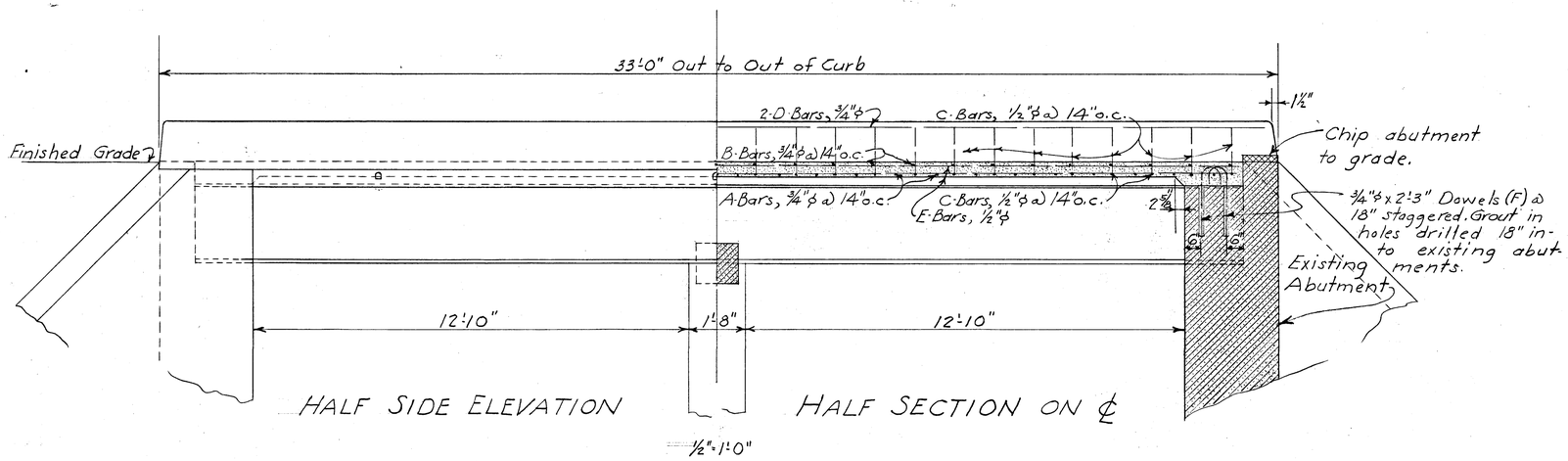
	RF	Safe Load Capacity (tons)	Controlling Member	Location (Span Ratio)	M, V, or B
HL-93 Inventory	0.44	-	Deck	Negative	M
HL-93 Operating	0.57	-	Deck	Negative	M
Type 3 Truck	1.11	27	Deck	Negative	M
Type 3S2 Truck	1.22	43	Deck	Negative	M
Type 3-3 Truck	1.18	47	Deck	Negative	M
SU4 Truck	1.11	30	Deck	Negative	M
SU5 Truck	1.11	34	Deck	Negative	M
SU6 Truck	1.11	38	Deck	Negative	M
SU7 Truck	1.11	43	Deck	Negative	M
NRL	1.11	44	Deck	Negative	M

Notes or Comments:

Safe load capacity is calculated as RF x GVW if RF ≥ 1.0. If RF < 1.0, equation 6A.8.3-1 in the Manual for Bridge Evaluation is used to calculate the safe posting load (highlighted).

Locations are span fractions as designated in BRASS (e.g. 105.00 = Mid-span).

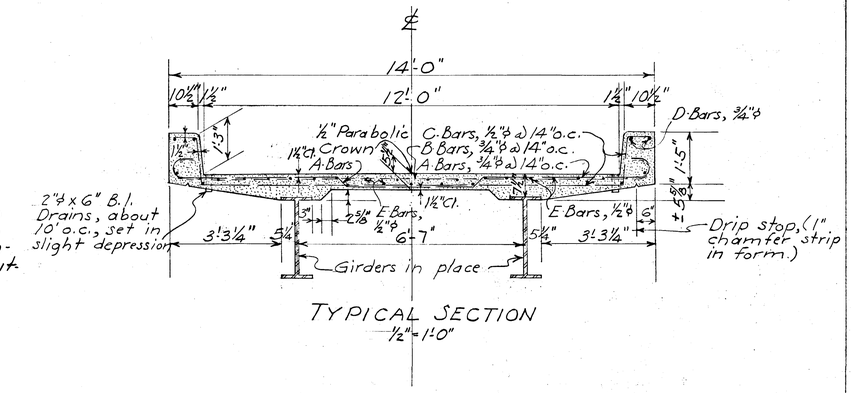
M = Moment, V = Shear, and B = Bearing



HALF SIDE ELEVATION

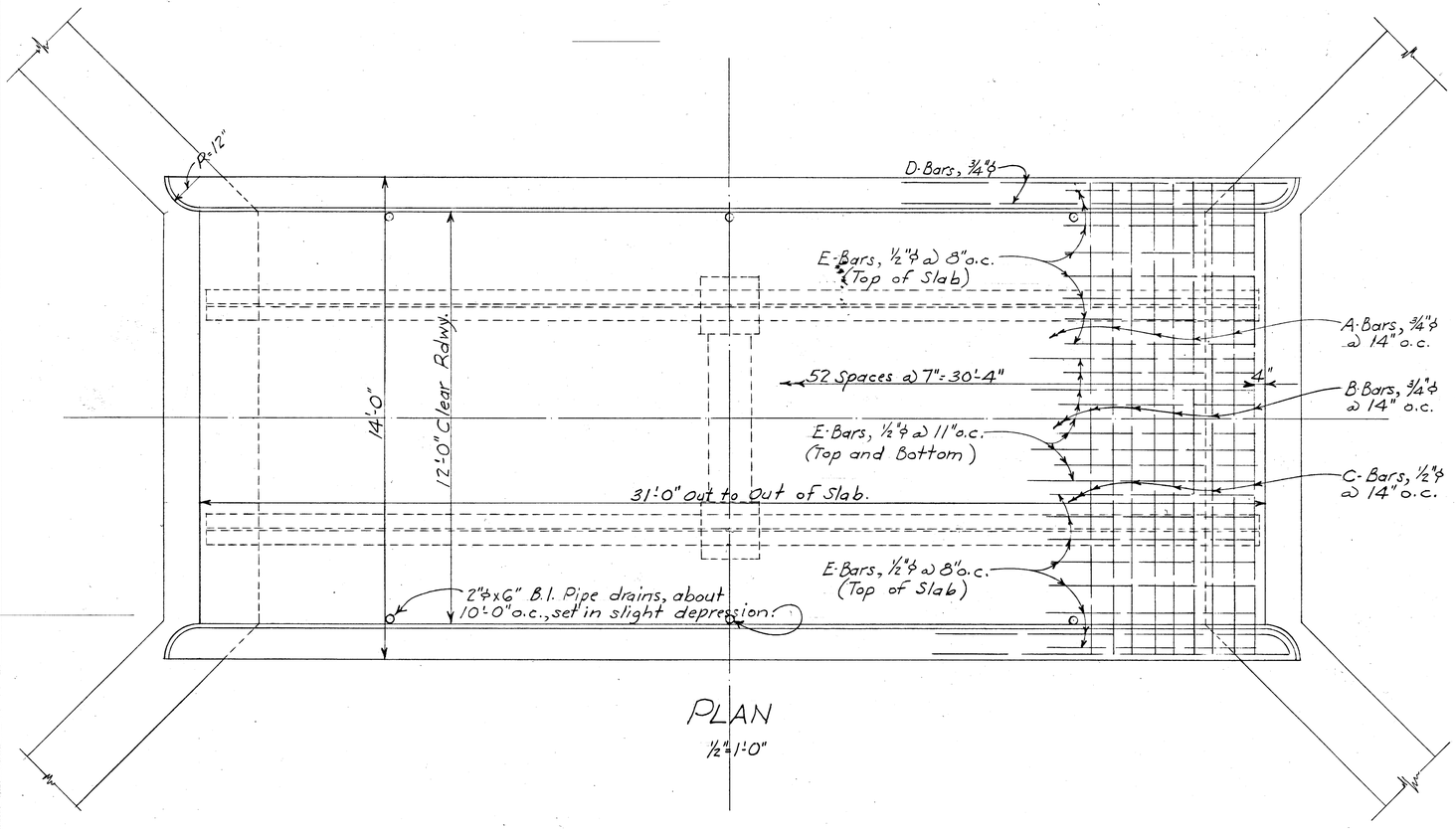
HALF SECTION ON ℄

½" = 1'-0"



TYPICAL SECTION

½" = 1'-0"



PLAN

½" = 1'-0"

REINFORCING STEEL				
Mark	No.	Size	Length	Detail
A	26	¾"ϕ	15'-4"	2'-7" 3'-7" 2'-7" 4'-10" 4'-10"
B	27	¾"ϕ	15'-2"	13'-8"
C	27	½"ϕ	15'-11"	12'-3"
D	4	¾"ϕ	32'-3"	Straight
E	25	½"ϕ	30'-4"	Straight
F	16	¾"ϕ	2'-3"	1'-6"
				d = Bar Diameter. 3d 3d TYPICAL HOOK
Approximate Concrete				11. Cu. Yds.
Reinforcing Steel				2256 Lbs.

NOTES

Approved chairs or precast blocks shall be used to maintain minimum cover for steel while pouring concrete.

Chamfer exposed edges ¾" unless otherwise specified.

Falsework for deck shall be hung from girders, with double hardwood wedges provided to adjust grade while pouring deck slab. See Drawing R-10901 for suggested falsework.

Remove loose scale, old paint and dirt from portions of girders to be imbedded in concrete, but do not paint.

DESIGN DATA

Loading: H-15, '44 AASHO.

Concrete: Minimum strength at 28 days 3600 Lbs. per sq. in., n = 10, fc = 1200 Lbs. per sq. in.

Reinforcing Steel: fs = 20,000 Lbs. per sq. in.

SPECIFICATIONS

Concrete: Shall be Class "A", not more than 5½ Gals. of water per sack of cement. Maximum aggregate: 1".

Reinforcing Steel: Shall meet Federal Specifications QQ-B-71a, Grade 2 (Intermediate), Type B (Deformed).

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION 8 R.E. PIDGEON REGIONAL ENGR.

CHEROKEE NATIONAL FOR FLATS CREEK BRIDGE DECK CITICO RIVER ROAD

DESIGNED: F.G.B. DRAWN: F.G.B.
SCALE: ½" = 1 FOOT CHECKED: F.G.B.
APPROVED: [signature] DATE: 10-15-51

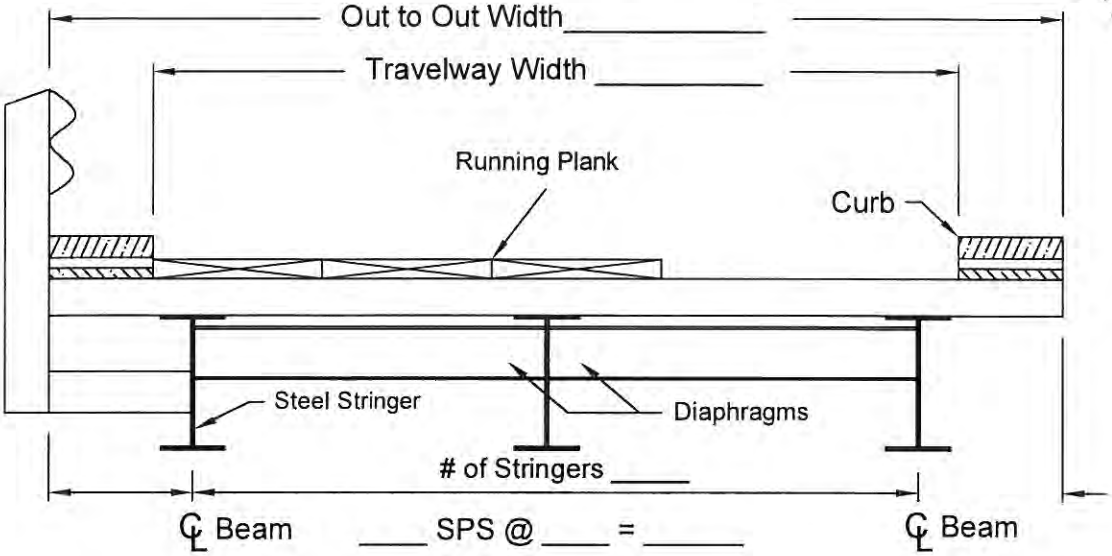
SHEET 1 OF 1 | DRAWING R-18001

5-2-15

Single Span Steel Bridge

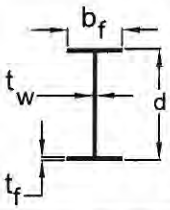
(All Measurements in Feet and Inches)

3-1 5.42
5/22/2019
? - 11:45am
ent
10sp.
Bdm
(See Back)



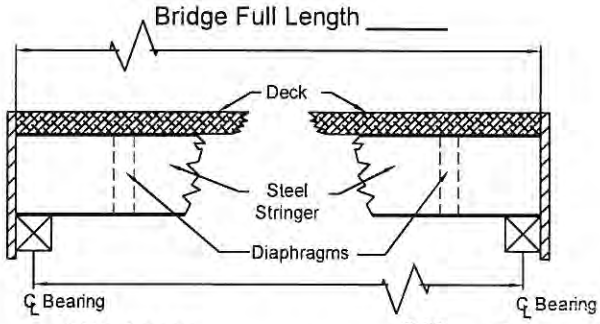
Steel Stringer

Measure to 1/16"



d	_____
b_f	_____
t_w	_____
t_f	_____

(Pick One ✓)
Rolled Shape _____
Welded Plate Girder _____
Riveted Built_up Member_____



Diaphragms _____ ____SPS____=_____

Bearing Distance_____

Elevation

Deck
Plank (Size) _____
Nail Laminated (Depth) _____
Glue Laminated (Depth) _____
Steel Corrugated (Depth) _____
Conc. Cast in Place (Depth)_____
Conc. Precast Panels (Depth) _____

Curb/ Railing
Curb Only Ht_____
W-Beam Ht _____
Other(Describe)_____

Wearing Surface
None _____
Steel Plate (size) _____
Timber Running Plank (size) _____
Gravel (Depth) _____
Asphalt (Depth) _____

Substructure (Pick One ✓)
Piling _____ Crib _____ Other(Describe)_____
Ledger/Sill _____ Wall _____

Substructure Material Type (Pick One ✓)
Timber,Treated _____
Timber,Untreated _____
Steel _____
Reinforced Concrete _____
Gabion _____
Other (Describe) _____

Take pictures along bridge surface and underneath to illustrate features ie. wearing surface, railing, stringers/slabs, substructure

Skew (Left or Right Ahead)

0° ____15°____ 30°____ 45°____

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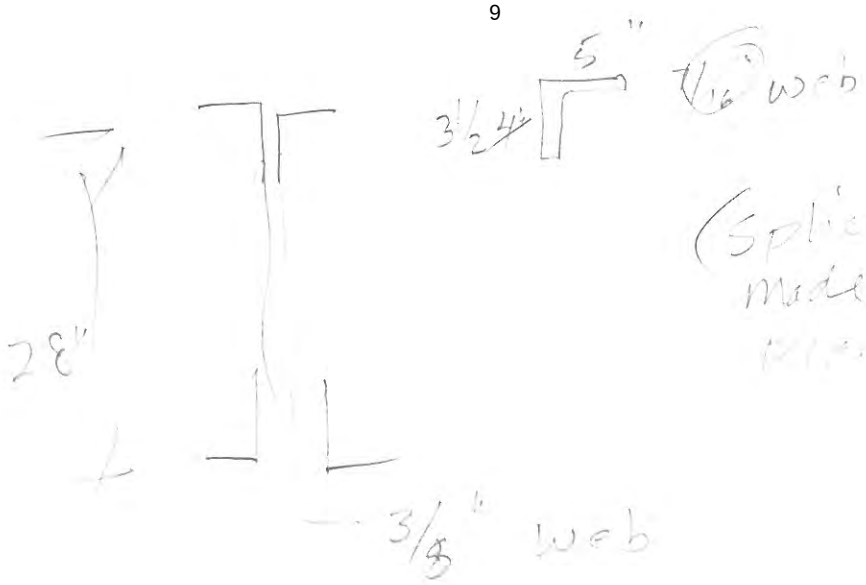

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made con

Calculations are in accordance with AASHTO LRFD Bridge Design Specifications, 8th Ed. & AASHTO Manual for Bridge Evaluation, 3rd Ed.
References to the Design Specifications are shown in [ ] brackets, references to the Bridge Evaluation Manual are shown in { } brackets.

DJ&A ENGINEERS PLANNERS SURVEYORS

GENERAL COMMENTS AND ASSUMPTIONS

All dimensions and properties of the existing bridge taken from USFS design drawings and field measurements.
Load Resistance Factor Rating (LRFR) methodology is used.
Load rating calculations are completed for superstructure elements only.
Live load distribution by approximate method.
BRASS-GIRDER v.8.0 program used for girder rating calculations. Electronic input/output BRASS files can be found in the Regional Bridge Engineer's files.

GENERAL INFORMATION

The following unit weights are used:

Concrete,	$\gamma c := 150 \cdot pcf$	pcf = Pounds Per Cubic Foot	
Asphalt,	$\gamma ws := 140 \cdot pcf$	[Table 3.5.1-1]	
Steel,	$\gamma s := 490 \cdot pcf$		
Wood,	$\gamma w := 50 \cdot pcf$		

Load Modifiers are as follows:

Ductility	$\eta D := 1.0$	For Conventional Designs		[1.3.3]
Redundancy	$\eta R := 1.0$	For Conventional Redundancy	** System factor reduction made for non-redundant bridges. **	[1.3.4]
Importance	$\eta I := 1.0$	For Typical Bridges		[1.3.5]

$\eta i = \eta D \cdot \eta R \cdot \eta I \geq 0.95$ [1.3.2.1] therefore, $\eta i := \max(\eta D \cdot \eta R \cdot \eta I, 0.95) = 1.00$
(maximum load factors)

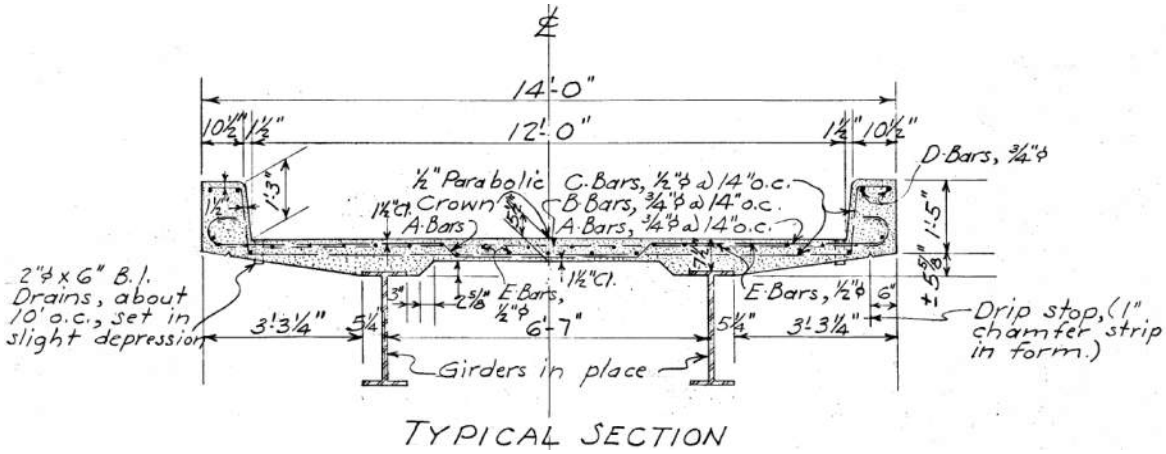
Load Factors are as follows:

	STRENGTH	SERVICE		
DC:	$\gamma DC := 1.25$	$\gamma DC_S := 1.0$	Dead Load of Components	
DW:	$\gamma DW := 1.50$	$\gamma DW_S := 1.0$	Dead Load of Wearing Surface	{6A.4.2.2-1 Notes}
Design LL:	$\gamma HL93_I := 1.75$	$\gamma HL93_{I.S} := 1.30$	HL-93 Live Load - Inventory Level	{Table 6A.4.2.2-1}
	$\gamma HL93_O := 1.35$	$\gamma HL93_{O.S} := 1.0$	HL-93 Live Load - Operating Level	
AASHTO Legal LL:	$\gamma LEGAL := 1.30$	$\gamma LEGAL_S := 1.30$	Type 3, Type 3S2, Type 3-3, SU4-SU7, NRL	{Table 6A.4.4.2.3a-1} $ADTT \leq 1000$

Resistance Factors are as follows:

Resistance Factor:		$\phi_f := 1.0$	$\phi_v := 1.0$	Steel Girders Flexure or Shear	[6.5.4.2]
		$\phi_{f.D} := 0.9$		Tension-Controlled Reinforced Concrete Sections	[5.5.4.2.1]
Condition Factor:	Girders,	$\phi c := 1.0$		** Based on Most Recent Inspection **	{Table 6A.4.2.3-1}
		$\phi c_{deck} := 1.0$		For the Deck	
System Factor:		$\phi s := 0.85$		For 2 Girder Bridge Per USFS	{Table 6A.4.2.4-1}
		$\phi s_{deck} := 1.0$		Deck	

BRIDGE GEOMETRY



Roadway Width,	$Wr := 12 \cdot ft$	Skew,	$Skew := 0 \cdot deg$	
Out-to-Out Deck Width,	$Wd := 14 \cdot ft$	Spans 1 & 2,	$Span_{12} := 28.3333 \cdot ft$	CL Brg. to CL Brg.
Girder Spacing,	$S := 6.5833 \cdot ft$	Number of Lanes,	$N_L := 1$	
		Number of Girders,	$N := 2$	
		Overhang,	$S_{over} := \frac{Wd - (N-1) \cdot S}{2} = 3.7083 \cdot ft$	

MATERIAL PROPERTIES

Concrete Deck: **Cast-In-Place Concrete Deck**

$t_D := 5.5 \cdot in$	Deck Thickness
$t_{D.OH} := 7.5 \cdot in$	Deck Thickness at Face of Exterior Soffit
$t_{D.OH.avg} := 5.5 \cdot in$	Average Deck Thickness for DL Calcs - Overhang
$Fc_D := 3600 \cdot psi$	28-day Compressive Strength
$Fy_D := 40 \cdot ksi$	Deck Rebar Yield
$cover_{top} := 1.5 \cdot in$	Concrete Cover to Top Transverse Bars
$cover_{bot} := 1.5 \cdot in$	Concrete Cover to Bottom Transverse Bars

Steel Girder: **Built-Up Plate Girder**

$b_{f.G} := 10.375 \cdot in$	Flange Width - Out to Out of Angles & Web	Angles Top & Bottom are L5x3-1/2x5/16
$t_{f.G} := 0.3125 \cdot in$	Flange Thickness - Angles	
$d_G := 28 \cdot in$	Girder Depth - Web Only	
$t_{w.G} := 0.375 \cdot in$	Web Thickness	
$E := 29000 \cdot ksi$	Modulus of Elasticity	
$F_y := 30 \cdot ksi$	Yield Stress - Based on Construction Between 1905 & 1935	{Table 6.A.6.2.1-1}

BRIDGE RATING FACTOR ANALYSIS:

DEAD LOADS

Girder and curb weight computed by BRASS.

Component Dead Load, DC:

Concrete Curb,

$w_{curb} := 12 \cdot in$ $w_{curb2} := 10.5 \cdot in$

$h_{curb} := 14.8125 \cdot in$

$DC_{curb} := \frac{w_{curb} + w_{curb2}}{2} \cdot h_{curb} \cdot \gamma c = 0.174 \cdot klf$

Deck (Interior), $DC_{Deck} := t_D \cdot \gamma c = 0.069 \cdot ksf$

Deck (Overhang), $DC_{Deck.OH} := t_{D.OH.avg} \cdot \gamma c = 0.069 \cdot ksf$

$DC_{Deck.OH.Brass} := (t_{D.OH.avg} - t_D) \cdot \gamma c = 0.000 \cdot ksf$

Wearing Surface Dead Load, DW:

Asphalt Wearing Surface,

$t_{ws} := 0 \cdot in$ Average Thickness $DW_{ws} := t_{ws} \cdot \gamma ws = 0.000 \cdot ksf$

LIVE LOADS

Live loads and live load distribution factors are computed directly by BRASS.

Multiple Presence Factor: Multiple Presence Factor for live loads is included per [3.6.1.1.2].
Multiple Presence Factor may be reduced to 95% of given value for $ADTT \le 1000$

$m_1 := 1.2$ Multiple Presence Factor for Single Lane Bridge [Table 3.6.1.1.2-1]

Adjust m for Low ADTT? $Adjust_m1 := 1$ 1 for "Yes", 0 for "No"

$$m_{1adjusted} := \begin{cases} (0.95 \cdot m_1) & \text{if } Adjust_m1 = 1 \\ m_1 & \text{if } Adjust_m1 = 0 \end{cases}$$

$m_{1adjusted} = 1.14$

CONCRETE DECK RATING FACTOR ANALYSIS:

CONCRETE DECK RATING

The deck transverse reinforcement is rated for moment. AASHTO LRFD strip widths are used to distribute the wheel loads.

DESIGN STRIP WIDTHS - [4.6.2.1]:

$X := 15.25 \cdot in$ Distance from Load to Point of Support

$B_{Pos} := 26 \cdot in + \frac{6.6 \cdot S}{12} = 5.79\,ft$ Interior Portion Between Girders (+Moment) [Table 4.6.2.1.3-1]

$B_{Neg} := 48 \cdot in + \frac{3.0 \cdot S}{12} = 5.65\,ft$ Interior Portion Over Girders (-Moment) [Table 4.6.2.1.3-1]

$B_{OH} := 45 \cdot in + \frac{10 \cdot X}{12} = 4.81\,ft$ Overhang (-Moment) [Table 4.6.2.1.3-1]

$B_{unit} := 1 \cdot ft$ Unit Strip Width for Dead & Live Loads in Visual Analysis

DECK NOMINAL RESISTANCE

Deck Thickness, $t_D = 5.50 \cdot in$

Nominal Flexural Resistance [5.7.3.2]

+Moment $Bar_No_{bot1} := 4$ $Dia_{bar.bot1} := \frac{Bar_No_{bot1}}{8} \cdot in = 0.50 \cdot in$ $A_{bar.bot1} := \frac{\pi}{4} \cdot (Dia_{bar.bot1})^2 = 0.20 \cdot in^2$

$d_{bot1} := t_D - cover_{bot} - \frac{Dia_{bar.bot1}}{2} = 3.75 \cdot in$

$Spa_{bar.bot1} := 14 \cdot in$ $As_{bot1} := A_{bar.bot1} \cdot \frac{B_{Pos}}{Spa_{bar.bot1}} = 0.97 \cdot in^2$

$Bar_No_{bot2} := 6$ $Dia_{bar.bot2} := \frac{Bar_No_{bot2}}{8} \cdot in = 0.75 \cdot in$ $A_{bar.bot2} := \frac{\pi}{4} \cdot (Dia_{bar.bot2})^2 = 0.44 \cdot in^2$

$d_{bot2} := t_D - cover_{bot} - \frac{Dia_{bar.bot2}}{2} = 3.62 \cdot in$

$Spa_{bar.bot2} := 14 \cdot in$ $As_{bot2} := A_{bar.bot2} \cdot \frac{B_{Pos}}{Spa_{bar.bot2}} = 2.19 \cdot in^2$

$d_{e.bot} := \frac{d_{bot1} \cdot As_{bot1} + d_{bot2} \cdot As_{bot2}}{As_{bot1} + As_{bot2}} = 3.66 \cdot in$

$As_{bot} := As_{bot1} + As_{bot2} = 3.17 \cdot in^2$ $a_{bot} := \frac{As_{bot} \cdot Fy_D}{0.85 \cdot Fc_D \cdot B_{Pos}} = 0.60 \cdot in$

$Mn_{D.Pos} := As_{bot} \cdot Fy_D \cdot \left(d_{e.bot} - \frac{a_{bot}}{2}\right) = 35.51 \cdot kip \cdot ft$ [5.7.3.2.2-1]

- Moment

$Bar_No_{top} := 6$ $\quad Dia_{bar.top} := \frac{Bar_No_{top}}{8} \cdot in = 0.75 \cdot in$ $\quad A_{bar.top} := \frac{\pi}{4} \cdot (Dia_{bar.top})^2 = 0.44 \cdot in^2$

$Spa_{bar.top} := 7 \cdot in$ $\quad d_{top} := t_D - cover_{top} - \frac{Dia_{bar.top}}{2} = 3.62 \cdot in$

$As_{top} := A_{bar.top} \cdot \frac{B_{Neg}}{Spa_{bar.top}} = 4.28 \cdot in^2$ $\quad a_{top} := \frac{As_{top} \cdot Fy_D}{0.85 \cdot Fc_D \cdot B_{Neg}} = 0.82 \cdot in$

$Mn_{D.Neg} := As_{top} \cdot Fy_D \cdot \left(d_{top} - \frac{a_{top}}{2}\right) = 45.79 \cdot kip \cdot ft$ [5.7.3.2.2-1]

Overhang -Moment

$Bar_No_{OH} := 6$ $\quad Dia_{bar.OH} := \frac{Bar_No_{OH}}{8} \cdot in = 0.75 \cdot in$ $\quad A_{bar.OH} := \frac{\pi}{4} \cdot (Dia_{bar.OH})^2 = 0.44 \cdot in^2$

$Spa_{bar.OH} := 7 \cdot in$ $\quad As_{OH} := A_{bar.OH} \cdot \frac{B_{OH}}{Spa_{bar.OH}} = 3.64 \cdot in^2$

$d_{OH} := t_{D.OH} - \left(cover_{top} + \frac{Dia_{bar.OH}}{2}\right) = 5.63 \cdot in$ $\quad a_{OH} := \frac{As_{OH} \cdot Fy_D}{0.85 \cdot Fc_D \cdot B_{OH}} = 0.82 \cdot in$

$Mn_{D.OH} := As_{OH} \cdot Fy_D \cdot \left(d_{OH} - \frac{a_{OH}}{2}\right) = 63.28 \cdot kip \cdot ft$ [5.7.3.2.2-1]

DECK DEAD LOADS:

Component Dead Load, DC:

Curb Weight per Foot of Width - Apply at Edge of Deck in Visual Analysis: $DC_{Rail.D} := DC_{curb} \cdot B_{unit} = 0.174 \cdot kip$

Deck (Interior), $DC_D := DC_{Deck} \cdot B_{unit} = 0.069 \cdot klf$

Deck (Overhang), $DC_{D.OH1} := DC_{Deck.OH} \cdot B_{unit} = 0.069 \cdot klf$

$t_{deck.edge} := 2.1875 \cdot in$ $DC_{D.OH2} := t_{deck.edge} \cdot B_{unit} \cdot \gamma c = 0.027 \cdot klf$

Wearing Surface Dead Load, DW:

Asphalt Wearing Surface, $DW_D := DW_{ws} \cdot B_{unit} = 0.000 \cdot klf$

DECK LIVE LOADS:

Add Dynamic Load Allowance per {6A.4.4.3} $IM_D := 0.33$

AASHTO LRFD 3.6.1.2.1 Specifies the **HL-93** vehicular live loading shall consist of the maximum of a design truck or design tandem. The design truck and design tandem must include the dynamic load allowance. Lane loads are not applied per 3.6.1.3.3. Only the axles of the design and legal vehicles are analyzed.

Live loads are applied as moving point loads equal to a 1 kip unit axle weight at 6' spacing in Visual Analysis.

DECK ANALYSIS RESULTS: (Per Unit Strip Width)

Deck loads were calculated using Visual Analysis.

	MAX (+) MOMENT	MAX (-) MOMENT	MAX (-) OH. MOMENT
DC	$M_{DC.Pos} := -0.56 \cdot kip \cdot ft$	$M_{DC.Neg} := 0.93 \cdot kip \cdot ft$	$M_{DC.OH} := 0.93 \cdot kip \cdot ft$
DW	$M_{DW.Pos} := 0 \cdot kip \cdot ft$	$M_{DW.Neg} := 0 \cdot kip \cdot ft$	$M_{DW.OH} := 0 \cdot kip \cdot ft$
1 kip Unit Truck	$M_{Unit.Pos} := 0.65 \cdot kip \cdot ft$	$M_{Unit.Neg} := 0.93 \cdot kip \cdot ft$	$M_{Unit.OH} := 0.93 \cdot kip \cdot ft$

Max Moments for Axle Loads:

	MAX (+) MOMENT	MAX (-) MOMENT
HL-93 $W_{HL93} := 32 \cdot kip$	$M_{HL93.Pos} := M_{Unit.Pos} \cdot \frac{W_{HL93}}{1 \cdot kip} = 20.80 \cdot kip \cdot ft$	$M_{HL93.Neg} := M_{Unit.Neg} \cdot \frac{W_{HL93}}{1 \cdot kip} = 29.76 \cdot kip \cdot ft$
TANDEM TRUCK $W_{Tdm} := 25 \cdot kip$	$M_{Tdm.Pos} := M_{Unit.Pos} \cdot \frac{W_{Tdm}}{1 \cdot kip} = 16.25 \cdot kip \cdot ft$	$M_{Tdm.Neg} := M_{Unit.Neg} \cdot \frac{W_{Tdm}}{1 \cdot kip} = 23.25 \cdot kip \cdot ft$
TYPE 3 $W_{T3} := 17 \cdot kip$	$M_{T3.Pos} := M_{Unit.Pos} \cdot \frac{W_{T3}}{1 \cdot kip} = 11.05 \cdot kip \cdot ft$	$M_{T3.Neg} := M_{Unit.Neg} \cdot \frac{W_{T3}}{1 \cdot kip} = 15.81 \cdot kip \cdot ft$
TYPE 3S2 $W_{T3S2} := 15.5 \cdot kip$	$M_{T3S2.Pos} := M_{Unit.Pos} \cdot \frac{W_{T3S2}}{1 \cdot kip} = 10.07 \cdot kip \cdot ft$	$M_{T3S2.Neg} := M_{Unit.Neg} \cdot \frac{W_{T3S2}}{1 \cdot kip} = 14.42 \cdot kip \cdot ft$
TYPE 3-3 $W_{T33} := 16 \cdot kip$	$M_{T33.Pos} := M_{Unit.Pos} \cdot \frac{W_{T33}}{1 \cdot kip} = 10.40 \cdot kip \cdot ft$	$M_{T33.Neg} := M_{Unit.Neg} \cdot \frac{W_{T33}}{1 \cdot kip} = 14.88 \cdot kip \cdot ft$
SU4-SU7, & NRL $W_{NRL} := 17 \cdot kip$	$M_{NRL.Pos} := M_{Unit.Pos} \cdot \frac{W_{NRL}}{1 \cdot kip} = 11.05 \cdot kip \cdot ft$	$M_{NRL.Neg} := M_{Unit.Neg} \cdot \frac{W_{NRL}}{1 \cdot kip} = 15.81 \cdot kip \cdot ft$

MAX (-) OH. MOMENT

HL-93	$M_{HL93.OH} := M_{Unit.OH} \cdot \frac{W_{HL93}}{1 \cdot kip} = 29.76 \cdot kip \cdot ft$
Tandem Truck	$M_{Tdm.OH} := M_{Unit.OH} \cdot \frac{W_{Tdm}}{1 \cdot kip} = 23.25 \cdot kip \cdot ft$
Type 3	$M_{T3.OH} := M_{Unit.OH} \cdot \frac{W_{T3}}{1 \cdot kip} = 15.81 \cdot kip \cdot ft$
Type 3S2	$M_{T3S2.OH} := M_{Unit.OH} \cdot \frac{W_{T3S2}}{1 \cdot kip} = 14.42 \cdot kip \cdot ft$
Type 3-3	$M_{T33.OH} := M_{Unit.OH} \cdot \frac{W_{T33}}{1 \cdot kip} = 14.88 \cdot kip \cdot ft$
SU4-SU7, & NRL	$M_{NRL.OH} := M_{Unit.OH} \cdot \frac{W_{NRL}}{1 \cdot kip} = 15.81 \cdot kip \cdot ft$

STRIP WIDTH SCALE FACTOR

$$B_{Pos.D} := \frac{B_{Pos}}{B_{unit}} = 5.79$$

$$B_{Neg.D} := \frac{B_{Neg}}{B_{unit}} = 5.65$$

$$B_{OH.D} := \frac{B_{OH}}{B_{unit}} = 4.81$$

Note: All SU Vehicles & NRL have same max wheel load.

RATING FACTOR GENERAL EQUATION

Rating Factor, $RF = \dfrac{\text{Member Capacity - Factored DL effects}}{\text{Factored LL effects}}$ {6A.4.2.1} {Eq. 6A.4.2.1-1}

Member Capacity, $C = \text{Nominal_Capacity} \cdot \phi c \cdot \phi s \cdot \phi$ {Eq. 6A.4.2.1-2}

$\phi c_{deck} = 1.00 \qquad \phi s_{deck} = 1.00$

$\phi c_{deck} \cdot \phi s_{deck} = 1.00$

Deck Capacity: {Table 6A.4.2.2-1}

$C_{M.D.Pos} := \max(\phi c_{deck} \cdot \phi s_{deck}, 0.85) \cdot \phi_{f.D} \cdot Mn_{D.Pos} = 31.96 \cdot kip \cdot ft$

$C_{M.D.Neg} := \max(\phi c_{deck} \cdot \phi s_{deck}, 0.85) \cdot \phi_{f.D} \cdot Mn_{D.Neg} = 41.21 \cdot kip \cdot ft$

$C_{M.D.OH} := \max(\phi c_{deck} \cdot \phi s_{deck}, 0.85) \cdot \phi_{f.D} \cdot Mn_{D.OH} = 56.95 \cdot kip \cdot ft$

STRENGTH Factored Force Effects: {Table 6A.4.2.2-1}

Dead Load

$MuDL_{D.Pos} := \eta i \cdot (\gamma DC \cdot M_{DC.Pos} + \gamma DW \cdot M_{DW.Pos}) \cdot B_{Pos.D} = -4.05 \cdot kip \cdot ft$

$MuDL_{D.Neg} := \eta i \cdot (\gamma DC \cdot M_{DC.Neg} + \gamma DW \cdot M_{DW.Neg}) \cdot B_{Neg.D} = 6.56 \cdot kip \cdot ft$

$MuDL_{D.OH} := \eta i \cdot (\gamma DC \cdot M_{DC.OH} + \gamma DW \cdot M_{DW.OH}) \cdot B_{OH.D} = 5.59 \cdot kip \cdot ft$

HL-93 INVENTORY

$MuHL93_{D.Pos.I} := \eta i \cdot \gamma HL93_I \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.Pos}, M_{Tdm.Pos}) = 55.19 \cdot kip \cdot ft$

$MuHL93_{D.Neg.I} := \eta i \cdot \gamma HL93_I \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.Neg}, M_{Tdm.Neg}) = 78.96 \cdot kip \cdot ft$

$MuHL93_{D.OH.I} := \eta i \cdot \gamma HL93_I \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.OH}, M_{Tdm.OH}) = 78.96 \cdot kip \cdot ft$

HL-93 OPERATING

$MuHL93_{D.Pos.O} := \eta i \cdot \gamma HL93_O \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.Pos}, M_{Tdm.Pos}) = 42.57 \cdot kip \cdot ft$

$MuHL93_{D.Neg.O} := \eta i \cdot \gamma HL93_O \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.Neg}, M_{Tdm.Neg}) = 60.91 \cdot kip \cdot ft$

$MuHL93_{D.OH.O} := \eta i \cdot \gamma HL93_O \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot \max(M_{HL93.OH}, M_{Tdm.OH}) = 60.91 \cdot kip \cdot ft$

Type 3

$MuT3_{D.Pos} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3.Pos} = 21.78 \cdot kip \cdot ft$

$MuT3_{D.Neg} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3.Neg} = 31.16 \cdot kip \cdot ft$

$MuT3_{D.OH} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3.OH} = 31.16 \cdot kip \cdot ft$

Type 3S2

$MuT3S2_{D.Pos} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3S2.Pos} = 19.86 \cdot kip \cdot ft$

$MuT3S2_{D.Neg} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3S2.Neg} = 28.41 \cdot kip \cdot ft$

$MuT3S2_{D.OH} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T3S2.OH} = 28.41 \cdot kip \cdot ft$

Type 3-3

$MuT33_{D.Pos} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T33.Pos} = 20.50 \cdot kip \cdot ft$

$MuT33_{D.Neg} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T33.Neg} = 29.33 \cdot kip \cdot ft$

$MuT33_{D.OH} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{T33.OH} = 29.33 \cdot kip \cdot ft$

SU4-SU7, & NRL

$MuNRL_{D.Pos} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{NRL.Pos} = 21.78 \cdot kip \cdot ft$

$MuNRL_{D.Neg} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{NRL.Neg} = 31.16 \cdot kip \cdot ft$

$MuNRL_{D.OH} := \eta i \cdot \gamma LEGAL \cdot m_{1adjusted} \cdot (1 + IM_D) \cdot M_{NRL.OH} = 31.16 \cdot kip \cdot ft$

DECK RATING FACTORS

	POSITIVE MOMENT	NEGATIVE MOMENT
HL-93 INVENTORY	$RF_{HL93.I.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuHL93_{D.Pos.I}} = 0.65$	$RF_{HL93.I.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuHL93_{D.Neg.I}} = 0.44$
HL-93 OPERATING	$RF_{HL93.O.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuHL93_{D.Pos.O}} = 0.85$	$RF_{HL93.O.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuHL93_{D.Neg.O}} = 0.57$
Type 3	$RF_{T3.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuT3_{D.Pos}} = 1.65$	$RF_{T3.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuT3_{D.Neg}} = 1.11$
Type 3S2	$RF_{T3S2.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuT3S2_{D.Pos}} = 1.81$	$RF_{T3S2.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuT3S2_{D.Neg}} = 1.22$
Type 3-3	$RF_{T33.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuT33_{D.Pos}} = 1.76$	$RF_{T33.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuT33_{D.Neg}} = 1.18$
SU4-SU7, & NRL	$RF_{NRL.P} := \frac{C_{M.D.Pos} - MuDL_{D.Pos}}{MuNRL_{D.Pos}} = 1.65$	$RF_{NRL.N} := \frac{C_{M.D.Neg} - MuDL_{D.Neg}}{MuNRL_{D.Neg}} = 1.11$

	NEGATIVE OH. MOMENT
HL-93 INVENTORY	$RF_{HL93.I.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuHL93_{D.OH.I}} = 0.65$
HL-93 OPERATING	$RF_{HL93.O.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuHL93_{D.OH.O}} = 0.84$
Type 3	$RF_{T3.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuT3_{D.OH}} = 1.65$
Type 3S2	$RF_{T3S2.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuT3S2_{D.OH}} = 1.81$
Type 3-3	$RF_{T33.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuT33_{D.OH}} = 1.75$
SU4-SU7, & NRL	$RF_{NRL.OH} := \frac{C_{M.D.OH} - MuDL_{D.OH}}{MuNRL_{D.OH}} = 1.65$

DECK RATING FACTOR SUMMARY:

HL-93 INVENTORY	$RF_{HL93.I} := \min(RF_{HL93.I.P}, RF_{HL93.I.N}, RF_{HL93.I.OH}) = 0.44$
HL-93 OPERATING	$RF_{HL93.O} := \min(RF_{HL93.O.P}, RF_{HL93.O.N}, RF_{HL93.O.OH}) = 0.57$
Type 3	$RF_{T3} := \min(RF_{T3.P}, RF_{T3.N}, RF_{T3.OH}) = 1.11$
Type 3S2	$RF_{T3S2} := \min(RF_{T3S2.P}, RF_{T3S2.N}, RF_{T3S2.OH}) = 1.22$
Type 3-3	$RF_{T33} := \min(RF_{T33.P}, RF_{T33.N}, RF_{T33.OH}) = 1.18$
SU4-SU7, & NRL	$RF_{NRL} := \min(RF_{NRL.P}, RF_{NRL.N}, RF_{NRL.OH}) = 1.11$

STEEL GIRDER RATING FACTOR ANALYSIS:

DEAD LOADS

Girder, deck, and curb self weight computed by BRASS.

Component Dead Load, DC:

All loads computed by BRASS.

Wearing Surface Dead Load, DW:

Asphalt Wearing Surface, $DW_{ws} = 0.000 \cdot ksf$

LIVE LOADS

Add Dynamic Load Allowance per {6A.4.4.3} $IM_G := 0.33$ Applies only to truck loads

AASHTO LRFD 3.6.1.2.1 Specifies the **HL-93** vehicular live loading shall consist of the maximum of a design truck or design tandem in combination with a 64 psf lane load over a 10' wide design lane. The design truck and design tandem must include the dynamic load allowance, but the design lane load need not include the dynamic load allowance.

BRASS POINTS OF INTEREST

The design is investigated at the 10th points along the span, at any changes in bottom plate conditions, and at either side of hinge locations. Locations are span fractions as designated in BRASS (e.g. 105.00 = Mid-span)

At Tenth Points:

$POI_{0.0} := 100.00$ $POI_{0.1} := 101.00$ $POI_{0.2} := 102.00$ $POI_{0.3} := 103.00$ $POI_{0.4} := 104.00$ $POI_{0.5} := 105.00$

(etc.)

SUMMARY OF RATING FACTORS

Rating Factors calculated using BRASS are shown for the stringer below.

STRENGTH I Limit State results are:

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load Combination No.	Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	104.0000	STRENGTH I	2.12	76.18
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.0000	STRENGTH I	1.89	47.33
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.0000	STRENGTH I	1.89	47.33

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	104.0000	STRENGTH I-O	2.74	98.75
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.0000	STRENGTH I-O	2.45	61.36
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.0000	STRENGTH I-O	2.45	61.36

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load							
3	TYPE3	(TRK)	25.00	104.0000	STRENGTH I	4.08	101.88
4	TYPE3S2	(TRK)	36.00	104.0000	STRENGTH I	4.47	160.88
5	TYPE3-3	(TRK)	40.00	104.0000	STRENGTH I	4.95	197.92
6	SU4	(TRK)	27.00	104.0000	STRENGTH I	3.74	100.93
7	SU5	(TRK)	31.00	104.0000	STRENGTH I	3.74	115.80
8	SU6	(TRK)	34.75	104.0000	STRENGTH I	3.69	128.26
9	SU7	(TRK)	38.75	110.0000	STRENGTH I	3.62	140.21
10	NRL	(TRK)	40.00	110.0000	STRENGTH I	3.56	142.35
Crit	NRL	(TRK)	40.00	110.0000	STRENGTH I	3.56	142.35

SERVICE II Limit State results are:

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load Combination No.	Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	104.0000	SERVICE II	2.70	97.06
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.0000	SERVICE II	2.41	60.31
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.0000	SERVICE II	2.41	60.31

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	104.0000	SERVICE II-O	3.50	126.18
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.0000	SERVICE II-O	3.14	78.40
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.0000	SERVICE II-O	3.14	78.40

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load							
3	TYPE3	(TRK)	25.00	104.0000	SERVICE II	3.86	96.43
4	TYPE3S2	(TRK)	36.00	104.0000	SERVICE II	4.23	152.27
5	TYPE3-3	(TRK)	40.00	104.0000	SERVICE II	4.68	187.33
6	SU4	(TRK)	27.00	104.0000	SERVICE II	3.54	95.53
7	SU5	(TRK)	31.00	104.0000	SERVICE II	3.54	109.61
8	SU6	(TRK)	34.75	104.0000	SERVICE II	3.49	121.40
9	SU7	(TRK)	38.75	104.0000	SERVICE II	3.66	142.00
10	NRL	(TRK)	40.00	104.0000	SERVICE II	3.49	139.66
Crit	NRL	(TRK)	40.00	104.0000	SERVICE II	3.49	139.66

** Full electronic copy of BRASS output can be found in the Regional Bridge Engineer's files **

BRIDGE RATING FACTOR SUMMARY:

A summary of the rating factors for each superstructure element evaluated is shown below. The safe load capacity is given in tons. If the vehicle rating factor is greater than 1.0, then the vehicle weight rating is GVW*RF. If that condition is not satisfied, safe posting loads are calculated using equation {6A.8.3-1} from the Manual for Bridge Evaluation.{6A.8.3}

Vehicle	Deck			Steel Girder	
	STRENGTH I			STRENGTH I & SERVICE II	
	+ M	- M	- OH	M	V
HL-93 I	0.65	**0.44**	0.65	1.89	-
HL-93 O	0.85	**0.57**	0.84	2.45	-
Type 3	1.65	**1.11**	1.65	3.86	-
Type 3S2	1.81	**1.22**	1.81	4.23	-
Type 3-3	1.76	**1.18**	1.75	4.68	-
SU4	1.65	**1.11**	1.65	3.54	-
SU5	1.65	**1.11**	1.65	3.54	-
SU6	1.65	**1.11**	1.65	3.49	-
SU7	1.65	**1.11**	1.65	3.62	-
NRL	1.65	**1.11**	1.65	3.49	-

Summary

Vehicle	RF
HL-93 I	0.44
HL-93 O	0.57
Type 3	1.11
Type 3S2	1.22
Type 3-3	1.18
SU4	1.11
SU5	1.11
SU6	1.11
SU7	1.11
NRL	1.11

GVW (tons)	Safe Load Capacity
36	-
25	-
25	27.8
36	43.9
40	47.2
27	30.0
31	34.5
34.75	38.6
38.75	43.1
40	44.5

Safe Load Capacity: {6A.8.3-1}

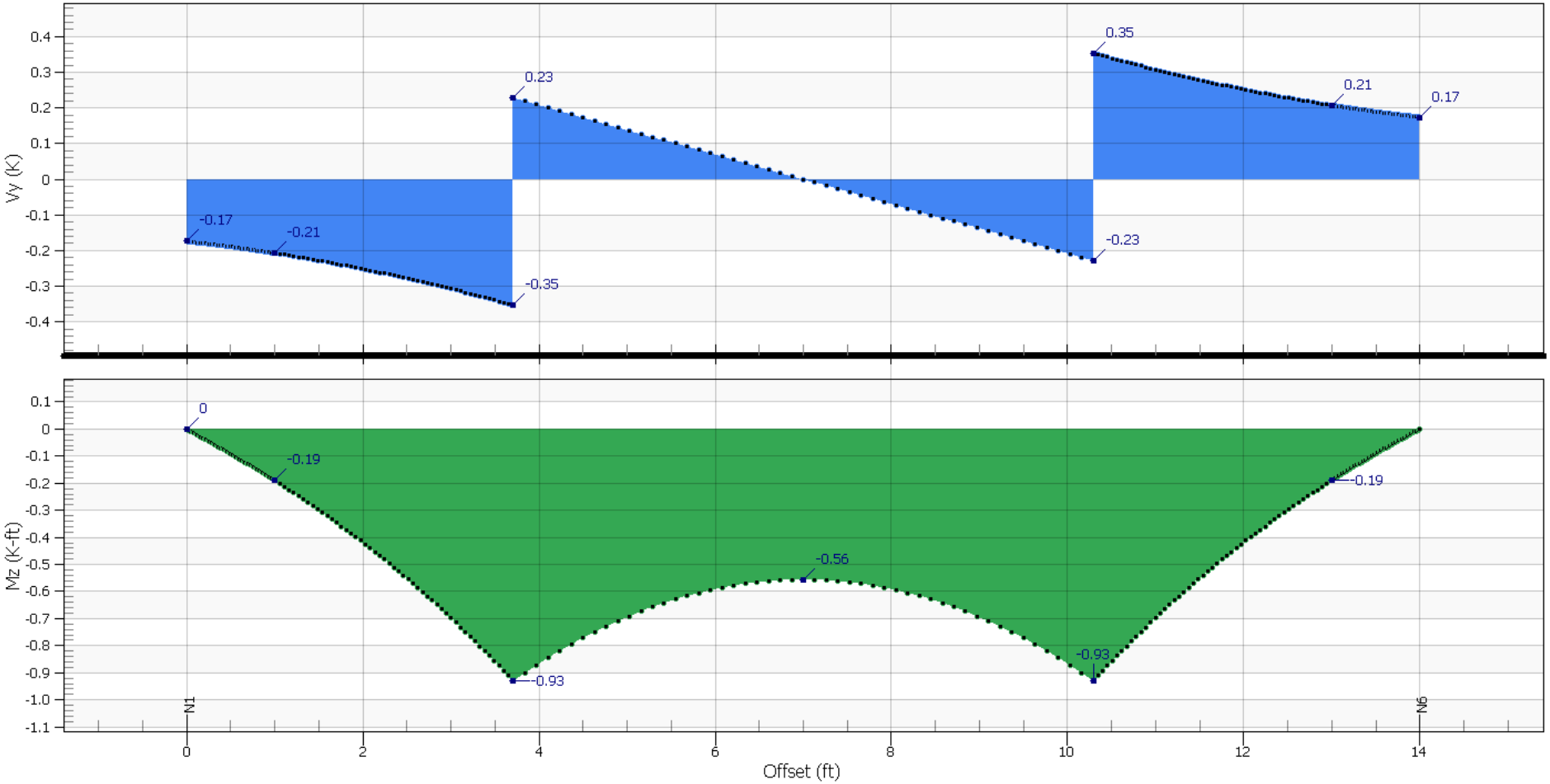
$$RF \cdot GVW \quad \text{if} \quad RF \geq 1.0$$

$$\frac{GVW}{0.7} \cdot (RF - 0.3) \quad \text{if} \quad RF < 1.0$$

Visual Analysis Results – Concrete Deck

Concrete Deck - 35-1-5.42
DJ & A, P.C.
Member: M1...M5
Load Case: DC

4/24/2019 - 8:22 AM
Ammon Groesbeck



VisualAnalysis 18.0
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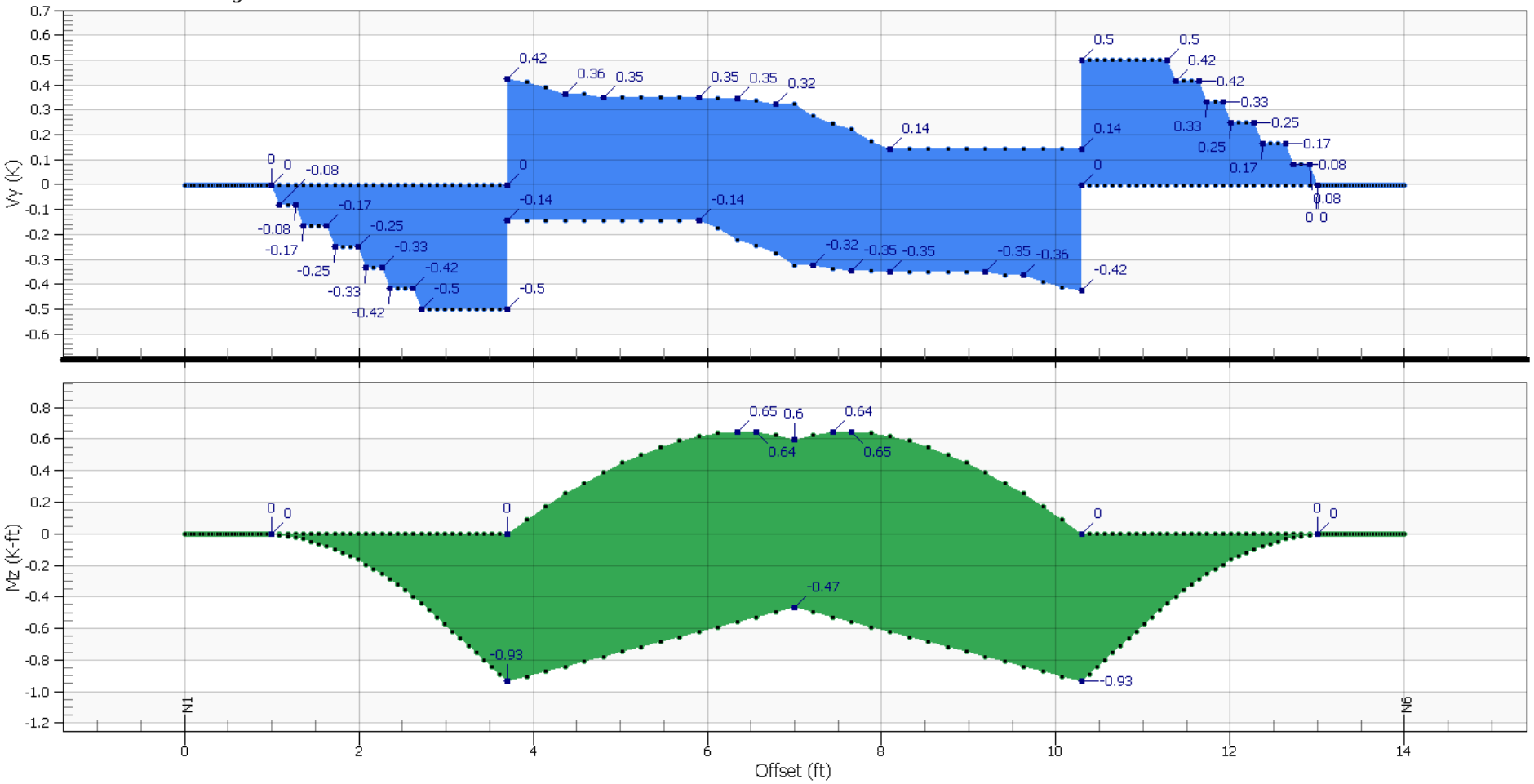
Concrete Deck - 35-1-5.42
DJ & A, P.C.
Member: M1...M5
Load Case: Unit Truck High Extreme

4/24/2019 - 8:22 AM
Ammon Groesbeck



VisualAnalysis 18.0
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BRASS Input

BRASS-GIRDER™ Input Parameters

Version Information

Girder UI:	8.0.0.3001
Girder XML:	8.0.0.3001
BRASS™ XML:	1.8.0.3001

Administration

Project ID:	6856
Project Title:	R8 Bridge Load Ratings 2018
Bridge ID:	35-1-5.42
Bridge Name:	Citico-Flats Creek
Route Name:	35-1
Reference Marker:	5.42
Title 1:	
Title 2:	
Date:	2019 4 30
Agency:	USDA Forest Service
Designer/Rater:	Ammon Groesbeck
Reviewer:	Brad Miller
Comments:	

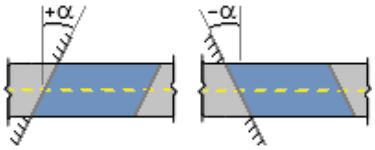
Bridge Notes

No bridge notes have been defined.

Control

Structure

Structure Type:	GirderSystem
Define Deck Cross Section:	Yes
Number of Members:	2
Skew Angle:	-



Analysis Model Type:	Beam
Number of Top Spans:	2

Spans

Span	Length

1	14.167 ft
2	14.167 ft

Structure Material: Steel
Beam Type: Builtup
Composite Structure: No
Number of Stages: 1
Bracing Definition Type: PerBay
Deck Material: Concrete

Analysis

Unit System: US
Analysis Method: LRFD
Analysis Type: Rating
Member of Interest: 1
Model Element Type: Stepped
Point of Interest Generation Control: User
Live-load Distribution Factor Application: AnalysisPoint
Interpolate Reinforcement: No
Calculate Effective Width: No

Input

Symmetry

Component	Symmetric
Bracing (Bay)	Yes
Beam Profile	Yes
Deck Profile	Yes
Shear Connectors	Yes
Transverse Stiffeners	Yes
Bearing Stiffeners	Yes
Longitudinal Stiffeners	Yes
Bracing (Member)	No
Lateral Support	Yes
Cb Factors (LRFD)	Yes
Beam Distribution Factors (LRFD)	Yes
Reaction Distribution Factors (LRFD)	Yes

Merge Beam/Deck Profile Schedules: Yes

Distribution

Perform Dead Load Distribution: Yes
Calculate LRFD Live Load Distribution Factors: Yes

Dead Load Distribution Methods

Stage	Method
1	Tributary area

Live Load Distribution (LRFD)

Distribution Method:	AASHTO LRFD
Cross Section Code:	a1
Max. Number of Lanes Loaded:	Computed
Consider Rigid Method:	Yes
Slab Thickness Type:	Structural
Set eg = 0 for Non-composite:	No
Apply Skew to Lever Rule Override:	Yes
Apply Skew to Ridgid Rule Override:	Yes
Use Constants from Table 4.6.2.2.1-2:	No

Libraries

Section Library: N:\BRASS\Libraries\BRASS-Sections.BLS
Vehicle Library: N:\BRASS\Libraries\BRASS-Vehicles.BLV

Output

Primary Output

Action Output Level: DL+LL
Action Locations: 10thPoints

General

Member Properties:	Yes
Load Combinations:	Yes
Load and Resistance Factors:	Yes
Warnings:	Yes
Camber:	No
Critical Design Ratios / Rating Factors:	Condensed

Live Load

Truck Positions:	No
Variable Axle Spacing:	No
Live Load Settings:	Yes
Live Load Combinations:	Yes
Live Load Details:	Yes
Impact (LFD):	No

Stage

Stage	Output
1	Yes

Dead Load

Member Self Load:	Yes
Distributed Dead Loads:	Yes
Concentrated Dead Loads:	Yes
Temperature Change:	No
Settlements:	No

Load Distribution

Dead Load Distribution:	Yes
Live Load Distribution:	Yes

Intermediate Output

Intermediate Output Level: Full
Effective Width: No
Floorbeam Lane Position: No

Points of Interest

Specification Checks: Yes

Load Factoring/Combinations: Yes

Load Distribution

Dead Load: No
Live Load: Yes

Limit State Output (LRFD)

Limit State	Specification Check	Load Combination
Strength I	Yes	Yes
Strength II	No	No
Strength IV	No	No
Service I	No	No
Service II	Yes	Yes
Fatigue I	No	No
Fatigue II	No	No

Intermediate Output (cont.)

Steel

Transverse Stiffeners: No
Bearing Stiffeners: No
Longitudinal Stiffeners: No

Results Tables

X-Y Plot Action Tables: No
Specification Check Results Tables: No
Mesh Plot Files: No

BRASS-PAD™ Data Transfer File: No

Influence

Output influence lines for: None
Ordinate Divisor: 1

Factors

Load Factors (LRFD)

Limit State	DC		DW		DU		TU	
	max	min	max	min	max	min	max	min
Strength I	1.25	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Strength II	1.25	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Strength IV	1.5	0.9	1.5	0.65	1.5	0.65	1.2	0.5
Service I	1	1	1	1	1	1	1.2	1
Service II	1	1	1	1	1	1	1.2	1
Fatigue I	0	0	0	0	0	0	0	0
Fatigue II	0	0	0	0	0	0	0	0

Load Factors (LRFD) (continued)

Limit State	LL			SE	PS	DS
	Design	Legal	Permit			

	Inventory	Operating			max	min	max	min	max	min
Strength I	1.75	1.35	1.3	0	1	1	1	1	1.25	0.9
Strength II	1.35		0	0	1	1	1	1	1.25	0.9
Strength IV	0		0	0	0	0	1	1	1.5	0.9
Service I	1		0	1	1	1	1	1	1	1
Service II	1.3	1	1.3	1	0	0	1	1	1	1
Fatigue I	1.5		0	0	0	0	1	1	0	0
Fatigue II	0.75		0	0	0	0	1	1	0	0

Load Modifiers (LRFD)

Limit State	Ductility	Redundancy	Importance	Combined Product	
				max	min
Strength I	1	1	1	-	-
Strength II	1	1	1	-	-
Strength IV	1	1	1	-	-
Service I	1	1	1	-	-
Service II	1	1	1	-	-
Fatigue I	1	1	1	-	-
Fatigue II	1	1	1	-	-

Resistance Factors (LRFD)

Resistance Factors

Type	Value
φ Flexure	1
φ Shear	1
φ Bearing	1
φ Compression	0.95
φ Shear Connectors	0.85
φ Fatigue	1

System/Total Modifiers

Limit State	Resistance Type	System	Total
Strength	Flexure	0.85	-
Strength	Shear	1	-
Strength	Bearing	1	-
Strength	Compression	1	-
Strength	Shear Connectors	1	-
Strength	Longitudinal Reinforcement	1	-
Service	Flexure	1	-
Fatigue	Fatigue	1	-

Condition Modifiers

Limit State	Condition
Strength	1

Service	1
Fatigue	1

Materials

Steel

ID	Name	Yield Stress	Tensile Strength	Modulus of Elasticity	Density	Thermal Expansion Coefficient
1	Grade 50	50 ksi	65 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
2	Grade 50W	50 ksi	70 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
3	Grade 36	36 ksi	58 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
4	Grade HPS 70W	70 ksi	85 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}
5	Grade 30	30 ksi	60 ksi	29000 ksi	0.49 kcf	6.5E-06 °F^{-1}

Concrete

ID	Name	28 Day Compressive Strength	Modulus of Elasticity	Density	Modulus of Rupture	Modulus of Rupture (VCI Method)	Thermal Expansion Coefficient
1	Deck Concrete	3.6 ksi	-	0.15 kcf	-	-	6E-06 °F^{-1}

Dead Load Groups

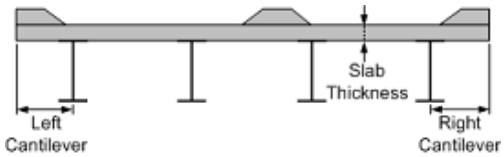
Groups

No dead load groups have been defined.

Deck Geometry

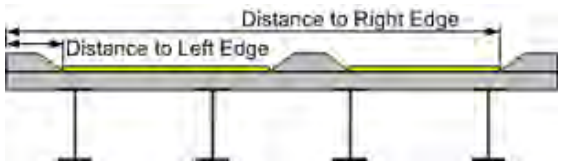
Deck

Deck Thickness: 5.5 in.
Left Cantilever Length: 3.708 ft
Right Cantilever Length: 3.708 ft
Equal Member Spacing: Yes



Travelway Locations

Distance to Left Edge: 1 ft
Distance to Right Edge: 13 ft

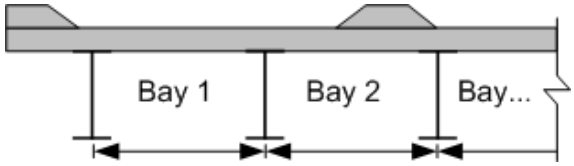


Sacrificial Topping

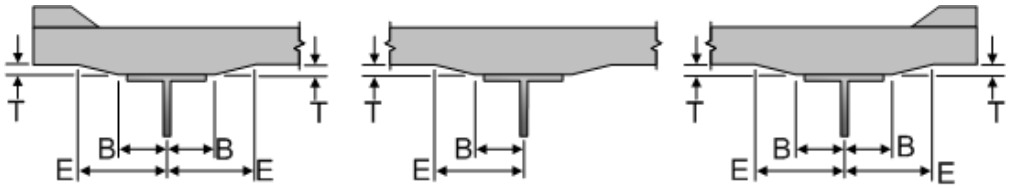
Thickness: -
Dead Load Type: DC

Member Spacing

Bay #	Spacing
1	6.583 ft

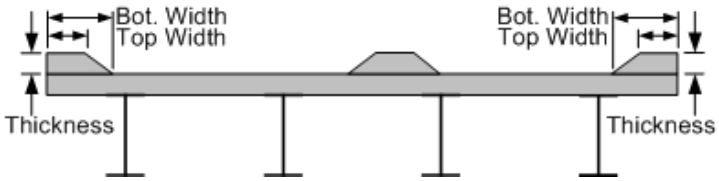


Soffits



Location	Side	Thickness	Taper Begin	Taper End
Left Exterior	Left	2 in.	5.25 in.	44.5 in.
	Right	2 in.	8.25 in.	10.875 in.
Right Exterior	Left	2 in.	8.25 in.	10.875 in.
	Right	2 in.	5.25 in.	44.5 in.

Appurtenances



Appurtenance Type	Bottom Width	Top Width	Thickness	Location
Left Curb	12 in.	10.5 in.	14.813 in.	N/A
Right Curb	12 in.	10.5 in.	14.813 in.	N/A

Deck Loads

Materials/Stages

Deck Material: **Deck Concrete**
Curb & Median Material: **Deck Concrete**
Wearing Surface Weight: -

Stages

Apply to Entire Structure: Yes
Deck Stage: 1
Curbs Stage: 1
Median Stage: Not Assigned
Wearing Surface Stage: Not Assigned

Line Loads

No line loads have been defined.

Uniform Loads

No uniform loads have been defined.

Live Loads

Live Load Control

Direction Control:	Up+Down
Standard Live Loads:	None
Wheel Advancement Denominator:	100
ADTT:	999
ADTT for Single Lane:	999
Multiple Presence Adjustment:	95 %
% of Dynamic Load Allowance (Impact):	100 %

Dynamic Load Allowance (LRFD)

Design/Rating Procedure	Truck	Lane	Fatigue
Design	33 %	0 %	15 %
Legal	33 %	0 %	0 %
Permit	33 %	0 %	0 %

Special Vehicles

Axle Vehicles

No axle vehicles have been defined.

Lane Vehicles

No lane vehicles have been defined.

Definitions (LRFD)

Definition 1

Code:	HL-93-TRUCK
Type:	GeneralTruck
Design Rating:	Design
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 2

Code:	HL-93-TANDEM
Type:	GeneralTruck
Design Rating:	Design
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 3

Code:	HL-93-LANE
Type:	GeneralLane

Live Load Factor Overrides

Design Rating:	Design
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 4

Code:	TYPE3
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 5

Code:	TYPE3S2
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 6

Code:	TYPE3-3
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 7

Code:	SU4
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-

Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 8

Code:	SU5
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 9

Code:	SU6
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 10

Code:	SU7
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	No
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-
Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

Definition 11

Code:	NRL
Type:	GeneralTruck
Design Rating:	Legal
% of Dynamic Load Allowance:	-
Scale Factor:	-
Lanes Loaded:	Critical
Notional Load:	Yes
Fixed DLA:	-

Live Load Factor Overrides

Limit State	gamma LL	gamma LL Operating
Strength I	-	-
Strength II	-	-
Strength IV	-	-
Service I	-	-

Service II	-	-
Service III	-	-
Fatigue I	-	-
Fatigue II	-	-

General Combinations (LRFD)

Standard Combo	Truck	Lane	Combination Factors	
			Truck	Lane
No	**HL-93-TRUCK**	**HL-93-LANE**	1	1
No	**HL-93-TANDEM**	**HL-93-LANE**	1	1

Deflection Combinations (LRFD)

No Deflection Combinations (LRFD) have been defined.

Component Groups

Bracing Groups

No bracing groups have been defined.

Transverse Stiffeners

No transverse stiffener groups have been defined.

Bearing Stiffeners

No bearing stiffener groups have been defined.

Longitudinal Stiffeners

No longitudinal stiffener groups have been defined.

Specification Control

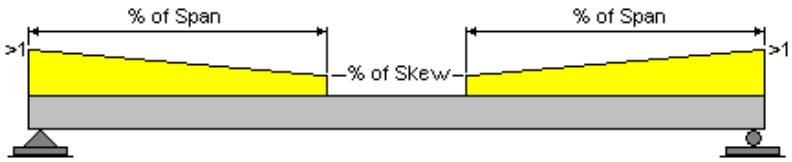
General

Lane Geometry

Design Vehicle Lane Width: 12 ft
Vehicle Width: 10 ft
Wheel Spacing: 6 ft
Encroachment Distance: -

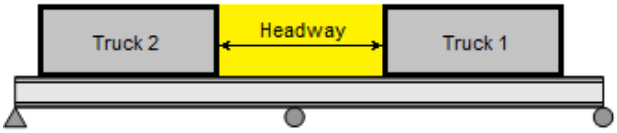
Load Factors Control (LRFD): Use load factors per analysis type (Review = max/min; Rating = max only)

Skew Factors



Span #	% of Span	% of Skew
1	-	-
2	-	-

Train Headway Limits



Train Type	Minimum Headway	Maximum Headway
Design Truck	-	-
Design Tandem	-	-
Legal Truck	-	-

Steel

Use Appendix A6 (LRFD): Yes
Allow Plastic Analysis: Yes
Override Longitudinal Stiffeners: No
Slab thickness for longitudinal shear force: Structural
Slab thickness for minimum negative flexure concrete deck reinforcement: Structural

Fatigue

AASHTO LRFD Table 6.6.1.2.5-2

% of Span: 10
Span Length: 40 ft

Stress Range in Longitudinal Reinforcement Over the Piers: 10 ksi

Detail Categories (LRFD)

Detail Category	Constant, A x 10^8	Constant Amplitude Fatigue Threshold
A	250 kip^3	24 ksi
B	120 kip^3	16 ksi
B'	61 kip^3	12 ksi
C	44 kip^3	10 ksi
C'	44 kip^3	12 ksi
D	22 kip^3	7 ksi
E	11 kip^3	4.5 ksi
E'	3.9 kip^3	2.6 ksi

Limit State Map

Limit State Maps (LRFD)

Limit State	Design Review			Rating		
	Design Load	Legal Load	Permit Load	Design Load	Legal Load	Permit Load
Strength I	No	No	No	Inventory/Operating	Yes	No
Strength II	No	No	No	Exclude	No	No
Strength IV	No	No	No	Exclude	No	No
Service I	No	No	No	Exclude	No	No
Service II	No	No	No	Inventory/Operating	Yes	No
Service III	No	No	No	Exclude	No	No
Fatigue I	No	No	No	Inventory	No	No
Fatigue II	No	No	No	Inventory	No	No

Spec. Check Map (Strength)

LRFD Specification Check Maps

Design Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Legal Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Permit Load Review

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Design Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	Yes	No	No
Shear	Yes	No	No
Bearing	Yes	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Legal Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	Yes	No	No
Shear	Yes	No	No
Bearing	Yes	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Permit Load Rating

Spec Check	Strength I	Strength II	Strength IV
Flexure	No	No	No
Shear	No	No	No
Bearing	No	No	No
Flexural Stress In Longitudinal Stiffener	No	No	No

Spec. Check Map (Service)

LRFD Specification Check Maps

Design Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Legal Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Permit Load Review

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Design Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	Yes
Live Load Deflection	No	No

Legal Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	Yes
Live Load Deflection	No	No

Permit Load Rating

Spec Check	Service I	Service II
Crack Control	No	No
Flexural Stress In Flanges	No	No
Live Load Deflection	No	No

Spec. Check Map (Fatigue)

LRFD Specification Check Maps

Design Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No

Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Legal Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Permit Load Review

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Design Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Legal Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Permit Load Rating

Spec Check	Fatigue I	Fatigue II
Fatigue of Reinforcement	No	No
Fatigue of Shear Connectors	No	No
Fatigue Shear Range of Shear Connectors	No	No
Fatigue of Special Points	No	No
Fatigue Shear	No	No

Bracing Schedules

No bracing schedules have been defined.

Member 1

Member Notes

No member notes have been defined.

Member Materials

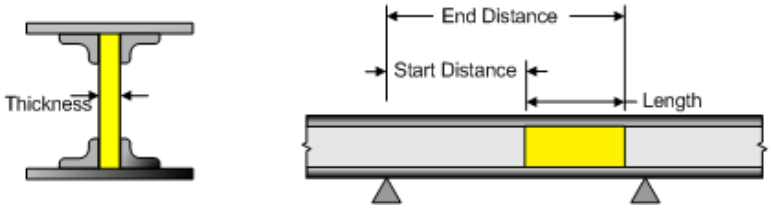
Beam

Beam Material: **Grade 30**

Beam Profile

Web

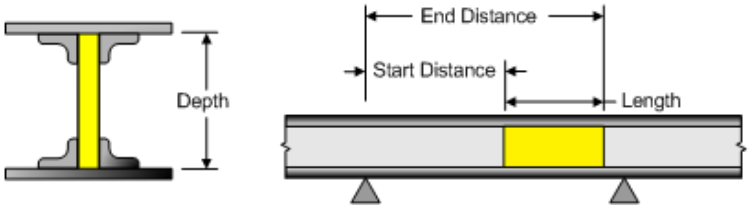
Apply to Entire Structure: Yes
Web Angle: -



Thickness	Material	Support Number	Start Distance	Length
0.375 in.	**Grade 30**	1	0 ft	14.167 ft

Web Depth

Apply to Entire Structure: Yes



Start Depth	Web Variation	End Depth	Support Number	Start Distance	Length
28 in.	Linear	28 in.	1	0 ft	14.167 ft

Top Cover Plate

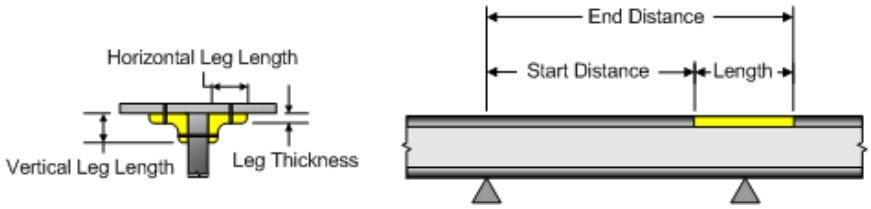
No top cover plate schedules have been defined.

Bottom Cover Plate

No bottom cover plate schedules have been defined.

Top Angles

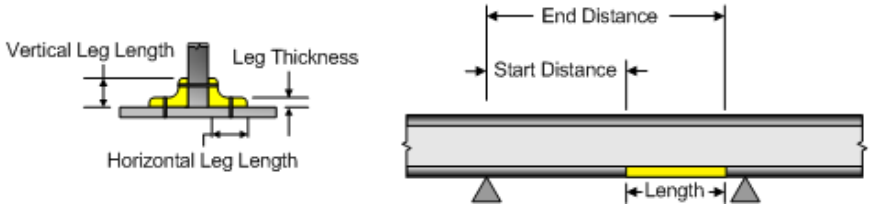
Apply to Entire Structure: Yes



Vertical Leg Length	Horizontal Leg Length	Leg Thickness	Material	Support Number	Start Distance	Length
3.5 in.	5 in.	0.313 in.	**Grade 30**	1	0 ft	14.167 ft

Bottom Angles

Apply to Entire Structure: Yes



Vertical Leg Length	Horizontal Leg Length	Leg Thickness	Material	Support Number	Start Distance	Length
3.5 in.	5 in.	0.313 in.	**Grade 30**	1	0 ft	14.167 ft

Hinges

No hinges have been defined.

Special Locations

No special locations have been defined.

Splice Locations

No splice locations have been defined.

Supports

Support Conditions

Support	Support Restraint		
	Horizontal	Vertical	Rotational
1	Restrained	Restrained	Free
2	Free	Restrained	Free
3	Free	Restrained	Free

Spring Constants

Support	Spring Constants		
	Horizontal	Vertical	Rotational
1	-	-	-
2	-	-	-
3	-	-	-

Schedules

Transverse Stiffeners

No transverse stiffener schedules have been defined.

Bearing Stiffeners

Apply to Entire Structure: No

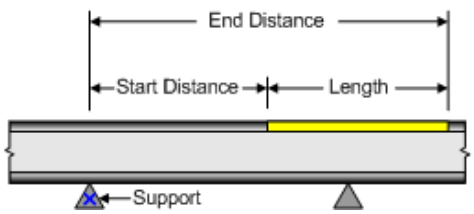
Support	Stiffener Group
1	Not Assigned
2	Not Assigned

Longitudinal Stiffeners

No longitudinal stiffener schedules have been defined.

Lateral Support

Apply to Entire Structure: Yes



Support	Start Distance	Length
1	0 ft	14.167 ft

Cb Factors (Standard)

No Cb factors (LRFD) have been defined.

Cb Factors (LRFD)

No Cb factors (LRFD) have been defined.

Fatigue Stress (Standard)

No fatigue stress (standard) schedules have been defined.

Member Control

Steel

Flexural Resistance

Span	Ignore Eq. 6.10.7.1.2-3 (LRFD)
1	No
2	No

End Panel Distances

Top Span

Left of Top Span: -
Right of Top Span: -

Flange Local Buckling Resistance Adjustment

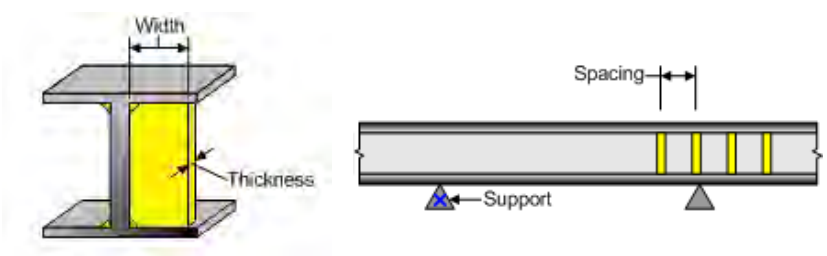
Standard Specifications: -
LRFD Specifications: -

Points of Interest

Points

Point of Interest	Output Specification Checks	Output Load Combinations
100	Yes	Yes
101	Yes	Yes
102	Yes	Yes
103	Yes	Yes
104	Yes	Yes
105	Yes	Yes
106	Yes	Yes
107	Yes	Yes
108	Yes	Yes
109	Yes	Yes
110	Yes	Yes

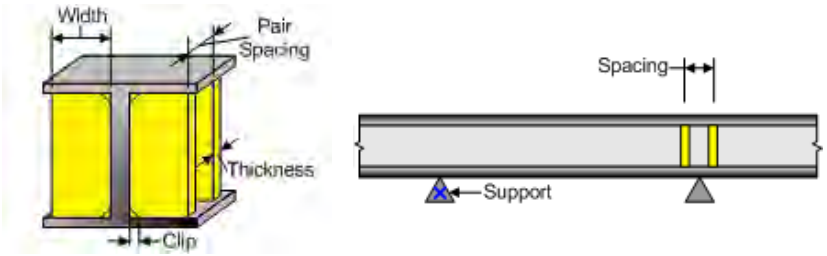
Transverse Stiffeners



Point of Interest	Override	Width	Thickness	Spacing	Type	Type Factor	Material
100	No	-	-	-	-	-	-
101	No	-	-	-	-	-	-
102	No	-	-	-	-	-	-
103	No	-	-	-	-	-	-
104	No	-	-	-	-	-	-

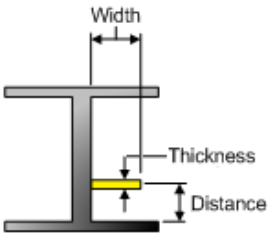
105	No	-	-	-	-	-	-
106	No	-	-	-	-	-	-
107	No	-	-	-	-	-	-
108	No	-	-	-	-	-	-
109	No	-	-	-	-	-	-
110	No	-	-	-	-	-	-

Bearing Stiffeners



Point of Interest	Override	Width	Thickness	Clip	Number of Pairs	Pair Spacing	Attachment	Material
100	No	-	-	-	-	-	-	-
101	No	-	-	-	-	-	-	-
102	No	-	-	-	-	-	-	-
103	No	-	-	-	-	-	-	-
104	No	-	-	-	-	-	-	-
105	No	-	-	-	-	-	-	-
106	No	-	-	-	-	-	-	-
107	No	-	-	-	-	-	-	-
108	No	-	-	-	-	-	-	-
109	No	-	-	-	-	-	-	-
110	No	-	-	-	-	-	-	-

Longitudinal Stiffeners

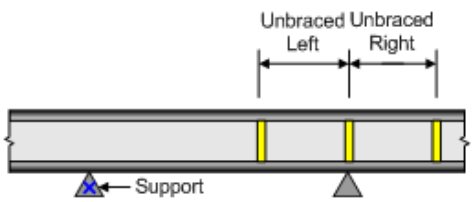


Point of Interest	Main Stiffener					
	Override	Width	Thickness	Distance	Web Reference	Material
100	No	-	-	-	-	-
101	No	-	-	-	-	-
102	No	-	-	-	-	-
103	No	-	-	-	-	-
104	No	-	-	-	-	-
105	No	-	-	-	-	-

106	No	-	-	-	-	-
107	No	-	-	-	-	-
108	No	-	-	-	-	-
109	No	-	-	-	-	-
110	No	-	-	-	-	-

Point of Interest	Second Stiffener					
	Override	Width	Thickness	Distance	Web Reference	Material
100	No	-	-	-	-	-
101	No	-	-	-	-	-
102	No	-	-	-	-	-
103	No	-	-	-	-	-
104	No	-	-	-	-	-
105	No	-	-	-	-	-
106	No	-	-	-	-	-
107	No	-	-	-	-	-
108	No	-	-	-	-	-
109	No	-	-	-	-	-
110	No	-	-	-	-	-

Bracing



Point of Interest	Override	Lateral Support	Point Braced	Unbraced Length	
				Left	Right
100	No	-	-	-	-
101	No	-	-	-	-
102	No	-	-	-	-
103	No	-	-	-	-
104	No	-	-	-	-
105	No	-	-	-	-
106	No	-	-	-	-
107	No	-	-	-	-
108	No	-	-	-	-
109	No	-	-	-	-
110	No	-	-	-	-

Cb Factors

LRFD

Point of Interest	Override	Cb Method	Cb Factor	
			Top Flange	Bottom Flange
100	No	-	-	-
101	No	-	-	-
102	No	-	-	-
103	No	-	-	-
104	No	-	-	-
105	No	-	-	-
106	No	-	-	-
107	No	-	-	-
108	No	-	-	-
109	No	-	-	-
110	No	-	-	-

Fatigue

No fatigue detail categories have been defined.

Point of Interest	N Cycles	Zr (LRFD)
100	-	-
101	-	-
102	-	-
103	-	-
104	-	-
105	-	-
106	-	-
107	-	-
108	-	-
109	-	-
110	-	-

Point of Interest	r/h (Top Reinf.)	r/h (Bottom Reinf.)
100	-	-
101	-	-
102	-	-
103	-	-
104	-	-
105	-	-
106	-	-
107	-	-
108	-	-
109	-	-
110	-	-

Output

Point of Interest	Flexure	Shear	Bearing	Flexural Stress in Longitudinal Stiffener	Crack Control	Flexural Stress in Flanges
100	Yes	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes	Yes
106	Yes	Yes	Yes	Yes	Yes	Yes
107	Yes	Yes	Yes	Yes	Yes	Yes
108	Yes	Yes	Yes	Yes	Yes	Yes
109	Yes	Yes	Yes	Yes	Yes	Yes
110	Yes	Yes	Yes	Yes	Yes	Yes

Point of Interest	Live Load Deflection	Fatigue of Reinforcement	Fatigue of Shear Connectors	Fatigue Shear Range of Shear Connectors	Fatigue of Special Points	Fatigue Shear
100	Yes	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes	Yes
106	Yes	Yes	Yes	Yes	Yes	Yes
107	Yes	Yes	Yes	Yes	Yes	Yes
108	Yes	Yes	Yes	Yes	Yes	Yes
109	Yes	Yes	Yes	Yes	Yes	Yes
110	Yes	Yes	Yes	Yes	Yes	Yes

Point of Interest	Details	Compactness and Bracing	Transverse Stiffeners	Bearing Stiffeners	Longitudinal Stiffeners
100	Yes	Yes	Yes	Yes	Yes
101	Yes	Yes	Yes	Yes	Yes
102	Yes	Yes	Yes	Yes	Yes
103	Yes	Yes	Yes	Yes	Yes
104	Yes	Yes	Yes	Yes	Yes
105	Yes	Yes	Yes	Yes	Yes
106	Yes	Yes	Yes	Yes	Yes
107	Yes	Yes	Yes	Yes	Yes
108	Yes	Yes	Yes	Yes	Yes
109	Yes	Yes	Yes	Yes	Yes
110	Yes	Yes	Yes	Yes	Yes

Dead Loads

Uniform

No uniform dead loads have been defined.

Additional Self-weight

No additional self-weight dead loads have been defined.

Distributed

No distributed dead loads have been defined.

Concentrated

No concentrated dead loads have been defined.

Temperature

No temperature dead loads have been defined.

Settlement

Stage: 1

No settlement loads have been defined.

Pedestrian Load

Pedestrian Load: -

Member 2

Identical to: **Member 1**

BRASS Results

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**********************************************************************************************
**                                                                                          **
**                            WYOMING DEPARTMENT OF TRANSPORTATION                          **
**                       BRIDGE RATING AND ANALYSIS OF STRUCTURAL SYSTEMS                   **
**                                                                                          **
**                                                                                          **
**             BBBBBBBBBB   RRRRRRRRRR    AAAAAAAAAA    SSSSSSSSSS    SSSSSSSSSS            **
**             BBBBBBBBBBB  RRRRRRRRRRR  AAAAAAAAAAA  SSSSSSSSSSS  SSSSSSSSSSS            **
**             BB        BB  RR        RR  AA        AA  SS        SS  SS        SS            **
**             BB        BB  RR        RR  AA        AA  SS            SS                    **
**             BB       BB   RR        RR  AA        AA  SSS           SSS                   **
**             BBBBBBBBBB    RRRRRRRRRRR  AAAAAAAAAAA   SSSSSSSSS     SSSSSSSSS              **
**             BBBBBBBBBB    RRRRRRRRRR   AAAAAAAAAAA    SSSSSSSS     SSSSSSSS               **
**             BB       BB   RR    RR      AA        AA           SSS           SSS           **
**             BB        BB  RR     RR     AA        AA            SS            SS           **
**             BB        BB  RR      RR    AA        AA  SS        SS  SS        SS           **
**             BBBBBBBBBBB   RR       RR   AA        AA  SSSSSSSSSSS  SSSSSSSSSSS            **
**             BBBBBBBBBB    RR        RR  AA        AA   SSSSSSSSSS    SSSSSSSSSS            **
**                                                                                          **
**                                                                                          **
**        GGGGGGGGGG   IIIIIIIIIIII  RRRRRRRRRRR   DDDDDDDD      EEEEEEEEEEEE  RRRRRRRRRRR    **
**       GGGGGGGGGGGG  IIIIIIIIIIII  RRRRRRRRRRRR  DDDDDDDDD     EEEEEEEEEEEE  RRRRRRRRRRRR   **
**       GG        GG       II       RR        RR  DD      DD    EE            RR        RR   **
**       GG                 II       RR        RR  DD       DD   EE            RR        RR   **
**       GG                 II       RR        RR  DD        DD  EE            RR        RR   **
**       GG    GGGGGG       II       RRRRRRRRRRRR  DD        DD  EEEEEEEEEE    RRRRRRRRRRRR   **
**       GG    GGGGGG       II       RRRRRRRRRRR   DD        DD  EEEEEEEEEE    RRRRRRRRRRR    **
**       GG        GG       II       RR    RR      DD        DD  EE            RR    RR       **
**       GG        GG       II       RR     RR     DD       DD   EE            RR     RR      **
**       GG        GG       II       RR      RR    DD      DD    EE            RR      RR     **
**       GGGGGGGGGGGG  IIIIIIIIIIII  RR       RR   DDDDDDDDD     EEEEEEEEEEEE  RR       RR    **
**        GGGGGGGGGG   IIIIIIIIIIII  RR        RR  DDDDDDDD      EEEEEEEEEEEE  RR        RR   **
**                                                                                          **
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**     AASHTO LRFD Specifications:                                                          **
**                                                                                          **
**        BRASS-GIRDER™ is current with the AASHTO LRFD Bridge Design Specifications, 8th   **
**        Edition, 2017.  Load and Resistance Factor Ratings are current with the AASHTO    **
**        Manual for Bridge Evaluation, 3rd Edition, 2017.                                  **
**                                                                                          **
**     AASHTO Standard Specifications (LFD):                                                **
**                                                                                          **
**        BRASS-GIRDER is current with the AASHTO Standard Specifications for Highway       **
**        Bridges, 17th Edition, 2002.  Load Factor Ratings are current with the AASHTO     **
**        Manual for Bridge Evaluation, 3rd Edition, 2017.                                  **
**                                                                                          **
**********************************************************************************************
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DECK GEOMETRY AND LOAD SUMMARY REPORT

No. Girders: 2

Girder Spacing, in

Bay No.	Spacing
1	79.000

Cantilevers:
Left = 44.500 in
Right = 44.500 in

Deck Width = 167.999 in

Slab Thickness = 5.500 in

Left Curb:
Thickness = 14.812 in
Width (top) = 10.500 in
Width (bot) = 12.000 in

Right Curb:
Thickness = 14.812 in
Width (top) = 10.500 in
Width (bot) = 12.000 in

DECK GEOMETRY AND LOAD SUMMARY REPORT (continued)

Left Exterior Soffit:

	Left Side, in	Right Side, in
Thickness	2.000	2.000
Distance (beg)	5.250	8.250
Distance (end)	44.500	10.875

Right Exterior Soffit:

	Left Side, in	Right Side, in
Thickness	2.000	2.000
Distance (beg)	8.250	5.250
Distance (end)	10.875	44.500

Travel Way Locations:
Left Edge = 12.000 in
Right Edge = 156.000 in

Material Weights:
Concrete (deck) = 0.1500 k/ft^3
Concrete (other) = 0.1500 k/ft^3

MEMBER LOADS SUMMARY REPORT (Deck Dead Load Distribution Only)

Units: Loads are in k/ft.

Member Loads Due to Deck Components:

Member No.	Stage	Slab DC	Soffit DC	Curbs DC	Median DC	Topping DC	Wearing Surface DW
=> 1	1	0.481	0.072	0.174	0.000	0.000	0.000
2	1	0.481	0.072	0.174	0.000	0.000	0.000

MEMBER LOADS SUMMARY REPORT (Deck Dead Load Distribution Only)(continued)

Units: Loads are in k/ft.

Member of Interest: 1

Total Loads Due to Load Groups:

Load Group	1	2	3	4	5	6	7	8	9	10
Member No.										
=> 1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Total Loads:

Member No.	Stage	Dead Load
=> 1	1	0.000
2	1	0.000

Member No.	Total Dead Load
=> 1	0.000
2	0.000

** STRUCTURE/ANALYSIS SUMMARY **

Structure Type : Beam
Material Type : Steel
Number of Stages: 1
Element Type : Stepped
Analysis Type : Rating

Span No.	Length (ft)	Angle (deg)
1	14.1666	N/A
2	14.1666	N/A

Supports:

Support No.	Fixity Horizontal	Fixity Vertical	Fixity Rotational	Spring Constants Horizontal (k/ft)	Spring Constants Vertical (k/ft)	Spring Constants Rotational (ft-k/rad)
1	Restrained	Restrained	Free	Infinity	Infinity	N/A
2	Free	Restrained	Free	N/A	Infinity	N/A
3	Free	Restrained	Free	N/A	Infinity	N/A

Beam Material Properties:
Unit Weight : 0.490 k/ft^3
Modulus of Elasticity (E) : 29000.000 ksi
Thermal Expansion Coefficient : 0.0000065 / deg. F

** OUTPUT CONTROL SUMMARY **

Action Output Locations	Actions at tenth points
Dead Load Actions	YES
Live Load Actions	YES
Concurrent Actions	NO
Girder Properties	YES
Truck Position	NO
Variable Axle Spacing	NO
Live Load Settings	YES
Live Load Combinations	YES
Live Load Details	YES
Load Combinations	YES
Load and Resistance Factors	YES
Warnings	YES
Member Self-Load	YES
Distributed Dead Loads	YES
Concentrated Dead Loads	YES
Temperature Change	NO
Settlements	NO
Camber Summary	NO
Influence Summary	NO
Critical Design Ratios or Rating Factors	YES (Condensed)
Dyn. Load Allowance Summary	NO
Intermediate Output Level	Expanded
Stage 1	YES

Limit State	Intermediate Output	Load Combinations
STRENGTH I	YES	YES
STRENGTH I-O	YES	YES
STRENGTH II	NO	NO
STRENGTH IV	NO	NO
SERVICE I	NO	NO
SERVICE II	YES	YES
SERVICE II-O	YES	YES
SERVICE III	NO	NO
FATIGUE I	NO	NO
FATIGUE II	NO	NO

Dead Load Distribution (Intermediate)	NO
Dead Load Distribution (Standard)	YES
Live Load Distribution (Intermediate)	YES
Live Load Distribution (Standard)	YES
Transverse Stiffeners (Intermediate)	NO
Bearing Stiffeners (Intermediate)	NO
Longitudinal Stiffeners (Intermediate)	NO
Shear Connectors (Intermediate)	NO
Shear Connectors (Standard)	NO
Floorbeam (Intermediate)	NO
Effective Width (Intermediate)	NO
Action X-Y Plot Tables	NO
Specification Check Results Tables	NO
Mesh Plot Files	NO

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 1 Span Length = 14.167 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Input Dimensions and Cross-Section Geometry: (in)

Point No.	Dist (ft)	Web Depth	Web Width top	Web Width bot	Flange Thickness top	Flange Thickness bot	Flange Width top	Flange Width bot
1-0.000	0.000	28.00	0.375	0.375	0.312	0.312	10.38	10.38
1-0.100	1.417	28.00	0.375	0.375	0.312	0.312	10.38	10.38
1-0.200	2.833	28.00	0.375	0.375	0.312	0.312	10.38	10.38
1-0.300	4.250	28.00	0.375	0.375	0.312	0.312	10.38	10.38
1-0.400	5.667	28.00	0.375	0.375	0.312	0.312	10.38	10.38
1-0.500	7.083	28.00	0.375	0.375	0.312	0.312	10.38	10.38
1-0.600	8.500	28.00	0.375	0.375	0.312	0.312	10.38	10.38
1-0.700	9.917	28.00	0.375	0.375	0.312	0.312	10.38	10.38
1-0.800	11.333	28.00	0.375	0.375	0.312	0.312	10.38	10.38
1-0.900	12.750	28.00	0.375	0.375	0.312	0.312	10.38	10.38
1-1.000	14.167	28.00	0.375	0.375	0.312	0.312	10.38	10.38

Calculated Properties:

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)	Standard Section Name
1-0.000	0.000	20.97	2603.8	14.31	-
1-0.100	1.417	20.97	2603.8	14.31	-
1-0.200	2.833	20.97	2603.8	14.31	-
1-0.300	4.250	20.97	2603.8	14.31	-
1-0.400	5.667	20.97	2603.8	14.31	-
1-0.500	7.083	20.97	2603.8	14.31	-
1-0.600	8.500	20.97	2603.8	14.31	-
1-0.700	9.917	20.97	2603.8	14.31	-
1-0.800	11.333	20.97	2603.8	14.31	-
1-0.900	12.750	20.97	2603.8	14.31	-
1-1.000	14.167	20.97	2603.8	14.31	-

Note: The calculated properties reported above are based on the entire cross section geometry, which may include the slab if it was input. These properties are used only for the structural analysis to obtain moments, shears, etc. When specification and stress checks are performed, BRASS calculates the section properties for both positive and negative bending, and uses them in accordance with the sign of the factored moments. The section properties used for the section analysis are tabulated in a later report.

Note: The distance to the centroid (X-bar) references the bottom of the bottom flange.

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 2 Span Length = 14.167 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Input Dimensions and Cross-Section Geometry: (in)

Point No.	Dist (ft)	Web Depth	Web Width top	Web Width bot	Flange Thickness top	Flange Thickness bot	Flange Width top	Flange Width bot
2-0.000	0.000	28.00	0.375	0.375	0.312	0.312	10.38	10.38
2-0.100	1.417	28.00	0.375	0.375	0.312	0.312	10.38	10.38
2-0.200	2.833	28.00	0.375	0.375	0.312	0.312	10.38	10.38
2-0.300	4.250	28.00	0.375	0.375	0.312	0.312	10.38	10.38
2-0.400	5.667	28.00	0.375	0.375	0.312	0.312	10.38	10.38
2-0.500	7.083	28.00	0.375	0.375	0.312	0.312	10.38	10.38
2-0.600	8.500	28.00	0.375	0.375	0.312	0.312	10.38	10.38
2-0.700	9.917	28.00	0.375	0.375	0.312	0.312	10.38	10.38
2-0.800	11.333	28.00	0.375	0.375	0.312	0.312	10.38	10.38
2-0.900	12.750	28.00	0.375	0.375	0.312	0.312	10.38	10.38
2-1.000	14.167	28.00	0.375	0.375	0.312	0.312	10.38	10.38

Calculated Properties:

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)	Standard Section Name
2-0.000	0.000	20.97	2603.8	14.31	-
2-0.100	1.417	20.97	2603.8	14.31	-
2-0.200	2.833	20.97	2603.8	14.31	-
2-0.300	4.250	20.97	2603.8	14.31	-
2-0.400	5.667	20.97	2603.8	14.31	-
2-0.500	7.083	20.97	2603.8	14.31	-
2-0.600	8.500	20.97	2603.8	14.31	-
2-0.700	9.917	20.97	2603.8	14.31	-
2-0.800	11.333	20.97	2603.8	14.31	-
2-0.900	12.750	20.97	2603.8	14.31	-
2-1.000	14.167	20.97	2603.8	14.31	-

Note: The calculated properties reported above are based on the entire cross section geometry, which may include the slab if it was input. These properties are used only for the structural analysis to obtain moments, shears, etc. When specification and stress checks are performed, BRASS calculates the section properties for both positive and negative bending, and uses them in accordance with the sign of the factored moments. The section properties used for the section analysis are tabulated in a later report.

Note: The distance to the centroid (X-bar) references the bottom of the bottom flange.

Self-Load Summary:

Span No.	Beginning of Load Distance, ft	Beginning of Load Magnitude, k/ft	End of Load Distance, ft	End of Load Magnitude, k/ft
1	0.000	0.0714	14.167	0.0714
2	0.000	0.0714	14.167	0.0714

Load Groups:

Distributed Dead Load Summary:
No loads are present.

Deck Loads and Schedules Summary:

Element	Stage	Load, k/ft
Deck	1	0.5530
Curbs	1	0.1736

Element	Stage	Span No.	Start Distance, ft	Length, ft
Deck	1	*	0.000	28.333
Curbs	1	*	0.000	28.333

Note: A span number denoted as "*" indicates the distances reference the left end of the bridge and the load may extend over one or more spans.

Concentrated Dead Load Summary:
No loads are present.

** LIVE LOAD DISTRIBUTION FACTORS SUMMARY **

** Warning! - The Lever Rule Override was invoked because one or more the ranges of applicability are not satisfied for the AASHTO LRFD distribution factor formulas. See the .DST intermediate output file for details.

Beam Distribution Factor Schedule: Shear

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	7.083	0.743 (LR-T)	0.000 (1,LR-O)
1	7.083	14.167	0.743 (LR-T)	0.000 (1,LR-O)
2	0.000	7.083	0.743 (LR-T)	0.000 (1,LR-O)
2	7.083	14.167	0.743 (LR-T)	0.000 (1,LR-O)

Beam Distribution Factor Schedule: Moment

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	10.578	0.743 (LR-T)	0.000 (1,LR-O)
1	10.578	14.167	0.743 (LR-T)	0.000 (1,LR-O)
2	0.000	3.589	0.743 (LR-T)	0.000 (1,LR-O)
2	3.589	14.167	0.743 (LR-T)	0.000 (1,LR-O)

Beam Distribution Factor Schedule: Deflection

Span No.	Distances, ft Start	End	mg(1-lane)	mg(M-lanes)
1	0.000	14.167	0.570 (LRFD)	0.570 (1,LRFD)
2	0.000	14.167	0.570 (LRFD)	0.570 (1,LRFD)

Reaction Distribution Factors: Shear

Support No.	mg(1-lane)	mg(M-lanes)
1	0.743 (LR-T)	0.000 (1,LR-O)
2	0.743 (LR-T)	0.000 (1,LR-O)
3	0.743 (LR-T)	0.000 (1,LR-O)

Reaction Distribution Factors: Moment

Support No.	mg(1-lane)	mg(M-lanes)
1	0.743 (LR-T)	0.000 (1,LR-O)
2	0.743 (LR-T)	0.000 (1,LR-O)
3	0.743 (LR-T)	0.000 (1,LR-O)

Reaction Distribution Factors: Deflection

Support No.	mg(1-lane)	mg(M-lanes)
1	0.570 (LRFD)	0.570 (1,LRFD)
2	0.570 (LRFD)	0.570 (1,LRFD)
3	0.570 (LRFD)	0.570 (1,LRFD)

Notes:
=> The controlling method is included in parenthesis next to each distribution factor.
USER = User Input LR-T = Lever Rule Specified in AASHTO LRFD Table
LRFD = AASHTO LRFD Formulas LR-O = Lever Rule Override
LR = Lever Rule Method RG-O = Rigid Method Override
=> Additionally, for multiple-lanes loaded, the number of lanes loaded is shown. An 'M' is used with the USER and LRFD methods because the number of multiple lanes is unknown.
=> The Lever Rule Override is invoked when the ranges of applicability are not satisfied for the AASHTO LRFD distribution factor formulas.

LIVE LOAD SETTINGS SUMMARY:

Direction Control : Up & Down Reference Marker
Pedestrian Load : 0.000 k/ft
Wheel Advancement Denominator: 100
ADTT : 999
ADTT (Single Lane) : 999
Multiple Presence Adjustment : 95.000 %

Design/Rating Procedure	Dynamic Load Allowance (%) Truck	Lane	Fatigue
Design Load	33.00	0.00	15.00
Legal Load	33.00	0.00	0.00
Permit Load	33.00	0.00	0.00

No.	Name	Description	Scale Factor	Percent Impact	Fixed Impact	Live Load Type	Rating Procedure	Lanes Loaded
1	HL-93-TRUCK	AASHTO LRFD HL-93 Design Truck (US)	1.000	100.000	0.33	TRK	Design Load	Critical
2	HL-93-TANDEM	AASHTO LRFD HL-93 Design Tandem (US)	1.000	100.000	0.33	TRK	Design Load	Critical
3	HL-93-LANE	AASHTO LRFD HL-93 Design Lane (US)	1.000	100.000	0.00	LAN	Design Load	Critical
4	TYPE3	AASHTO Type 3 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
5	TYPE3S2	AASHTO Type 3S2 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
6	TYPE3-3	AASHTO Type 3-3 Rating Truck (US)	1.000	100.000	0.33	TRK	Legal Load	Critical
7	SU4	AASHTO Specialized Hauling Vehicle SU4	1.000	100.000	0.33	TRK	Legal Load	Critical
8	SU5	AASHTO Specialized Hauling Vehicle SU5	1.000	100.000	0.33	TRK	Legal Load	Critical
9	SU6	AASHTO Specialized Hauling Vehicle SU6	1.000	100.000	0.33	TRK	Legal Load	Critical
10	SU7	AASHTO Specialized Hauling Vehicle SU7	1.000	100.000	0.33	TRK	Legal Load	Critical
11	NRL	AASHTO Notional Rating Load	1.000	100.000	0.33	TRK	Legal Load	Critical

LIVE LOAD COMBINATIONS SUMMARY:

Comb. No.	Name	Description	Truck No.	Lane No.	Combination Factors Truck	Lane
1	HL-93-TRUCK	HL-93-TRUCK + HL-93-LANE	1	3	1.000	1.000
2	HL-93-TANDEM	HL-93-TANDEM + HL-93-LANE	2	3	1.000	1.000
3	TYPE3	TYPE3	4	N/A	1.000	N/A
4	TYPE3S2	TYPE3S2	5	N/A	1.000	N/A
5	TYPE3-3	TYPE3-3	6	N/A	1.000	N/A
6	SU4	SU4	7	N/A	1.000	N/A
7	SU5	SU5	8	N/A	1.000	N/A
8	SU6	SU6	9	N/A	1.000	N/A
9	SU7	SU7	10	N/A	1.000	N/A
10	NRL	NRL	11	N/A	1.000	N/A

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Moment	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 1: HL-93-TRUCK : AASHTO LRFD HL-93 Design Truck (US)												
0.000	0.000	0.000	72.000	1	8.000	0.000	2	32.000	14.000	3	32.000	14.000
Live Load 2: HL-93-TANDEM: AASHTO LRFD HL-93 Design Tandem (US)												
0.000	0.000	0.000	50.000	1	25.000	0.000	2	25.000	4.000			
Live Load 3: HL-93-LANE : AASHTO LRFD HL-93 Design Lane (US)												
0.640	0.000	0.000	36.000									
Live Load 4: TYPE3 : AASHTO Type 3 Rating Truck (US)												
0.000	0.000	0.000	50.000	1	16.000	0.000	2	17.000	15.000	3	17.000	4.000
Live Load 5: TYPE3S2 : AASHTO Type 3S2 Rating Truck (US)												
0.000	0.000	0.000	72.000	1	10.000	0.000	2	15.500	11.000	3	15.500	4.000
				4	15.500	22.000	5	15.500	4.000			

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Moment	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 6: TYPE3-3 : AASHTO Type 3-3 Rating Truck (US)												
0.000	0.000	0.000	80.000	1	12.000	0.000	2	12.000	15.000	3	12.000	4.000
				4	16.000	15.000	5	14.000	16.000	6	14.000	4.000
Live Load 7: SU4 : AASHTO Specialized Hauling Vehicle SU4												
0.000	0.000	0.000	54.000	1	12.000	0.000	2	8.000	10.000	3	17.000	4.000
				4	17.000	4.000						
Live Load 8: SU5 : AASHTO Specialized Hauling Vehicle SU5												
0.000	0.000	0.000	62.000	1	12.000	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000			
Live Load 9: SU6 : AASHTO Specialized Hauling Vehicle SU6												
0.000	0.000	0.000	69.500	1	11.500	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
Live Load 10: SU7 : AASHTO Specialized Hauling Vehicle SU7												
0.000	0.000	0.000	77.500	1	11.500	0.000	2	8.000	10.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
				7	8.000	4.000						

LIVE LOAD DETAILS SUMMARY:

Uniform. Lane Load (k/ft)	Concentrated Loads Shear (kips)	Moment (kips)	Total Weight (kips)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)	Axle No.	Axle Weight (kips)	Axle Spacing (ft)
Live Load 11: NRL : AASHTO Notional Rating Load												
0.000	0.000	0.000	80.000	1	6.000	0.000	2	8.000	6.000	3	8.000	4.000
				4	17.000	4.000	5	17.000	4.000	6	8.000	4.000
				7	8.000	4.000	8	8.000	4.000			

LOAD FACTORS SUMMARY:

Limit State	eta D	eta R	eta I	eta T MAX	eta T MIN
STRENGTH I	1.00	1.00	1.00	1.00	1.00
STRENGTH II	1.00	1.00	1.00	1.00	1.00
STRENGTH IV	1.00	1.00	1.00	1.00	1.00
SERVICE I	1.00	1.00	1.00	1.00	1.00
SERVICE II	1.00	1.00	1.00	1.00	1.00
SERVICE III	1.00	1.00	1.00	1.00	1.00
FATIGUE I	1.00	1.00	1.00	1.00	1.00
FATIGUE II	1.00	1.00	1.00	1.00	1.00

Limit State	DC		DW		DU		LL (Design)		LL	LL
	MAX	MIN	MAX	MIN	MAX	MIN	Inventory	Operating	Legal	Permit
STRENGTH I	1.25	1.25	1.50	1.50	1.50	1.50	1.75	1.35	1.30	0.00
STRENGTH II	1.25	1.25	1.50	1.50	1.50	1.50	1.35	0.00	0.00	0.00
STRENGTH IV	1.50	1.50	1.50	1.50	1.50	1.50	0.00	0.00	0.00	0.00
SERVICE I	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00
SERVICE II	1.00	1.00	1.00	1.00	1.00	1.00	1.30	1.00	1.30	1.00
SERVICE III	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.00	1.00	0.00
FATIGUE I	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	0.00	0.00
FATIGUE II	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00

Limit State	TU		SE		PS		DS	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
STRENGTH I	1.20	1.20	1.00	1.00	1.00	1.00	1.25	1.25
STRENGTH II	1.20	1.20	1.00	1.00	1.00	1.00	1.25	1.25
STRENGTH IV	1.20	1.20	0.00	0.00	1.00	1.00	1.50	1.50
SERVICE I	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
SERVICE II	1.20	1.20	0.00	0.00	1.00	1.00	1.00	1.00
SERVICE III	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
FATIGUE I	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
FATIGUE II	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00

Notes:
=> DU = Utilities
=> PS = Prestress
=> DS = Differential Deck Shrinkage

RESISTANCE FACTORS SUMMARY:

Limit State	phi C
STRENGTH	1.00
SERVICE	1.00
FATIGUE	1.00

Resistance Type	phi* (Base)	STRENGTH phi S	STRENGTH phi T	SERVICE phi S	SERVICE phi T	FATIGUE phi S	FATIGUE phi T
Flexure	1.00	0.85	0.85	1.00	1.00	1.00	1.00
Shear	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Bearing	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shear Connectors	0.85	1.00	1.00	1.00	1.00	1.00	1.00
Compression	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fatigue	1.00	1.00	1.00	1.00	1.00	1.00	1.00

* Base phi factors are not adjusted by phi C * phi S.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR GIRDER WEIGHT
Length of Span No. 1 = 14.167 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	-0.0	0.0	0.4	0.4	0.00	0.00
1-0.100	0.5	0.0	0.3		0.00	0.00
1-0.200	0.8	0.0	0.2		0.00	0.00
1-0.300	1.0	0.0	0.1		0.00	0.00
1-0.400	1.0	0.0	-0.0		0.00	0.00
1-0.500	0.9	0.0	-0.1		0.00	0.00
1-0.600	0.6	0.0	-0.2		0.00	0.00
1-0.700	0.3	0.0	-0.3		0.00	0.00
1-0.800	-0.3	0.0	-0.4		0.00	0.00
1-0.900	-1.0	0.0	-0.5		0.00	0.00
1-1.000	-1.8	0.0	-0.6	1.3	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000008 rad Right End = -0.000000 rad

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR GIRDER WEIGHT
Length of Span No. 2 = 14.167 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
2-0.000	-1.8	0.0	0.6	1.3	0.00	0.00
2-0.100	-1.0	0.0	0.5		0.00	0.00
2-0.200	-0.3	0.0	0.4		0.00	0.00
2-0.300	0.3	0.0	0.3		0.00	0.00
2-0.400	0.6	0.0	0.2		0.00	0.00
2-0.500	0.9	0.0	0.1		0.00	0.00
2-0.600	1.0	0.0	0.0		0.00	0.00
2-0.700	1.0	0.0	-0.1		0.00	0.00
2-0.800	0.8	0.0	-0.2		0.00	0.00
2-0.900	0.5	0.0	-0.3		0.00	0.00
2-1.000	0.0	0.0	-0.4	0.4	0.00	0.00

Rotations (+) Clockwise: Left End = -0.000000 rad Right End = -0.000008 rad

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD FROM DECK LOADS **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR SUPERIMPOSED UNIFORM DEAD LOAD (DC) ON TOP SPANS
Length of Span No. 1 = 14.167 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
1-0.000	0.0	0.0	3.9	3.9	0.00	0.00
1-0.100	4.7	0.0	2.8		0.00	0.00
1-0.200	8.0	0.0	1.8		0.00	0.00
1-0.300	9.8	0.0	0.8		0.00	0.00
1-0.400	10.2	0.0	-0.3		0.00	0.00
1-0.500	9.1	0.0	-1.3		0.00	0.00
1-0.600	6.6	0.0	-2.3		0.00	0.00
1-0.700	2.6	0.0	-3.3		0.00	0.00
1-0.800	-2.9	0.0	-4.4		0.00	0.00
1-0.900	-9.8	0.0	-5.4		0.00	0.00
1-1.000	-18.2	0.0	-6.4	12.9	0.00	0.00

Rotations (+) Clockwise: Left End = 0.000082 rad Right End = -0.000000 rad

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED STATIC LOAD FROM DECK LOADS **
** CONSTRUCTION STAGE 1 **

ACTIONS AND DISPLACEMENTS FOR SUPERIMPOSED UNIFORM DEAD LOAD (DC) ON TOP SPANS
Length of Span No. 2 = 14.167 ft

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	X DEFL. (in)	Y DEFL. (in)
2-0.000	-18.2	0.0	6.4	12.9	0.00	0.00
2-0.100	-9.8	0.0	5.4		0.00	0.00
2-0.200	-2.9	0.0	4.4		0.00	0.00
2-0.300	2.6	0.0	3.3		0.00	0.00
2-0.400	6.6	0.0	2.3		0.00	0.00
2-0.500	9.1	0.0	1.3		0.00	0.00
2-0.600	10.2	0.0	0.3		0.00	0.00
2-0.700	9.8	0.0	-0.8		0.00	0.00
2-0.800	8.0	0.0	-1.8		0.00	0.00
2-0.900	4.7	0.0	-2.8		0.00	0.00
2-1.000	0.0	0.0	-3.9	3.9	0.00	0.00

Rotations (+) Clockwise: Left End = -0.000000 rad Right End = -0.000082 rad

** COMBINED UNFACTORED DEAD LOAD ACTIONS **
** CONSTRUCTION STAGE 1 **

Length of Span No. 1 = 14.167 ft

Dead Loads of Structural Components (DC)

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
1-0.000	0.0	0.0	4.2	4.2	0.00
1-0.100	5.2	0.0	3.1		0.00
1-0.200	8.8	0.0	2.0		0.00
1-0.300	10.8	0.0	0.8		0.00
1-0.400	11.2	0.0	-0.3		0.00
1-0.500	10.0	0.0	-1.4		0.00
1-0.600	7.2	0.0	-2.5		0.00
1-0.700	2.8	0.0	-3.7		0.00
1-0.800	-3.2	0.0	-4.8		0.00
1-0.900	-10.8	0.0	-5.9		0.00
1-1.000	-20.0	0.0	-7.1	14.1	0.00

Rotations (DC): Left End = 0.000090 rad
(+) Clockwise Right End = -0.000000 rad

Dead Loads of Wearing Surfaces (DW)

MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
0.0	0.0	0.0	0.0	0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0	0.0	0.00

Rotations (DW): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

Dead Loads of Utilities (DU)

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
1-0.000	0.0	0.0	0.0	0.0	0.00
1-0.100	0.0	0.0	0.0		0.00
1-0.200	0.0	0.0	0.0		0.00
1-0.300	0.0	0.0	0.0		0.00
1-0.400	0.0	0.0	0.0		0.00
1-0.500	0.0	0.0	0.0		0.00
1-0.600	0.0	0.0	0.0		0.00
1-0.700	0.0	0.0	0.0		0.00
1-0.800	0.0	0.0	0.0		0.00
1-0.900	0.0	0.0	0.0		0.00
1-1.000	0.0	0.0	0.0	0.0	0.00

Rotations (DU): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

** COMBINED UNFACTORED DEAD LOAD ACTIONS **
** CONSTRUCTION STAGE 1 **

Length of Span No. 2 = 14.167 ft

Dead Loads of Structural Components (DC)

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
2-0.000	-20.0	0.0	7.1	14.1	0.00
2-0.100	-10.8	0.0	5.9		0.00
2-0.200	-3.2	0.0	4.8		0.00
2-0.300	2.8	0.0	3.7		0.00
2-0.400	7.2	0.0	2.5		0.00
2-0.500	10.0	0.0	1.4		0.00
2-0.600	11.2	0.0	0.3		0.00
2-0.700	10.8	0.0	-0.8		0.00
2-0.800	8.8	0.0	-2.0		0.00
2-0.900	5.2	0.0	-3.1		0.00
2-1.000	0.0	0.0	-4.2	4.2	0.00

Rotations (DC): Left End = -0.000000 rad
(+) Clockwise Right End = -0.000090 rad

Dead Loads of Wearing Surfaces (DW)

MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
0.0	0.0	0.0	0.0	0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0		0.00
0.0	0.0	0.0	0.0	0.00

Rotations (DW): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

Dead Loads of Utilities (DU)

POINT NO.	MOMENT (ft-kips)	AXIAL (kips)	SHEAR (kips)	REACTION (kips)	DEFL. (in)
2-0.000	0.0	0.0	0.0	0.0	0.00
2-0.100	0.0	0.0	0.0		0.00
2-0.200	0.0	0.0	0.0		0.00
2-0.300	0.0	0.0	0.0		0.00
2-0.400	0.0	0.0	0.0		0.00
2-0.500	0.0	0.0	0.0		0.00
2-0.600	0.0	0.0	0.0		0.00
2-0.700	0.0	0.0	0.0		0.00
2-0.800	0.0	0.0	0.0		0.00
2-0.900	0.0	0.0	0.0		0.00
2-1.000	0.0	0.0	0.0	0.0	0.00

Rotations (DU): Left End = 0.000000 rad
(+) Clockwise Right End = 0.000000 rad

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 1: AASHTO LRFD HL-93 Design Truck (US) (TRK)
Length of Span No. 1 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	31.6	-3.0	31.6	-3.0	0.00	0.00	0.00	0.00	33.00	33.00
1-0.100	38.8	-4.3	0.0	0.0	27.7	-4.7			0.00	0.00	0.01	-0.00		
1-0.200	66.6	-8.6	0.0	0.0	23.7	-9.6			0.00	0.00	0.01	-0.00		
1-0.300	83.9	-12.9	0.0	0.0	19.9	-14.1			0.00	0.00	0.02	-0.01		
1-0.400	91.5	-17.2	0.0	0.0	16.2	-18.0			0.00	0.00	0.02	-0.01		
1-0.500	90.1	-21.5	0.0	0.0	12.8	-21.5			0.00	0.00	0.02	-0.01		
1-0.600	80.8	-25.8	0.0	0.0	9.5	-24.5			0.00	0.00	0.02	-0.01		
1-0.700	65.1	-30.2	0.0	0.0	6.6	-27.0			0.00	0.00	0.02	-0.01		
1-0.800	44.8	-34.5	0.0	0.0	4.0	-29.0			0.00	0.00	0.01	-0.01		
1-0.900	22.0	-54.8	0.0	0.0	1.7	-30.6			0.00	0.00	0.01	-0.00		
1-1.000	0.0	-84.3	0.0	0.0	0.0	-31.8	43.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000465 rad Right End = 0.000298 rad
Concurrent Reactions (without impact): Left End = 12.852 kips Right End = 18.593 kips
Negative Rotations (+) Clockwise: Left End = -0.000149 rad Right End = -0.000298 rad
Concurrent Reactions (without impact): Left End = -2.287 kips Right End = 18.117 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 1: AASHTO LRFD HL-93 Design Truck (US) (TRK)
Length of Span No. 2 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
2-0.000	0.0	-84.3	0.0	0.0	31.8	0.0	43.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00
2-0.100	22.0	-54.8	0.0	0.0	30.6	-1.7			0.00	0.00	0.01	-0.00		
2-0.200	44.8	-34.5	0.0	0.0	29.1	-4.0			0.00	0.00	0.01	-0.01		
2-0.300	65.1	-30.2	0.0	0.0	27.0	-6.6			0.00	0.00	0.02	-0.01		
2-0.400	80.8	-25.9	0.0	0.0	24.5	-9.5			0.00	0.00	0.02	-0.01		
2-0.500	90.1	-21.5	0.0	0.0	21.5	-12.8			0.00	0.00	0.02	-0.01		
2-0.600	91.5	-17.2	0.0	0.0	18.0	-16.2			0.00	0.00	0.02	-0.01		
2-0.700	83.9	-12.9	0.0	0.0	14.1	-19.9			0.00	0.00	0.02	-0.01		
2-0.800	66.6	-8.6	0.0	0.0	9.6	-23.7			0.00	0.00	0.01	-0.00		
2-0.900	38.8	-4.3	0.0	0.0	4.7	-27.7			0.00	0.00	0.01	-0.00		
2-1.000	0.0	-0.0	0.0	0.0	3.0	-31.6	31.6	-3.0	0.00	0.00	0.00	0.00	33.00	33.00

Positive Rotations (+) Clockwise: Left End = 0.000298 rad Right End = 0.000149 rad
Concurrent Reactions (without impact): Left End = 18.593 kips Right End = -2.287 kips
Negative Rotations (+) Clockwise: Left End = -0.000298 rad Right End = -0.000465 rad
Concurrent Reactions (without impact): Left End = 18.117 kips Right End = 12.580 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 2: AASHTO LRFD HL-93 Design Tandem (US) (TRK)
Length of Span No. 1 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	40.8	-4.3	40.8	-4.3	0.00	0.00	0.00	0.00	33.00	33.00
1-0.100	49.4	-6.1	0.0	0.0	34.9	-4.3			0.00	0.00	0.01	-0.00		
1-0.200	82.2	-12.3	0.0	0.0	29.1	-5.9			0.00	0.00	0.02	-0.01		
1-0.300	99.7	-18.4	0.0	0.0	23.5	-9.2			0.00	0.00	0.03	-0.01		
1-0.400	103.4	-24.5	0.0	0.0	18.3	-15.1			0.00	0.00	0.03	-0.01		
1-0.500	100.0	-30.7	0.0	0.0	13.4	-20.9			0.00	0.00	0.03	-0.01		
1-0.600	93.0	-36.8	0.0	0.0	9.1	-26.5			0.00	0.00	0.03	-0.01		
1-0.700	73.9	-43.0	0.0	0.0	5.3	-31.6			0.00	0.00	0.02	-0.01		
1-0.800	44.9	-49.1	0.0	0.0	2.2	-36.4			0.00	0.00	0.02	-0.01		
1-0.900	8.9	-55.2	0.0	0.0	0.0	-40.7			0.00	0.00	0.01	-0.01		
1-1.000	0.0	-61.4	0.0	0.0	0.0	-44.4	48.0	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000653 rad Right End = 0.000424 rad
Concurrent Reactions (without impact): Left End = 19.332 kips Right End = 27.817 kips
Negative Rotations (+) Clockwise: Left End = -0.000212 rad Right End = -0.000424 rad
Concurrent Reactions (without impact): Left End = -3.257 kips Right End = 27.040 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 2: AASHTO LRFD HL-93 Design Tandem (US) (TRK)
Length of Span No. 2 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
2-0.000	0.0	-61.4	0.0	0.0	44.4	0.0	48.0	0.0	0.00	0.00	0.00	0.00	33.00	0.00
2-0.100	8.9	-55.3	0.0	0.0	40.7	0.0			0.00	0.00	0.01	-0.01		
2-0.200	44.9	-49.1	0.0	0.0	36.4	-2.2			0.00	0.00	0.02	-0.01		
2-0.300	73.9	-43.0	0.0	0.0	31.7	-5.3			0.00	0.00	0.02	-0.01		
2-0.400	93.0	-36.8	0.0	0.0	26.5	-9.1			0.00	0.00	0.03	-0.01		
2-0.500	100.0	-30.7	0.0	0.0	20.9	-13.4			0.00	0.00	0.03	-0.01		
2-0.600	103.4	-24.6	0.0	0.0	15.1	-18.3			0.00	0.00	0.03	-0.01		
2-0.700	99.8	-18.4	0.0	0.0	9.2	-23.5			0.00	0.00	0.03	-0.01		
2-0.800	82.2	-12.3	0.0	0.0	5.9	-29.0			0.00	0.00	0.02	-0.01		
2-0.900	49.4	-6.1	0.0	0.0	4.3	-34.8			0.00	0.00	0.01	-0.00		
2-1.000	0.0	-0.0	0.0	0.0	4.3	-40.8	40.8	-4.3	0.00	0.00	0.00	0.00	33.00	33.00

Positive Rotations (+) Clockwise: Left End = 0.000424 rad Right End = 0.000212 rad
Concurrent Reactions (without impact): Left End = 27.817 kips Right End = -3.259 kips
Negative Rotations (+) Clockwise: Left End = -0.000424 rad Right End = -0.000653 rad
Concurrent Reactions (without impact): Left End = 27.040 kips Right End = 18.917 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 3: AASHTO LRFD HL-93 Design Lane (US) (LAN)
Length of Span No. 1 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	2.9	-0.4	2.9	-0.4	0.00	0.00	0.00	0.00	0.00	0.00
1-0.100	3.7	-0.6	0.0	0.0	2.3	-0.5			0.00	0.00	0.00	-0.00		
1-0.200	6.4	-1.2	0.0	0.0	1.8	-0.6			0.00	0.00	0.00	-0.00		
1-0.300	8.2	-1.8	0.0	0.0	1.3	-0.8			0.00	0.00	0.00	-0.00		
1-0.400	9.1	-2.4	0.0	0.0	0.9	-1.1			0.00	0.00	0.00	-0.00		
1-0.500	8.9	-3.0	0.0	0.0	0.6	-1.4			0.00	0.00	0.00	-0.00		
1-0.600	7.9	-3.6	0.0	0.0	0.4	-1.9			0.00	0.00	0.00	-0.00		
1-0.700	5.8	-4.2	0.0	0.0	0.2	-2.4			0.00	0.00	0.00	-0.00		
1-0.800	2.9	-4.8	0.0	0.0	0.1	-2.9			0.00	0.00	0.00	-0.00		
1-0.900	0.6	-7.0	0.0	0.0	0.0	-3.6			0.00	0.00	0.00	-0.00		
1-1.000	0.0	-11.9	0.0	0.0	0.0	-4.2	8.4	0.0	0.00	0.00	0.00	0.00	0.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000062 rad Right End = 0.000041 rad
Concurrent Reactions (without impact): Left End = 2.948 kips Right End = 4.211 kips
Negative Rotations (+) Clockwise: Left End = -0.000021 rad Right End = -0.000041 rad
Concurrent Reactions (without impact): Left End = -0.421 kips Right End = 4.211 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 3: AASHTO LRFD HL-93 Design Lane (US) (LAN)
Length of Span No. 2 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
2-0.000	0.0	-11.9	0.0	0.0	4.2	0.0	8.4	0.0	0.00	0.00	0.00	0.00	0.00	0.00
2-0.100	0.6	-7.0	0.0	0.0	3.6	-0.0			0.00	0.00	0.00	-0.00		
2-0.200	2.9	-4.8	0.0	0.0	2.9	-0.1			0.00	0.00	0.00	-0.00		
2-0.300	5.8	-4.2	0.0	0.0	2.4	-0.2			0.00	0.00	0.00	-0.00		
2-0.400	7.9	-3.6	0.0	0.0	1.9	-0.4			0.00	0.00	0.00	-0.00		
2-0.500	8.9	-3.0	0.0	0.0	1.4	-0.6			0.00	0.00	0.00	-0.00		
2-0.600	9.1	-2.4	0.0	0.0	1.1	-0.9			0.00	0.00	0.00	-0.00		
2-0.700	8.2	-1.8	0.0	0.0	0.8	-1.3			0.00	0.00	0.00	-0.00		
2-0.800	6.4	-1.2	0.0	0.0	0.6	-1.8			0.00	0.00	0.00	-0.00		
2-0.900	3.7	-0.6	0.0	0.0	0.5	-2.3			0.00	0.00	0.00	-0.00		
2-1.000	0.0	-0.0	0.0	0.0	0.4	-2.9	2.9	-0.4	0.00	0.00	0.00	0.00	0.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000041 rad Right End = 0.000021 rad
Concurrent Reactions (without impact): Left End = 4.211 kips Right End = -0.421 kips
Negative Rotations (+) Clockwise: Left End = -0.000041 rad Right End = -0.000062 rad
Concurrent Reactions (without impact): Left End = 4.211 kips Right End = 2.948 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 4: AASHTO Type 3 Rating Truck (US) (TRK)
Length of Span No. 1 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	27.6	-2.9	27.6	-2.9	0.00	0.00	0.00	0.00	33.00	33.00
1-0.100	33.4	-4.2	0.0	0.0	23.6	-4.4			0.00	0.00	0.01	-0.00		
1-0.200	55.5	-8.3	0.0	0.0	19.6	-6.7			0.00	0.00	0.01	-0.00		
1-0.300	67.5	-12.5	0.0	0.0	15.8	-8.6			0.00	0.00	0.02	-0.01		
1-0.400	70.3	-16.7	0.0	0.0	12.3	-11.7			0.00	0.00	0.02	-0.01		
1-0.500	67.9	-20.9	0.0	0.0	9.0	-15.5			0.00	0.00	0.02	-0.01		
1-0.600	62.9	-25.0	0.0	0.0	6.1	-19.1			0.00	0.00	0.02	-0.01		
1-0.700	49.9	-29.2	0.0	0.0	3.7	-22.3			0.00	0.00	0.02	-0.01		
1-0.800	30.4	-33.4	0.0	0.0	2.0	-25.2			0.00	0.00	0.01	-0.01		
1-0.900	11.0	-44.0	0.0	0.0	0.9	-27.8			0.00	0.00	0.01	-0.00		
1-1.000	0.0	-56.7	0.0	0.0	0.0	-30.3	32.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000444 rad Right End = 0.000288 rad
Concurrent Reactions (without impact): Left End = 13.302 kips Right End = 18.754 kips
Negative Rotations (+) Clockwise: Left End = -0.000144 rad Right End = -0.000288 rad
Concurrent Reactions (without impact): Left End = -2.216 kips Right End = 18.244 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 4: AASHTO Type 3 Rating Truck (US) (TRK)
Length of Span No. 2 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
2-0.000	0.0	-56.7	0.0	0.0	30.3	0.0	32.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00
2-0.100	11.0	-44.0	0.0	0.0	27.7	-0.9			0.00	0.00	0.01	-0.00		
2-0.200	30.4	-33.4	0.0	0.0	25.2	-2.0			0.00	0.00	0.01	-0.01		
2-0.300	49.9	-29.2	0.0	0.0	22.3	-3.7			0.00	0.00	0.02	-0.01		
2-0.400	62.9	-25.0	0.0	0.0	19.1	-6.1			0.00	0.00	0.02	-0.01		
2-0.500	67.9	-20.9	0.0	0.0	15.5	-9.0			0.00	0.00	0.02	-0.01		
2-0.600	70.3	-16.7	0.0	0.0	11.7	-12.3			0.00	0.00	0.02	-0.01		
2-0.700	67.5	-12.5	0.0	0.0	8.6	-15.8			0.00	0.00	0.02	-0.01		
2-0.800	55.5	-8.3	0.0	0.0	6.7	-19.6			0.00	0.00	0.01	-0.00		
2-0.900	33.4	-4.2	0.0	0.0	4.4	-23.6			0.00	0.00	0.01	-0.00		
2-1.000	0.0	-0.0	0.0	0.0	2.9	-27.6	27.6	-2.9	0.00	0.00	0.00	0.00	33.00	33.00

Positive Rotations (+) Clockwise: Left End = 0.000288 rad Right End = 0.000144 rad
Concurrent Reactions (without impact): Left End = 18.754 kips Right End = -2.215 kips
Negative Rotations (+) Clockwise: Left End = -0.000288 rad Right End = -0.000444 rad
Concurrent Reactions (without impact): Left End = 18.244 kips Right End = 12.738 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 5: AASHTO Type 3S2 Rating Truck (US) (TRK)
Length of Span No. 1 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	25.0	-2.7	25.0	-2.7	0.00	0.00	0.00	0.00	33.00	33.00
1-0.100	30.4	-3.8	0.0	0.0	21.6	-3.2			0.00	0.00	0.01	-0.00		
1-0.200	51.0	-7.6	0.0	0.0	18.0	-4.5			0.00	0.00	0.01	-0.00		
1-0.300	61.8	-11.4	0.0	0.0	14.6	-6.3			0.00	0.00	0.02	-0.01		
1-0.400	64.1	-15.2	0.0	0.0	11.3	-9.9			0.00	0.00	0.02	-0.01		
1-0.500	62.0	-19.0	0.0	0.0	8.3	-13.7			0.00	0.00	0.02	-0.01		
1-0.600	57.6	-22.8	0.0	0.0	5.6	-17.2			0.00	0.00	0.02	-0.01		
1-0.700	45.8	-26.6	0.0	0.0	3.3	-20.5			0.00	0.00	0.02	-0.01		
1-0.800	27.8	-30.5	0.0	0.0	1.3	-23.4			0.00	0.00	0.01	-0.01		
1-0.900	5.5	-39.0	0.0	0.0	0.0	-25.9			0.00	0.00	0.00	-0.00		
1-1.000	0.0	-51.4	0.0	0.0	0.0	-28.0	32.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000405 rad Right End = 0.000263 rad
Concurrent Reactions (without impact): Left End = 11.953 kips Right End = 17.078 kips
Negative Rotations (+) Clockwise: Left End = -0.000131 rad Right End = -0.000263 rad
Concurrent Reactions (without impact): Left End = -2.020 kips Right End = 16.794 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 5: AASHTO Type 3S2 Rating Truck (US) (TRK)
Length of Span No. 2 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
2-0.000	0.0	-51.4	0.0	0.0	28.0	0.0	32.3	0.0	0.00	0.00	0.00	0.00	33.00	0.00
2-0.100	5.5	-39.0	0.0	0.0	25.9	0.0			0.00	0.00	0.00	-0.00		
2-0.200	27.8	-30.5	0.0	0.0	23.4	-1.3			0.00	0.00	0.01	-0.01		
2-0.300	45.8	-26.6	0.0	0.0	20.5	-3.3			0.00	0.00	0.02	-0.01		
2-0.400	57.6	-22.8	0.0	0.0	17.2	-5.6			0.00	0.00	0.02	-0.01		
2-0.500	62.0	-19.0	0.0	0.0	13.7	-8.3			0.00	0.00	0.02	-0.01		
2-0.600	64.1	-15.2	0.0	0.0	9.9	-11.3			0.00	0.00	0.02	-0.01		
2-0.700	61.8	-11.4	0.0	0.0	6.3	-14.6			0.00	0.00	0.02	-0.01		
2-0.800	51.0	-7.6	0.0	0.0	4.5	-18.0			0.00	0.00	0.01	-0.00		
2-0.900	30.4	-3.8	0.0	0.0	3.2	-21.6			0.00	0.00	0.01	-0.00		
2-1.000	0.0	-0.0	0.0	0.0	2.7	-25.0	25.0	-2.7	0.00	0.00	0.00	0.00	33.00	33.00

Positive Rotations (+) Clockwise: Left End = 0.000263 rad Right End = 0.000131 rad
Concurrent Reactions (without impact): Left End = 17.078 kips Right End = -2.021 kips
Negative Rotations (+) Clockwise: Left End = -0.000263 rad Right End = -0.000405 rad
Concurrent Reactions (without impact): Left End = 16.794 kips Right End = 11.638 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 6: AASHTO Type 3-3 Rating Truck (US) (TRK)
Length of Span No. 1 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	22.8	-2.4	22.8	-2.4	0.00	0.00	0.00	0.00	33.00	33.00
1-0.100	27.6	-3.4	0.0	0.0	19.5	-4.1			0.00	0.00	0.01	-0.00		
1-0.200	45.9	-6.9	0.0	0.0	16.2	-6.1			0.00	0.00	0.01	-0.00		
1-0.300	55.6	-10.3	0.0	0.0	13.1	-7.9			0.00	0.00	0.02	-0.01		
1-0.400	57.9	-13.8	0.0	0.0	10.2	-9.9			0.00	0.00	0.02	-0.01		
1-0.500	55.9	-17.2	0.0	0.0	7.5	-12.9			0.00	0.00	0.02	-0.01		
1-0.600	51.9	-20.6	0.0	0.0	5.1	-15.8			0.00	0.00	0.02	-0.01		
1-0.700	41.2	-24.1	0.0	0.0	3.0	-18.3			0.00	0.00	0.01	-0.01		
1-0.800	25.0	-27.5	0.0	0.0	1.7	-20.7			0.00	0.00	0.01	-0.01		
1-0.900	11.0	-36.3	0.0	0.0	0.9	-22.8			0.00	0.00	0.00	-0.00		
1-1.000	0.0	-47.1	0.0	0.0	0.0	-24.9	26.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000366 rad Right End = 0.000238 rad
Concurrent Reactions (without impact): Left End = 10.762 kips Right End = 15.409 kips
Negative Rotations (+) Clockwise: Left End = -0.000119 rad Right End = -0.000237 rad
Concurrent Reactions (without impact): Left End = -1.825 kips Right End = 14.988 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 6: AASHTO Type 3-3 Rating Truck (US) (TRK)
Length of Span No. 2 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
2-0.000	0.0	-47.1	0.0	0.0	24.9	0.0	26.9	0.0	0.00	0.00	0.00	0.00	33.00	0.00
2-0.100	11.0	-36.3	0.0	0.0	22.8	-0.9			0.00	0.00	0.00	-0.00		
2-0.200	25.0	-27.5	0.0	0.0	20.6	-1.7			0.00	0.00	0.01	-0.01		
2-0.300	41.2	-24.0	0.0	0.0	18.3	-3.0			0.00	0.00	0.01	-0.01		
2-0.400	51.9	-20.6	0.0	0.0	15.8	-5.1			0.00	0.00	0.02	-0.01		
2-0.500	55.9	-17.2	0.0	0.0	12.9	-7.5			0.00	0.00	0.02	-0.01		
2-0.600	57.9	-13.7	0.0	0.0	9.9	-10.2			0.00	0.00	0.02	-0.01		
2-0.700	55.6	-10.3	0.0	0.0	7.9	-13.1			0.00	0.00	0.02	-0.01		
2-0.800	45.9	-6.9	0.0	0.0	6.1	-16.2			0.00	0.00	0.01	-0.00		
2-0.900	27.6	-3.4	0.0	0.0	4.1	-19.5			0.00	0.00	0.01	-0.00		
2-1.000	0.0	-0.0	0.0	0.0	2.4	-22.8	22.8	-2.4	0.00	0.00	0.00	0.00	33.00	33.00

Positive Rotations (+) Clockwise: Left End = 0.000238 rad Right End = 0.000119 rad
Concurrent Reactions (without impact): Left End = 15.409 kips Right End = -1.823 kips
Negative Rotations (+) Clockwise: Left End = -0.000237 rad Right End = -0.000366 rad
Concurrent Reactions (without impact): Left End = 14.988 kips Right End = 10.530 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 7: AASHTO Specialized Hauling Vehicle SU4 (TRK)
Length of Span No. 1 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	29.1	-3.3	29.1	-3.3	0.00	0.00	0.00	0.00	33.00	33.00
1-0.100	34.3	-4.6	0.0	0.0	24.6	-3.3			0.00	0.00	0.01	-0.00		
1-0.200	55.8	-9.3	0.0	0.0	19.9	-5.1			0.00	0.00	0.01	-0.01		
1-0.300	68.9	-13.9	0.0	0.0	15.6	-7.2			0.00	0.00	0.02	-0.01		
1-0.400	76.7	-18.5	0.0	0.0	11.8	-10.4			0.00	0.00	0.02	-0.01		
1-0.500	74.1	-23.1	0.0	0.0	8.3	-14.3			0.00	0.00	0.02	-0.01		
1-0.600	64.2	-27.8	0.0	0.0	5.4	-18.4			0.00	0.00	0.02	-0.01		
1-0.700	51.9	-32.4	0.0	0.0	2.9	-22.9			0.00	0.00	0.02	-0.01		
1-0.800	30.6	-37.0	0.0	0.0	0.7	-27.1			0.00	0.00	0.01	-0.01		
1-0.900	5.8	-46.8	0.0	0.0	0.0	-31.0			0.00	0.00	0.01	-0.00		
1-1.000	0.0	-60.0	0.0	0.0	0.0	-34.4	39.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000472 rad Right End = 0.000320 rad
Concurrent Reactions (without impact): Left End = 15.280 kips Right End = 21.962 kips
Negative Rotations (+) Clockwise: Left End = -0.000160 rad Right End = -0.000320 rad
Concurrent Reactions (without impact): Left End = -2.456 kips Right End = 21.333 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 7: AASHTO Specialized Hauling Vehicle SU4 (TRK)
Length of Span No. 2 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
2-0.000	0.0	-60.0	0.0	0.0	34.4	0.0	39.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00
2-0.100	5.8	-46.8	0.0	0.0	31.0	0.0			0.00	0.00	0.01	-0.00		
2-0.200	30.6	-37.0	0.0	0.0	27.1	-0.7			0.00	0.00	0.01	-0.01		
2-0.300	51.9	-32.4	0.0	0.0	22.9	-2.9			0.00	0.00	0.02	-0.01		
2-0.400	64.2	-27.8	0.0	0.0	18.4	-5.4			0.00	0.00	0.02	-0.01		
2-0.500	74.1	-23.1	0.0	0.0	14.3	-8.3			0.00	0.00	0.02	-0.01		
2-0.600	76.7	-18.5	0.0	0.0	10.4	-11.8			0.00	0.00	0.02	-0.01		
2-0.700	68.9	-13.9	0.0	0.0	7.2	-15.6			0.00	0.00	0.02	-0.01		
2-0.800	55.8	-9.3	0.0	0.0	5.1	-19.9			0.00	0.00	0.01	-0.01		
2-0.900	34.3	-4.6	0.0	0.0	3.3	-24.6			0.00	0.00	0.01	-0.00		
2-1.000	0.0	-0.0	0.0	0.0	3.3	-29.1	29.1	-3.3	0.00	0.00	0.00	0.00	33.00	33.00

Positive Rotations (+) Clockwise: Left End = 0.000320 rad Right End = 0.000160 rad
Concurrent Reactions (without impact): Left End = 21.962 kips Right End = -2.455 kips
Negative Rotations (+) Clockwise: Left End = -0.000320 rad Right End = -0.000472 rad
Concurrent Reactions (without impact): Left End = 21.333 kips Right End = 14.944 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 8: AASHTO Specialized Hauling Vehicle SU5 (TRK)
Length of Span No. 1 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	29.9	-3.3	29.9	-3.3	0.00	0.00	0.00	0.00	33.00	33.00
1-0.100	35.0	-4.6	0.0	0.0	24.7	-3.5			0.00	0.00	0.01	-0.00		
1-0.200	56.5	-9.3	0.0	0.0	19.9	-5.5			0.00	0.00	0.01	-0.01		
1-0.300	68.8	-13.9	0.0	0.0	15.6	-7.0			0.00	0.00	0.02	-0.01		
1-0.400	76.7	-18.5	0.0	0.0	11.6	-10.1			0.00	0.00	0.02	-0.01		
1-0.500	74.1	-23.1	0.0	0.0	8.0	-14.0			0.00	0.00	0.02	-0.01		
1-0.600	64.1	-27.8	0.0	0.0	4.8	-18.1			0.00	0.00	0.02	-0.01		
1-0.700	51.9	-32.4	0.0	0.0	2.5	-22.6			0.00	0.00	0.02	-0.01		
1-0.800	30.7	-37.0	0.0	0.0	0.5	-26.8			0.00	0.00	0.01	-0.01		
1-0.900	5.8	-41.7	0.0	0.0	0.0	-31.1			0.00	0.00	0.01	-0.00		
1-1.000	0.0	-57.8	0.0	0.0	0.0	-35.6	43.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000472 rad Right End = 0.000320 rad
Concurrent Reactions (without impact): Left End = 15.248 kips Right End = 21.991 kips
Negative Rotations (+) Clockwise: Left End = -0.000160 rad Right End = -0.000320 rad
Concurrent Reactions (without impact): Left End = -2.456 kips Right End = 21.364 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 8: AASHTO Specialized Hauling Vehicle SU5 (TRK)
Length of Span No. 2 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
2-0.000	0.0	-57.8	0.0	0.0	35.6	0.0	43.7	0.0	0.00	0.00	0.00	0.00	33.00	0.00
2-0.100	5.8	-41.6	0.0	0.0	31.1	0.0			0.00	0.00	0.01	-0.00		
2-0.200	30.7	-37.0	0.0	0.0	26.8	-0.5			0.00	0.00	0.01	-0.01		
2-0.300	51.8	-32.4	0.0	0.0	22.6	-2.5			0.00	0.00	0.02	-0.01		
2-0.400	64.1	-27.8	0.0	0.0	18.1	-4.8			0.00	0.00	0.02	-0.01		
2-0.500	74.1	-23.1	0.0	0.0	14.0	-8.0			0.00	0.00	0.02	-0.01		
2-0.600	76.7	-18.5	0.0	0.0	10.1	-11.6			0.00	0.00	0.02	-0.01		
2-0.700	68.8	-13.9	0.0	0.0	7.0	-15.6			0.00	0.00	0.02	-0.01		
2-0.800	56.5	-9.3	0.0	0.0	5.5	-19.9			0.00	0.00	0.01	-0.01		
2-0.900	35.0	-4.6	0.0	0.0	3.5	-24.7			0.00	0.00	0.01	-0.00		
2-1.000	0.0	-0.0	0.0	0.0	3.3	-29.9	29.9	-3.3	0.00	0.00	0.00	0.00	33.00	33.00

Positive Rotations (+) Clockwise: Left End = 0.000320 rad Right End = 0.000160 rad
Concurrent Reactions (without impact): Left End = 21.991 kips Right End = -2.456 kips
Negative Rotations (+) Clockwise: Left End = -0.000320 rad Right End = -0.000472 rad
Concurrent Reactions (without impact): Left End = 21.364 kips Right End = 14.913 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 9: AASHTO Specialized Hauling Vehicle SU6 (TRK)
Length of Span No. 1 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	30.2	-3.3	30.2	-3.3	0.00	0.00	0.00	0.00	33.00	33.00
1-0.100	36.0	-4.7	0.0	0.0	25.4	-3.6			0.00	0.00	0.01	-0.00		
1-0.200	58.9	-9.4	0.0	0.0	20.8	-5.4			0.00	0.00	0.02	-0.01		
1-0.300	71.4	-14.1	0.0	0.0	16.2	-6.9			0.00	0.00	0.02	-0.01		
1-0.400	77.6	-18.8	0.0	0.0	11.2	-8.9			0.00	0.00	0.02	-0.01		
1-0.500	75.4	-23.5	0.0	0.0	6.5	-13.7			0.00	0.00	0.02	-0.01		
1-0.600	68.4	-28.2	0.0	0.0	3.4	-18.3			0.00	0.00	0.02	-0.01		
1-0.700	52.6	-32.9	0.0	0.0	2.4	-23.2			0.00	0.00	0.02	-0.01		
1-0.800	27.5	-37.6	0.0	0.0	0.5	-27.8			0.00	0.00	0.01	-0.01		
1-0.900	5.5	-42.9	0.0	0.0	0.0	-32.0			0.00	0.00	0.01	-0.00		
1-1.000	0.0	-61.1	0.0	0.0	0.0	-36.2	48.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000488 rad Right End = 0.000325 rad
Concurrent Reactions (without impact): Left End = 15.620 kips Right End = 24.214 kips
Negative Rotations (+) Clockwise: Left End = -0.000162 rad Right End = -0.000325 rad
Concurrent Reactions (without impact): Left End = -2.496 kips Right End = 23.842 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 9: AASHTO Specialized Hauling Vehicle SU6 (TRK)
Length of Span No. 2 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
2-0.000	0.0	-61.1	0.0	0.0	36.2	0.0	48.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00
2-0.100	5.5	-42.9	0.0	0.0	32.0	0.0			0.00	0.00	0.01	-0.00		
2-0.200	27.5	-37.6	0.0	0.0	27.8	-0.5			0.00	0.00	0.01	-0.01		
2-0.300	52.6	-32.9	0.0	0.0	23.2	-2.4			0.00	0.00	0.02	-0.01		
2-0.400	68.4	-28.2	0.0	0.0	18.3	-3.4			0.00	0.00	0.02	-0.01		
2-0.500	75.4	-23.5	0.0	0.0	13.7	-6.5			0.00	0.00	0.02	-0.01		
2-0.600	77.6	-18.8	0.0	0.0	8.9	-11.2			0.00	0.00	0.02	-0.01		
2-0.700	71.4	-14.1	0.0	0.0	6.9	-16.2			0.00	0.00	0.02	-0.01		
2-0.800	58.9	-9.4	0.0	0.0	5.4	-20.8			0.00	0.00	0.02	-0.01		
2-0.900	36.0	-4.7	0.0	0.0	3.6	-25.4			0.00	0.00	0.01	-0.00		
2-1.000	0.0	-0.0	0.0	0.0	3.3	-30.2	30.2	-3.3	0.00	0.00	0.00	0.00	33.00	33.00

Positive Rotations (+) Clockwise: Left End = 0.000325 rad Right End = 0.000162 rad
Concurrent Reactions (without impact): Left End = 24.214 kips Right End = -2.496 kips
Negative Rotations (+) Clockwise: Left End = -0.000325 rad Right End = -0.000489 rad
Concurrent Reactions (without impact): Left End = 23.842 kips Right End = 14.947 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 10: AASHTO Specialized Hauling Vehicle SU7 (TRK)
Length of Span No. 1 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	31.0	-2.8	31.0	-2.8	0.00	0.00	0.00	0.00	33.00	33.00
1-0.100	36.3	-4.0	0.0	0.0	25.6	-3.6			0.00	0.00	0.01	-0.00		
1-0.200	58.5	-7.9	0.0	0.0	20.6	-5.4			0.00	0.00	0.01	-0.00		
1-0.300	69.4	-11.9	0.0	0.0	15.7	-6.9			0.00	0.00	0.02	-0.01		
1-0.400	74.0	-15.9	0.0	0.0	10.5	-8.9			0.00	0.00	0.02	-0.01		
1-0.500	73.8	-19.9	0.0	0.0	5.8	-13.7			0.00	0.00	0.02	-0.01		
1-0.600	64.2	-23.8	0.0	0.0	3.4	-18.3			0.00	0.00	0.02	-0.01		
1-0.700	46.0	-27.8	0.0	0.0	2.4	-23.2			0.00	0.00	0.02	-0.01		
1-0.800	19.0	-31.8	0.0	0.0	0.5	-27.8			0.00	0.00	0.01	-0.01		
1-0.900	5.5	-42.9	0.0	0.0	0.0	-32.4			0.00	0.00	0.01	-0.00		
1-1.000	0.0	-63.4	0.0	0.0	0.0	-37.0	51.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000479 rad Right End = 0.000276 rad
Concurrent Reactions (without impact): Left End = 16.582 kips Right End = 23.774 kips
Negative Rotations (+) Clockwise: Left End = -0.000137 rad Right End = -0.000275 rad
Concurrent Reactions (without impact): Left End = -2.106 kips Right End = 23.053 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 10: AASHTO Specialized Hauling Vehicle SU7 (TRK)
Length of Span No. 2 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
2-0.000	0.0	-63.4	0.0	0.0	36.9	0.0	51.6	0.0	0.00	0.00	0.00	0.00	33.00	0.00
2-0.100	5.5	-42.9	0.0	0.0	32.4	0.0			0.00	0.00	0.01	-0.00		
2-0.200	19.0	-31.8	0.0	0.0	27.8	-0.5			0.00	0.00	0.01	-0.01		
2-0.300	46.0	-27.8	0.0	0.0	23.2	-2.4			0.00	0.00	0.02	-0.01		
2-0.400	64.2	-23.8	0.0	0.0	18.3	-3.4			0.00	0.00	0.02	-0.01		
2-0.500	73.8	-19.9	0.0	0.0	13.7	-5.8			0.00	0.00	0.02	-0.01		
2-0.600	74.0	-15.9	0.0	0.0	8.9	-10.5			0.00	0.00	0.02	-0.01		
2-0.700	69.4	-11.9	0.0	0.0	6.9	-15.7			0.00	0.00	0.02	-0.01		
2-0.800	58.5	-7.9	0.0	0.0	5.4	-20.6			0.00	0.00	0.01	-0.00		
2-0.900	36.3	-4.0	0.0	0.0	3.6	-25.6			0.00	0.00	0.01	-0.00		
2-1.000	0.0	-0.0	0.0	0.0	2.8	-31.0	31.0	-2.8	0.00	0.00	0.00	0.00	33.00	33.00

Positive Rotations (+) Clockwise: Left End = 0.000276 rad Right End = 0.000137 rad
Concurrent Reactions (without impact): Left End = 23.774 kips Right End = -2.107 kips
Negative Rotations (+) Clockwise: Left End = -0.000275 rad Right End = -0.000480 rad
Concurrent Reactions (without impact): Left End = 23.053 kips Right End = 15.842 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 11: AASHTO Notional Rating Load (TRK)
Length of Span No. 1 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
1-0.000	0.0	-0.0	0.0	0.0	31.0	-3.3	31.0	-3.3	0.00	0.00	0.00	0.00	33.00	33.00
1-0.100	36.3	-4.7	0.0	0.0	26.0	-3.6			0.00	0.00	0.01	-0.00		
1-0.200	59.0	-9.4	0.0	0.0	21.1	-4.9			0.00	0.00	0.02	-0.01		
1-0.300	71.5	-14.1	0.0	0.0	16.7	-7.3			0.00	0.00	0.02	-0.01		
1-0.400	77.7	-18.8	0.0	0.0	12.6	-11.0			0.00	0.00	0.02	-0.01		
1-0.500	75.5	-23.5	0.0	0.0	9.2	-15.3			0.00	0.00	0.02	-0.01		
1-0.600	68.6	-28.2	0.0	0.0	6.2	-19.6			0.00	0.00	0.02	-0.01		
1-0.700	52.7	-32.9	0.0	0.0	3.6	-24.3			0.00	0.00	0.02	-0.01		
1-0.800	30.7	-37.6	0.0	0.0	2.1	-28.8			0.00	0.00	0.01	-0.01		
1-0.900	11.7	-47.6	0.0	0.0	0.9	-33.2			0.00	0.00	0.01	-0.00		
1-1.000	0.0	-69.3	0.0	0.0	0.0	-37.6	52.2	0.0	0.00	0.00	0.00	0.00	33.00	0.00

Positive Rotations (+) Clockwise: Left End = 0.000489 rad Right End = 0.000325 rad
Concurrent Reactions (without impact): Left End = 15.569 kips Right End = 33.773 kips
Negative Rotations (+) Clockwise: Left End = -0.000162 rad Right End = -0.000325 rad
Concurrent Reactions (without impact): Left End = 3.309 kips Right End = 31.490 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** UNFACTORED GIRDER ACTIONS DUE TO APPLIED LIVE LOADS **
(Adjusted for Dynamic Load Allowance, Distribution Factors, and Live Load Scale Factor)
** CONSTRUCTION STAGE 1 **

MAX ACTIONS AND DISPLACEMENTS FOR LIVE LOAD NO. 11: AASHTO Notional Rating Load (TRK)
Length of Span No. 2 = 14.167 ft
Live Load Scale Factor = 1.000 Lanes Loaded: Critical

POINT NO.	MOMENT POS (ft-kips)	MOMENT NEG (ft-kips)	AXIAL POS (kips)	AXIAL NEG (kips)	SHEAR POS (kips)	SHEAR NEG (kips)	REACTION POS (kips)	REACTION NEG (kips)	X DEFLECTION POS (in)	X DEFLECTION NEG (in)	Y DEFLECTION POS (in)	Y DEFLECTION NEG (in)	REACTION POS %IMP.	REACTION NEG %IMP.
2-0.000	0.0	-69.3	0.0	0.0	37.6	0.0	52.2	0.0	0.00	0.00	0.00	0.00	33.00	0.00
2-0.100	11.7	-47.6	0.0	0.0	33.2	-0.9			0.00	0.00	0.01	-0.00		
2-0.200	30.7	-37.6	0.0	0.0	28.8	-2.1			0.00	0.00	0.01	-0.01		
2-0.300	52.7	-32.9	0.0	0.0	24.3	-3.6			0.00	0.00	0.02	-0.01		
2-0.400	68.6	-28.2	0.0	0.0	19.6	-6.2			0.00	0.00	0.02	-0.01		
2-0.500	75.5	-23.5	0.0	0.0	15.3	-9.2			0.00	0.00	0.02	-0.01		
2-0.600	77.6	-18.8	0.0	0.0	11.0	-12.6			0.00	0.00	0.02	-0.01		
2-0.700	71.5	-14.1	0.0	0.0	7.3	-16.7			0.00	0.00	0.02	-0.01		
2-0.800	59.0	-9.4	0.0	0.0	4.9	-21.1			0.00	0.00	0.02	-0.01		
2-0.900	36.4	-4.7	0.0	0.0	3.6	-26.0			0.00	0.00	0.01	-0.00		
2-1.000	0.0	-0.0	0.0	0.0	3.3	-31.0	31.0	-3.3	0.00	0.00	0.00	0.00	33.00	33.00

Positive Rotations (+) Clockwise: Left End = 0.000325 rad Right End = 0.000162 rad
Concurrent Reactions (without impact): Left End = 33.773 kips Right End = 3.226 kips
Negative Rotations (+) Clockwise: Left End = -0.000325 rad Right End = -0.000489 rad
Concurrent Reactions (without impact): Left End = 31.490 kips Right End = 14.978 kips

Note(s):
=> These actions and deflections include dynamic load allowance (impact), distribution factors, and live load scale factor.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I
Length of Span No. 1 = 14.167 ft

POINT NO.	MOMENT (ft-kips) MAX	MOMENT (ft-kips) MIN	AXIAL (kips) MAX	AXIAL (kips) MIN	SHEAR (kips) MAX	SHEAR (kips) MIN	REACTION (kips) MAX	REACTION (kips) MIN	Y DEFLECTION (in) MAX	Y DEFLECTION (in) MIN
1-0.000	0.0	-0.0	0.0	0.0	81.9	-3.0	81.9	-3.0	0.00	0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)
1-0.100	99.4	-5.3	0.0	0.0	69.0	-5.2			0.02	-0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.200	166.2	-12.6	0.0	0.0	56.4	-15.4			0.04	-0.01
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.300	202.4	-21.8	0.0	0.0	44.5	-25.0			0.06	-0.01
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.400	210.8	-33.1	0.0	0.0	33.2	-33.8			0.07	-0.02
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.500	203.2	-46.4	0.0	0.0	22.8	-41.9			0.07	-0.02
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.600	185.6	-61.7	0.0	0.0	14.1	-52.8			0.06	-0.02
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
1-0.700	143.0	-79.0	0.0	0.0	7.2	-64.1			0.05	-0.02
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
1-0.800	79.6	-98.3	0.0	0.0	1.1	-74.9			0.03	-0.02
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
1-0.900	25.9	-122.5	0.0	0.0	-4.4	-84.9			0.02	-0.01
	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
1-1.000	-25.0	-193.4	0.0	0.0	-8.8	-93.9	116.4	17.7	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I
Length of Span No. 2 = 14.167 ft

POINT NO.	MOMENT MAX (ft-kips)	MOMENT MIN (ft-kips)	AXIAL MAX (kips)	AXIAL MIN (kips)	SHEAR MAX (kips)	SHEAR MIN (kips)	REACTION MAX (kips)	REACTION MIN (kips)	Y DEFLECTION MAX (in)	Y DEFLECTION MIN (in)
2-0.000	-25.0	-193.4	0.0	0.0	94.0	8.8	116.4	17.7	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)
2-0.100	25.9	-122.5	0.0	0.0	84.9	4.4			0.02	-0.01
	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
2-0.200	79.6	-98.3	0.0	0.0	74.9	-1.1			0.03	-0.02
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
2-0.300	143.0	-79.0	0.0	0.0	64.1	-7.2			0.05	-0.02
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
2-0.400	185.6	-61.7	0.0	0.0	52.8	-14.1			0.06	-0.02
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
2-0.500	203.1	-46.4	0.0	0.0	41.9	-22.8			0.07	-0.02
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
2-0.600	210.8	-33.1	0.0	0.0	33.8	-33.2			0.07	-0.02
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
2-0.700	202.5	-21.9	0.0	0.0	25.0	-44.4			0.06	-0.01
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
2-0.800	166.2	-12.6	0.0	0.0	15.4	-56.4			0.04	-0.01
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
2-0.900	99.4	-5.3	0.0	0.0	5.2	-69.0			0.02	-0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
2-1.000	0.0	-0.0	0.0	0.0	3.0	-81.9	81.9	-3.0	0.00	0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I-O
Length of Span No. 1 = 14.167 ft

POINT NO.	MOMENT MAX (ft-kips)		MOMENT MIN (ft-kips)		AXIAL MAX (kips)		AXIAL MIN (kips)		SHEAR MAX (kips)		SHEAR MIN (kips)		REACTION MAX (kips)		REACTION MIN (kips)		Y DEFLECTION MAX (in)		Y DEFLECTION MIN (in)	
1-0.000	0.0	(2, 1)	-0.0	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	64.4	(2, 1)	-1.1	(2, 1)	64.4	(2, 1)	-1.1	(2, 1)	0.00	(1, 1)	0.00	(1, 1)
1-0.100	78.1	(2, 1)	-2.6	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	54.1	(2, 1)	-3.1	(1, 1)					0.02	(2, 1)	-0.00	(2, 1)
1-0.200	130.7	(2, 1)	-7.2	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	44.1	(2, 1)	-11.3	(1, 1)					0.03	(2, 1)	-0.01	(2, 1)
1-0.300	159.2	(2, 1)	-13.8	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	34.6	(2, 1)	-19.0	(1, 1)					0.05	(2, 1)	-0.01	(2, 1)
1-0.400	165.8	(2, 1)	-22.3	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	25.6	(2, 1)	-26.2	(1, 1)					0.05	(2, 1)	-0.01	(2, 1)
1-0.500	159.6	(2, 1)	-32.9	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	17.2	(2, 1)	-32.8	(1, 1)					0.05	(2, 1)	-0.02	(2, 1)
1-0.600	145.2	(2, 1)	-45.5	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	10.2	(1, 1)	-41.4	(2, 1)					0.05	(2, 1)	-0.02	(2, 1)
1-0.700	111.1	(2, 1)	-60.1	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	4.5	(1, 1)	-50.5	(2, 1)					0.04	(2, 1)	-0.02	(2, 1)
1-0.800	60.5	(2, 1)	-76.7	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	-0.6	(1, 1)	-59.1	(2, 1)					0.03	(2, 1)	-0.01	(2, 1)
1-0.900	16.9	(1, 1)	-97.6	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	-5.1	(1, 1)	-67.2	(2, 1)					0.01	(2, 1)	-0.01	(2, 1)
1-1.000	-25.0	(1, 1)	-154.9	(1, 1)	0.0	(1, 1)	0.0	(1, 1)	-8.8	(1, 1)	-74.5	(2, 1)	93.8	(2, 1)	17.7	(1, 1)	0.00	(1, 1)	0.00	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: STRENGTH I-O
Length of Span No. 2 = 14.167 ft

POINT NO.	MOMENT MAX (ft-kips)		MOMENT MIN (ft-kips)		AXIAL MAX (kips)		AXIAL MIN (kips)		SHEAR MAX (kips)		SHEAR MIN (kips)		REACTION MAX (kips)		REACTION MIN (kips)		Y DEFLECTION MAX (in)		Y DEFLECTION MIN (in)	
2-0.000	-25.0	(1, 1)	-154.9	(1, 1)	0.0	(1, 1)	0.0	(1, 1)	74.5	(2, 1)	8.8	(1, 1)	93.8	(2, 1)	17.7	(1, 1)	0.00	(1, 1)	0.00	(1, 1)
2-0.100	16.9	(1, 1)	-97.6	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	67.2	(2, 1)	5.1	(1, 1)					0.01	(2, 1)	-0.01	(2, 1)
2-0.200	60.5	(2, 1)	-76.8	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	59.2	(2, 1)	0.6	(1, 1)					0.03	(2, 1)	-0.01	(2, 1)
2-0.300	111.1	(2, 1)	-60.2	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	50.5	(2, 1)	-4.5	(1, 1)					0.04	(2, 1)	-0.02	(2, 1)
2-0.400	145.2	(2, 1)	-45.6	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	41.4	(2, 1)	-10.2	(1, 1)					0.05	(2, 1)	-0.02	(2, 1)
2-0.500	159.5	(2, 1)	-33.0	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	32.8	(1, 1)	-17.2	(2, 1)					0.05	(2, 1)	-0.02	(2, 1)
2-0.600	165.8	(2, 1)	-22.4	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	26.2	(1, 1)	-25.6	(2, 1)					0.05	(2, 1)	-0.01	(2, 1)
2-0.700	159.3	(2, 1)	-13.8	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	19.0	(1, 1)	-34.5	(2, 1)					0.05	(2, 1)	-0.01	(2, 1)
2-0.800	130.7	(2, 1)	-7.2	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	11.3	(1, 1)	-44.1	(2, 1)					0.03	(2, 1)	-0.01	(2, 1)
2-0.900	78.1	(2, 1)	-2.6	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	3.1	(1, 1)	-54.1	(2, 1)					0.02	(2, 1)	-0.00	(2, 1)
2-1.000	0.0	(2, 1)	-0.0	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	1.1	(2, 1)	-64.4	(2, 1)	64.4	(2, 1)	-1.1	(2, 1)	0.00	(1, 1)	0.00	(1, 1)

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** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II
Length of Span No. 1 = 14.167 ft

POINT NO.	MOMENT (ft-kips) MAX	MOMENT (ft-kips) MIN	AXIAL (kips) MAX	AXIAL (kips) MIN	SHEAR (kips) MAX	SHEAR (kips) MIN	REACTION (kips) MAX	REACTION (kips) MIN	Y DEFLECTION (in) MAX	Y DEFLECTION (in) MIN
1-0.000	0.0	-0.0	0.0	0.0	61.2	-1.9	61.2	-1.9	0.00	0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)
1-0.100	74.2	-3.5	0.0	0.0	51.5	-3.6			0.02	-0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.200	124.1	-8.7	0.0	0.0	42.1	-11.3			0.03	-0.01
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.300	151.1	-15.4	0.0	0.0	33.1	-18.5			0.04	-0.01
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.400	157.4	-23.8	0.0	0.0	24.7	-25.1			0.05	-0.01
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.500	151.6	-33.8	0.0	0.0	16.9	-31.3			0.05	-0.02
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.600	138.4	-45.3	0.0	0.0	10.3	-39.4			0.05	-0.02
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
1-0.700	106.5	-58.5	0.0	0.0	5.1	-47.9			0.04	-0.02
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
1-0.800	58.9	-73.2	0.0	0.0	0.4	-56.0			0.02	-0.01
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
1-0.900	18.5	-91.7	0.0	0.0	-3.7	-63.5			0.01	-0.01
	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
1-1.000	-20.0	-145.1	0.0	0.0	-7.1	-70.3	87.5	14.1	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
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=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II
Length of Span No. 2 = 14.167 ft

POINT NO.	MOMENT (ft-kips) MAX		MOMENT (ft-kips) MIN		AXIAL (kips) MAX		AXIAL (kips) MIN		SHEAR (kips) MAX		SHEAR (kips) MIN		REACTION (kips) MAX		REACTION (kips) MIN		Y DEFLECTION (in) MAX		Y DEFLECTION (in) MIN	
2-0.000	-20.0		-145.1		0.0		0.0		70.3		7.1		87.5		14.1		0.00		0.00	
	(1, 1)		(1, 1)		(1, 1)		(1, 1)		(2, 1)		(1, 1)		(2, 1)		(1, 1)		(1, 1)		(1, 1)	
2-0.100	18.5		-91.8		0.0		0.0		63.5		3.7						0.01		-0.01	
	(1, 1)		(2, 1)		(1, 1)		(1, 1)		(2, 1)		(1, 1)						(2, 1)		(2, 1)	
2-0.200	58.9		-73.3		0.0		0.0		56.0		-0.4						0.02		-0.01	
	(2, 1)		(2, 1)		(1, 1)		(1, 1)		(2, 1)		(1, 1)						(2, 1)		(2, 1)	
2-0.300	106.5		-58.5		0.0		0.0		47.9		-5.1						0.04		-0.02	
	(2, 1)		(2, 1)		(1, 1)		(1, 1)		(2, 1)		(1, 1)						(2, 1)		(2, 1)	
2-0.400	138.4		-45.3		0.0		0.0		39.4		-10.3						0.05		-0.02	
	(2, 1)		(2, 1)		(1, 1)		(1, 1)		(2, 1)		(1, 1)						(2, 1)		(2, 1)	
2-0.500	151.6		-33.8		0.0		0.0		31.3		-16.9						0.05		-0.02	
	(2, 1)		(2, 1)		(1, 1)		(1, 1)		(1, 1)		(2, 1)						(2, 1)		(2, 1)	
2-0.600	157.4		-23.8		0.0		0.0		25.1		-24.7						0.05		-0.01	
	(2, 1)		(2, 1)		(1, 1)		(1, 1)		(1, 1)		(2, 1)						(2, 1)		(2, 1)	
2-0.700	151.2		-15.5		0.0		0.0		18.5		-33.1						0.04		-0.01	
	(2, 1)		(2, 1)		(1, 1)		(1, 1)		(1, 1)		(2, 1)						(2, 1)		(2, 1)	
2-0.800	124.1		-8.7		0.0		0.0		11.3		-42.0						0.03		-0.01	
	(2, 1)		(2, 1)		(1, 1)		(1, 1)		(1, 1)		(2, 1)						(2, 1)		(2, 1)	
2-0.900	74.2		-3.6		0.0		0.0		3.6		-51.5						0.02		-0.00	
	(2, 1)		(2, 1)		(1, 1)		(1, 1)		(1, 1)		(2, 1)						(2, 1)		(2, 1)	
2-1.000	0.0		-0.0		0.0		0.0		1.9		-61.2		61.2		-1.9		0.00		0.00	
	(2, 1)		(2, 1)		(1, 1)		(1, 1)		(2, 1)		(2, 1)		(2, 1)		(2, 1)		(1, 1)		(1, 1)	

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II-O
Length of Span No. 1 = 14.167 ft

POINT NO.	MOMENT (ft-kips) MAX	MOMENT (ft-kips) MIN	AXIAL (kips) MAX	AXIAL (kips) MIN	SHEAR (kips) MAX	SHEAR (kips) MIN	REACTION (kips) MAX	REACTION (kips) MIN	Y DEFLECTION (in) MAX	Y DEFLECTION (in) MIN
1-0.000	0.0	-0.0	0.0	0.0	48.0	-0.5	48.0	-0.5	0.00	0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)
1-0.100	58.3	-1.5	0.0	0.0	40.3	-2.1			0.01	-0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.200	97.5	-4.7	0.0	0.0	32.8	-8.2			0.03	-0.00
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.300	118.7	-9.4	0.0	0.0	25.7	-14.0			0.03	-0.01
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.400	123.7	-15.7	0.0	0.0	18.9	-19.4			0.04	-0.01
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.500	119.0	-23.7	0.0	0.0	12.6	-24.4			0.04	-0.01
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(2, 1)	(1, 1)			(2, 1)	(2, 1)
1-0.600	108.1	-33.2	0.0	0.0	7.3	-30.9			0.04	-0.01
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
1-0.700	82.5	-44.3	0.0	0.0	3.1	-37.7			0.03	-0.01
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
1-0.800	44.6	-57.1	0.0	0.0	-0.8	-44.1			0.02	-0.01
	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
1-0.900	11.7	-73.1	0.0	0.0	-4.2	-50.2			0.01	-0.01
	(1, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)			(2, 1)	(2, 1)
1-1.000	-20.0	-116.2	0.0	0.0	-7.1	-55.7	70.5	14.1	0.00	0.00
	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(1, 1)	(2, 1)	(2, 1)	(1, 1)	(1, 1)	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
2 = MINIMUM dead load factors controlled
=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

** LOAD COMBINATIONS FOR ALL LOAD EFFECTS IN CURRENT STAGE **
** CONSTRUCTION STAGE 1 **

Limit State: SERVICE II-O
Length of Span No. 2 = 14.167 ft

POINT NO.	MOMENT MAX (ft-kips)		MOMENT MIN (ft-kips)		AXIAL MAX (kips)		AXIAL MIN (kips)		SHEAR MAX (kips)		SHEAR MIN (kips)		REACTION MAX (kips)		REACTION MIN (kips)		Y DEFLECTION MAX (in)		Y DEFLECTION MIN (in)	
2-0.000	-20.0	(1, 1)	-116.2	(1, 1)	0.0	(1, 1)	0.0	(1, 1)	55.7	(2, 1)	7.1	(1, 1)	70.5	(2, 1)	14.1	(1, 1)	0.00	(1, 1)	0.00	(1, 1)
2-0.100	11.7	(1, 1)	-73.1	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	50.2	(2, 1)	4.2	(1, 1)					0.01	(2, 1)	-0.01	(2, 1)
2-0.200	44.6	(2, 1)	-57.1	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	44.2	(2, 1)	0.8	(1, 1)					0.02	(2, 1)	-0.01	(2, 1)
2-0.300	82.5	(2, 1)	-44.4	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	37.7	(2, 1)	-3.1	(1, 1)					0.03	(2, 1)	-0.01	(2, 1)
2-0.400	108.1	(2, 1)	-33.2	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	30.9	(2, 1)	-7.3	(1, 1)					0.04	(2, 1)	-0.01	(2, 1)
2-0.500	118.9	(2, 1)	-23.7	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	24.4	(1, 1)	-12.6	(2, 1)					0.04	(2, 1)	-0.01	(2, 1)
2-0.600	123.7	(2, 1)	-15.7	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	19.4	(1, 1)	-18.9	(2, 1)					0.04	(2, 1)	-0.01	(2, 1)
2-0.700	118.8	(2, 1)	-9.4	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	14.0	(1, 1)	-25.6	(2, 1)					0.03	(2, 1)	-0.01	(2, 1)
2-0.800	97.5	(2, 1)	-4.7	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	8.2	(1, 1)	-32.8	(2, 1)					0.03	(2, 1)	-0.00	(2, 1)
2-0.900	58.3	(2, 1)	-1.5	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	2.1	(1, 1)	-40.3	(2, 1)					0.01	(2, 1)	-0.00	(2, 1)
2-1.000	0.0	(2, 1)	-0.0	(2, 1)	0.0	(1, 1)	0.0	(1, 1)	0.5	(2, 1)	-48.0	(2, 1)	48.0	(2, 1)	-0.5	(2, 1)	0.00	(1, 1)	0.00	(1, 1)

Notes:
=> The first number in parenthesis is the governing live load combination number, which is combined with a lane load if applicable. 0 indicates that this limit state is not assigned to a design/rating procedure used by any live load, i.e., dead load controls.
=> The second number in parenthesis represents the dead load factors that controlled.
1 = MAXIMUM dead load factors controlled
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=> (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.

LIMIT STATE LEGEND:

BRASS	Specifications
STRENGTH I	Strength I Inventory
STRENGTH I-O	Strength I Operating
STRENGTH II	Strength II
STRENGTH IV	Strength IV
SERVICE I	Service I
SERVICE II	Service II Inventory
SERVICE II-O	Service II Operating
FATIGUE I	Fatigue I
FATIGUE II	Fatigue II

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 1 Span Length = 14.167 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Calculated Properties: Section Analysis (Positive Bending)

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)
1-0.000	0.000	20.97	2603.8	14.31
1-0.100	1.417	20.97	2603.8	14.31
1-0.200	2.833	20.97	2603.8	14.31
1-0.300	4.250	20.97	2603.8	14.31
1-0.400	5.667	20.97	2603.8	14.31
1-0.500	7.083	20.97	2603.8	14.31
1-0.600	8.500	20.97	2603.8	14.31
1-0.700	9.917	20.97	2603.8	14.31
1-0.800	11.333	20.97	2603.8	14.31
1-0.900	12.750	20.97	2603.8	14.31
1-1.000	14.167	20.97	2603.8	14.31

Calculated Properties: Section Analysis (Negative Bending)

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)
1-0.000	0.000	20.97	2603.8	14.31
1-0.100	1.417	20.97	2603.8	14.31
1-0.200	2.833	20.97	2603.8	14.31
1-0.300	4.250	20.97	2603.8	14.31
1-0.400	5.667	20.97	2603.8	14.31
1-0.500	7.083	20.97	2603.8	14.31
1-0.600	8.500	20.97	2603.8	14.31
1-0.700	9.917	20.97	2603.8	14.31
1-0.800	11.333	20.97	2603.8	14.31
1-0.900	12.750	20.97	2603.8	14.31
1-1.000	14.167	20.97	2603.8	14.31

* Note: Section properties for section analysis are only calculated at
points of interest either specified by the user or generated by BRASS.

Beam Properties: General span segments variation.
Construction Stage: 1
Span No. 2 Span Length = 14.167 (ft) Span Ratio = 1.000 E = 29000.0 (ksi)

Calculated Properties: Section Analysis (Positive Bending)

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)
2-0.000	0.000	*	*	*
2-0.100	1.417	*	*	*
2-0.200	2.833	*	*	*
2-0.300	4.250	*	*	*
2-0.400	5.667	*	*	*
2-0.500	7.083	*	*	*
2-0.600	8.500	*	*	*
2-0.700	9.917	*	*	*
2-0.800	11.333	*	*	*
2-0.900	12.750	*	*	*
2-1.000	14.167	*	*	*

Calculated Properties: Section Analysis (Negative Bending)

Point No.	Dist (ft)	A (in^2)	I (in^4)	X-bar (in)
2-0.000	0.000	*	*	*
2-0.100	1.417	*	*	*
2-0.200	2.833	*	*	*
2-0.300	4.250	*	*	*
2-0.400	5.667	*	*	*
2-0.500	7.083	*	*	*
2-0.600	8.500	*	*	*
2-0.700	9.917	*	*	*
2-0.800	11.333	*	*	*
2-0.900	12.750	*	*	*
2-1.000	14.167	*	*	*

* Note: Section properties for section analysis are only calculated at
points of interest either specified by the user or generated by BRASS.

CONTRAFLEXURE LOCATIONS:

Dead Load Contraflexure Locations:

Span No.	Locations, in	
1	0.000	126.933
2	43.066	169.999

=> Note: These locations are determined from stage 1 actions due to a uniform load on the top spans of the structure.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 100.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.6250			
Top Flange Thickness	=	0.3125	Top Flange Width	=	10.3750
Web Depth	=	28.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3125	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 0.000 ft
Maximum distance to Right Brace Point = 14.167 ft
Is analysis point braced? YES

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 100.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0
Total Load Effect	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0
Resistance - Dead	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	5.3	5.3	5.3	5.3	5.3	5.3	6.4	6.4
Live Load Effect	60.5	-6.1	46.7	-4.7	46.7	-4.7	0.0	0.0
Total Load Effect	65.8	-0.8	52.0	0.6	52.0	0.6	6.4	6.4
Resistance - Dead	177.4	-188.0	177.4	177.4	177.4	177.4	176.3	176.3
Design Ratio	2.78	240.33	3.51	292.46	(3.51)	(292.46)	(28.73)	(28.73)
Rating Factor	2.93	31.03	3.80	N/A	(3.80)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0
Total Load Effect	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0
Resistance - Dead	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	182.7	182.7
Dead Load Effect	5.3	5.3	5.3	5.3	5.3	5.3	6.4	6.4
Live Load Effect	76.6	-8.3	59.1	-6.4	59.1	-6.4	0.0	0.0
Total Load Effect	81.9	-3.0	64.4	-1.1	64.4	-1.1	6.4	6.4
Resistance - Dead	177.4	-188.0	177.4	-188.0	177.4	-188.0	176.3	176.3
Design Ratio	2.23	60.53	2.84	163.53	(2.84)	(163.53)	(28.73)	(28.73)
Rating Factor	2.32	22.60	3.00	29.30	(3.00)	(29.30)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	5.3	5.3	5.3	5.3	5.3	5.3	6.4	6.4
Live Load Effect	35.9	-3.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	41.2	1.5	5.3	5.3	5.3	5.3	6.4	6.4
Resistance - Dead	177.4	177.4	177.4	177.4	177.4	177.4	176.3	176.3
Design Ratio	4.43	124.49	34.48	34.48	(34.48)	(34.48)	(28.73)	(28.73)
Rating Factor	4.94	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	5.3	5.3	5.3	5.3	5.3	5.3	6.4	6.4
Live Load Effect	32.5	-3.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	37.8	1.8	5.3	5.3	5.3	5.3	6.4	6.4
Resistance - Dead	177.4	177.4	177.4	177.4	177.4	177.4	176.3	176.3
Design Ratio	4.83	101.20	34.48	34.48	(34.48)	(34.48)	(28.73)	(28.73)
Rating Factor	5.46	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	5.3	5.3	5.3	5.3	5.3	5.3	6.4	6.4
Live Load Effect	29.6	-3.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	34.9	2.1	5.3	5.3	5.3	5.3	6.4	6.4
Resistance - Dead	177.4	177.4	177.4	177.4	177.4	177.4	176.3	176.3
Design Ratio	5.23	85.24	34.48	34.48	(34.48)	(34.48)	(28.73)	(28.73)
Rating Factor	5.98	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	5.3	5.3	5.3	5.3	5.3	5.3	6.4	6.4
Live Load Effect	37.9	-4.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	43.2	1.1	5.3	5.3	5.3	5.3	6.4	6.4
Resistance - Dead	177.4	177.4	177.4	177.4	177.4	177.4	176.3	176.3
Design Ratio	4.23	173.74	34.48	34.48	(34.48)	(34.48)	(28.73)	(28.73)
Rating Factor	4.68	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	5.3	5.3	5.3	5.3	5.3	5.3	6.4	6.4
Live Load Effect	38.8	-4.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	44.1	1.1	5.3	5.3	5.3	5.3	6.4	6.4
Resistance - Dead	177.4	177.4	177.4	177.4	177.4	177.4	176.3	176.3
Design Ratio	4.14	173.67	34.48	34.48	(34.48)	(34.48)	(28.73)	(28.73)
Rating Factor	4.57	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	5.3	5.3	5.3	5.3	5.3	5.3	6.4	6.4
Live Load Effect	39.3	-4.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	44.6	1.0	5.3	5.3	5.3	5.3	6.4	6.4
Resistance - Dead	177.4	177.4	177.4	177.4	177.4	177.4	176.3	176.3
Design Ratio	4.10	185.92	34.48	34.48	(34.48)	(34.48)	(28.73)	(28.73)
Rating Factor	4.51	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	5.3	5.3	5.3	5.3	5.3	5.3	6.4	6.4
Live Load Effect	40.2	-3.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	45.5	1.7	5.3	5.3	5.3	5.3	6.4	6.4
Resistance - Dead	177.4	177.4	177.4	177.4	177.4	177.4	176.3	176.3
Design Ratio	4.01	110.46	34.48	34.48	(34.48)	(34.48)	(28.73)	(28.73)
Rating Factor	4.41	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Live Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Resistance - Dead	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
Design Ratio	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)
Rating Factor	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	5.3	5.3	5.3	5.3	5.3	5.3	6.4	6.4
Live Load Effect	40.3	-4.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	45.6	1.0	5.3	5.3	5.3	5.3	6.4	6.4
Resistance - Dead	177.4	177.4	177.4	177.4	177.4	177.4	176.3	176.3
Design Ratio	4.01	185.96	34.48	34.48	(34.48)	(34.48)	(28.73)	(28.73)
Rating Factor	4.40	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 100.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Live Load Effect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load Effect	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00
Resistance - Dead	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Design Ratio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rating Factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 101.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.6250			
Top Flange Thickness	=	0.3125	Top Flange Width	=	10.3750
Web Depth	=	28.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3125	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 1.417 ft
Maximum distance to Right Brace Point = 12.750 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 101.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	74.4	-8.6	57.4	-6.6	57.4	-6.6	0.0	0.0
Total Load Effect	80.9	-2.1	63.9	-0.1	63.9	-0.1	7.8	7.8
Resistance - Dead	380.1	-390.0	380.1	-390.0	380.1	-390.0	378.8	378.8
Design Ratio	4.78	184.57	6.05	3309.41	(6.05)	(3309.41)	(49.52)	(49.52)
Rating Factor	5.11	45.44	6.62	58.90	(6.62)	(58.90)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	182.7	182.7
Dead Load Effect	3.9	3.9	3.9	3.9	3.9	3.9	4.7	4.7
Live Load Effect	52.5	-9.1	40.5	-7.0	40.5	-7.0	0.0	0.0
Total Load Effect	56.4	-5.2	44.4	-3.1	44.4	-3.1	4.7	4.7
Resistance - Dead	178.8	-186.6	178.8	-186.6	178.8	-186.6	178.0	178.0
Design Ratio	3.24	35.37	4.12	58.99	(4.12)	(58.99)	(39.18)	(39.18)
Rating Factor	3.41	20.61	4.41	26.72	(4.41)	(26.72)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-3.65	3.65	0.42	-0.42	-2.80	2.80	0.32	-0.32
Total Load Effect	-3.99	3.99	0.08	-0.08	-3.15	3.15	-0.02	0.02
Resistance - Dead	-23.66	23.66	24.34	-24.34	-23.66	23.66	24.34	-24.34
Design Ratio	6.02	6.02	310.52	310.52	7.62	7.62	N/A	N/A
Rating Factor	6.49	6.49	57.88	57.88	8.44	8.44	75.24	75.24

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-3.65	3.65	0.42	-0.42	-2.80	2.80	0.32	-0.32
Total Load Effect	-3.99	3.99	0.08	-0.08	-3.15	3.15	-0.02	0.02
Resistance - Dead	-29.66	N/A	N/A	-30.34	-29.66	N/A	-29.66	N/A
Design Ratio	7.52	N/A	N/A	388.15	9.53	N/A	1517.67	N/A
Rating Factor	8.13	N/A	N/A	72.15	10.57	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	92.9	-11.8	71.6	-9.1	71.6	-9.1	0.0	0.0
Total Load Effect	99.4	-5.3	78.1	-2.6	78.1	-2.6	7.8	7.8
Resistance - Dead	380.1	-390.0	380.1	-390.0	380.1	-390.0	378.8	378.8
Design Ratio	3.89	72.68	4.95	148.43	(4.95)	(148.43)	(49.52)	(49.52)
Rating Factor	4.09	33.10	5.31	42.91	(5.31)	(42.91)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	182.7	182.7
Dead Load Effect	3.9	3.9	3.9	3.9	3.9	3.9	4.7	4.7
Live Load Effect	65.1	-8.4	50.2	-6.5	50.2	-6.5	0.0	0.0
Total Load Effect	69.0	-4.5	54.1	-2.6	54.1	-2.6	4.7	4.7
Resistance - Dead	178.8	-186.6	178.8	-186.6	178.8	-186.6	178.0	178.0
Design Ratio	2.65	40.62	3.38	70.76	(3.38)	(70.76)	(39.18)	(39.18)
Rating Factor	2.75	22.26	3.56	28.85	(3.56)	(28.85)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-4.55	4.55	0.58	-0.58	-3.50	3.50	0.44	-0.44
Total Load Effect	-4.89	4.89	0.23	-0.23	-3.84	3.84	0.10	-0.10
Resistance - Dead	-23.66	23.66	24.34	-24.34	-23.66	23.66	24.34	-24.34
Design Ratio	4.90	4.90	102.55	102.55	6.25	6.25	238.08	238.08
Rating Factor	5.20	5.20	42.17	42.17	6.76	6.76	54.82	54.82

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-4.55	4.55	0.58	-0.58	-3.50	3.50	0.44	-0.44
Total Load Effect	-4.89	4.89	0.23	-0.23	-3.84	3.84	0.10	-0.10
Resistance - Dead	-29.66	N/A	N/A	-30.34	-29.66	N/A	N/A	-30.34
Design Ratio	6.13	N/A	N/A	128.19	7.81	N/A	N/A	297.60
Rating Factor	6.52	N/A	N/A	52.56	8.47	N/A	N/A	68.33

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	43.4	-5.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	49.9	1.1	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	380.1	380.1	380.1	380.1	380.1	380.1	378.8	378.8
Design Ratio	7.75	358.54	59.42	59.42	(59.42)	(59.42)	(49.52)	(49.52)
Rating Factor	8.76	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	3.9	3.9	3.9	3.9	3.9	3.9	4.7	4.7
Live Load Effect	30.6	-5.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	34.5	-1.8	3.9	3.9	3.9	3.9	4.7	4.7
Resistance - Dead	178.8	-186.6	178.8	178.8	178.8	178.8	178.0	178.0
Design Ratio	5.30	100.42	47.02	47.02	(47.02)	(47.02)	(39.18)	(39.18)
Rating Factor	5.84	32.71	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-2.86	2.86	0.36	-0.36	0.00	0.00	0.00	0.00
Total Load Effect	-3.20	3.20	0.01	-0.01	-0.34	0.34	-0.34	0.34
Resistance - Dead	-23.66	23.66	24.34	-24.34	24.34	23.66	24.34	23.66
Design Ratio	7.49	7.49	1632.45	1632.45	N/A	69.91	N/A	69.91
Rating Factor	8.27	8.27	68.00	68.00	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-2.86	2.86	0.36	-0.36	0.00	0.00	0.00	0.00
Total Load Effect	-3.20	3.20	0.01	-0.01	-0.34	0.34	-0.34	0.34
Resistance - Dead	-29.66	N/A	N/A	-30.34	-29.66	N/A	-29.66	N/A
Design Ratio	9.36	N/A	N/A	2040.56	87.39	N/A	87.39	N/A
Rating Factor	10.37	N/A	N/A	84.76	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	39.5	-4.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	46.0	1.6	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	380.1	380.1	380.1	380.1	380.1	380.1	378.8	378.8
Design Ratio	8.40	248.33	59.42	59.42	(59.42)	(59.42)	(49.52)	(49.52)
Rating Factor	9.62	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	3.9	3.9	3.9	3.9	3.9	3.9	4.7	4.7
Live Load Effect	28.1	-4.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	32.0	-0.3	3.9	3.9	3.9	3.9	4.7	4.7
Resistance - Dead	178.8	-186.6	178.8	178.8	178.8	178.8	178.0	178.0
Design Ratio	5.71	677.76	47.02	47.02	(47.02)	(47.02)	(39.18)	(39.18)
Rating Factor	6.36	44.90	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-2.61	2.61	0.33	-0.33	0.00	0.00	0.00	0.00
Total Load Effect	-2.95	2.95	-0.02	0.02	-0.34	0.34	-0.34	0.34
Resistance - Dead	-23.66	23.66	24.34	-24.34	24.34	23.66	24.34	23.66
Design Ratio	8.13	8.13	N/A	N/A	N/A	69.91	N/A	69.91
Rating Factor	9.07	9.07	74.57	74.57	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-2.61	2.61	0.33	-0.33	0.00	0.00	0.00	0.00
Total Load Effect	-2.95	2.95	-0.02	0.02	-0.34	0.34	-0.34	0.34
Resistance - Dead	-29.66	N/A	-29.66	N/A	-29.66	N/A	-29.66	N/A
Design Ratio	10.17	N/A	1779.13	N/A	87.39	N/A	87.39	N/A
Rating Factor	11.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	35.8	-4.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	42.3	2.0	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	380.1	380.1	380.1	380.1	380.1	380.1	378.8	378.8
Design Ratio	9.13	189.93	59.42	59.42	(59.42)	(59.42)	(49.52)	(49.52)
Rating Factor	10.61	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	3.9	3.9	3.9	3.9	3.9	3.9	4.7	4.7
Live Load Effect	25.3	-5.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	29.2	-1.4	3.9	3.9	3.9	3.9	4.7	4.7
Resistance - Dead	178.8	-186.6	178.8	178.8	178.8	178.8	178.0	178.0
Design Ratio	6.26	127.21	47.02	47.02	(47.02)	(47.02)	(39.18)	(39.18)
Rating Factor	7.07	35.06	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-2.36	2.36	0.29	-0.29	0.00	0.00	0.00	0.00
Total Load Effect	-2.71	2.71	-0.05	0.05	-0.34	0.34	-0.34	0.34
Resistance - Dead	-23.66	23.66	24.34	-24.34	24.34	23.66	24.34	23.66
Design Ratio	8.87	8.87	N/A	N/A	N/A	69.91	N/A	69.91
Rating Factor	10.01	10.01	82.56	82.56	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-2.36	2.36	0.29	-0.29	0.00	0.00	0.00	0.00
Total Load Effect	-2.71	2.71	-0.05	0.05	-0.34	0.34	-0.34	0.34
Resistance - Dead	-29.66	N/A	-29.66	N/A	-29.66	N/A	-29.66	N/A
Design Ratio	11.09	N/A	619.40	N/A	87.39	N/A	87.39	N/A
Rating Factor	12.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	44.6	-6.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	51.1	0.5	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	380.1	380.1	380.1	380.1	380.1	380.1	378.8	378.8
Design Ratio	7.57	790.79	59.42	59.42	(59.42)	(59.42)	(49.52)	(49.52)
Rating Factor	8.53	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	3.9	3.9	3.9	3.9	3.9	3.9	4.7	4.7
Live Load Effect	32.0	-4.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	35.9	-0.4	3.9	3.9	3.9	3.9	4.7	4.7
Resistance - Dead	178.8	-186.6	178.8	178.8	178.8	178.8	178.0	178.0
Design Ratio	5.09	505.52	47.02	47.02	(47.02)	(47.02)	(39.18)	(39.18)
Rating Factor	5.59	43.93	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-2.94	2.94	0.40	-0.40	0.00	0.00	0.00	0.00
Total Load Effect	-3.28	3.28	0.05	-0.05	-0.34	0.34	-0.34	0.34
Resistance - Dead	-23.66	23.66	24.34	-24.34	24.34	23.66	24.34	23.66
Design Ratio	7.31	7.31	447.96	447.96	N/A	69.91	N/A	69.91
Rating Factor	8.05	8.05	61.34	61.34	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-2.94	2.94	0.40	-0.40	0.00	0.00	0.00	0.00
Total Load Effect	-3.28	3.28	0.05	-0.05	-0.34	0.34	-0.34	0.34
Resistance - Dead	-29.66	N/A	N/A	-30.34	-29.66	N/A	-29.66	N/A
Design Ratio	9.14	N/A	N/A	559.95	87.39	N/A	87.39	N/A
Rating Factor	10.09	N/A	N/A	76.46	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	45.5	-6.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	52.0	0.5	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	380.1	380.1	380.1	380.1	380.1	380.1	378.8	378.8
Design Ratio	7.44	789.89	59.42	59.42	(59.42)	(59.42)	(49.52)	(49.52)
Rating Factor	8.36	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	3.9	3.9	3.9	3.9	3.9	3.9	4.7	4.7
Live Load Effect	32.1	-4.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	36.0	-0.6	3.9	3.9	3.9	3.9	4.7	4.7
Resistance - Dead	178.8	-186.6	178.8	178.8	178.8	178.8	178.0	178.0
Design Ratio	5.08	289.11	47.02	47.02	(47.02)	(47.02)	(39.18)	(39.18)
Rating Factor	5.57	41.30	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-3.00	3.00	0.40	-0.40	0.00	0.00	0.00	0.00
Total Load Effect	-3.34	3.34	0.05	-0.05	-0.34	0.34	-0.34	0.34
Resistance - Dead	-23.66	23.66	24.34	-24.34	24.34	23.66	24.34	23.66
Design Ratio	7.18	7.18	448.26	448.26	N/A	69.91	N/A	69.91
Rating Factor	7.89	7.89	61.34	61.34	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-3.00	3.00	0.40	-0.40	0.00	0.00	0.00	0.00
Total Load Effect	-3.34	3.34	0.05	-0.05	-0.34	0.34	-0.34	0.34
Resistance - Dead	-29.66	N/A	N/A	-30.34	-29.66	N/A	-29.66	N/A
Design Ratio	8.98	N/A	N/A	560.33	87.39	N/A	87.39	N/A
Rating Factor	9.89	N/A	N/A	76.46	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	46.8	-6.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	53.3	0.4	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	380.1	380.1	380.1	380.1	380.1	380.1	378.8	378.8
Design Ratio	7.25	988.04	59.42	59.42	(59.42)	(59.42)	(49.52)	(49.52)
Rating Factor	8.12	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	3.9	3.9	3.9	3.9	3.9	3.9	4.7	4.7
Live Load Effect	33.0	-4.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	36.9	-0.7	3.9	3.9	3.9	3.9	4.7	4.7
Resistance - Dead	178.8	-186.6	178.8	178.8	178.8	178.8	178.0	178.0
Design Ratio	4.95	243.89	47.02	47.02	(47.02)	(47.02)	(39.18)	(39.18)
Rating Factor	5.41	40.26	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-3.09	3.09	0.40	-0.40	0.00	0.00	0.00	0.00
Total Load Effect	-3.43	3.43	0.06	-0.06	-0.34	0.34	-0.34	0.34
Resistance - Dead	-23.66	23.66	24.34	-24.34	24.34	23.66	24.34	23.66
Design Ratio	7.00	7.00	399.91	399.91	N/A	69.91	N/A	69.91
Rating Factor	7.67	7.67	60.36	60.36	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-3.09	3.09	0.40	-0.40	0.00	0.00	0.00	0.00
Total Load Effect	-3.43	3.43	0.06	-0.06	-0.34	0.34	-0.34	0.34
Resistance - Dead	-29.66	N/A	N/A	-30.34	-29.66	N/A	-29.66	N/A
Design Ratio	8.75	N/A	N/A	499.88	87.39	N/A	87.39	N/A
Rating Factor	9.61	N/A	N/A	75.24	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	47.2	-5.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	53.7	1.3	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	380.1	380.1	380.1	380.1	380.1	380.1	378.8	378.8
Design Ratio	7.20	287.99	59.42	59.42	(59.42)	(59.42)	(49.52)	(49.52)
Rating Factor	8.06	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	3.9	3.9	3.9	3.9	3.9	3.9	4.7	4.7
Live Load Effect	33.3	-4.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	37.2	-0.7	3.9	3.9	3.9	3.9	4.7	4.7
Resistance - Dead	178.8	-186.6	178.8	178.8	178.8	178.8	178.0	178.0
Design Ratio	4.91	243.89	47.02	47.02	(47.02)	(47.02)	(39.18)	(39.18)
Rating Factor	5.37	40.26	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-3.11	3.11	0.34	-0.34	0.00	0.00	0.00	0.00
Total Load Effect	-3.45	3.45	-0.00	0.00	-0.34	0.34	-0.34	0.34
Resistance - Dead	-23.66	23.66	24.34	-24.34	24.34	23.66	24.34	23.66
Design Ratio	6.95	6.95	N/A	N/A	N/A	69.91	N/A	69.91
Rating Factor	7.60	7.60	71.48	71.48	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-3.11	3.11	0.34	-0.34	0.00	0.00	0.00	0.00
Total Load Effect	-3.45	3.45	-0.00	0.00	-0.34	0.34	-0.34	0.34
Resistance - Dead	-29.66	N/A	-29.66	N/A	-29.66	N/A	-29.66	N/A
Design Ratio	8.68	N/A	N/A	N/A	87.39	N/A	87.39	N/A
Rating Factor	9.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	6.5	6.5	6.5	6.5	6.5	6.5	7.8	7.8
Live Load Effect	47.3	-6.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	53.8	0.4	6.5	6.5	6.5	6.5	7.8	7.8
Resistance - Dead	380.1	380.1	380.1	380.1	380.1	380.1	378.8	378.8
Design Ratio	7.19	988.87	59.42	59.42	(59.42)	(59.42)	(49.52)	(49.52)
Rating Factor	8.04	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	3.9	3.9	3.9	3.9	3.9	3.9	4.7	4.7
Live Load Effect	33.8	-4.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	37.6	-0.8	3.9	3.9	3.9	3.9	4.7	4.7
Resistance - Dead	178.8	-186.6	178.8	178.8	178.8	178.8	178.0	178.0
Design Ratio	4.85	228.66	47.02	47.02	(47.02)	(47.02)	(39.18)	(39.18)
Rating Factor	5.30	39.83	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 101.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-3.12	3.12	0.40	-0.40	0.00	0.00	0.00	0.00
Total Load Effect	-3.46	3.46	0.06	-0.06	-0.34	0.34	-0.34	0.34
Resistance - Dead	-23.66	23.66	24.34	-24.34	24.34	23.66	24.34	23.66
Design Ratio	6.94	6.94	399.76	399.76	N/A	69.91	N/A	69.91
Rating Factor	7.59	7.59	60.36	60.36	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.34	0.34	-0.34	0.34	-0.34	0.34	-0.34	0.34
Live Load Effect	-3.12	3.12	0.40	-0.40	0.00	0.00	0.00	0.00
Total Load Effect	-3.46	3.46	0.06	-0.06	-0.34	0.34	-0.34	0.34
Resistance - Dead	-29.66	N/A	N/A	-30.34	-29.66	N/A	-29.66	N/A
Design Ratio	8.67	N/A	N/A	499.70	87.39	N/A	87.39	N/A
Rating Factor	9.51	N/A	N/A	75.23	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 102.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.6250			
Top Flange Thickness	=	0.3125	Top Flange Width	=	10.3750
Web Depth	=	28.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3125	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 2.833 ft
Maximum distance to Right Brace Point = 11.333 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 102.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6
Dead Load Effect	11.0	11.0	11.0	11.0	11.0	11.0	13.2	13.2
Live Load Effect	127.7	-17.2	98.5	-13.2	98.5	-13.2	0.0	0.0
Total Load Effect	138.8	-6.2	109.6	-2.2	109.6	-2.2	13.2	13.2
Resistance - Dead	375.6	-394.5	375.6	-394.5	375.6	-394.5	373.4	373.4
Design Ratio	2.79	62.28	3.53	171.70	(3.53)	(171.70)	(29.26)	(29.26)
Rating Factor	2.94	22.98	3.81	29.79	(3.81)	(29.79)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	182.7	182.7
Dead Load Effect	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.0
Live Load Effect	44.7	-17.9	34.5	-13.8	34.5	-13.8	0.0	0.0
Total Load Effect	47.2	-15.4	36.9	-11.3	36.9	-11.3	3.0	3.0
Resistance - Dead	180.2	-185.2	180.2	-185.2	180.2	-185.2	179.7	179.7
Design Ratio	3.87	11.85	4.95	16.13	(4.95)	(16.13)	(61.57)	(61.57)
Rating Factor	4.03	10.35	5.23	13.42	(5.23)	(13.42)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-6.26	6.26	0.84	-0.84	-4.81	4.81	0.65	-0.65
Total Load Effect	-6.84	6.84	0.26	-0.26	-5.40	5.40	0.07	-0.07
Resistance - Dead	-23.42	23.42	24.58	-24.58	-23.42	23.42	24.58	-24.58
Design Ratio	3.51	3.51	92.23	92.23	4.45	4.45	363.12	363.12
Rating Factor	3.74	3.74	29.22	29.22	4.86	4.86	37.99	37.99

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-6.26	6.26	0.84	-0.84	-4.81	4.81	0.65	-0.65
Total Load Effect	-6.84	6.84	0.26	-0.26	-5.40	5.40	0.07	-0.07
Resistance - Dead	-29.42	N/A	N/A	-30.58	-29.42	N/A	N/A	-30.58
Design Ratio	4.39	N/A	N/A	115.29	5.56	N/A	N/A	453.90
Rating Factor	4.70	N/A	N/A	36.36	6.11	N/A	N/A	47.26

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6
Dead Load Effect	11.0	11.0	11.0	11.0	11.0	11.0	13.2	13.2
Live Load Effect	155.2	-23.6	119.7	-18.2	119.7	-18.2	0.0	0.0
Total Load Effect	166.2	-12.6	130.7	-7.2	130.7	-7.2	13.2	13.2
Resistance - Dead	375.6	-394.5	375.6	-394.5	375.6	-394.5	373.4	373.4
Design Ratio	2.33	30.54	2.96	53.49	(2.96)	(53.49)	(29.26)	(29.26)
Rating Factor	2.42	16.74	3.14	21.70	(3.14)	(21.70)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	182.7	182.7
Dead Load Effect	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.0
Live Load Effect	54.0	-11.3	41.6	-8.7	41.6	-8.7	0.0	0.0
Total Load Effect	56.4	-8.8	44.1	-6.2	44.1	-6.2	3.0	3.0
Resistance - Dead	180.2	-185.2	180.2	-185.2	180.2	-185.2	179.7	179.7
Design Ratio	3.24	20.78	4.14	29.38	(4.14)	(29.38)	(61.57)	(61.57)
Rating Factor	3.34	16.44	4.33	21.31	(4.33)	(21.31)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-7.61	7.61	1.15	-1.15	-5.85	5.85	0.89	-0.89
Total Load Effect	-8.19	8.19	0.57	-0.57	-6.43	6.43	0.31	-0.31
Resistance - Dead	-23.42	23.42	24.58	-24.58	-23.42	23.42	24.58	-24.58
Design Ratio	2.93	2.93	41.83	41.83	3.73	3.73	78.12	78.12
Rating Factor	3.08	3.08	21.29	21.29	4.00	4.00	27.68	27.68

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-7.61	7.61	1.15	-1.15	-5.85	5.85	0.89	-0.89
Total Load Effect	-8.19	8.19	0.57	-0.57	-6.43	6.43	0.31	-0.31
Resistance - Dead	-29.42	N/A	N/A	-30.58	-29.42	N/A	N/A	-30.58
Design Ratio	3.66	N/A	N/A	52.29	4.66	N/A	N/A	97.64
Rating Factor	3.87	N/A	N/A	26.49	5.03	N/A	N/A	34.43

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	11.0	11.0	11.0	11.0	11.0	11.0	13.2	13.2
Live Load Effect	72.2	-10.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	83.2	0.2	11.0	11.0	11.0	11.0	13.2	13.2
Resistance - Dead	375.6	375.6	375.6	375.6	375.6	375.6	373.4	373.4
Design Ratio	4.65	2498.33	35.11	35.11	(35.11)	(35.11)	(29.26)	(29.26)
Rating Factor	5.20	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.0
Live Load Effect	25.5	-8.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	28.0	-6.2	2.5	2.5	2.5	2.5	3.0	3.0
Resistance - Dead	180.2	-185.2	180.2	180.2	180.2	180.2	179.7	179.7
Design Ratio	6.54	29.54	73.89	73.89	(73.89)	(73.89)	(61.57)	(61.57)
Rating Factor	7.07	21.39	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-4.76	4.76	0.72	-0.72	0.00	0.00	0.00	0.00
Total Load Effect	-5.34	5.34	0.14	-0.14	-0.58	0.58	-0.58	0.58
Resistance - Dead	-23.42	23.42	24.58	-24.58	24.58	23.42	24.58	23.42
Design Ratio	4.49	4.49	177.74	177.74	N/A	41.31	N/A	41.31
Rating Factor	4.92	4.92	34.33	34.33	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-4.76	4.76	0.72	-0.72	0.00	0.00	0.00	0.00
Total Load Effect	-5.34	5.34	0.14	-0.14	-0.58	0.58	-0.58	0.58
Resistance - Dead	-29.42	N/A	N/A	-30.58	-29.42	N/A	-29.42	N/A
Design Ratio	5.61	N/A	N/A	222.17	51.64	N/A	51.64	N/A
Rating Factor	6.18	N/A	N/A	42.71	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	11.0	11.0	11.0	11.0	11.0	11.0	13.2	13.2
Live Load Effect	66.3	-9.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	77.3	1.1	11.0	11.0	11.0	11.0	13.2	13.2
Resistance - Dead	375.6	375.6	375.6	375.6	375.6	375.6	373.4	373.4
Design Ratio	5.00	347.72	35.11	35.11	(35.11)	(35.11)	(29.26)	(29.26)
Rating Factor	5.67	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.0
Live Load Effect	23.4	-5.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	25.9	-3.4	2.5	2.5	2.5	2.5	3.0	3.0
Resistance - Dead	180.2	-185.2	180.2	180.2	180.2	180.2	179.7	179.7
Design Ratio	7.05	53.22	73.89	73.89	(73.89)	(73.89)	(61.57)	(61.57)
Rating Factor	7.69	31.36	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-4.37	4.37	0.65	-0.65	0.00	0.00	0.00	0.00
Total Load Effect	-4.95	4.95	0.07	-0.07	-0.58	0.58	-0.58	0.58
Resistance - Dead	-23.42	23.42	24.58	-24.58	24.58	23.42	24.58	23.42
Design Ratio	4.85	4.85	333.78	333.78	N/A	41.31	N/A	41.31
Rating Factor	5.36	5.36	37.65	37.65	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-4.37	4.37	0.65	-0.65	0.00	0.00	0.00	0.00
Total Load Effect	-4.95	4.95	0.07	-0.07	-0.58	0.58	-0.58	0.58
Resistance - Dead	-29.42	N/A	N/A	-30.58	-29.42	N/A	-29.42	N/A
Design Ratio	6.06	N/A	N/A	417.22	51.64	N/A	51.64	N/A
Rating Factor	6.73	N/A	N/A	46.84	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	11.0	11.0	11.0	11.0	11.0	11.0	13.2	13.2
Live Load Effect	59.7	-8.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	70.7	2.1	11.0	11.0	11.0	11.0	13.2	13.2
Resistance - Dead	375.6	375.6	375.6	375.6	375.6	375.6	373.4	373.4
Design Ratio	5.47	186.84	35.11	35.11	(35.11)	(35.11)	(29.26)	(29.26)
Rating Factor	6.29	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.0
Live Load Effect	21.1	-8.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	23.5	-5.5	2.5	2.5	2.5	2.5	3.0	3.0
Resistance - Dead	180.2	-185.2	180.2	180.2	180.2	180.2	179.7	179.7
Design Ratio	7.76	33.22	73.89	73.89	(73.89)	(73.89)	(61.57)	(61.57)
Rating Factor	8.56	23.23	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-3.94	3.94	0.59	-0.59	0.00	0.00	0.00	0.00
Total Load Effect	-4.52	4.52	0.01	-0.01	-0.58	0.58	-0.58	0.58
Resistance - Dead	-23.42	23.42	24.58	-24.58	24.58	23.42	24.58	23.42
Design Ratio	5.31	5.31	2739.80	2739.80	N/A	41.31	N/A	41.31
Rating Factor	5.95	5.95	41.68	41.68	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-3.94	3.94	0.59	-0.59	0.00	0.00	0.00	0.00
Total Load Effect	-4.52	4.52	0.01	-0.01	-0.58	0.58	-0.58	0.58
Resistance - Dead	-29.42	N/A	N/A	-30.58	-29.42	N/A	-29.42	N/A
Design Ratio	6.64	N/A	N/A	3424.75	51.64	N/A	51.64	N/A
Rating Factor	7.48	N/A	N/A	51.86	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	11.0	11.0	11.0	11.0	11.0	11.0	13.2	13.2
Live Load Effect	72.6	-12.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	83.6	-1.0	11.0	11.0	11.0	11.0	13.2	13.2
Resistance - Dead	375.6	-394.5	375.6	375.6	375.6	375.6	373.4	373.4
Design Ratio	4.62	374.51	35.11	35.11	(35.11)	(35.11)	(29.26)	(29.26)
Rating Factor	5.17	32.78	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.0
Live Load Effect	25.9	-6.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	28.4	-4.1	2.5	2.5	2.5	2.5	3.0	3.0
Resistance - Dead	180.2	-185.2	180.2	180.2	180.2	180.2	179.7	179.7
Design Ratio	6.43	44.33	73.89	73.89	(73.89)	(73.89)	(61.57)	(61.57)
Rating Factor	6.95	28.08	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-4.79	4.79	0.79	-0.79	0.00	0.00	0.00	0.00
Total Load Effect	-5.37	5.37	0.21	-0.21	-0.58	0.58	-0.58	0.58
Resistance - Dead	-23.42	23.42	24.58	-24.58	24.58	23.42	24.58	23.42
Design Ratio	4.47	4.47	112.79	112.79	N/A	41.31	N/A	41.31
Rating Factor	4.89	4.89	30.97	30.97	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-4.79	4.79	0.79	-0.79	0.00	0.00	0.00	0.00
Total Load Effect	-5.37	5.37	0.21	-0.21	-0.58	0.58	-0.58	0.58
Resistance - Dead	-29.42	N/A	N/A	-30.58	-29.42	N/A	-29.42	N/A
Design Ratio	5.59	N/A	N/A	140.99	51.64	N/A	51.64	N/A
Rating Factor	6.15	N/A	N/A	38.53	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	11.0	11.0	11.0	11.0	11.0	11.0	13.2	13.2
Live Load Effect	73.5	-12.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	84.5	-1.0	11.0	11.0	11.0	11.0	13.2	13.2
Resistance - Dead	375.6	-394.5	375.6	375.6	375.6	375.6	373.4	373.4
Design Ratio	4.58	374.91	35.11	35.11	(35.11)	(35.11)	(29.26)	(29.26)
Rating Factor	5.11	32.79	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.0
Live Load Effect	25.8	-7.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	28.3	-4.7	2.5	2.5	2.5	2.5	3.0	3.0
Resistance - Dead	180.2	-185.2	180.2	180.2	180.2	180.2	179.7	179.7
Design Ratio	6.45	39.26	73.89	73.89	(73.89)	(73.89)	(61.57)	(61.57)
Rating Factor	6.97	25.98	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-4.85	4.85	0.79	-0.79	0.00	0.00	0.00	0.00
Total Load Effect	-5.43	5.43	0.21	-0.21	-0.58	0.58	-0.58	0.58
Resistance - Dead	-23.42	23.42	24.58	-24.58	24.58	23.42	24.58	23.42
Design Ratio	4.42	4.42	112.83	112.83	N/A	41.31	N/A	41.31
Rating Factor	4.83	4.83	30.97	30.97	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-4.85	4.85	0.79	-0.79	0.00	0.00	0.00	0.00
Total Load Effect	-5.43	5.43	0.21	-0.21	-0.58	0.58	-0.58	0.58
Resistance - Dead	-29.42	N/A	N/A	-30.58	-29.42	N/A	-29.42	N/A
Design Ratio	5.53	N/A	N/A	141.04	51.64	N/A	51.64	N/A
Rating Factor	6.07	N/A	N/A	38.53	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	11.0	11.0	11.0	11.0	11.0	11.0	13.2	13.2
Live Load Effect	76.6	-12.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	87.6	-1.2	11.0	11.0	11.0	11.0	13.2	13.2
Resistance - Dead	375.6	-394.5	375.6	375.6	375.6	375.6	373.4	373.4
Design Ratio	4.41	314.55	35.11	35.11	(35.11)	(35.11)	(29.26)	(29.26)
Rating Factor	4.90	32.26	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.0
Live Load Effect	27.0	-7.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	29.5	-4.5	2.5	2.5	2.5	2.5	3.0	3.0
Resistance - Dead	180.2	-185.2	180.2	180.2	180.2	180.2	179.7	179.7
Design Ratio	6.20	40.58	73.89	73.89	(73.89)	(73.89)	(61.57)	(61.57)
Rating Factor	6.67	26.55	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-5.05	5.05	0.81	-0.81	0.00	0.00	0.00	0.00
Total Load Effect	-5.63	5.63	0.23	-0.23	-0.58	0.58	-0.58	0.58
Resistance - Dead	-23.42	23.42	24.58	-24.58	24.58	23.42	24.58	23.42
Design Ratio	4.26	4.26	106.36	106.36	N/A	41.31	N/A	41.31
Rating Factor	4.64	4.64	30.47	30.47	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-5.05	5.05	0.81	-0.81	0.00	0.00	0.00	0.00
Total Load Effect	-5.63	5.63	0.23	-0.23	-0.58	0.58	-0.58	0.58
Resistance - Dead	-29.42	N/A	N/A	-30.58	-29.42	N/A	-29.42	N/A
Design Ratio	5.33	N/A	N/A	132.95	51.64	N/A	51.64	N/A
Rating Factor	5.82	N/A	N/A	37.91	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	11.0	11.0	11.0	11.0	11.0	11.0	13.2	13.2
Live Load Effect	76.0	-10.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	87.0	0.7	11.0	11.0	11.0	11.0	13.2	13.2
Resistance - Dead	375.6	375.6	375.6	375.6	375.6	375.6	373.4	373.4
Design Ratio	4.44	565.99	35.11	35.11	(35.11)	(35.11)	(29.26)	(29.26)
Rating Factor	4.94	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.0
Live Load Effect	26.8	-7.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	29.2	-4.5	2.5	2.5	2.5	2.5	3.0	3.0
Resistance - Dead	180.2	-185.2	180.2	180.2	180.2	180.2	179.7	179.7
Design Ratio	6.25	40.58	73.89	73.89	(73.89)	(73.89)	(61.57)	(61.57)
Rating Factor	6.74	26.55	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-5.01	5.01	0.68	-0.68	0.00	0.00	0.00	0.00
Total Load Effect	-5.59	5.59	0.10	-0.10	-0.58	0.58	-0.58	0.58
Resistance - Dead	-23.42	23.42	24.58	-24.58	24.58	23.42	24.58	23.42
Design Ratio	4.29	4.29	239.56	239.56	N/A	41.31	N/A	41.31
Rating Factor	4.67	4.67	36.09	36.09	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-5.01	5.01	0.68	-0.68	0.00	0.00	0.00	0.00
Total Load Effect	-5.59	5.59	0.10	-0.10	-0.58	0.58	-0.58	0.58
Resistance - Dead	-29.42	N/A	N/A	-30.58	-29.42	N/A	-29.42	N/A
Design Ratio	5.36	N/A	N/A	299.45	51.64	N/A	51.64	N/A
Rating Factor	5.87	N/A	N/A	44.90	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	11.0	11.0	11.0	11.0	11.0	11.0	13.2	13.2
Live Load Effect	76.7	-12.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	87.8	-1.2	11.0	11.0	11.0	11.0	13.2	13.2
Resistance - Dead	375.6	-394.5	375.6	375.6	375.6	375.6	373.4	373.4
Design Ratio	4.41	314.38	35.11	35.11	(35.11)	(35.11)	(29.26)	(29.26)
Rating Factor	4.89	32.26	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.0
Live Load Effect	27.4	-6.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	29.9	-3.8	2.5	2.5	2.5	2.5	3.0	3.0
Resistance - Dead	180.2	-185.2	180.2	180.2	180.2	180.2	179.7	179.7
Design Ratio	6.12	47.51	73.89	73.89	(73.89)	(73.89)	(61.57)	(61.57)
Rating Factor	6.58	29.31	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 102.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-5.06	5.06	0.81	-0.81	0.00	0.00	0.00	0.00
Total Load Effect	-5.64	5.64	0.23	-0.23	-0.58	0.58	-0.58	0.58
Resistance - Dead	-23.42	23.42	24.58	-24.58	24.58	23.42	24.58	23.42
Design Ratio	4.25	4.25	106.34	106.34	N/A	41.31	N/A	41.31
Rating Factor	4.63	4.63	30.47	30.47	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.58	0.58	-0.58	0.58	-0.58	0.58	-0.58	0.58
Live Load Effect	-5.06	5.06	0.81	-0.81	0.00	0.00	0.00	0.00
Total Load Effect	-5.64	5.64	0.23	-0.23	-0.58	0.58	-0.58	0.58
Resistance - Dead	-29.42	N/A	N/A	-30.58	-29.42	N/A	-29.42	N/A
Design Ratio	5.32	N/A	N/A	132.92	51.64	N/A	51.64	N/A
Rating Factor	5.81	N/A	N/A	37.91	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 103.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.6250			
Top Flange Thickness	=	0.3125	Top Flange Width	=	10.3750
Web Depth	=	28.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3125	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 4.250 ft
Maximum distance to Right Brace Point = 9.917 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 103.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6
Dead Load Effect	13.5	13.5	13.5	13.5	13.5	13.5	16.2	16.2
Live Load Effect	161.3	-25.8	124.4	-19.9	124.4	-19.9	0.0	0.0
Total Load Effect	174.8	-12.2	137.9	-6.4	137.9	-6.4	16.2	16.2
Resistance - Dead	373.1	-397.0	373.1	-397.0	373.1	-397.0	370.4	370.4
Design Ratio	2.21	31.33	2.80	60.37	(2.80)	(60.37)	(23.84)	(23.84)
Rating Factor	2.31	15.42	3.00	19.99	(3.00)	(19.99)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	182.7	182.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	37.2	-26.0	28.7	-20.1	28.7	-20.1	0.0	0.0
Total Load Effect	38.2	-25.0	29.7	-19.0	29.7	-19.0	1.3	1.3
Resistance - Dead	181.6	-183.8	181.6	-183.8	181.6	-183.8	181.4	181.4
Design Ratio	4.78	7.32	6.14	9.61	(6.14)	(9.61)	(143.67)	(143.67)
Rating Factor	4.89	7.06	6.33	9.15	(6.33)	(9.15)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-7.90	7.90	1.26	-1.26	-6.08	6.08	0.97	-0.97
Total Load Effect	-8.62	8.62	0.55	-0.55	-6.79	6.79	0.26	-0.26
Resistance - Dead	-23.29	23.29	24.71	-24.71	-23.29	23.29	24.71	-24.71
Design Ratio	2.79	2.79	43.74	43.74	3.53	3.53	93.17	93.17
Rating Factor	2.95	2.95	19.59	19.59	3.83	3.83	25.46	25.46

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-7.90	7.90	1.26	-1.26	-6.08	6.08	0.97	-0.97
Total Load Effect	-8.62	8.62	0.55	-0.55	-6.79	6.79	0.26	-0.26
Resistance - Dead	-29.29	N/A	N/A	-30.71	-29.29	N/A	N/A	-30.71
Design Ratio	3.48	N/A	N/A	54.67	4.42	N/A	N/A	116.47
Rating Factor	3.71	N/A	N/A	24.34	4.82	N/A	N/A	31.64

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6
Dead Load Effect	13.5	13.5	13.5	13.5	13.5	13.5	16.2	16.2
Live Load Effect	188.9	-35.3	145.7	-27.3	145.7	-27.3	0.0	0.0
Total Load Effect	202.4	-21.8	159.2	-13.8	159.2	-13.8	16.2	16.2
Resistance - Dead	373.1	-397.0	373.1	-397.0	373.1	-397.0	370.4	370.4
Design Ratio	1.91	17.56	2.43	27.88	(2.43)	(27.88)	(23.84)	(23.84)
Rating Factor	1.98	11.23	2.56	14.56	(2.56)	(14.56)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	182.7	182.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	43.4	-17.4	33.5	-13.4	33.5	-13.4	0.0	0.0
Total Load Effect	44.5	-16.3	34.6	-12.4	34.6	-12.4	1.3	1.3
Resistance - Dead	181.6	-183.8	181.6	-183.8	181.6	-183.8	181.4	181.4
Design Ratio	4.11	11.17	5.29	14.77	(5.29)	(14.77)	(143.67)	(143.67)
Rating Factor	4.18	10.56	5.42	13.68	(5.42)	(13.68)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-9.25	9.25	1.73	-1.73	-7.12	7.12	1.33	-1.33
Total Load Effect	-9.97	9.97	1.02	-1.02	-7.83	7.83	0.62	-0.62
Resistance - Dead	-23.29	23.29	24.71	-24.71	-23.29	23.29	24.71	-24.71
Design Ratio	2.41	2.41	23.55	23.55	3.06	3.06	38.75	38.75
Rating Factor	2.52	2.52	14.27	14.27	3.27	3.27	18.55	18.55

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-9.25	9.25	1.73	-1.73	-7.12	7.12	1.33	-1.33
Total Load Effect	-9.97	9.97	1.02	-1.02	-7.83	7.83	0.62	-0.62
Resistance - Dead	-29.29	N/A	N/A	-30.71	-29.29	N/A	N/A	-30.71
Design Ratio	3.01	N/A	N/A	29.44	3.83	N/A	N/A	48.44
Rating Factor	3.16	N/A	N/A	17.73	4.11	N/A	N/A	23.05

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	13.5	13.5	13.5	13.5	13.5	13.5	16.2	16.2
Live Load Effect	87.8	-16.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	101.3	-2.8	13.5	13.5	13.5	13.5	16.2	16.2
Resistance - Dead	373.1	-397.0	373.1	373.1	373.1	373.1	370.4	370.4
Design Ratio	3.82	138.42	28.61	28.61	(28.61)	(28.61)	(23.84)	(23.84)
Rating Factor	4.25	24.38	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	20.6	-11.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	21.6	-10.1	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	181.6	-183.8	181.6	181.6	181.6	181.6	181.4	181.4
Design Ratio	8.44	18.11	172.40	172.40	(172.40)	(172.40)	(143.67)	(143.67)
Rating Factor	8.83	16.48	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-5.79	5.79	1.07	-1.07	0.00	0.00	0.00	0.00
Total Load Effect	-6.50	6.50	0.36	-0.36	-0.71	0.71	-0.71	0.71
Resistance - Dead	-23.29	23.29	24.71	-24.71	24.71	23.29	24.71	23.29
Design Ratio	3.69	3.69	66.48	66.48	N/A	33.66	N/A	33.66
Rating Factor	4.02	4.02	23.01	23.01	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-5.79	5.79	1.07	-1.07	0.00	0.00	0.00	0.00
Total Load Effect	-6.50	6.50	0.36	-0.36	-0.71	0.71	-0.71	0.71
Resistance - Dead	-29.29	N/A	N/A	-30.71	-29.29	N/A	-29.29	N/A
Design Ratio	4.61	N/A	N/A	83.10	42.08	N/A	42.08	N/A
Rating Factor	5.06	N/A	N/A	28.60	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	13.5	13.5	13.5	13.5	13.5	13.5	16.2	16.2
Live Load Effect	80.3	-14.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	93.9	-1.3	13.5	13.5	13.5	13.5	16.2	16.2
Resistance - Dead	373.1	-397.0	373.1	373.1	373.1	373.1	370.4	370.4
Design Ratio	4.12	287.28	28.61	28.61	(28.61)	(28.61)	(23.84)	(23.84)
Rating Factor	4.64	26.74	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	18.9	-8.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	20.0	-7.1	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	181.6	-183.8	181.6	181.6	181.6	181.6	181.4	181.4
Design Ratio	9.13	25.63	172.40	172.40	(172.40)	(172.40)	(143.67)	(143.67)
Rating Factor	9.59	22.44	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-5.30	5.30	0.98	-0.98	0.00	0.00	0.00	0.00
Total Load Effect	-6.01	6.01	0.27	-0.27	-0.71	0.71	-0.71	0.71
Resistance - Dead	-23.29	23.29	24.71	-24.71	24.71	23.29	24.71	23.29
Design Ratio	3.99	3.99	90.12	90.12	N/A	33.66	N/A	33.66
Rating Factor	4.39	4.39	25.24	25.24	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-5.30	5.30	0.98	-0.98	0.00	0.00	0.00	0.00
Total Load Effect	-6.01	6.01	0.27	-0.27	-0.71	0.71	-0.71	0.71
Resistance - Dead	-29.29	N/A	N/A	-30.71	-29.29	N/A	-29.29	N/A
Design Ratio	4.99	N/A	N/A	112.66	42.08	N/A	42.08	N/A
Rating Factor	5.53	N/A	N/A	31.36	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	13.5	13.5	13.5	13.5	13.5	13.5	16.2	16.2
Live Load Effect	72.3	-13.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	85.8	0.1	13.5	13.5	13.5	13.5	16.2	16.2
Resistance - Dead	373.1	373.1	373.1	373.1	373.1	373.1	370.4	370.4
Design Ratio	4.50	3825.61	28.61	28.61	(28.61)	(28.61)	(23.84)	(23.84)
Rating Factor	5.16	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	17.0	-10.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	18.1	-9.2	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	181.6	-183.8	181.6	181.6	181.6	181.6	181.4	181.4
Design Ratio	10.11	19.84	172.40	172.40	(172.40)	(172.40)	(143.67)	(143.67)
Rating Factor	10.67	17.89	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-4.77	4.77	0.88	-0.88	0.00	0.00	0.00	0.00
Total Load Effect	-5.48	5.48	0.17	-0.17	-0.71	0.71	-0.71	0.71
Resistance - Dead	-23.29	23.29	24.71	-24.71	24.71	23.29	24.71	23.29
Design Ratio	4.38	4.38	139.88	139.88	N/A	33.66	N/A	33.66
Rating Factor	4.88	4.88	27.94	27.94	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-4.77	4.77	0.88	-0.88	0.00	0.00	0.00	0.00
Total Load Effect	-5.48	5.48	0.17	-0.17	-0.71	0.71	-0.71	0.71
Resistance - Dead	-29.29	N/A	N/A	-30.71	-29.29	N/A	-29.29	N/A
Design Ratio	5.47	N/A	N/A	174.84	42.08	N/A	42.08	N/A
Rating Factor	6.14	N/A	N/A	34.72	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	13.5	13.5	13.5	13.5	13.5	13.5	16.2	16.2
Live Load Effect	89.6	-18.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	103.1	-4.5	13.5	13.5	13.5	13.5	16.2	16.2
Resistance - Dead	373.1	-397.0	373.1	373.1	373.1	373.1	370.4	370.4
Design Ratio	3.75	84.50	28.61	28.61	(28.61)	(28.61)	(23.84)	(23.84)
Rating Factor	4.17	21.99	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	20.3	-9.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	21.4	-8.3	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	181.6	-183.8	181.6	181.6	181.6	181.6	181.4	181.4
Design Ratio	8.54	22.08	172.40	172.40	(172.40)	(172.40)	(143.67)	(143.67)
Rating Factor	8.93	19.69	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-5.91	5.91	1.19	-1.19	0.00	0.00	0.00	0.00
Total Load Effect	-6.62	6.62	0.48	-0.48	-0.71	0.71	-0.71	0.71
Resistance - Dead	-23.29	23.29	24.71	-24.71	24.71	23.29	24.71	23.29
Design Ratio	3.63	3.63	50.25	50.25	N/A	33.66	N/A	33.66
Rating Factor	3.94	3.94	20.76	20.76	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-5.91	5.91	1.19	-1.19	0.00	0.00	0.00	0.00
Total Load Effect	-6.62	6.62	0.48	-0.48	-0.71	0.71	-0.71	0.71
Resistance - Dead	-29.29	N/A	N/A	-30.71	-29.29	N/A	-29.29	N/A
Design Ratio	4.53	N/A	N/A	62.81	42.08	N/A	42.08	N/A
Rating Factor	4.96	N/A	N/A	25.80	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	13.5	13.5	13.5	13.5	13.5	13.5	16.2	16.2
Live Load Effect	89.5	-18.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	103.0	-4.5	13.5	13.5	13.5	13.5	16.2	16.2
Resistance - Dead	373.1	-397.0	373.1	373.1	373.1	373.1	370.4	370.4
Design Ratio	3.75	84.53	28.61	28.61	(28.61)	(28.61)	(23.84)	(23.84)
Rating Factor	4.17	22.00	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	20.2	-9.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	21.3	-8.1	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	181.6	-183.8	181.6	181.6	181.6	181.6	181.4	181.4
Design Ratio	8.58	22.55	172.40	172.40	(172.40)	(172.40)	(143.67)	(143.67)
Rating Factor	8.97	20.06	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-5.90	5.90	1.19	-1.19	0.00	0.00	0.00	0.00
Total Load Effect	-6.61	6.61	0.48	-0.48	-0.71	0.71	-0.71	0.71
Resistance - Dead	-23.29	23.29	24.71	-24.71	24.71	23.29	24.71	23.29
Design Ratio	3.63	3.63	50.26	50.26	N/A	33.66	N/A	33.66
Rating Factor	3.95	3.95	20.76	20.76	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-5.90	5.90	1.19	-1.19	0.00	0.00	0.00	0.00
Total Load Effect	-6.61	6.61	0.48	-0.48	-0.71	0.71	-0.71	0.71
Resistance - Dead	-29.29	N/A	N/A	-30.71	-29.29	N/A	-29.29	N/A
Design Ratio	4.54	N/A	N/A	62.83	42.08	N/A	42.08	N/A
Rating Factor	4.96	N/A	N/A	25.80	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	13.5	13.5	13.5	13.5	13.5	13.5	16.2	16.2
Live Load Effect	92.8	-18.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	106.3	-4.8	13.5	13.5	13.5	13.5	16.2	16.2
Resistance - Dead	373.1	-397.0	373.1	373.1	373.1	373.1	370.4	370.4
Design Ratio	3.64	79.38	28.61	28.61	(28.61)	(28.61)	(23.84)	(23.84)
Rating Factor	4.02	21.64	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	21.0	-8.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	22.1	-7.9	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	181.6	-183.8	181.6	181.6	181.6	181.6	181.4	181.4
Design Ratio	8.27	23.21	172.40	172.40	(172.40)	(172.40)	(143.67)	(143.67)
Rating Factor	8.64	20.58	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-6.12	6.12	1.21	-1.21	0.00	0.00	0.00	0.00
Total Load Effect	-6.83	6.83	0.50	-0.50	-0.71	0.71	-0.71	0.71
Resistance - Dead	-23.29	23.29	24.71	-24.71	24.71	23.29	24.71	23.29
Design Ratio	3.51	3.51	48.30	48.30	N/A	33.66	N/A	33.66
Rating Factor	3.80	3.80	20.43	20.43	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-6.12	6.12	1.21	-1.21	0.00	0.00	0.00	0.00
Total Load Effect	-6.83	6.83	0.50	-0.50	-0.71	0.71	-0.71	0.71
Resistance - Dead	-29.29	N/A	N/A	-30.71	-29.29	N/A	-29.29	N/A
Design Ratio	4.39	N/A	N/A	60.37	42.08	N/A	42.08	N/A
Rating Factor	4.78	N/A	N/A	25.38	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	13.5	13.5	13.5	13.5	13.5	13.5	16.2	16.2
Live Load Effect	90.2	-15.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	103.7	-2.0	13.5	13.5	13.5	13.5	16.2	16.2
Resistance - Dead	373.1	-397.0	373.1	373.1	373.1	373.1	370.4	370.4
Design Ratio	3.73	193.87	28.61	28.61	(28.61)	(28.61)	(23.84)	(23.84)
Rating Factor	4.13	25.63	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	20.4	-8.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	21.5	-7.9	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	181.6	-183.8	181.6	181.6	181.6	181.6	181.4	181.4
Design Ratio	8.51	23.21	172.40	172.40	(172.40)	(172.40)	(143.67)	(143.67)
Rating Factor	8.90	20.58	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-5.95	5.95	1.02	-1.02	0.00	0.00	0.00	0.00
Total Load Effect	-6.66	6.66	0.31	-0.31	-0.71	0.71	-0.71	0.71
Resistance - Dead	-23.29	23.29	24.71	-24.71	24.71	23.29	24.71	23.29
Design Ratio	3.60	3.60	77.74	77.74	N/A	33.66	N/A	33.66
Rating Factor	3.91	3.91	24.19	24.19	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-5.95	5.95	1.02	-1.02	0.00	0.00	0.00	0.00
Total Load Effect	-6.66	6.66	0.31	-0.31	-0.71	0.71	-0.71	0.71
Resistance - Dead	-29.29	N/A	N/A	-30.71	-29.29	N/A	-29.29	N/A
Design Ratio	4.50	N/A	N/A	97.18	42.08	N/A	42.08	N/A
Rating Factor	4.92	N/A	N/A	30.06	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	13.5	13.5	13.5	13.5	13.5	13.5	16.2	16.2
Live Load Effect	92.9	-18.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	106.4	-4.8	13.5	13.5	13.5	13.5	16.2	16.2
Resistance - Dead	373.1	-397.0	373.1	373.1	373.1	373.1	370.4	370.4
Design Ratio	3.63	79.36	28.61	28.61	(28.61)	(28.61)	(23.84)	(23.84)
Rating Factor	4.02	21.64	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	182.7	182.7	182.7	182.7	182.7
Dead Load Effect	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Live Load Effect	21.7	-9.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	22.8	-8.5	1.1	1.1	1.1	1.1	1.3	1.3
Resistance - Dead	181.6	-183.8	181.6	181.6	181.6	181.6	181.4	181.4
Design Ratio	8.03	21.51	172.40	172.40	(172.40)	(172.40)	(143.67)	(143.67)
Rating Factor	8.37	19.24	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 103.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-6.13	6.13	1.21	-1.21	0.00	0.00	0.00	0.00
Total Load Effect	-6.84	6.84	0.50	-0.50	-0.71	0.71	-0.71	0.71
Resistance - Dead	-23.29	23.29	24.71	-24.71	24.71	23.29	24.71	23.29
Design Ratio	3.51	3.51	48.29	48.29	N/A	33.66	N/A	33.66
Rating Factor	3.80	3.80	20.42	20.42	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71
Live Load Effect	-6.13	6.13	1.21	-1.21	0.00	0.00	0.00	0.00
Total Load Effect	-6.84	6.84	0.50	-0.50	-0.71	0.71	-0.71	0.71
Resistance - Dead	-29.29	N/A	N/A	-30.71	-29.29	N/A	-29.29	N/A
Design Ratio	4.39	N/A	N/A	60.36	42.08	N/A	42.08	N/A
Rating Factor	4.78	N/A	N/A	25.38	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 104.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.6250			
Top Flange Thickness	=	0.3125	Top Flange Width	=	10.3750
Web Depth	=	28.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3125	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 5.667 ft
Maximum distance to Right Brace Point = 8.500 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 104.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6
Dead Load Effect	14.0	14.0	14.0	14.0	14.0	14.0	16.8	16.8
Live Load Effect	176.1	-34.3	135.8	-26.5	135.8	-26.5	0.0	0.0
Total Load Effect	190.1	-20.3	149.8	-12.5	149.8	-12.5	16.8	16.8
Resistance - Dead	372.6	-397.5	372.6	-397.5	372.6	-397.5	369.8	369.8
Design Ratio	2.03	18.87	2.58	30.74	(2.58)	(30.74)	(22.99)	(22.99)
Rating Factor	2.12	11.58	2.74	15.01	(2.74)	(15.01)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	-182.7	-182.7
Dead Load Effect	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Live Load Effect	30.1	-33.5	23.2	-25.8	23.2	-25.8	0.0	0.0
Total Load Effect	29.7	-33.8	22.8	-26.2	22.8	-26.2	-0.4	-0.4
Resistance - Dead	183.1	-182.3	183.1	-182.3	183.1	-182.3	-182.3	-182.3
Design Ratio	6.15	5.40	8.00	6.98	(8.00)	(6.98)	(431.00)	(431.00)
Rating Factor	6.09	5.45	7.90	7.07	(7.90)	(7.07)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-8.63	8.63	1.68	-1.68	-6.64	6.64	1.29	-1.29
Total Load Effect	-9.37	9.37	0.94	-0.94	-7.38	7.38	0.55	-0.55
Resistance - Dead	-23.26	23.26	24.74	-24.74	-23.26	23.26	24.74	-24.74
Design Ratio	2.56	2.56	25.45	25.45	3.25	3.25	43.27	43.27
Rating Factor	2.70	2.70	14.71	14.71	3.50	3.50	19.12	19.12

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-8.63	8.63	1.68	-1.68	-6.64	6.64	1.29	-1.29
Total Load Effect	-9.37	9.37	0.94	-0.94	-7.38	7.38	0.55	-0.55
Resistance - Dead	-29.26	N/A	N/A	-30.74	-29.26	N/A	N/A	-30.74
Design Ratio	3.20	N/A	N/A	31.82	4.07	N/A	N/A	54.08
Rating Factor	3.39	N/A	N/A	18.27	4.41	N/A	N/A	23.75

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6
Dead Load Effect	14.0	14.0	14.0	14.0	14.0	14.0	16.8	16.8
Live Load Effect	196.8	-47.1	151.8	-36.4	151.8	-36.4	0.0	0.0
Total Load Effect	210.8	-33.1	165.8	-22.3	165.8	-22.3	16.8	16.8
Resistance - Dead	372.6	-397.5	372.6	-397.5	372.6	-397.5	369.8	369.8
Design Ratio	1.83	11.58	2.33	17.16	(2.33)	(17.16)	(22.99)	(22.99)
Rating Factor	1.89	8.43	2.45	10.93	(2.45)	(10.93)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	-182.7	-182.7
Dead Load Effect	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Live Load Effect	33.6	-28.4	25.9	-21.9	25.9	-21.9	0.0	0.0
Total Load Effect	33.2	-28.7	25.6	-22.2	25.6	-22.2	-0.4	-0.4
Resistance - Dead	183.1	-182.3	183.1	-182.3	183.1	-182.3	-182.3	-182.3
Design Ratio	5.50	6.36	7.15	8.21	(7.15)	(8.21)	(431.00)	(431.00)
Rating Factor	5.45	6.43	7.06	8.33	(7.06)	(8.33)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-9.64	9.64	2.31	-2.31	-7.42	7.42	1.78	-1.78
Total Load Effect	-10.38	10.38	1.57	-1.57	-8.16	8.16	1.04	-1.04
Resistance - Dead	-23.26	23.26	24.74	-24.74	-23.26	23.26	24.74	-24.74
Design Ratio	2.31	2.31	15.29	15.29	2.94	2.94	23.14	23.14
Rating Factor	2.41	2.41	10.71	10.71	3.14	3.14	13.93	13.93

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-9.64	9.64	2.31	-2.31	-7.42	7.42	1.78	-1.78
Total Load Effect	-10.38	10.38	1.57	-1.57	-8.16	8.16	1.04	-1.04
Resistance - Dead	-29.26	N/A	N/A	-30.74	-29.26	N/A	N/A	-30.74
Design Ratio	2.89	N/A	N/A	19.11	3.68	N/A	N/A	28.93
Rating Factor	3.03	N/A	N/A	13.31	3.94	N/A	N/A	17.30

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	14.0	14.0	14.0	14.0	14.0	14.0	16.8	16.8
Live Load Effect	91.4	-21.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	105.4	-7.7	14.0	14.0	14.0	14.0	16.8	16.8
Resistance - Dead	372.6	-397.5	372.6	372.6	372.6	372.6	369.8	369.8
Design Ratio	3.67	49.82	27.59	27.59	(27.59)	(27.59)	(22.99)	(22.99)
Rating Factor	4.08	18.31	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Live Load Effect	16.0	-15.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	15.6	-15.5	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Resistance - Dead	183.1	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3
Design Ratio	11.70	11.79	517.20	517.20	(517.20)	(517.20)	(431.00)	(431.00)
Rating Factor	11.46	12.04	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-6.03	6.03	1.43	-1.43	0.00	0.00	0.00	0.00
Total Load Effect	-6.77	6.77	0.69	-0.69	-0.74	0.74	-0.74	0.74
Resistance - Dead	-23.26	23.26	24.74	-24.74	24.74	23.26	24.74	23.26
Design Ratio	3.55	3.55	34.65	34.65	N/A	32.46	N/A	32.46
Rating Factor	3.86	3.86	17.28	17.28	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-6.03	6.03	1.43	-1.43	0.00	0.00	0.00	0.00
Total Load Effect	-6.77	6.77	0.69	-0.69	-0.74	0.74	-0.74	0.74
Resistance - Dead	-29.26	N/A	N/A	-30.74	-29.26	N/A	-29.26	N/A
Design Ratio	4.43	N/A	N/A	43.32	40.57	N/A	40.57	N/A
Rating Factor	4.85	N/A	N/A	21.47	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	14.0	14.0	14.0	14.0	14.0	14.0	16.8	16.8
Live Load Effect	83.4	-19.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	97.4	-5.8	14.0	14.0	14.0	14.0	16.8	16.8
Resistance - Dead	372.6	-397.5	372.6	372.6	372.6	372.6	369.8	369.8
Design Ratio	3.97	66.31	27.59	27.59	(27.59)	(27.59)	(22.99)	(22.99)
Rating Factor	4.47	20.08	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Live Load Effect	14.7	-12.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	14.4	-13.2	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Resistance - Dead	183.1	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3
Design Ratio	12.71	13.81	517.20	517.20	(517.20)	(517.20)	(431.00)	(431.00)
Rating Factor	12.43	14.17	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-5.50	5.50	1.31	-1.31	0.00	0.00	0.00	0.00
Total Load Effect	-6.24	6.24	0.57	-0.57	-0.74	0.74	-0.74	0.74
Resistance - Dead	-23.26	23.26	24.74	-24.74	24.74	23.26	24.74	23.26
Design Ratio	3.85	3.85	42.38	42.38	N/A	32.46	N/A	32.46
Rating Factor	4.23	4.23	18.95	18.95	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-5.50	5.50	1.31	-1.31	0.00	0.00	0.00	0.00
Total Load Effect	-6.24	6.24	0.57	-0.57	-0.74	0.74	-0.74	0.74
Resistance - Dead	-29.26	N/A	N/A	-30.74	-29.26	N/A	-29.26	N/A
Design Ratio	4.81	N/A	N/A	52.97	40.57	N/A	40.57	N/A
Rating Factor	5.32	N/A	N/A	23.54	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	14.0	14.0	14.0	14.0	14.0	14.0	16.8	16.8
Live Load Effect	75.3	-17.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	89.3	-3.9	14.0	14.0	14.0	14.0	16.8	16.8
Resistance - Dead	372.6	-397.5	372.6	372.6	372.6	372.6	369.8	369.8
Design Ratio	4.33	99.13	27.59	27.59	(27.59)	(27.59)	(22.99)	(22.99)
Rating Factor	4.95	22.23	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Live Load Effect	13.2	-12.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	12.9	-13.2	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Resistance - Dead	183.1	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3
Design Ratio	14.20	13.87	517.20	517.20	(517.20)	(517.20)	(431.00)	(431.00)
Rating Factor	13.85	14.22	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-4.97	4.97	1.18	-1.18	0.00	0.00	0.00	0.00
Total Load Effect	-5.71	5.71	0.44	-0.44	-0.74	0.74	-0.74	0.74
Resistance - Dead	-23.26	23.26	24.74	-24.74	24.74	23.26	24.74	23.26
Design Ratio	4.21	4.21	54.54	54.54	N/A	32.46	N/A	32.46
Rating Factor	4.68	4.68	20.98	20.98	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-4.97	4.97	1.18	-1.18	0.00	0.00	0.00	0.00
Total Load Effect	-5.71	5.71	0.44	-0.44	-0.74	0.74	-0.74	0.74
Resistance - Dead	-29.26	N/A	N/A	-30.74	-29.26	N/A	-29.26	N/A
Design Ratio	5.26	N/A	N/A	68.18	40.57	N/A	40.57	N/A
Rating Factor	5.89	N/A	N/A	26.06	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	14.0	14.0	14.0	14.0	14.0	14.0	16.8	16.8
Live Load Effect	99.7	-24.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	113.7	-10.1	14.0	14.0	14.0	14.0	16.8	16.8
Resistance - Dead	372.6	-397.5	372.6	372.6	372.6	372.6	369.8	369.8
Design Ratio	3.40	38.14	27.59	27.59	(27.59)	(27.59)	(22.99)	(22.99)
Rating Factor	3.74	16.52	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Live Load Effect	15.3	-13.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	14.9	-13.8	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Resistance - Dead	183.1	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3
Design Ratio	12.24	13.21	517.20	517.20	(517.20)	(517.20)	(431.00)	(431.00)
Rating Factor	11.98	13.53	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-6.57	6.57	1.59	-1.59	0.00	0.00	0.00	0.00
Total Load Effect	-7.31	7.31	0.85	-0.85	-0.74	0.74	-0.74	0.74
Resistance - Dead	-23.26	23.26	24.74	-24.74	24.74	23.26	24.74	23.26
Design Ratio	3.28	3.28	28.30	28.30	N/A	32.46	N/A	32.46
Rating Factor	3.54	3.54	15.58	15.58	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-6.57	6.57	1.59	-1.59	0.00	0.00	0.00	0.00
Total Load Effect	-7.31	7.31	0.85	-0.85	-0.74	0.74	-0.74	0.74
Resistance - Dead	-29.26	N/A	N/A	-30.74	-29.26	N/A	-29.26	N/A
Design Ratio	4.10	N/A	N/A	35.37	40.57	N/A	40.57	N/A
Rating Factor	4.45	N/A	N/A	19.36	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	14.0	14.0	14.0	14.0	14.0	14.0	16.8	16.8
Live Load Effect	99.7	-24.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	113.8	-10.1	14.0	14.0	14.0	14.0	16.8	16.8
Resistance - Dead	372.6	-397.5	372.6	372.6	372.6	372.6	369.8	369.8
Design Ratio	3.40	38.15	27.59	27.59	(27.59)	(27.59)	(22.99)	(22.99)
Rating Factor	3.74	16.52	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Live Load Effect	15.1	-13.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	14.7	-13.5	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Resistance - Dead	183.1	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3
Design Ratio	12.42	13.57	517.20	517.20	(517.20)	(517.20)	(431.00)	(431.00)
Rating Factor	12.15	13.91	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-6.58	6.58	1.59	-1.59	0.00	0.00	0.00	0.00
Total Load Effect	-7.32	7.32	0.85	-0.85	-0.74	0.74	-0.74	0.74
Resistance - Dead	-23.26	23.26	24.74	-24.74	24.74	23.26	24.74	23.26
Design Ratio	3.28	3.28	28.30	28.30	N/A	32.46	N/A	32.46
Rating Factor	3.54	3.54	15.59	15.59	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-6.58	6.58	1.59	-1.59	0.00	0.00	0.00	0.00
Total Load Effect	-7.32	7.32	0.85	-0.85	-0.74	0.74	-0.74	0.74
Resistance - Dead	-29.26	N/A	N/A	-30.74	-29.26	N/A	-29.26	N/A
Design Ratio	4.10	N/A	N/A	35.38	40.57	N/A	40.57	N/A
Rating Factor	4.45	N/A	N/A	19.37	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	14.0	14.0	14.0	14.0	14.0	14.0	16.8	16.8
Live Load Effect	100.9	-24.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	115.0	-10.4	14.0	14.0	14.0	14.0	16.8	16.8
Resistance - Dead	372.6	-397.5	372.6	372.6	372.6	372.6	369.8	369.8
Design Ratio	3.36	36.71	27.59	27.59	(27.59)	(27.59)	(22.99)	(22.99)
Rating Factor	3.69	16.25	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Live Load Effect	14.5	-11.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	14.2	-11.9	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Resistance - Dead	183.1	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3
Design Ratio	12.91	15.35	517.20	517.20	(517.20)	(517.20)	(431.00)	(431.00)
Rating Factor	12.62	15.79	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-6.66	6.66	1.61	-1.61	0.00	0.00	0.00	0.00
Total Load Effect	-7.40	7.40	0.87	-0.87	-0.74	0.74	-0.74	0.74
Resistance - Dead	-23.26	23.26	24.74	-24.74	24.74	23.26	24.74	23.26
Design Ratio	3.24	3.24	27.47	27.47	N/A	32.46	N/A	32.46
Rating Factor	3.49	3.49	15.34	15.34	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-6.66	6.66	1.61	-1.61	0.00	0.00	0.00	0.00
Total Load Effect	-7.40	7.40	0.87	-0.87	-0.74	0.74	-0.74	0.74
Resistance - Dead	-29.26	N/A	N/A	-30.74	-29.26	N/A	-29.26	N/A
Design Ratio	4.06	N/A	N/A	34.33	40.57	N/A	40.57	N/A
Rating Factor	4.39	N/A	N/A	19.05	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	14.0	14.0	14.0	14.0	14.0	14.0	16.8	16.8
Live Load Effect	96.2	-20.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	110.2	-6.6	14.0	14.0	14.0	14.0	16.8	16.8
Resistance - Dead	372.6	-397.5	372.6	372.6	372.6	372.6	369.8	369.8
Design Ratio	3.51	57.75	27.59	27.59	(27.59)	(27.59)	(22.99)	(22.99)
Rating Factor	3.87	19.25	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Live Load Effect	13.7	-11.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	13.3	-11.9	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Resistance - Dead	183.1	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3
Design Ratio	13.73	15.35	517.20	517.20	(517.20)	(517.20)	(431.00)	(431.00)
Rating Factor	13.40	15.79	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-6.35	6.35	1.36	-1.36	0.00	0.00	0.00	0.00
Total Load Effect	-7.09	7.09	0.62	-0.62	-0.74	0.74	-0.74	0.74
Resistance - Dead	-23.26	23.26	24.74	-24.74	24.74	23.26	24.74	23.26
Design Ratio	3.39	3.39	38.53	38.53	N/A	32.46	N/A	32.46
Rating Factor	3.66	3.66	18.16	18.16	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-6.35	6.35	1.36	-1.36	0.00	0.00	0.00	0.00
Total Load Effect	-7.09	7.09	0.62	-0.62	-0.74	0.74	-0.74	0.74
Resistance - Dead	-29.26	N/A	N/A	-30.74	-29.26	N/A	-29.26	N/A
Design Ratio	4.23	N/A	N/A	48.16	40.57	N/A	40.57	N/A
Rating Factor	4.61	N/A	N/A	22.56	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	14.0	14.0	14.0	14.0	14.0	14.0	16.8	16.8
Live Load Effect	101.0	-24.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	115.0	-10.4	14.0	14.0	14.0	14.0	16.8	16.8
Resistance - Dead	372.6	-397.5	372.6	372.6	372.6	372.6	369.8	369.8
Design Ratio	3.36	36.71	27.59	27.59	(27.59)	(27.59)	(22.99)	(22.99)
Rating Factor	3.69	16.25	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Live Load Effect	16.4	-14.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	16.1	-14.7	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Resistance - Dead	183.1	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3	-182.3
Design Ratio	11.37	12.46	517.20	517.20	(517.20)	(517.20)	(431.00)	(431.00)
Rating Factor	11.15	12.75	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 104.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-6.66	6.66	1.61	-1.61	0.00	0.00	0.00	0.00
Total Load Effect	-7.40	7.40	0.87	-0.87	-0.74	0.74	-0.74	0.74
Resistance - Dead	-23.26	23.26	24.74	-24.74	24.74	23.26	24.74	23.26
Design Ratio	3.24	3.24	27.46	27.46	N/A	32.46	N/A	32.46
Rating Factor	3.49	3.49	15.33	15.33	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.74	0.74	-0.74	0.74	-0.74	0.74	-0.74	0.74
Live Load Effect	-6.66	6.66	1.61	-1.61	0.00	0.00	0.00	0.00
Total Load Effect	-7.40	7.40	0.87	-0.87	-0.74	0.74	-0.74	0.74
Resistance - Dead	-29.26	N/A	N/A	-30.74	-29.26	N/A	-29.26	N/A
Design Ratio	4.05	N/A	N/A	34.33	40.57	N/A	40.57	N/A
Rating Factor	4.39	N/A	N/A	19.05	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 105.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.6250			
Top Flange Thickness	=	0.3125	Top Flange Width	=	10.3750
Web Depth	=	28.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3125	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 7.083 ft
Maximum distance to Right Brace Point = 7.083 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 105.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	173.3	-42.9	133.7	-33.1	133.7	-33.1	0.0	0.0
Total Load Effect	185.8	-30.4	146.2	-20.6	146.2	-20.6	15.0	15.0
Resistance - Dead	374.1	-396.0	374.1	-396.0	374.1	-396.0	371.6	371.6
Design Ratio	2.08	12.61	2.64	18.62	(2.64)	(18.62)	(25.75)	(25.75)
Rating Factor	2.16	9.23	2.80	11.96	(2.80)	(11.96)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	-182.7	-182.7
Dead Load Effect	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Live Load Effect	23.4	-40.2	18.1	-31.0	18.1	-31.0	0.0	0.0
Total Load Effect	21.6	-41.9	16.3	-32.8	16.3	-32.8	-2.1	-2.1
Resistance - Dead	184.5	-180.9	184.5	-180.9	184.5	-180.9	-180.6	-180.6
Design Ratio	8.44	4.36	11.21	5.58	(11.21)	(5.58)	(86.20)	(86.20)
Rating Factor	7.88	4.50	10.21	5.84	(10.21)	(5.84)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-8.49	8.49	2.10	-2.10	-6.53	6.53	1.62	-1.62
Total Load Effect	-9.15	9.15	1.44	-1.44	-7.19	7.19	0.96	-0.96
Resistance - Dead	-23.34	23.34	24.66	-24.66	-23.34	23.34	24.66	-24.66
Design Ratio	2.62	2.62	16.64	16.64	3.34	3.34	25.07	25.07
Rating Factor	2.75	2.75	11.73	11.73	3.57	3.57	15.24	15.24

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-8.49	8.49	2.10	-2.10	-6.53	6.53	1.62	-1.62
Total Load Effect	-9.15	9.15	1.44	-1.44	-7.19	7.19	0.96	-0.96
Resistance - Dead	-29.34	N/A	N/A	-30.66	-29.34	N/A	N/A	-30.66
Design Ratio	3.28	N/A	N/A	20.79	4.17	N/A	N/A	31.33
Rating Factor	3.45	N/A	N/A	14.58	4.49	N/A	N/A	18.95

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	190.7	-58.9	147.1	-45.4	147.1	-45.4	0.0	0.0
Total Load Effect	203.2	-46.4	159.6	-32.9	159.6	-32.9	15.0	15.0
Resistance - Dead	374.1	-396.0	374.1	-396.0	374.1	-396.0	371.6	371.6
Design Ratio	1.90	8.26	2.42	11.64	(2.42)	(11.64)	(25.75)	(25.75)
Rating Factor	1.96	6.72	2.54	8.71	(2.54)	(8.71)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	-182.7	-182.7
Dead Load Effect	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Live Load Effect	24.6	-39.2	19.0	-30.2	19.0	-30.2	0.0	0.0
Total Load Effect	22.8	-40.9	17.2	-32.0	17.2	-32.0	-2.1	-2.1
Resistance - Dead	184.5	-180.9	184.5	-180.9	184.5	-180.9	-180.6	-180.6
Design Ratio	8.00	4.47	10.62	5.72	(10.62)	(5.72)	(86.20)	(86.20)
Rating Factor	7.50	4.62	9.72	5.99	(9.72)	(5.99)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-9.34	9.34	2.89	-2.89	-7.19	7.19	2.22	-2.22
Total Load Effect	-10.00	10.00	2.23	-2.23	-7.85	7.85	1.56	-1.56
Resistance - Dead	-23.34	23.34	24.66	-24.66	-23.34	23.34	24.66	-24.66
Design Ratio	2.40	2.40	10.78	10.78	3.06	3.06	15.38	15.38
Rating Factor	2.50	2.50	8.54	8.54	3.25	3.25	11.11	11.11

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-9.34	9.34	2.89	-2.89	-7.19	7.19	2.22	-2.22
Total Load Effect	-10.00	10.00	2.23	-2.23	-7.85	7.85	1.56	-1.56
Resistance - Dead	-29.34	N/A	N/A	-30.66	-29.34	N/A	N/A	-30.66
Design Ratio	3.00	N/A	N/A	13.47	3.82	N/A	N/A	19.23
Rating Factor	3.14	N/A	N/A	10.62	4.08	N/A	N/A	13.81

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	88.2	-27.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	100.7	-14.6	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	374.1	-396.0	374.1	374.1	374.1	374.1	371.6	371.6
Design Ratio	3.84	26.22	30.90	30.90	(30.90)	(30.90)	(25.75)	(25.75)
Rating Factor	4.24	14.59	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Live Load Effect	11.7	-20.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	10.0	-21.9	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Resistance - Dead	184.5	-180.9	-180.9	-180.9	-180.9	-180.9	-180.6	-180.6
Design Ratio	18.34	8.34	103.44	103.44	(103.44)	(103.44)	(86.20)	(86.20)
Rating Factor	15.73	8.98	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-5.82	5.82	1.79	-1.79	0.00	0.00	0.00	0.00
Total Load Effect	-6.48	6.48	1.13	-1.13	-0.66	0.66	-0.66	0.66
Resistance - Dead	-23.34	23.34	24.66	-24.66	24.66	23.34	24.66	23.34
Design Ratio	3.70	3.70	21.24	21.24	N/A	36.35	N/A	36.35
Rating Factor	4.01	4.01	13.78	13.78	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-5.82	5.82	1.79	-1.79	0.00	0.00	0.00	0.00
Total Load Effect	-6.48	6.48	1.13	-1.13	-0.66	0.66	-0.66	0.66
Resistance - Dead	-29.34	N/A	N/A	-30.66	-29.34	N/A	-29.34	N/A
Design Ratio	4.63	N/A	N/A	26.55	45.44	N/A	45.44	N/A
Rating Factor	5.04	N/A	N/A	17.13	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	80.6	-24.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	93.1	-12.2	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	374.1	-396.0	374.1	374.1	374.1	374.1	371.6	371.6
Design Ratio	4.15	31.35	30.90	30.90	(30.90)	(30.90)	(25.75)	(25.75)
Rating Factor	4.64	16.00	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Live Load Effect	10.8	-17.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	9.1	-19.6	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Resistance - Dead	184.5	-180.9	-180.9	-180.9	-180.9	-180.9	-180.6	-180.6
Design Ratio	20.13	9.33	103.44	103.44	(103.44)	(103.44)	(86.20)	(86.20)
Rating Factor	17.01	10.15	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-5.31	5.31	1.63	-1.63	0.00	0.00	0.00	0.00
Total Load Effect	-5.97	5.97	0.97	-0.97	-0.66	0.66	-0.66	0.66
Resistance - Dead	-23.34	23.34	24.66	-24.66	24.66	23.34	24.66	23.34
Design Ratio	4.02	4.02	24.69	24.69	N/A	36.35	N/A	36.35
Rating Factor	4.39	4.39	15.11	15.11	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-5.31	5.31	1.63	-1.63	0.00	0.00	0.00	0.00
Total Load Effect	-5.97	5.97	0.97	-0.97	-0.66	0.66	-0.66	0.66
Resistance - Dead	-29.34	N/A	N/A	-30.66	-29.34	N/A	-29.34	N/A
Design Ratio	5.02	N/A	N/A	30.87	45.44	N/A	45.44	N/A
Rating Factor	5.52	N/A	N/A	18.79	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	72.7	-22.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	85.2	-9.8	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	374.1	-396.0	374.1	374.1	374.1	374.1	371.6	371.6
Design Ratio	4.54	38.97	30.90	30.90	(30.90)	(30.90)	(25.75)	(25.75)
Rating Factor	5.14	17.72	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Live Load Effect	9.7	-16.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	7.9	-18.6	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Resistance - Dead	184.5	-180.9	-180.9	-180.9	-180.9	-180.9	-180.6	-180.6
Design Ratio	22.99	9.83	103.44	103.44	(103.44)	(103.44)	(86.20)	(86.20)
Rating Factor	18.99	10.76	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-4.80	4.80	1.47	-1.47	0.00	0.00	0.00	0.00
Total Load Effect	-5.46	5.46	0.81	-0.81	-0.66	0.66	-0.66	0.66
Resistance - Dead	-23.34	23.34	24.66	-24.66	24.66	23.34	24.66	23.34
Design Ratio	4.40	4.40	29.48	29.48	N/A	36.35	N/A	36.35
Rating Factor	4.87	4.87	16.73	16.73	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-4.80	4.80	1.47	-1.47	0.00	0.00	0.00	0.00
Total Load Effect	-5.46	5.46	0.81	-0.81	-0.66	0.66	-0.66	0.66
Resistance - Dead	-29.34	N/A	N/A	-30.66	-29.34	N/A	-29.34	N/A
Design Ratio	5.50	N/A	N/A	36.85	45.44	N/A	45.44	N/A
Rating Factor	6.12	N/A	N/A	20.80	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	96.3	-30.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	108.8	-17.6	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	374.1	-396.0	374.1	374.1	374.1	374.1	371.6	371.6
Design Ratio	3.55	21.82	30.90	30.90	(30.90)	(30.90)	(25.75)	(25.75)
Rating Factor	3.89	13.16	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Live Load Effect	10.8	-18.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	9.0	-20.4	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Resistance - Dead	184.5	-180.9	-180.9	-180.9	-180.9	-180.9	-180.6	-180.6
Design Ratio	20.21	8.97	103.44	103.44	(103.44)	(103.44)	(86.20)	(86.20)
Rating Factor	17.07	9.73	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-6.35	6.35	1.98	-1.98	0.00	0.00	0.00	0.00
Total Load Effect	-7.01	7.01	1.32	-1.32	-0.66	0.66	-0.66	0.66
Resistance - Dead	-23.34	23.34	24.66	-24.66	24.66	23.34	24.66	23.34
Design Ratio	3.42	3.42	18.12	18.12	N/A	36.35	N/A	36.35
Rating Factor	3.68	3.68	12.43	12.43	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-6.35	6.35	1.98	-1.98	0.00	0.00	0.00	0.00
Total Load Effect	-7.01	7.01	1.32	-1.32	-0.66	0.66	-0.66	0.66
Resistance - Dead	-29.34	N/A	N/A	-30.66	-29.34	N/A	-29.34	N/A
Design Ratio	4.28	N/A	N/A	22.66	45.44	N/A	45.44	N/A
Rating Factor	4.62	N/A	N/A	15.45	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	96.3	-30.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	108.8	-17.6	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	374.1	-396.0	374.1	374.1	374.1	374.1	371.6	371.6
Design Ratio	3.55	21.83	30.90	30.90	(30.90)	(30.90)	(25.75)	(25.75)
Rating Factor	3.89	13.16	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Live Load Effect	10.4	-18.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	8.6	-20.0	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Resistance - Dead	184.5	-180.9	-180.9	-180.9	-180.9	-180.9	-180.6	-180.6
Design Ratio	21.22	9.13	103.44	103.44	(103.44)	(103.44)	(86.20)	(86.20)
Rating Factor	17.78	9.92	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-6.35	6.35	1.98	-1.98	0.00	0.00	0.00	0.00
Total Load Effect	-7.01	7.01	1.32	-1.32	-0.66	0.66	-0.66	0.66
Resistance - Dead	-23.34	23.34	24.66	-24.66	24.66	23.34	24.66	23.34
Design Ratio	3.42	3.42	18.13	18.13	N/A	36.35	N/A	36.35
Rating Factor	3.68	3.68	12.43	12.43	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-6.35	6.35	1.98	-1.98	0.00	0.00	0.00	0.00
Total Load Effect	-7.01	7.01	1.32	-1.32	-0.66	0.66	-0.66	0.66
Resistance - Dead	-29.34	N/A	N/A	-30.66	-29.34	N/A	-29.34	N/A
Design Ratio	4.28	N/A	N/A	22.66	45.44	N/A	45.44	N/A
Rating Factor	4.62	N/A	N/A	15.45	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	98.1	-30.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	110.6	-18.1	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	374.1	-396.0	374.1	374.1	374.1	374.1	371.6	371.6
Design Ratio	3.50	21.23	30.90	30.90	(30.90)	(30.90)	(25.75)	(25.75)
Rating Factor	3.81	12.95	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Live Load Effect	8.5	-17.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	6.7	-19.6	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Resistance - Dead	184.5	-180.9	-180.9	-180.9	-180.9	-180.9	-180.6	-180.6
Design Ratio	27.08	9.34	103.44	103.44	(103.44)	(103.44)	(86.20)	(86.20)
Rating Factor	21.67	10.16	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-6.47	6.47	2.02	-2.02	0.00	0.00	0.00	0.00
Total Load Effect	-7.13	7.13	1.36	-1.36	-0.66	0.66	-0.66	0.66
Resistance - Dead	-23.34	23.34	24.66	-24.66	24.66	23.34	24.66	23.34
Design Ratio	3.37	3.37	17.69	17.69	N/A	36.35	N/A	36.35
Rating Factor	3.61	3.61	12.23	12.23	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-6.47	6.47	2.02	-2.02	0.00	0.00	0.00	0.00
Total Load Effect	-7.13	7.13	1.36	-1.36	-0.66	0.66	-0.66	0.66
Resistance - Dead	-29.34	N/A	N/A	-30.66	-29.34	N/A	-29.34	N/A
Design Ratio	4.21	N/A	N/A	22.12	45.44	N/A	45.44	N/A
Rating Factor	4.54	N/A	N/A	15.20	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	95.9	-25.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	108.4	-13.3	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	374.1	-396.0	374.1	374.1	374.1	374.1	371.6	371.6
Design Ratio	3.57	28.82	30.90	30.90	(30.90)	(30.90)	(25.75)	(25.75)
Rating Factor	3.90	15.34	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Live Load Effect	7.5	-17.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	5.8	-19.6	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Resistance - Dead	184.5	-180.9	-180.9	-180.9	-180.9	-180.9	-180.6	-180.6
Design Ratio	31.61	9.34	103.44	103.44	(103.44)	(103.44)	(86.20)	(86.20)
Rating Factor	24.44	10.16	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-6.32	6.32	1.70	-1.70	0.00	0.00	0.00	0.00
Total Load Effect	-6.99	6.99	1.04	-1.04	-0.66	0.66	-0.66	0.66
Resistance - Dead	-23.34	23.34	24.66	-24.66	24.66	23.34	24.66	23.34
Design Ratio	3.44	3.44	23.02	23.02	N/A	36.35	N/A	36.35
Rating Factor	3.69	3.69	14.48	14.48	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-6.32	6.32	1.70	-1.70	0.00	0.00	0.00	0.00
Total Load Effect	-6.99	6.99	1.04	-1.04	-0.66	0.66	-0.66	0.66
Resistance - Dead	-29.34	N/A	N/A	-30.66	-29.34	N/A	-29.34	N/A
Design Ratio	4.29	N/A	N/A	28.77	45.44	N/A	45.44	N/A
Rating Factor	4.64	N/A	N/A	18.01	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0
Live Load Effect	98.1	-30.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	110.7	-18.1	12.5	12.5	12.5	12.5	15.0	15.0
Resistance - Dead	374.1	-396.0	374.1	374.1	374.1	374.1	371.6	371.6
Design Ratio	3.49	21.23	30.90	30.90	(30.90)	(30.90)	(25.75)	(25.75)
Rating Factor	3.81	12.95	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Live Load Effect	11.9	-19.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	10.2	-21.6	-1.8	-1.8	-1.8	-1.8	-2.1	-2.1
Resistance - Dead	184.5	-180.9	-180.9	-180.9	-180.9	-180.9	-180.6	-180.6
Design Ratio	17.95	8.46	103.44	103.44	(103.44)	(103.44)	(86.20)	(86.20)
Rating Factor	15.45	9.12	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 105.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-6.47	6.47	2.02	-2.02	0.00	0.00	0.00	0.00
Total Load Effect	-7.13	7.13	1.36	-1.36	-0.66	0.66	-0.66	0.66
Resistance - Dead	-23.34	23.34	24.66	-24.66	24.66	23.34	24.66	23.34
Design Ratio	3.36	3.36	17.69	17.69	N/A	36.35	N/A	36.35
Rating Factor	3.61	3.61	12.23	12.23	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.66	0.66	-0.66	0.66	-0.66	0.66	-0.66	0.66
Live Load Effect	-6.47	6.47	2.02	-2.02	0.00	0.00	0.00	0.00
Total Load Effect	-7.13	7.13	1.36	-1.36	-0.66	0.66	-0.66	0.66
Resistance - Dead	-29.34	N/A	N/A	-30.66	-29.34	N/A	-29.34	N/A
Design Ratio	4.21	N/A	N/A	22.12	45.44	N/A	45.44	N/A
Rating Factor	4.53	N/A	N/A	15.20	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 106.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.6250			
Top Flange Thickness	=	0.3125	Top Flange Width	=	10.3750
Web Depth	=	28.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3125	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 8.500 ft
Maximum distance to Right Brace Point = 5.667 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 106.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 106.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 106.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 106.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6
Dead Load Effect	9.0	9.0	9.0	9.0	9.0	9.0	10.8	10.8
Live Load Effect	155.1	-51.5	119.7	-39.7	119.7	-39.7	0.0	0.0
Total Load Effect	164.1	-42.5	128.7	-30.7	128.7	-30.7	10.8	10.8
Resistance - Dead	377.6	-392.5	377.6	-392.5	377.6	-392.5	375.8	375.8
Design Ratio	2.36	9.02	3.00	12.48	(3.00)	(12.48)	(35.76)	(35.76)
Rating Factor	2.43	7.62	3.16	9.88	(3.16)	(9.88)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	-182.7	-182.7
Dead Load Effect	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Live Load Effect	17.3	-46.2	13.4	-35.6	13.4	-35.6	0.0	0.0
Total Load Effect	14.1	-49.4	10.2	-38.8	10.2	-38.8	-3.8	-3.8
Resistance - Dead	185.9	-179.5	185.9	-179.5	185.9	-179.5	-178.9	-178.9
Design Ratio	12.93	3.70	17.95	4.71	(17.95)	(4.71)	(47.89)	(47.89)
Rating Factor	10.74	3.89	13.92	5.04	(13.92)	(5.04)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-7.60	7.60	2.52	-2.52	-5.85	5.85	1.94	-1.94
Total Load Effect	-8.08	8.08	2.05	-2.05	-6.32	6.32	1.47	-1.47
Resistance - Dead	-23.52	23.52	24.48	-24.48	-23.52	23.52	24.48	-24.48
Design Ratio	2.97	2.97	11.72	11.72	3.80	3.80	16.37	16.37
Rating Factor	3.10	3.10	9.70	9.70	4.02	4.02	12.61	12.61

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-7.60	7.60	2.52	-2.52	-5.85	5.85	1.94	-1.94
Total Load Effect	-8.08	8.08	2.05	-2.05	-6.32	6.32	1.47	-1.47
Resistance - Dead	-29.52	N/A	N/A	-30.48	-29.52	N/A	N/A	-30.48
Design Ratio	3.71	N/A	N/A	14.65	4.75	N/A	N/A	20.47
Rating Factor	3.88	N/A	N/A	12.08	5.05	N/A	N/A	15.70

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6
Dead Load Effect	9.0	9.0	9.0	9.0	9.0	9.0	10.8	10.8
Live Load Effect	176.6	-70.7	136.2	-54.5	136.2	-54.5	0.0	0.0
Total Load Effect	185.6	-61.7	145.2	-45.5	145.2	-45.5	10.8	10.8
Resistance - Dead	377.6	-392.5	377.6	-392.5	377.6	-392.5	375.8	375.8
Design Ratio	2.08	6.22	2.66	8.42	(2.66)	(8.42)	(35.76)	(35.76)
Rating Factor	2.14	5.55	2.77	7.20	(2.77)	(7.20)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	-182.7	-182.7
Dead Load Effect	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Live Load Effect	16.6	-49.6	12.8	-38.3	12.8	-38.3	0.0	0.0
Total Load Effect	13.4	-52.8	9.6	-41.4	9.6	-41.4	-3.8	-3.8
Resistance - Dead	185.9	-179.5	185.9	-179.5	185.9	-179.5	-178.9	-178.9
Design Ratio	13.63	3.46	19.01	4.41	(19.01)	(4.41)	(47.89)	(47.89)
Rating Factor	11.21	3.62	14.53	4.69	(14.53)	(4.69)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-8.65	8.65	3.46	-3.46	-6.66	6.66	2.66	-2.66
Total Load Effect	-9.13	9.13	2.99	-2.99	-7.13	7.13	2.19	-2.19
Resistance - Dead	-23.52	23.52	24.48	-24.48	-23.52	23.52	24.48	-24.48
Design Ratio	2.63	2.63	8.03	8.03	3.37	3.37	10.96	10.96
Rating Factor	2.72	2.72	7.07	7.07	3.53	3.53	9.19	9.19

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-8.65	8.65	3.46	-3.46	-6.66	6.66	2.66	-2.66
Total Load Effect	-9.13	9.13	2.99	-2.99	-7.13	7.13	2.19	-2.19
Resistance - Dead	-29.52	N/A	N/A	-30.48	-29.52	N/A	N/A	-30.48
Design Ratio	3.29	N/A	N/A	10.04	4.21	N/A	N/A	13.70
Rating Factor	3.41	N/A	N/A	8.80	4.44	N/A	N/A	11.44

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	9.0	9.0	9.0	9.0	9.0	9.0	10.8	10.8
Live Load Effect	81.8	-32.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	90.8	-23.6	9.0	9.0	9.0	9.0	10.8	10.8
Resistance - Dead	377.6	-392.5	377.6	377.6	377.6	377.6	375.8	375.8
Design Ratio	4.26	16.28	42.92	42.92	(42.92)	(42.92)	(35.76)	(35.76)
Rating Factor	4.61	12.05	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Live Load Effect	7.9	-24.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.7	-28.0	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Resistance - Dead	185.9	-179.5	-179.5	-179.5	-179.5	-179.5	-178.9	-178.9
Design Ratio	38.63	6.53	57.47	57.47	(57.47)	(57.47)	(47.89)	(47.89)
Rating Factor	23.50	7.24	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-5.40	5.40	2.15	-2.15	0.00	0.00	0.00	0.00
Total Load Effect	-5.87	5.87	1.67	-1.67	-0.48	0.48	-0.48	0.48
Resistance - Dead	-23.52	23.52	24.48	-24.48	24.48	23.52	24.48	23.52
Design Ratio	4.09	4.09	14.35	14.35	N/A	50.49	N/A	50.49
Rating Factor	4.36	4.36	11.39	11.39	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-5.40	5.40	2.15	-2.15	0.00	0.00	0.00	0.00
Total Load Effect	-5.87	5.87	1.67	-1.67	-0.48	0.48	-0.48	0.48
Resistance - Dead	-29.52	N/A	N/A	-30.48	-29.52	N/A	-29.52	N/A
Design Ratio	5.11	N/A	N/A	17.94	63.11	N/A	63.11	N/A
Rating Factor	5.47	N/A	N/A	14.19	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	9.0	9.0	9.0	9.0	9.0	9.0	10.8	10.8
Live Load Effect	74.9	-29.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	83.9	-20.7	9.0	9.0	9.0	9.0	10.8	10.8
Resistance - Dead	377.6	-392.5	377.6	377.6	377.6	377.6	375.8	375.8
Design Ratio	4.61	18.54	42.92	42.92	(42.92)	(42.92)	(35.76)	(35.76)
Rating Factor	5.04	13.22	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Live Load Effect	7.3	-22.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.2	-25.6	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Resistance - Dead	185.9	-179.5	-179.5	-179.5	-179.5	-179.5	-178.9	-178.9
Design Ratio	43.88	7.14	57.47	57.47	(57.47)	(57.47)	(47.89)	(47.89)
Rating Factor	25.31	8.01	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-4.94	4.94	1.96	-1.96	0.00	0.00	0.00	0.00
Total Load Effect	-5.41	5.41	1.48	-1.48	-0.48	0.48	-0.48	0.48
Resistance - Dead	-23.52	23.52	24.48	-24.48	24.48	23.52	24.48	23.52
Design Ratio	4.43	4.43	16.18	16.18	N/A	50.49	N/A	50.49
Rating Factor	4.76	4.76	12.50	12.50	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-4.94	4.94	1.96	-1.96	0.00	0.00	0.00	0.00
Total Load Effect	-5.41	5.41	1.48	-1.48	-0.48	0.48	-0.48	0.48
Resistance - Dead	-29.52	N/A	N/A	-30.48	-29.52	N/A	-29.52	N/A
Design Ratio	5.54	N/A	N/A	20.23	63.11	N/A	63.11	N/A
Rating Factor	5.98	N/A	N/A	15.56	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	9.0	9.0	9.0	9.0	9.0	9.0	10.8	10.8
Live Load Effect	67.5	-26.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	76.5	-17.8	9.0	9.0	9.0	9.0	10.8	10.8
Resistance - Dead	377.6	-392.5	377.6	377.6	377.6	377.6	375.8	375.8
Design Ratio	5.05	21.53	42.92	42.92	(42.92)	(42.92)	(35.76)	(35.76)
Rating Factor	5.59	14.63	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Live Load Effect	6.7	-20.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	3.5	-23.7	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Resistance - Dead	185.9	-179.5	-179.5	-179.5	-179.5	-179.5	-178.9	-178.9
Design Ratio	52.64	7.72	57.47	57.47	(57.47)	(57.47)	(47.89)	(47.89)
Rating Factor	27.95	8.76	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-4.45	4.45	1.77	-1.77	0.00	0.00	0.00	0.00
Total Load Effect	-4.93	4.93	1.29	-1.29	-0.48	0.48	-0.48	0.48
Resistance - Dead	-23.52	23.52	24.48	-24.48	24.48	23.52	24.48	23.52
Design Ratio	4.87	4.87	18.55	18.55	N/A	50.49	N/A	50.49
Rating Factor	5.28	5.28	13.83	13.83	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-4.45	4.45	1.77	-1.77	0.00	0.00	0.00	0.00
Total Load Effect	-4.93	4.93	1.29	-1.29	-0.48	0.48	-0.48	0.48
Resistance - Dead	-29.52	N/A	N/A	-30.48	-29.52	N/A	-29.52	N/A
Design Ratio	6.09	N/A	N/A	23.19	63.11	N/A	63.11	N/A
Rating Factor	6.63	N/A	N/A	17.23	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	9.0	9.0	9.0	9.0	9.0	9.0	10.8	10.8
Live Load Effect	83.4	-36.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	92.4	-27.1	9.0	9.0	9.0	9.0	10.8	10.8
Resistance - Dead	377.6	-392.5	377.6	377.6	377.6	377.6	375.8	375.8
Design Ratio	4.18	14.15	42.92	42.92	(42.92)	(42.92)	(35.76)	(35.76)
Rating Factor	4.53	10.87	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Live Load Effect	7.0	-23.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	3.8	-27.1	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Resistance - Dead	185.9	-179.5	-179.5	-179.5	-179.5	-179.5	-178.9	-178.9
Design Ratio	48.36	6.75	57.47	57.47	(57.47)	(57.47)	(47.89)	(47.89)
Rating Factor	26.72	7.51	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-5.50	5.50	2.38	-2.38	0.00	0.00	0.00	0.00
Total Load Effect	-5.98	5.98	1.91	-1.91	-0.48	0.48	-0.48	0.48
Resistance - Dead	-23.52	23.52	24.48	-24.48	24.48	23.52	24.48	23.52
Design Ratio	4.02	4.02	12.59	12.59	N/A	50.49	N/A	50.49
Rating Factor	4.28	4.28	10.28	10.28	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-5.50	5.50	2.38	-2.38	0.00	0.00	0.00	0.00
Total Load Effect	-5.98	5.98	1.91	-1.91	-0.48	0.48	-0.48	0.48
Resistance - Dead	-29.52	N/A	N/A	-30.48	-29.52	N/A	-29.52	N/A
Design Ratio	5.02	N/A	N/A	15.74	63.11	N/A	63.11	N/A
Rating Factor	5.37	N/A	N/A	12.80	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	9.0	9.0	9.0	9.0	9.0	9.0	10.8	10.8
Live Load Effect	83.4	-36.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	92.4	-27.1	9.0	9.0	9.0	9.0	10.8	10.8
Resistance - Dead	377.6	-392.5	377.6	377.6	377.6	377.6	375.8	375.8
Design Ratio	4.19	14.16	42.92	42.92	(42.92)	(42.92)	(35.76)	(35.76)
Rating Factor	4.53	10.87	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Live Load Effect	6.2	-23.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	3.0	-26.7	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Resistance - Dead	185.9	-179.5	-179.5	-179.5	-179.5	-179.5	-178.9	-178.9
Design Ratio	60.32	6.84	57.47	57.47	(57.47)	(57.47)	(47.89)	(47.89)
Rating Factor	29.94	7.63	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-5.50	5.50	2.38	-2.38	0.00	0.00	0.00	0.00
Total Load Effect	-5.97	5.97	1.91	-1.91	-0.48	0.48	-0.48	0.48
Resistance - Dead	-23.52	23.52	24.48	-24.48	24.48	23.52	24.48	23.52
Design Ratio	4.02	4.02	12.59	12.59	N/A	50.49	N/A	50.49
Rating Factor	4.28	4.28	10.28	10.28	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-5.50	5.50	2.38	-2.38	0.00	0.00	0.00	0.00
Total Load Effect	-5.97	5.97	1.91	-1.91	-0.48	0.48	-0.48	0.48
Resistance - Dead	-29.52	N/A	N/A	-30.48	-29.52	N/A	-29.52	N/A
Design Ratio	5.02	N/A	N/A	15.74	63.11	N/A	63.11	N/A
Rating Factor	5.37	N/A	N/A	12.80	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	9.0	9.0	9.0	9.0	9.0	9.0	10.8	10.8
Live Load Effect	89.0	-36.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	98.0	-27.7	9.0	9.0	9.0	9.0	10.8	10.8
Resistance - Dead	377.6	-392.5	377.6	377.6	377.6	377.6	375.8	375.8
Design Ratio	3.95	13.86	42.92	42.92	(42.92)	(42.92)	(35.76)	(35.76)
Rating Factor	4.24	10.70	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Live Load Effect	4.4	-23.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	1.3	-27.0	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Resistance - Dead	185.9	-179.5	-179.5	-179.5	-179.5	-179.5	-178.9	-178.9
Design Ratio	143.96	6.77	57.47	57.47	(57.47)	(57.47)	(47.89)	(47.89)
Rating Factor	41.79	7.54	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-5.87	5.87	2.42	-2.42	0.00	0.00	0.00	0.00
Total Load Effect	-6.34	6.34	1.94	-1.94	-0.48	0.48	-0.48	0.48
Resistance - Dead	-23.52	23.52	24.48	-24.48	24.48	23.52	24.48	23.52
Design Ratio	3.78	3.78	12.34	12.34	N/A	50.49	N/A	50.49
Rating Factor	4.01	4.01	10.11	10.11	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-5.87	5.87	2.42	-2.42	0.00	0.00	0.00	0.00
Total Load Effect	-6.34	6.34	1.94	-1.94	-0.48	0.48	-0.48	0.48
Resistance - Dead	-29.52	N/A	N/A	-30.48	-29.52	N/A	-29.52	N/A
Design Ratio	4.73	N/A	N/A	15.43	63.11	N/A	63.11	N/A
Rating Factor	5.03	N/A	N/A	12.59	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	9.0	9.0	9.0	9.0	9.0	9.0	10.8	10.8
Live Load Effect	83.5	-31.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	92.5	-22.0	9.0	9.0	9.0	9.0	10.8	10.8
Resistance - Dead	377.6	-392.5	377.6	377.6	377.6	377.6	375.8	375.8
Design Ratio	4.18	17.45	42.92	42.92	(42.92)	(42.92)	(35.76)	(35.76)
Rating Factor	4.52	12.67	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Live Load Effect	4.4	-23.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	1.3	-27.0	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Resistance - Dead	185.9	-179.5	-179.5	-179.5	-179.5	-179.5	-178.9	-178.9
Design Ratio	143.96	6.77	57.47	57.47	(57.47)	(57.47)	(47.89)	(47.89)
Rating Factor	41.79	7.54	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-5.51	5.51	2.04	-2.04	0.00	0.00	0.00	0.00
Total Load Effect	-5.98	5.98	1.57	-1.57	-0.48	0.48	-0.48	0.48
Resistance - Dead	-23.52	23.52	24.48	-24.48	24.48	23.52	24.48	23.52
Design Ratio	4.01	4.01	15.31	15.31	N/A	50.49	N/A	50.49
Rating Factor	4.27	4.27	11.98	11.98	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-5.51	5.51	2.04	-2.04	0.00	0.00	0.00	0.00
Total Load Effect	-5.98	5.98	1.57	-1.57	-0.48	0.48	-0.48	0.48
Resistance - Dead	-29.52	N/A	N/A	-30.48	-29.52	N/A	-29.52	N/A
Design Ratio	5.01	N/A	N/A	19.13	63.11	N/A	63.11	N/A
Rating Factor	5.36	N/A	N/A	14.91	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	9.0	9.0	9.0	9.0	9.0	9.0	10.8	10.8
Live Load Effect	89.1	-36.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	98.1	-27.7	9.0	9.0	9.0	9.0	10.8	10.8
Resistance - Dead	377.6	-392.5	377.6	377.6	377.6	377.6	375.8	375.8
Design Ratio	3.94	13.85	42.92	42.92	(42.92)	(42.92)	(35.76)	(35.76)
Rating Factor	4.24	10.70	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Live Load Effect	8.1	-25.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	4.9	-28.7	-3.2	-3.2	-3.2	-3.2	-3.8	-3.8
Resistance - Dead	185.9	-179.5	-179.5	-179.5	-179.5	-179.5	-178.9	-178.9
Design Ratio	37.15	6.36	57.47	57.47	(57.47)	(57.47)	(47.89)	(47.89)
Rating Factor	22.96	7.03	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 106.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-5.88	5.88	2.42	-2.42	0.00	0.00	0.00	0.00
Total Load Effect	-6.35	6.35	1.94	-1.94	-0.48	0.48	-0.48	0.48
Resistance - Dead	-23.52	23.52	24.48	-24.48	24.48	23.52	24.48	23.52
Design Ratio	3.78	3.78	12.34	12.34	N/A	50.49	N/A	50.49
Rating Factor	4.00	4.00	10.11	10.11	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.48	0.48	-0.48	0.48	-0.48	0.48	-0.48	0.48
Live Load Effect	-5.88	5.88	2.42	-2.42	0.00	0.00	0.00	0.00
Total Load Effect	-6.35	6.35	1.94	-1.94	-0.48	0.48	-0.48	0.48
Resistance - Dead	-29.52	N/A	N/A	-30.48	-29.52	N/A	-29.52	N/A
Design Ratio	4.72	N/A	N/A	15.43	63.11	N/A	63.11	N/A
Rating Factor	5.02	N/A	N/A	12.59	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 107.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.6250			
Top Flange Thickness	=	0.3125	Top Flange Width	=	10.3750
Web Depth	=	28.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3125	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 9.917 ft
Maximum distance to Right Brace Point = 4.250 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 107.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 107.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 107.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 107.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6
Dead Load Effect	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.2
Live Load Effect	124.1	-60.1	95.8	-46.4	95.8	-46.4	0.0	0.0
Total Load Effect	127.6	-56.6	99.3	-42.8	99.3	-42.8	4.2	4.2
Resistance - Dead	383.1	-387.0	383.1	-387.0	383.1	-387.0	382.4	382.4
Design Ratio	3.03	6.78	3.89	8.95	(3.89)	(8.95)	(91.97)	(91.97)
Rating Factor	3.09	6.44	4.00	8.35	(4.00)	(8.35)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	-182.7	-182.7
Dead Load Effect	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Live Load Effect	11.8	-51.4	9.1	-39.7	9.1	-39.7	0.0	0.0
Total Load Effect	7.2	-56.0	4.5	-44.3	4.5	-44.3	-5.5	-5.5
Resistance - Dead	187.3	-178.1	187.3	-178.1	187.3	-178.1	-177.2	-177.2
Design Ratio	25.22	3.26	40.25	4.13	(40.25)	(4.13)	(33.15)	(33.15)
Rating Factor	15.82	3.46	20.51	4.49	(20.51)	(4.49)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-6.08	6.08	2.94	-2.94	-4.68	4.68	2.26	-2.26
Total Load Effect	-6.27	6.27	2.76	-2.76	-4.86	4.86	2.08	-2.08
Resistance - Dead	-23.82	23.82	24.18	-24.18	-23.82	23.82	24.18	-24.18
Design Ratio	3.83	3.83	8.70	8.70	4.93	4.93	11.54	11.54
Rating Factor	3.92	3.92	8.21	8.21	5.09	5.09	10.68	10.68

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-6.08	6.08	2.94	-2.94	-4.68	4.68	2.26	-2.26
Total Load Effect	-6.27	6.27	2.76	-2.76	-4.86	4.86	2.08	-2.08
Resistance - Dead	-29.82	N/A	N/A	-30.18	-29.82	N/A	N/A	-30.18
Design Ratio	4.79	N/A	N/A	10.87	6.17	N/A	N/A	14.42
Rating Factor	4.90	N/A	N/A	10.25	6.37	N/A	N/A	13.33

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6
Dead Load Effect	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.2
Live Load Effect	139.5	-82.5	107.6	-63.6	107.6	-63.6	0.0	0.0
Total Load Effect	143.0	-79.0	111.1	-60.1	111.1	-60.1	4.2	4.2
Resistance - Dead	383.1	-387.0	383.1	-387.0	383.1	-387.0	382.4	382.4
Design Ratio	2.70	4.86	3.48	6.38	(3.48)	(6.38)	(91.97)	(91.97)
Rating Factor	2.75	4.69	3.56	6.08	(3.56)	(6.08)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	182.7	-182.7	182.7	-182.7	-182.7	-182.7
Dead Load Effect	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Live Load Effect	9.7	-59.5	7.4	-45.9	7.4	-45.9	0.0	0.0
Total Load Effect	5.1	-64.1	2.9	-50.5	2.9	-50.5	-5.5	-5.5
Resistance - Dead	187.3	-178.1	187.3	-178.1	187.3	-178.1	-177.2	-177.2
Design Ratio	36.09	2.85	63.97	3.62	(63.97)	(3.62)	(33.15)	(33.15)
Rating Factor	19.40	2.99	25.15	3.88	(25.15)	(3.88)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-6.84	6.84	4.04	-4.04	-5.26	5.26	3.11	-3.11
Total Load Effect	-7.02	7.02	3.86	-3.86	-5.44	5.44	2.92	-2.92
Resistance - Dead	-23.82	23.82	24.18	-24.18	-23.82	23.82	24.18	-24.18
Design Ratio	3.42	3.42	6.22	6.22	4.41	4.41	8.21	8.21
Rating Factor	3.48	3.48	5.98	5.98	4.53	4.53	7.78	7.78

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-6.84	6.84	4.04	-4.04	-5.26	5.26	3.11	-3.11
Total Load Effect	-7.02	7.02	3.86	-3.86	-5.44	5.44	2.92	-2.92
Resistance - Dead	-29.82	N/A	N/A	-30.18	-29.82	N/A	N/A	-30.18
Design Ratio	4.27	N/A	N/A	7.78	5.51	N/A	N/A	10.26
Rating Factor	4.36	N/A	N/A	7.47	5.67	N/A	N/A	9.71

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.2
Live Load Effect	64.9	-38.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	68.4	-34.5	3.5	3.5	3.5	3.5	4.2	4.2
Resistance - Dead	383.1	-387.0	383.1	383.1	383.1	383.1	382.4	382.4
Design Ratio	5.65	11.12	110.36	110.36	(110.36)	(110.36)	(91.97)	(91.97)
Rating Factor	5.90	10.19	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Live Load Effect	4.7	-29.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.2	-33.6	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Resistance - Dead	187.3	-178.1	-178.1	-178.1	-178.1	-178.1	-177.2	-177.2
Design Ratio	1193.37	5.44	39.78	39.78	(39.78)	(39.78)	(33.15)	(33.15)
Rating Factor	39.47	6.14	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-4.28	4.28	2.51	-2.51	0.00	0.00	0.00	0.00
Total Load Effect	-4.47	4.47	2.32	-2.32	-0.18	0.18	-0.18	0.18
Resistance - Dead	-23.82	23.82	24.18	-24.18	24.18	23.82	24.18	23.82
Design Ratio	5.37	5.37	10.34	10.34	N/A	129.84	N/A	129.84
Rating Factor	5.56	5.56	9.65	9.65	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-4.28	4.28	2.51	-2.51	0.00	0.00	0.00	0.00
Total Load Effect	-4.47	4.47	2.32	-2.32	-0.18	0.18	-0.18	0.18
Resistance - Dead	-29.82	N/A	N/A	-30.18	-29.82	N/A	-29.82	N/A
Design Ratio	6.72	N/A	N/A	12.92	162.29	N/A	162.29	N/A
Rating Factor	6.97	N/A	N/A	12.05	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.2
Live Load Effect	59.5	-34.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	63.0	-31.1	3.5	3.5	3.5	3.5	4.2	4.2
Resistance - Dead	383.1	-387.0	383.1	383.1	383.1	383.1	382.4	382.4
Design Ratio	6.13	12.32	110.36	110.36	(110.36)	(110.36)	(91.97)	(91.97)
Rating Factor	6.44	11.17	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Live Load Effect	4.3	-26.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.3	-31.2	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Resistance - Dead	-178.1	-178.1	-178.1	-178.1	-178.1	-178.1	-177.2	-177.2
Design Ratio	609.48	5.85	39.78	39.78	(39.78)	(39.78)	(33.15)	(33.15)
Rating Factor	N/A	6.69	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-3.93	3.93	2.29	-2.29	0.00	0.00	0.00	0.00
Total Load Effect	-4.11	4.11	2.10	-2.10	-0.18	0.18	-0.18	0.18
Resistance - Dead	-23.82	23.82	24.18	-24.18	24.18	23.82	24.18	23.82
Design Ratio	5.84	5.84	11.43	11.43	N/A	129.84	N/A	129.84
Rating Factor	6.06	6.06	10.58	10.58	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-3.93	3.93	2.29	-2.29	0.00	0.00	0.00	0.00
Total Load Effect	-4.11	4.11	2.10	-2.10	-0.18	0.18	-0.18	0.18
Resistance - Dead	-29.82	N/A	N/A	-30.18	-29.82	N/A	-29.82	N/A
Design Ratio	7.30	N/A	N/A	14.28	162.29	N/A	162.29	N/A
Rating Factor	7.59	N/A	N/A	13.21	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.2
Live Load Effect	53.5	-31.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	57.0	-27.8	3.5	3.5	3.5	3.5	4.2	4.2
Resistance - Dead	383.1	-387.0	383.1	383.1	383.1	383.1	382.4	382.4
Design Ratio	6.78	13.80	110.36	110.36	(110.36)	(110.36)	(91.97)	(91.97)
Rating Factor	7.16	12.37	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Live Load Effect	3.9	-23.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.7	-28.4	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Resistance - Dead	-178.1	-178.1	-178.1	-178.1	-178.1	-178.1	-177.2	-177.2
Design Ratio	260.64	6.42	39.78	39.78	(39.78)	(39.78)	(33.15)	(33.15)
Rating Factor	N/A	7.47	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-3.53	3.53	2.06	-2.06	0.00	0.00	0.00	0.00
Total Load Effect	-3.71	3.71	1.88	-1.88	-0.18	0.18	-0.18	0.18
Resistance - Dead	-23.82	23.82	24.18	-24.18	24.18	23.82	24.18	23.82
Design Ratio	6.46	6.46	12.77	12.77	N/A	129.84	N/A	129.84
Rating Factor	6.75	6.75	11.72	11.72	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-3.53	3.53	2.06	-2.06	0.00	0.00	0.00	0.00
Total Load Effect	-3.71	3.71	1.88	-1.88	-0.18	0.18	-0.18	0.18
Resistance - Dead	-29.82	N/A	N/A	-30.18	-29.82	N/A	-29.82	N/A
Design Ratio	8.08	N/A	N/A	15.96	162.29	N/A	162.29	N/A
Rating Factor	8.45	N/A	N/A	14.62	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.2
Live Load Effect	67.5	-42.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	71.0	-38.6	3.5	3.5	3.5	3.5	4.2	4.2
Resistance - Dead	383.1	-387.0	383.1	383.1	383.1	383.1	382.4	382.4
Design Ratio	5.45	9.93	110.36	110.36	(110.36)	(110.36)	(91.97)	(91.97)
Rating Factor	5.68	9.19	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Live Load Effect	3.8	-29.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-0.8	-34.4	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Resistance - Dead	-178.1	-178.1	-178.1	-178.1	-178.1	-178.1	-177.2	-177.2
Design Ratio	219.47	5.32	39.78	39.78	(39.78)	(39.78)	(33.15)	(33.15)
Rating Factor	N/A	5.98	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-4.45	4.45	2.78	-2.78	0.00	0.00	0.00	0.00
Total Load Effect	-4.64	4.64	2.59	-2.59	-0.18	0.18	-0.18	0.18
Resistance - Dead	-23.82	23.82	24.18	-24.18	24.18	23.82	24.18	23.82
Design Ratio	5.18	5.18	9.25	9.25	N/A	129.84	N/A	129.84
Rating Factor	5.35	5.35	8.71	8.71	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-4.45	4.45	2.78	-2.78	0.00	0.00	0.00	0.00
Total Load Effect	-4.64	4.64	2.59	-2.59	-0.18	0.18	-0.18	0.18
Resistance - Dead	-29.82	N/A	N/A	-30.18	-29.82	N/A	-29.82	N/A
Design Ratio	6.47	N/A	N/A	11.57	162.29	N/A	162.29	N/A
Rating Factor	6.70	N/A	N/A	10.87	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.2
Live Load Effect	67.4	-42.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	71.0	-38.6	3.5	3.5	3.5	3.5	4.2	4.2
Resistance - Dead	383.1	-387.0	383.1	383.1	383.1	383.1	382.4	382.4
Design Ratio	5.45	9.93	110.36	110.36	(110.36)	(110.36)	(91.97)	(91.97)
Rating Factor	5.68	9.19	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Live Load Effect	3.2	-29.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-1.4	-33.9	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Resistance - Dead	-178.1	-178.1	-178.1	-178.1	-178.1	-178.1	-177.2	-177.2
Design Ratio	131.39	5.39	39.78	39.78	(39.78)	(39.78)	(33.15)	(33.15)
Rating Factor	N/A	6.07	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-4.45	4.45	2.78	-2.78	0.00	0.00	0.00	0.00
Total Load Effect	-4.63	4.63	2.59	-2.59	-0.18	0.18	-0.18	0.18
Resistance - Dead	-23.82	23.82	24.18	-24.18	24.18	23.82	24.18	23.82
Design Ratio	5.18	5.18	9.26	9.26	N/A	129.84	N/A	129.84
Rating Factor	5.35	5.35	8.71	8.71	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-4.45	4.45	2.78	-2.78	0.00	0.00	0.00	0.00
Total Load Effect	-4.63	4.63	2.59	-2.59	-0.18	0.18	-0.18	0.18
Resistance - Dead	-29.82	N/A	N/A	-30.18	-29.82	N/A	-29.82	N/A
Design Ratio	6.47	N/A	N/A	11.57	162.29	N/A	162.29	N/A
Rating Factor	6.70	N/A	N/A	10.87	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.2
Live Load Effect	68.4	-42.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	71.9	-39.3	3.5	3.5	3.5	3.5	4.2	4.2
Resistance - Dead	383.1	-387.0	383.1	383.1	383.1	383.1	382.4	382.4
Design Ratio	5.37	9.76	110.36	110.36	(110.36)	(110.36)	(91.97)	(91.97)
Rating Factor	5.60	9.04	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Live Load Effect	3.1	-30.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-1.5	-34.8	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Resistance - Dead	-178.1	-178.1	-178.1	-178.1	-178.1	-178.1	-177.2	-177.2
Design Ratio	119.89	5.25	39.78	39.78	(39.78)	(39.78)	(33.15)	(33.15)
Rating Factor	N/A	5.90	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-4.51	4.51	2.82	-2.82	0.00	0.00	0.00	0.00
Total Load Effect	-4.70	4.70	2.64	-2.64	-0.18	0.18	-0.18	0.18
Resistance - Dead	-23.82	23.82	24.18	-24.18	24.18	23.82	24.18	23.82
Design Ratio	5.11	5.11	9.10	9.10	N/A	129.84	N/A	129.84
Rating Factor	5.28	5.28	8.57	8.57	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-4.51	4.51	2.82	-2.82	0.00	0.00	0.00	0.00
Total Load Effect	-4.70	4.70	2.64	-2.64	-0.18	0.18	-0.18	0.18
Resistance - Dead	-29.82	N/A	N/A	-30.18	-29.82	N/A	-29.82	N/A
Design Ratio	6.38	N/A	N/A	11.37	162.29	N/A	162.29	N/A
Rating Factor	6.60	N/A	N/A	10.69	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.2
Live Load Effect	59.9	-36.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	63.4	-32.6	3.5	3.5	3.5	3.5	4.2	4.2
Resistance - Dead	383.1	-387.0	383.1	383.1	383.1	383.1	382.4	382.4
Design Ratio	6.10	11.75	110.36	110.36	(110.36)	(110.36)	(91.97)	(91.97)
Rating Factor	6.40	10.71	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Live Load Effect	3.1	-30.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-1.5	-34.8	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Resistance - Dead	-178.1	-178.1	-178.1	-178.1	-178.1	-178.1	-177.2	-177.2
Design Ratio	119.89	5.25	39.78	39.78	(39.78)	(39.78)	(33.15)	(33.15)
Rating Factor	N/A	5.90	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-3.95	3.95	2.38	-2.38	0.00	0.00	0.00	0.00
Total Load Effect	-4.13	4.13	2.20	-2.20	-0.18	0.18	-0.18	0.18
Resistance - Dead	-23.82	23.82	24.18	-24.18	24.18	23.82	24.18	23.82
Design Ratio	5.81	5.81	10.91	10.91	N/A	129.84	N/A	129.84
Rating Factor	6.03	6.03	10.14	10.14	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-3.95	3.95	2.38	-2.38	0.00	0.00	0.00	0.00
Total Load Effect	-4.13	4.13	2.20	-2.20	-0.18	0.18	-0.18	0.18
Resistance - Dead	-29.82	N/A	N/A	-30.18	-29.82	N/A	-29.82	N/A
Design Ratio	7.26	N/A	N/A	13.64	162.29	N/A	162.29	N/A
Rating Factor	7.55	N/A	N/A	12.66	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	386.6	386.6	386.6	386.6	386.6
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6	6A6.9.6
Dead Load Effect	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.2
Live Load Effect	68.5	-42.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	72.0	-39.3	3.5	3.5	3.5	3.5	4.2	4.2
Resistance - Dead	383.1	-387.0	383.1	383.1	383.1	383.1	382.4	382.4
Design Ratio	5.37	9.76	110.36	110.36	(110.36)	(110.36)	(91.97)	(91.97)
Rating Factor	5.59	9.04	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Live Load Effect	4.7	-31.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.2	-36.2	-4.6	-4.6	-4.6	-4.6	-5.5	-5.5
Resistance - Dead	187.3	-178.1	-178.1	-178.1	-178.1	-178.1	-177.2	-177.2
Design Ratio	1215.17	5.05	39.78	39.78	(39.78)	(39.78)	(33.15)	(33.15)
Rating Factor	39.49	5.64	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 107.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-4.52	4.52	2.82	-2.82	0.00	0.00	0.00	0.00
Total Load Effect	-4.70	4.70	2.64	-2.64	-0.18	0.18	-0.18	0.18
Resistance - Dead	-23.82	23.82	24.18	-24.18	24.18	23.82	24.18	23.82
Design Ratio	5.10	5.10	9.10	9.10	N/A	129.84	N/A	129.84
Rating Factor	5.27	5.27	8.57	8.57	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	-30.00	N/A
Dead Load Effect	-0.18	0.18	-0.18	0.18	-0.18	0.18	-0.18	0.18
Live Load Effect	-4.52	4.52	2.82	-2.82	0.00	0.00	0.00	0.00
Total Load Effect	-4.70	4.70	2.64	-2.64	-0.18	0.18	-0.18	0.18
Resistance - Dead	-29.82	N/A	N/A	-30.18	-29.82	N/A	-29.82	N/A
Design Ratio	6.38	N/A	N/A	11.37	162.29	N/A	162.29	N/A
Rating Factor	6.60	N/A	N/A	10.69	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 108.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.6250			
Top Flange Thickness	=	0.3125	Top Flange Width	=	10.3750
Web Depth	=	28.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3125	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 11.333 ft
Maximum distance to Right Brace Point = 2.833 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 108.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 108.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 108.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 108.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Live Load Effect	83.4	-68.7	64.3	-53.0	64.3	-53.0	0.0	0.0
Total Load Effect	79.4	-72.7	60.3	-57.0	60.3	-57.0	-4.8	-4.8
Resistance - Dead	390.6	-379.5	390.6	-379.5	390.6	-379.5	-378.7	-378.7
Design Ratio	4.87	5.28	6.41	6.73	(6.41)	(6.73)	(79.82)	(79.82)
Rating Factor	4.68	5.53	6.07	7.16	(6.07)	(7.16)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Live Load Effect	7.1	-56.0	5.4	-43.2	5.4	-43.2	0.0	0.0
Total Load Effect	1.1	-62.0	-0.6	-49.2	-0.6	-49.2	-7.2	-7.2
Resistance - Dead	188.7	-176.7	-176.7	-176.7	-176.7	-176.7	-175.5	-175.5
Design Ratio	173.90	2.95	325.01	3.71	(325.01)	(3.71)	(25.35)	(25.35)
Rating Factor	26.74	3.16	N/A	4.09	(N/A)	(4.09)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-4.09	4.09	3.36	-3.36	-3.14	3.14	2.59	-2.59
Total Load Effect	-3.88	3.88	3.58	-3.58	-2.93	2.93	2.80	-2.80
Resistance - Dead	-24.21	24.21	23.79	-23.79	-24.21	24.21	23.79	-23.79
Design Ratio	6.19	6.19	6.71	6.71	8.18	8.18	8.57	8.57
Rating Factor	5.92	5.92	7.07	7.07	7.70	7.70	9.19	9.19

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-4.09	4.09	3.36	-3.36	-3.14	3.14	2.59	-2.59
Total Load Effect	-3.88	3.88	3.58	-3.58	-2.93	2.93	2.80	-2.80
Resistance - Dead	-30.21	N/A	N/A	-29.79	-30.21	N/A	N/A	-29.79
Design Ratio	7.74	N/A	N/A	8.39	10.23	N/A	N/A	10.72
Rating Factor	7.39	N/A	N/A	8.85	9.61	N/A	N/A	11.51

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Live Load Effect	83.6	-94.3	64.5	-72.7	64.5	-72.7	0.0	0.0
Total Load Effect	79.6	-98.3	60.5	-76.7	60.5	-76.7	-4.8	-4.8
Resistance - Dead	390.6	-379.5	390.6	-379.5	390.6	-379.5	-378.7	-378.7
Design Ratio	4.86	3.90	6.39	5.00	(6.39)	(5.00)	(79.82)	(79.82)
Rating Factor	4.67	4.03	6.06	5.22	(6.06)	(5.22)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Live Load Effect	3.9	-68.9	3.0	-53.1	3.0	-53.1	0.0	0.0
Total Load Effect	-2.1	-74.9	-3.0	-59.1	-3.0	-59.1	-7.2	-7.2
Resistance - Dead	-176.7	-176.7	-176.7	-176.7	-176.7	-176.7	-175.5	-175.5
Design Ratio	87.88	2.44	61.38	3.09	(61.38)	(3.09)	(25.35)	(25.35)
Rating Factor	N/A	2.57	N/A	3.33	(N/A)	(3.33)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-4.10	4.10	4.62	-4.62	-3.15	3.15	3.55	-3.55
Total Load Effect	-3.89	3.89	4.83	-4.83	-2.94	2.94	3.76	-3.76
Resistance - Dead	-24.21	24.21	23.79	-23.79	-24.21	24.21	23.79	-23.79
Design Ratio	6.18	6.18	4.97	4.97	8.16	8.16	6.38	6.38
Rating Factor	5.91	5.91	5.15	5.15	7.68	7.68	6.70	6.70

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-4.10	4.10	4.62	-4.62	-3.15	3.15	3.55	-3.55
Total Load Effect	-3.89	3.89	4.83	-4.83	-2.94	2.94	3.76	-3.76
Resistance - Dead	-30.21	N/A	N/A	-29.79	-30.21	N/A	N/A	-29.79
Design Ratio	7.72	N/A	N/A	6.21	10.20	N/A	N/A	7.97
Rating Factor	7.37	N/A	N/A	6.45	9.59	N/A	N/A	8.38

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Live Load Effect	39.5	-43.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	35.5	-47.4	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Resistance - Dead	390.6	-379.5	-379.5	-379.5	-379.5	-379.5	-378.7	-378.7
Design Ratio	10.90	8.09	95.79	95.79	(95.79)	(95.79)	(79.82)	(79.82)
Rating Factor	9.90	8.74	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Live Load Effect	2.6	-32.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-3.4	-38.8	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Resistance - Dead	-176.7	-176.7	-176.7	-176.7	-176.7	-176.7	-175.5	-175.5
Design Ratio	53.15	4.71	30.42	30.42	(30.42)	(30.42)	(25.35)	(25.35)
Rating Factor	N/A	5.39	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-2.60	2.60	2.86	-2.86	0.00	0.00	0.00	0.00
Total Load Effect	-2.39	2.39	3.08	-3.08	0.21	-0.21	0.21	-0.21
Resistance - Dead	-24.21	24.21	23.79	-23.79	23.79	24.21	23.79	24.21
Design Ratio	10.03	10.03	7.80	7.80	113.61	N/A	113.61	N/A
Rating Factor	9.30	9.30	8.31	8.31	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-2.60	2.60	2.86	-2.86	0.00	0.00	0.00	0.00
Total Load Effect	-2.39	2.39	3.08	-3.08	0.21	-0.21	0.21	-0.21
Resistance - Dead	-30.21	N/A	N/A	-29.79	N/A	-29.79	N/A	-29.79
Design Ratio	12.54	N/A	N/A	9.76	N/A	142.01	N/A	142.01
Rating Factor	11.61	N/A	N/A	10.40	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Live Load Effect	36.2	-39.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	32.2	-43.6	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Resistance - Dead	390.6	-379.5	-379.5	-379.5	-379.5	-379.5	-378.7	-378.7
Design Ratio	12.01	8.80	95.79	95.79	(95.79)	(95.79)	(79.82)	(79.82)
Rating Factor	10.79	9.59	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Live Load Effect	1.7	-30.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-4.3	-36.4	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Resistance - Dead	-176.7	-176.7	-176.7	-176.7	-176.7	-176.7	-175.5	-175.5
Design Ratio	42.89	5.02	30.42	30.42	(30.42)	(30.42)	(25.35)	(25.35)
Rating Factor	N/A	5.82	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-2.39	2.39	2.61	-2.61	0.00	0.00	0.00	0.00
Total Load Effect	-2.18	2.18	2.82	-2.82	0.21	-0.21	0.21	-0.21
Resistance - Dead	-24.21	24.21	23.79	-23.79	23.79	24.21	23.79	24.21
Design Ratio	11.03	11.03	8.50	8.50	113.61	N/A	113.61	N/A
Rating Factor	10.14	10.14	9.11	9.11	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-2.39	2.39	2.61	-2.61	0.00	0.00	0.00	0.00
Total Load Effect	-2.18	2.18	2.82	-2.82	0.21	-0.21	0.21	-0.21
Resistance - Dead	-30.21	N/A	N/A	-29.79	N/A	-29.79	N/A	-29.79
Design Ratio	13.79	N/A	N/A	10.63	N/A	142.01	N/A	142.01
Rating Factor	12.65	N/A	N/A	11.41	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Live Load Effect	32.4	-35.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	28.4	-39.8	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Resistance - Dead	390.6	-379.5	-379.5	-379.5	-379.5	-379.5	-378.7	-378.7
Design Ratio	13.60	9.64	95.79	95.79	(95.79)	(95.79)	(79.82)	(79.82)
Rating Factor	12.04	10.61	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Live Load Effect	2.3	-26.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-3.7	-32.9	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Resistance - Dead	-176.7	-176.7	-176.7	-176.7	-176.7	-176.7	-175.5	-175.5
Design Ratio	48.80	5.56	30.42	30.42	(30.42)	(30.42)	(25.35)	(25.35)
Rating Factor	N/A	6.58	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-2.14	2.14	2.36	-2.36	0.00	0.00	0.00	0.00
Total Load Effect	-1.93	1.93	2.57	-2.57	0.21	-0.21	0.21	-0.21
Resistance - Dead	-24.21	24.21	23.79	-23.79	23.79	24.21	23.79	24.21
Design Ratio	12.45	12.45	9.34	9.34	113.61	N/A	113.61	N/A
Rating Factor	11.32	11.32	10.08	10.08	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-2.14	2.14	2.36	-2.36	0.00	0.00	0.00	0.00
Total Load Effect	-1.93	1.93	2.57	-2.57	0.21	-0.21	0.21	-0.21
Resistance - Dead	-30.21	N/A	N/A	-29.79	N/A	-29.79	N/A	-29.79
Design Ratio	15.56	N/A	N/A	11.67	N/A	142.01	N/A	142.01
Rating Factor	14.12	N/A	N/A	12.63	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Live Load Effect	39.8	-48.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	35.8	-52.1	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Resistance - Dead	390.6	-379.5	-379.5	-379.5	-379.5	-379.5	-378.7	-378.7
Design Ratio	10.79	7.36	95.79	95.79	(95.79)	(95.79)	(79.82)	(79.82)
Rating Factor	9.81	7.88	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Live Load Effect	1.0	-35.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-5.0	-41.3	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Resistance - Dead	-176.7	-176.7	-176.7	-176.7	-176.7	-176.7	-175.5	-175.5
Design Ratio	36.26	4.43	30.42	30.42	(30.42)	(30.42)	(25.35)	(25.35)
Rating Factor	N/A	5.01	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-2.63	2.63	3.17	-3.17	0.00	0.00	0.00	0.00
Total Load Effect	-2.42	2.42	3.39	-3.39	0.21	-0.21	0.21	-0.21
Resistance - Dead	-24.21	24.21	23.79	-23.79	23.79	24.21	23.79	24.21
Design Ratio	9.94	9.94	7.09	7.09	113.61	N/A	113.61	N/A
Rating Factor	9.22	9.22	7.49	7.49	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-2.63	2.63	3.17	-3.17	0.00	0.00	0.00	0.00
Total Load Effect	-2.42	2.42	3.39	-3.39	0.21	-0.21	0.21	-0.21
Resistance - Dead	-30.21	N/A	N/A	-29.79	N/A	-29.79	N/A	-29.79
Design Ratio	12.42	N/A	N/A	8.86	N/A	142.01	N/A	142.01
Rating Factor	11.50	N/A	N/A	9.38	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Live Load Effect	39.9	-48.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	35.9	-52.1	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Resistance - Dead	390.6	-379.5	-379.5	-379.5	-379.5	-379.5	-378.7	-378.7
Design Ratio	10.78	7.36	95.79	95.79	(95.79)	(95.79)	(79.82)	(79.82)
Rating Factor	9.80	7.88	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Live Load Effect	0.7	-34.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-5.3	-40.9	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Resistance - Dead	-176.7	-176.7	-176.7	-176.7	-176.7	-176.7	-175.5	-175.5
Design Ratio	34.23	4.47	30.42	30.42	(30.42)	(30.42)	(25.35)	(25.35)
Rating Factor	N/A	5.07	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-2.63	2.63	3.17	-3.17	0.00	0.00	0.00	0.00
Total Load Effect	-2.42	2.42	3.39	-3.39	0.21	-0.21	0.21	-0.21
Resistance - Dead	-24.21	24.21	23.79	-23.79	23.79	24.21	23.79	24.21
Design Ratio	9.92	9.92	7.09	7.09	113.61	N/A	113.61	N/A
Rating Factor	9.21	9.21	7.49	7.49	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-2.63	2.63	3.17	-3.17	0.00	0.00	0.00	0.00
Total Load Effect	-2.42	2.42	3.39	-3.39	0.21	-0.21	0.21	-0.21
Resistance - Dead	-30.21	N/A	N/A	-29.79	N/A	-29.79	N/A	-29.79
Design Ratio	12.40	N/A	N/A	8.86	N/A	142.01	N/A	142.01
Rating Factor	11.49	N/A	N/A	9.38	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Live Load Effect	35.7	-48.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	31.7	-52.9	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Resistance - Dead	390.6	-379.5	-379.5	-379.5	-379.5	-379.5	-378.7	-378.7
Design Ratio	12.20	7.25	95.79	95.79	(95.79)	(95.79)	(79.82)	(79.82)
Rating Factor	10.94	7.76	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Live Load Effect	0.6	-36.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-5.4	-42.2	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Resistance - Dead	-176.7	-176.7	-176.7	-176.7	-176.7	-176.7	-175.5	-175.5
Design Ratio	33.72	4.33	30.42	30.42	(30.42)	(30.42)	(25.35)	(25.35)
Rating Factor	N/A	4.88	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-2.35	2.35	3.23	-3.23	0.00	0.00	0.00	0.00
Total Load Effect	-2.14	2.14	3.44	-3.44	0.21	-0.21	0.21	-0.21
Resistance - Dead	-24.21	24.21	23.79	-23.79	23.79	24.21	23.79	24.21
Design Ratio	11.20	11.20	6.98	6.98	113.61	N/A	113.61	N/A
Rating Factor	10.28	10.28	7.37	7.37	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-2.35	2.35	3.23	-3.23	0.00	0.00	0.00	0.00
Total Load Effect	-2.14	2.14	3.44	-3.44	0.21	-0.21	0.21	-0.21
Resistance - Dead	-30.21	N/A	N/A	-29.79	N/A	-29.79	N/A	-29.79
Design Ratio	14.00	N/A	N/A	8.73	N/A	142.01	N/A	142.01
Rating Factor	12.83	N/A	N/A	9.23	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Live Load Effect	24.7	-41.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	20.7	-45.3	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Resistance - Dead	390.6	-379.5	-379.5	-379.5	-379.5	-379.5	-378.7	-378.7
Design Ratio	18.72	8.46	95.79	95.79	(95.79)	(95.79)	(79.82)	(79.82)
Rating Factor	15.84	9.19	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Live Load Effect	0.6	-36.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-5.4	-42.2	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Resistance - Dead	-176.7	-176.7	-176.7	-176.7	-176.7	-176.7	-175.5	-175.5
Design Ratio	33.72	4.33	30.42	30.42	(30.42)	(30.42)	(25.35)	(25.35)
Rating Factor	N/A	4.88	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-1.63	1.63	2.72	-2.72	0.00	0.00	0.00	0.00
Total Load Effect	-1.42	1.42	2.94	-2.94	0.21	-0.21	0.21	-0.21
Resistance - Dead	-24.21	24.21	23.79	-23.79	23.79	24.21	23.79	24.21
Design Ratio	16.96	16.96	8.17	8.17	113.61	N/A	113.61	N/A
Rating Factor	14.89	14.89	8.73	8.73	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-1.63	1.63	2.72	-2.72	0.00	0.00	0.00	0.00
Total Load Effect	-1.42	1.42	2.94	-2.94	0.21	-0.21	0.21	-0.21
Resistance - Dead	-30.21	N/A	N/A	-29.79	N/A	-29.79	N/A	-29.79
Design Ratio	21.20	N/A	N/A	10.22	N/A	142.01	N/A	142.01
Rating Factor	18.57	N/A	N/A	10.93	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Live Load Effect	39.9	-48.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	35.9	-52.9	-4.0	-4.0	-4.0	-4.0	-4.8	-4.8
Resistance - Dead	390.6	-379.5	-379.5	-379.5	-379.5	-379.5	-378.7	-378.7
Design Ratio	10.76	7.25	95.79	95.79	(95.79)	(95.79)	(79.82)	(79.82)
Rating Factor	9.78	7.76	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Live Load Effect	2.7	-37.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-3.3	-43.4	-6.0	-6.0	-6.0	-6.0	-7.2	-7.2
Resistance - Dead	-176.7	-176.7	-176.7	-176.7	-176.7	-176.7	-175.5	-175.5
Design Ratio	55.76	4.21	30.42	30.42	(30.42)	(30.42)	(25.35)	(25.35)
Rating Factor	N/A	4.73	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 108.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-2.63	2.63	3.23	-3.23	0.00	0.00	0.00	0.00
Total Load Effect	-2.42	2.42	3.44	-3.44	0.21	-0.21	0.21	-0.21
Resistance - Dead	-24.21	24.21	23.79	-23.79	23.79	24.21	23.79	24.21
Design Ratio	9.90	9.90	6.98	6.98	113.61	N/A	113.61	N/A
Rating Factor	9.19	9.19	7.37	7.37	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.21	-0.21	0.21	-0.21	0.21	-0.21	0.21	-0.21
Live Load Effect	-2.63	2.63	3.23	-3.23	0.00	0.00	0.00	0.00
Total Load Effect	-2.42	2.42	3.44	-3.44	0.21	-0.21	0.21	-0.21
Resistance - Dead	-30.21	N/A	N/A	-29.79	N/A	-29.79	N/A	-29.79
Design Ratio	12.38	N/A	N/A	8.73	N/A	142.01	N/A	142.01
Rating Factor	11.47	N/A	N/A	9.23	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 109.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.6250			
Top Flange Thickness	=	0.3125	Top Flange Width	=	10.3750
Web Depth	=	28.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3125	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 12.750 ft
Maximum distance to Right Brace Point = 1.417 ft
Is analysis point braced? NO

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 109.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 109.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 109.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 109.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	386.6	-383.5	386.6	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-13.5	-13.5	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Live Load Effect	39.5	-108.3	30.4	-83.5	30.4	-83.5	0.0	0.0
Total Load Effect	25.9	-121.8	16.9	-97.0	16.9	-97.0	-16.2	-16.2
Resistance - Dead	400.1	-370.0	400.1	-370.0	400.1	-370.0	-367.3	-367.3
Design Ratio	14.90	3.15	22.84	3.95	(22.84)	(3.95)	(23.65)	(23.65)
Rating Factor	10.14	3.42	13.14	4.43	(13.14)	(4.43)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Live Load Effect	3.0	-59.8	2.3	-46.1	2.3	-46.1	0.0	0.0
Total Load Effect	-4.4	-67.2	-5.1	-53.5	-5.1	-53.5	-8.9	-8.9
Resistance - Dead	-175.3	-175.3	-175.3	-175.3	-175.3	-175.3	-173.8	-173.8
Design Ratio	41.74	2.72	36.02	3.41	(36.02)	(3.41)	(20.52)	(20.52)
Rating Factor	N/A	2.93	N/A	3.80	(N/A)	(3.80)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-1.93	1.93	5.31	-5.31	-1.49	1.49	4.08	-4.08
Total Load Effect	-1.22	1.22	6.02	-6.02	-0.77	0.77	4.79	-4.79
Resistance - Dead	-24.71	24.71	23.29	-23.29	-24.71	24.71	23.29	-23.29
Design Ratio	19.66	19.66	3.99	3.99	31.00	31.00	5.01	5.01
Rating Factor	12.78	12.78	4.39	4.39	16.62	16.62	5.71	5.71

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	-30.00	N/A	N/A	-30.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-1.93	1.93	5.31	-5.31	-1.49	1.49	4.08	-4.08
Total Load Effect	-1.22	1.22	6.02	-6.02	-0.77	0.77	4.79	-4.79
Resistance - Dead	-30.71	N/A	N/A	-29.29	-30.71	N/A	N/A	-29.29
Design Ratio	24.58	N/A	N/A	4.98	38.75	N/A	N/A	6.26
Rating Factor	15.89	N/A	N/A	5.52	20.65	N/A	N/A	7.18

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-13.5	-13.5	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Live Load Effect	16.5	-108.9	12.8	-84.0	12.8	-84.0	0.0	0.0
Total Load Effect	3.0	-122.5	-0.7	-97.6	-0.7	-97.6	-16.2	-16.2
Resistance - Dead	400.1	-370.0	-370.0	-370.0	-370.0	-370.0	-367.3	-367.3
Design Ratio	127.50	3.13	511.77	3.93	(511.77)	(3.93)	(23.65)	(23.65)
Rating Factor	24.18	3.40	N/A	4.40	(N/A)	(4.40)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Live Load Effect	0.0	-77.4	0.0	-59.7	0.0	-59.7	0.0	0.0
Total Load Effect	-7.4	-84.9	-7.4	-67.2	-7.4	-67.2	-8.9	-8.9
Resistance - Dead	-175.3	-175.3	-175.3	-175.3	-175.3	-175.3	-173.8	-173.8
Design Ratio	24.74	2.15	24.71	2.72	(24.71)	(2.72)	(20.52)	(20.52)
Rating Factor	N/A	2.26	N/A	2.93	(N/A)	(2.93)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	-24.00	24.00	24.00	-24.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.81	0.81	5.34	-5.34	-0.62	0.62	4.11	-4.11
Total Load Effect	-0.10	0.10	6.05	-6.05	0.09	-0.09	4.82	-4.82
Resistance - Dead	-24.71	24.71	23.29	-23.29	-24.71	24.71	23.29	-23.29
Design Ratio	245.80	245.80	3.97	3.97	N/A	N/A	4.98	4.98
Rating Factor	30.49	30.49	4.36	4.36	39.63	39.63	5.67	5.67

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.81	0.81	5.34	-5.34	-0.62	0.62	4.11	-4.11
Total Load Effect	-0.10	0.10	6.05	-6.05	0.09	-0.09	4.82	-4.82
Resistance - Dead	-30.71	N/A	N/A	-29.29	N/A	-29.29	N/A	-29.29
Design Ratio	307.24	N/A	N/A	4.96	N/A	335.47	N/A	6.23
Rating Factor	37.89	N/A	N/A	5.49	N/A	N/A	N/A	7.13

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-13.5	-13.5	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Live Load Effect	14.3	-57.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.8	-70.7	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Resistance - Dead	400.1	-370.0	-370.0	-370.0	-370.0	-370.0	-367.3	-367.3
Design Ratio	470.71	5.42	28.38	28.38	(28.38)	(28.38)	(23.65)	(23.65)
Rating Factor	27.92	6.47	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Live Load Effect	1.1	-36.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-6.3	-43.5	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Resistance - Dead	-175.3	-175.3	-175.3	-175.3	-175.3	-175.3	-173.8	-173.8
Design Ratio	29.00	4.20	24.63	24.63	(24.63)	(24.63)	(20.52)	(20.52)
Rating Factor	N/A	4.85	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.95	0.95	3.77	-3.77	0.00	0.00	0.00	0.00
Total Load Effect	-0.23	0.23	4.49	-4.49	0.71	-0.71	0.71	-0.71
Resistance - Dead	-24.71	24.71	23.29	-23.29	23.29	24.71	23.29	24.71
Design Ratio	103.26	103.26	5.35	5.35	33.66	N/A	33.66	N/A
Rating Factor	26.14	26.14	6.17	6.17	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.95	0.95	3.77	-3.77	0.00	0.00	0.00	0.00
Total Load Effect	-0.23	0.23	4.49	-4.49	0.71	-0.71	0.71	-0.71
Resistance - Dead	-30.71	N/A	N/A	-29.29	N/A	-29.29	N/A	-29.29
Design Ratio	129.08	N/A	N/A	6.69	N/A	42.08	N/A	42.08
Rating Factor	32.49	N/A	N/A	7.76	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-13.5	-13.5	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Live Load Effect	7.1	-50.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-6.4	-64.2	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Resistance - Dead	-370.0	-370.0	-370.0	-370.0	-370.0	-370.0	-367.3	-367.3
Design Ratio	60.20	5.98	28.38	28.38	(28.38)	(28.38)	(23.65)	(23.65)
Rating Factor	N/A	7.30	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Live Load Effect	0.0	-33.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-7.4	-41.1	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Resistance - Dead	-175.3	-175.3	-175.3	-175.3	-175.3	-175.3	-173.8	-173.8
Design Ratio	24.63	4.45	24.63	24.63	(24.63)	(24.63)	(20.52)	(20.52)
Rating Factor	N/A	5.21	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.47	0.47	3.34	-3.34	0.00	0.00	0.00	0.00
Total Load Effect	0.24	-0.24	4.05	-4.05	0.71	-0.71	0.71	-0.71
Resistance - Dead	-24.71	24.71	23.29	-23.29	23.29	24.71	23.29	24.71
Design Ratio	N/A	N/A	5.92	5.92	33.66	N/A	33.66	N/A
Rating Factor	52.47	52.47	6.97	6.97	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.47	0.47	3.34	-3.34	0.00	0.00	0.00	0.00
Total Load Effect	0.24	-0.24	4.05	-4.05	0.71	-0.71	0.71	-0.71
Resistance - Dead	N/A	-29.29	N/A	-29.29	N/A	-29.29	N/A	-29.29
Design Ratio	N/A	123.99	N/A	7.40	N/A	42.08	N/A	42.08
Rating Factor	N/A	N/A	N/A	8.76	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-13.5	-13.5	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Live Load Effect	14.3	-47.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	0.8	-60.6	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Resistance - Dead	400.1	-370.0	-370.0	-370.0	-370.0	-370.0	-367.3	-367.3
Design Ratio	513.16	6.32	28.38	28.38	(28.38)	(28.38)	(23.65)	(23.65)
Rating Factor	28.05	7.85	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Live Load Effect	1.1	-29.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-6.3	-37.1	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Resistance - Dead	-175.3	-175.3	-175.3	-175.3	-175.3	-175.3	-173.8	-173.8
Design Ratio	29.00	4.93	24.63	24.63	(24.63)	(24.63)	(20.52)	(20.52)
Rating Factor	N/A	5.91	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.94	0.94	3.11	-3.11	0.00	0.00	0.00	0.00
Total Load Effect	-0.23	0.23	3.82	-3.82	0.71	-0.71	0.71	-0.71
Resistance - Dead	-24.71	24.71	23.29	-23.29	23.29	24.71	23.29	24.71
Design Ratio	105.29	105.29	6.28	6.28	33.66	N/A	33.66	N/A
Rating Factor	26.26	26.26	7.49	7.49	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.94	0.94	3.11	-3.11	0.00	0.00	0.00	0.00
Total Load Effect	-0.23	0.23	3.82	-3.82	0.71	-0.71	0.71	-0.71
Resistance - Dead	-30.71	N/A	N/A	-29.29	N/A	-29.29	N/A	-29.29
Design Ratio	131.61	N/A	N/A	7.85	N/A	42.08	N/A	42.08
Rating Factor	32.64	N/A	N/A	9.42	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-13.5	-13.5	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Live Load Effect	7.5	-60.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-6.0	-74.3	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Resistance - Dead	-370.0	-370.0	-370.0	-370.0	-370.0	-370.0	-367.3	-367.3
Design Ratio	64.18	5.16	28.38	28.38	(28.38)	(28.38)	(23.65)	(23.65)
Rating Factor	N/A	6.08	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Live Load Effect	0.0	-40.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-7.4	-47.7	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Resistance - Dead	-175.3	-175.3	-175.3	-175.3	-175.3	-175.3	-173.8	-173.8
Design Ratio	24.63	3.83	24.63	24.63	(24.63)	(24.63)	(20.52)	(20.52)
Rating Factor	N/A	4.35	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.50	0.50	4.01	-4.01	0.00	0.00	0.00	0.00
Total Load Effect	0.22	-0.22	4.73	-4.73	0.71	-0.71	0.71	-0.71
Resistance - Dead	-24.71	24.71	23.29	-23.29	23.29	24.71	23.29	24.71
Design Ratio	N/A	N/A	5.08	5.08	33.66	N/A	33.66	N/A
Rating Factor	49.71	49.71	5.80	5.80	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.50	0.50	4.01	-4.01	0.00	0.00	0.00	0.00
Total Load Effect	0.22	-0.22	4.73	-4.73	0.71	-0.71	0.71	-0.71
Resistance - Dead	N/A	-29.29	N/A	-29.29	N/A	-29.29	N/A	-29.29
Design Ratio	N/A	138.98	N/A	6.35	N/A	42.08	N/A	42.08
Rating Factor	N/A	N/A	N/A	7.30	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-13.5	-13.5	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Live Load Effect	7.5	-54.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-6.0	-67.7	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Resistance - Dead	-370.0	-370.0	-370.0	-370.0	-370.0	-370.0	-367.3	-367.3
Design Ratio	64.18	5.67	28.38	28.38	(28.38)	(28.38)	(23.65)	(23.65)
Rating Factor	N/A	6.83	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Live Load Effect	0.0	-40.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-7.4	-47.9	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Resistance - Dead	-175.3	-175.3	-175.3	-175.3	-175.3	-175.3	-173.8	-173.8
Design Ratio	24.63	3.82	24.63	24.63	(24.63)	(24.63)	(20.52)	(20.52)
Rating Factor	N/A	4.33	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.50	0.50	3.57	-3.57	0.00	0.00	0.00	0.00
Total Load Effect	0.22	-0.22	4.28	-4.28	0.71	-0.71	0.71	-0.71
Resistance - Dead	-24.71	24.71	23.29	-23.29	23.29	24.71	23.29	24.71
Design Ratio	N/A	N/A	5.60	5.60	33.66	N/A	33.66	N/A
Rating Factor	49.71	49.71	6.52	6.52	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.50	0.50	3.57	-3.57	0.00	0.00	0.00	0.00
Total Load Effect	0.22	-0.22	4.28	-4.28	0.71	-0.71	0.71	-0.71
Resistance - Dead	N/A	-29.29	N/A	-29.29	N/A	-29.29	N/A	-29.29
Design Ratio	N/A	138.98	N/A	7.00	N/A	42.08	N/A	42.08
Rating Factor	N/A	N/A	N/A	8.20	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-13.5	-13.5	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Live Load Effect	7.1	-55.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-6.4	-69.2	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Resistance - Dead	-370.0	-370.0	-370.0	-370.0	-370.0	-370.0	-367.3	-367.3
Design Ratio	59.71	5.54	28.38	28.38	(28.38)	(28.38)	(23.65)	(23.65)
Rating Factor	N/A	6.64	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Live Load Effect	0.0	-41.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-7.4	-49.0	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Resistance - Dead	-175.3	-175.3	-175.3	-175.3	-175.3	-175.3	-173.8	-173.8
Design Ratio	24.63	3.73	24.63	24.63	(24.63)	(24.63)	(20.52)	(20.52)
Rating Factor	N/A	4.22	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.47	0.47	3.68	-3.68	0.00	0.00	0.00	0.00
Total Load Effect	0.25	-0.25	4.39	-4.39	0.71	-0.71	0.71	-0.71
Resistance - Dead	-24.71	24.71	23.29	-23.29	23.29	24.71	23.29	24.71
Design Ratio	N/A	N/A	5.47	5.47	33.66	N/A	33.66	N/A
Rating Factor	52.85	52.85	6.33	6.33	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.47	0.47	3.68	-3.68	0.00	0.00	0.00	0.00
Total Load Effect	0.25	-0.25	4.39	-4.39	0.71	-0.71	0.71	-0.71
Resistance - Dead	N/A	-29.29	N/A	-29.29	N/A	-29.29	N/A	-29.29
Design Ratio	N/A	122.25	N/A	6.84	N/A	42.08	N/A	42.08
Rating Factor	N/A	N/A	N/A	7.97	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-13.5	-13.5	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Live Load Effect	7.1	-55.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-6.4	-69.2	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Resistance - Dead	-370.0	-370.0	-370.0	-370.0	-370.0	-370.0	-367.3	-367.3
Design Ratio	59.71	5.54	28.38	28.38	(28.38)	(28.38)	(23.65)	(23.65)
Rating Factor	N/A	6.64	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Live Load Effect	0.0	-42.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-7.4	-49.5	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Resistance - Dead	-175.3	-175.3	-175.3	-175.3	-175.3	-175.3	-173.8	-173.8
Design Ratio	24.63	3.69	24.63	24.63	(24.63)	(24.63)	(20.52)	(20.52)
Rating Factor	N/A	4.16	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.47	0.47	3.68	-3.68	0.00	0.00	0.00	0.00
Total Load Effect	0.25	-0.25	4.39	-4.39	0.71	-0.71	0.71	-0.71
Resistance - Dead	-24.71	24.71	23.29	-23.29	23.29	24.71	23.29	24.71
Design Ratio	N/A	N/A	5.47	5.47	33.66	N/A	33.66	N/A
Rating Factor	52.85	52.85	6.33	6.33	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-0.47	0.47	3.68	-3.68	0.00	0.00	0.00	0.00
Total Load Effect	0.25	-0.25	4.39	-4.39	0.71	-0.71	0.71	-0.71
Resistance - Dead	N/A	-29.29	N/A	-29.29	N/A	-29.29	N/A	-29.29
Design Ratio	N/A	122.25	N/A	6.84	N/A	42.08	N/A	42.08
Rating Factor	N/A	N/A	N/A	7.97	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	386.6	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	6A6.9.6	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-13.5	-13.5	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Live Load Effect	15.2	-61.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	1.7	-75.4	-13.5	-13.5	-13.5	-13.5	-16.2	-16.2
Resistance - Dead	400.1	-370.0	-370.0	-370.0	-370.0	-370.0	-367.3	-367.3
Design Ratio	230.27	5.09	28.38	28.38	(28.38)	(28.38)	(23.65)	(23.65)
Rating Factor	26.34	5.98	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Live Load Effect	1.2	-43.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-6.2	-50.6	-7.4	-7.4	-7.4	-7.4	-8.9	-8.9
Resistance - Dead	-175.3	-175.3	-175.3	-175.3	-175.3	-175.3	-173.8	-173.8
Design Ratio	29.32	3.61	24.63	24.63	(24.63)	(24.63)	(20.52)	(20.52)
Rating Factor	N/A	4.06	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 109.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-1.00	1.00	4.08	-4.08	0.00	0.00	0.00	0.00
Total Load Effect	-0.29	0.29	4.79	-4.79	0.71	-0.71	0.71	-0.71
Resistance - Dead	-24.71	24.71	23.29	-23.29	23.29	24.71	23.29	24.71
Design Ratio	83.05	83.05	5.01	5.01	33.66	N/A	33.66	N/A
Rating Factor	24.66	24.66	5.71	5.71	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	-30.00	N/A	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	0.71	-0.71	0.71	-0.71	0.71	-0.71	0.71	-0.71
Live Load Effect	-1.00	1.00	4.08	-4.08	0.00	0.00	0.00	0.00
Total Load Effect	-0.29	0.29	4.79	-4.79	0.71	-0.71	0.71	-0.71
Resistance - Dead	-30.71	N/A	N/A	-29.29	N/A	-29.29	N/A	-29.29
Design Ratio	103.81	N/A	N/A	6.26	N/A	42.08	N/A	42.08
Rating Factor	30.65	N/A	N/A	7.18	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

POINT OF INTEREST SUMMARY: Steel Section (Non-composite)

Point of Interest : 110.000
Construction Stage: 1

SECTION DIMENSIONS: (in)

Section Depth	=	28.6250			
Top Flange Thickness	=	0.3125	Top Flange Width	=	10.3750
Web Depth	=	28.0000	Web Thickness	=	0.3750
Bottom Flange Thickness	=	0.3125	Bottom Flange Width	=	10.3750

MATERIAL STRENGTHS: (ksi)

		Fy
Top Flange	=	30.00
Web	=	30.00
Bottom Flange	=	30.00

STIFFENER INFORMATION:

Longitudinal Stiffeners: None present.

Transverse Stiffeners: None present.

Bearing Stiffeners: None present.

BRACING INFORMATION:
Maximum distance to Left Brace Point = 14.167 ft
Maximum distance to Right Brace Point = 0.000 ft
Is analysis point braced? YES

MOMENT GRADIENT CORRECTION INFORMATION:
Method: User Defined or Standard? STANDARD

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 110.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 1 - HL-93-TRUCK + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 2 - HL-93-TANDEM + HL-93-LANE				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 3 - TYPE3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 110.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 4 - TYPE3S2				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 5 - TYPE3-3				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 6 - SU4				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 110.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

AASHTO Reference	Strength Limit State:	MAXIMUM EFFECTS I	I-O	II	IV	MINIMUM EFFECTS I	I-O	II	IV
Live Load Combo 7 - SU5				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 8 - SU6				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Live Load Combo 9 - SU7				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

SUMMARY OF AASHTO LRFD SPECIFICATION CHECKS:

Point of Interest : 110.000
Construction Stage: 1

Cross-section Proportion Limits:

6.10.2.1 Web Proportions	PASS
6.10.2.2 Flange Proportions (Top Flange)	FAIL
6.10.2.2 Flange Proportions (Bottom Flange)	FAIL

		MAXIMUM EFFECTS				MINIMUM EFFECTS			
AASHTO Reference	Strength Limit State:	I	I-O	II	IV	I	I-O	II	IV
Live Load Combo 10 - NRL				(TRK)					
	Is section compact?	YES	YES	YES	YES	YES	YES	YES	YES
6.10.6.2.3	Yield Stress	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
6.10.6.2.3	Noncompact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.1	General (Flange Proportions)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
A6.2.1	Compact Web Slenderness	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

=> Note: For clarity ' .. ' means Not Applicable.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Live Load Effect	0.0	-168.4	0.0	-129.9	0.0	-129.9	0.0	0.0
Total Load Effect	-25.0	-193.4	-25.0	-154.9	-25.0	-154.9	-30.0	-30.0
Resistance - Dead	-358.5	-358.5	-358.5	-358.5	-358.5	-358.5	-353.5	-353.5
Design Ratio	15.33	1.98	15.33	2.48	(15.33)	(2.48)	(12.77)	(12.77)
Rating Factor	N/A	2.13	N/A	2.76	(N/A)	(2.76)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Live Load Effect	0.0	-62.9	0.0	-48.6	0.0	-48.6	0.0	0.0
Total Load Effect	-8.8	-71.8	-8.8	-57.4	-8.8	-57.4	-10.6	-10.6
Resistance - Dead	-173.9	-173.9	-173.9	-173.9	-173.9	-173.9	-172.1	-172.1
Design Ratio	20.69	2.55	20.69	3.18	(20.69)	(3.18)	(17.24)	(17.24)
Rating Factor	N/A	2.76	N/A	3.58	(N/A)	(3.58)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 1 - HL-93-TRUCK + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	-24.00	24.00	24.00	24.00	-24.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	8.25	-8.25	0.00	0.00	6.35	-6.35
Total Load Effect	1.32	-1.32	9.57	-9.57	1.32	-1.32	7.67	-7.67
Resistance - Dead	22.68	25.32	22.68	-22.68	22.68	25.32	22.68	-22.68
Design Ratio	18.18	N/A	2.51	2.51	18.18	N/A	3.13	3.13
Rating Factor	N/A	N/A	2.75	2.75	N/A	N/A	3.57	3.57

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	8.25	-8.25	0.00	0.00	6.35	-6.35
Total Load Effect	1.32	-1.32	9.57	-9.57	1.32	-1.32	7.67	-7.67
Resistance - Dead	N/A	-28.68	N/A	-28.68	N/A	-28.68	N/A	-28.68
Design Ratio	N/A	22.72	N/A	3.13	N/A	22.72	N/A	3.91
Rating Factor	N/A	N/A	N/A	3.48	N/A	N/A	N/A	4.52

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Live Load Effect	0.0	-128.3	0.0	-99.0	0.0	-99.0	0.0	0.0
Total Load Effect	-25.0	-153.4	-25.0	-124.0	-25.0	-124.0	-30.0	-30.0
Resistance - Dead	-358.5	-358.5	-358.5	-358.5	-358.5	-358.5	-353.5	-353.5
Design Ratio	15.33	2.50	15.33	3.09	(15.33)	(3.09)	(12.77)	(12.77)
Rating Factor	N/A	2.79	N/A	3.62	(N/A)	(3.62)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Live Load Effect	0.0	-85.1	0.0	-65.7	0.0	-65.7	0.0	0.0
Total Load Effect	-8.8	-93.9	-8.8	-74.5	-8.8	-74.5	-10.6	-10.6
Resistance - Dead	-173.9	-173.9	-173.9	-173.9	-173.9	-173.9	-172.1	-172.1
Design Ratio	20.69	1.94	20.69	2.45	(20.69)	(2.45)	(17.24)	(17.24)
Rating Factor	N/A	2.04	N/A	2.65	(N/A)	(2.65)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 2 - HL-93-TANDEM + HL-93-LANE (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	-24.00	24.00	24.00	24.00	-24.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	6.29	-6.29	0.00	0.00	4.84	-4.84
Total Load Effect	1.32	-1.32	7.61	-7.61	1.32	-1.32	6.16	-6.16
Resistance - Dead	22.68	25.32	22.68	-22.68	22.68	25.32	22.68	-22.68
Design Ratio	18.18	N/A	3.15	3.15	18.18	N/A	3.90	3.90
Rating Factor	N/A	N/A	3.61	3.61	N/A	N/A	4.69	4.69

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	6.29	-6.29	0.00	0.00	4.84	-4.84
Total Load Effect	1.32	-1.32	7.61	-7.61	1.32	-1.32	6.16	-6.16
Resistance - Dead	N/A	-28.68	N/A	-28.68	N/A	-28.68	N/A	-28.68
Design Ratio	N/A	22.72	N/A	3.94	N/A	22.72	N/A	4.87
Rating Factor	N/A	N/A	N/A	4.56	N/A	N/A	N/A	5.93

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Live Load Effect	0.0	-73.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-25.0	-98.7	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Resistance - Dead	-358.5	-358.5	-358.5	-358.5	-358.5	-358.5	-353.5	-353.5
Design Ratio	15.33	3.88	15.33	15.33	(15.33)	(15.33)	(12.77)	(12.77)
Rating Factor	N/A	4.86	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Live Load Effect	0.0	-39.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-8.8	-48.2	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Resistance - Dead	-173.9	-173.9	-173.9	-173.9	-173.9	-173.9	-172.1	-172.1
Design Ratio	20.69	3.79	20.69	20.69	(20.69)	(20.69)	(17.24)	(17.24)
Rating Factor	N/A	4.42	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 3 - TYPE3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	4.86	-4.86	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	6.18	-6.18	1.32	-1.32	1.32	-1.32
Resistance - Dead	22.68	25.32	22.68	-22.68	22.68	25.32	22.68	25.32
Design Ratio	18.18	N/A	3.88	3.88	18.18	N/A	18.18	N/A
Rating Factor	N/A	N/A	4.66	4.66	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	4.86	-4.86	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	6.18	-6.18	1.32	-1.32	1.32	-1.32
Resistance - Dead	N/A	-28.68	N/A	-28.68	N/A	-28.68	N/A	-28.68
Design Ratio	N/A	22.72	N/A	4.85	N/A	22.72	N/A	22.72
Rating Factor	N/A	N/A	N/A	5.90	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Live Load Effect	0.0	-66.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-25.0	-91.8	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Resistance - Dead	-358.5	-358.5	-358.5	-358.5	-358.5	-358.5	-353.5	-353.5
Design Ratio	15.33	4.18	15.33	15.33	(15.33)	(15.33)	(12.77)	(12.77)
Rating Factor	N/A	5.36	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Live Load Effect	0.0	-36.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-8.8	-45.3	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Resistance - Dead	-173.9	-173.9	-173.9	-173.9	-173.9	-173.9	-172.1	-172.1
Design Ratio	20.69	4.04	20.69	20.69	(20.69)	(20.69)	(17.24)	(17.24)
Rating Factor	N/A	4.77	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 4 - TYPE3S2 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	4.41	-4.41	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	5.73	-5.73	1.32	-1.32	1.32	-1.32
Resistance - Dead	22.68	25.32	22.68	-22.68	22.68	25.32	22.68	25.32
Design Ratio	18.18	N/A	4.19	4.19	18.18	N/A	18.18	N/A
Rating Factor	N/A	N/A	5.15	5.15	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	4.41	-4.41	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	5.73	-5.73	1.32	-1.32	1.32	-1.32
Resistance - Dead	N/A	-28.68	N/A	-28.68	N/A	-28.68	N/A	-28.68
Design Ratio	N/A	22.72	N/A	5.24	N/A	22.72	N/A	22.72
Rating Factor	N/A	N/A	N/A	6.51	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Live Load Effect	0.0	-61.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-25.0	-86.2	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Resistance - Dead	-358.5	-358.5	-358.5	-358.5	-358.5	-358.5	-353.5	-353.5
Design Ratio	15.33	4.45	15.33	15.33	(15.33)	(15.33)	(12.77)	(12.77)
Rating Factor	N/A	5.86	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Live Load Effect	0.0	-32.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-8.8	-41.2	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Resistance - Dead	-173.9	-173.9	-173.9	-173.9	-173.9	-173.9	-172.1	-172.1
Design Ratio	20.69	4.43	20.69	20.69	(20.69)	(20.69)	(17.24)	(17.24)
Rating Factor	N/A	5.37	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 5 - TYPE3-3 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	4.04	-4.04	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	5.36	-5.36	1.32	-1.32	1.32	-1.32
Resistance - Dead	22.68	25.32	22.68	-22.68	22.68	25.32	22.68	25.32
Design Ratio	18.18	N/A	4.48	4.48	18.18	N/A	18.18	N/A
Rating Factor	N/A	N/A	5.62	5.62	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	4.04	-4.04	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	5.36	-5.36	1.32	-1.32	1.32	-1.32
Resistance - Dead	N/A	-28.68	N/A	-28.68	N/A	-28.68	N/A	-28.68
Design Ratio	N/A	22.72	N/A	5.60	N/A	22.72	N/A	22.72
Rating Factor	N/A	N/A	N/A	7.10	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Live Load Effect	0.0	-78.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-25.0	-103.1	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Resistance - Dead	-358.5	-358.5	-358.5	-358.5	-358.5	-358.5	-353.5	-353.5
Design Ratio	15.33	3.72	15.33	15.33	(15.33)	(15.33)	(12.77)	(12.77)
Rating Factor	N/A	4.59	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Live Load Effect	0.0	-44.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-8.8	-53.6	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Resistance - Dead	-173.9	-173.9	-173.9	-173.9	-173.9	-173.9	-172.1	-172.1
Design Ratio	20.69	3.41	20.69	20.69	(20.69)	(20.69)	(17.24)	(17.24)
Rating Factor	N/A	3.89	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 6 - SU4 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	5.15	-5.15	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	6.47	-6.47	1.32	-1.32	1.32	-1.32
Resistance - Dead	22.68	25.32	22.68	-22.68	22.68	25.32	22.68	25.32
Design Ratio	18.18	N/A	3.71	3.71	18.18	N/A	18.18	N/A
Rating Factor	N/A	N/A	4.41	4.41	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	5.15	-5.15	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	6.47	-6.47	1.32	-1.32	1.32	-1.32
Resistance - Dead	N/A	-28.68	N/A	-28.68	N/A	-28.68	N/A	-28.68
Design Ratio	N/A	22.72	N/A	4.64	N/A	22.72	N/A	22.72
Rating Factor	N/A	N/A	N/A	5.57	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Live Load Effect	0.0	-75.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-25.0	-100.2	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Resistance - Dead	-358.5	-358.5	-358.5	-358.5	-358.5	-358.5	-353.5	-353.5
Design Ratio	15.33	3.83	15.33	15.33	(15.33)	(15.33)	(12.77)	(12.77)
Rating Factor	N/A	4.77	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Live Load Effect	0.0	-46.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-8.8	-55.1	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Resistance - Dead	-173.9	-173.9	-173.9	-173.9	-173.9	-173.9	-172.1	-172.1
Design Ratio	20.69	3.32	20.69	20.69	(20.69)	(20.69)	(17.24)	(17.24)
Rating Factor	N/A	3.76	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 7 - SU5 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	4.96	-4.96	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	6.28	-6.28	1.32	-1.32	1.32	-1.32
Resistance - Dead	22.68	25.32	22.68	-22.68	22.68	25.32	22.68	25.32
Design Ratio	18.18	N/A	3.82	3.82	18.18	N/A	18.18	N/A
Rating Factor	N/A	N/A	4.58	4.58	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	4.96	-4.96	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	6.28	-6.28	1.32	-1.32	1.32	-1.32
Resistance - Dead	N/A	-28.68	N/A	-28.68	N/A	-28.68	N/A	-28.68
Design Ratio	N/A	22.72	N/A	4.78	N/A	22.72	N/A	22.72
Rating Factor	N/A	N/A	N/A	5.79	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Live Load Effect	0.0	-79.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-25.0	-104.4	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Resistance - Dead	-358.5	-358.5	-358.5	-358.5	-358.5	-358.5	-353.5	-353.5
Design Ratio	15.33	3.67	15.33	15.33	(15.33)	(15.33)	(12.77)	(12.77)
Rating Factor	N/A	4.51	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Live Load Effect	0.0	-47.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-8.8	-55.9	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Resistance - Dead	-173.9	-173.9	-173.9	-173.9	-173.9	-173.9	-172.1	-172.1
Design Ratio	20.69	3.27	20.69	20.69	(20.69)	(20.69)	(17.24)	(17.24)
Rating Factor	N/A	3.69	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 8 - SU6 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	5.24	-5.24	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	6.56	-6.56	1.32	-1.32	1.32	-1.32
Resistance - Dead	22.68	25.32	22.68	-22.68	22.68	25.32	22.68	25.32
Design Ratio	18.18	N/A	3.66	3.66	18.18	N/A	18.18	N/A
Rating Factor	N/A	N/A	4.33	4.33	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	5.24	-5.24	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	6.56	-6.56	1.32	-1.32	1.32	-1.32
Resistance - Dead	N/A	-28.68	N/A	-28.68	N/A	-28.68	N/A	-28.68
Design Ratio	N/A	22.72	N/A	4.57	N/A	22.72	N/A	22.72
Rating Factor	N/A	N/A	N/A	5.47	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Live Load Effect	0.0	-82.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-25.0	-107.4	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Resistance - Dead	-358.5	-358.5	-358.5	-358.5	-358.5	-358.5	-353.5	-353.5
Design Ratio	15.33	3.57	15.33	15.33	(15.33)	(15.33)	(12.77)	(12.77)
Rating Factor	N/A	4.35	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Live Load Effect	0.0	-48.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-8.8	-56.9	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Resistance - Dead	-173.9	-173.9	-173.9	-173.9	-173.9	-173.9	-172.1	-172.1
Design Ratio	20.69	3.21	20.69	20.69	(20.69)	(20.69)	(17.24)	(17.24)
Rating Factor	N/A	3.62	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 9 - SU7 (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	5.43	-5.43	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	6.75	-6.75	1.32	-1.32	1.32	-1.32
Resistance - Dead	22.68	25.32	22.68	-22.68	22.68	25.32	22.68	25.32
Design Ratio	18.18	N/A	3.55	3.55	18.18	N/A	18.18	N/A
Rating Factor	N/A	N/A	4.17	4.17	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	5.43	-5.43	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	6.75	-6.75	1.32	-1.32	1.32	-1.32
Resistance - Dead	N/A	-28.68	N/A	-28.68	N/A	-28.68	N/A	-28.68
Design Ratio	N/A	22.72	N/A	4.44	N/A	22.72	N/A	22.72
Rating Factor	N/A	N/A	N/A	5.28	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

STRENGTH LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure (ft-k or ksi)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Effect Type: *	M	M	M	M	M	M	M	M
Resistance	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5	-383.5
6.10. or Appendix A	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2	A.3.2-2
Dead Load Effect	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Live Load Effect	0.0	-90.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-25.0	-115.1	-25.0	-25.0	-25.0	-25.0	-30.0	-30.0
Resistance - Dead	-358.5	-358.5	-358.5	-358.5	-358.5	-358.5	-353.5	-353.5
Design Ratio	15.33	3.33	15.33	15.33	(15.33)	(15.33)	(12.77)	(12.77)
Rating Factor	N/A	3.98	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

* Effect Type: M = Moment, f = Stress

AASHTO Reference: LRFD 6.10.9 Shear Resistance (kips)

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Resistance	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7	-182.7
Dead Load Effect	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Live Load Effect	0.0	-48.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Load Effect	-8.8	-57.7	-8.8	-8.8	-8.8	-8.8	-10.6	-10.6
Resistance - Dead	-173.9	-173.9	-173.9	-173.9	-173.9	-173.9	-172.1	-172.1
Design Ratio	20.69	3.17	20.69	20.69	(20.69)	(20.69)	(17.24)	(17.24)
Rating Factor	N/A	3.56	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

SERVICE LIMIT STATE SUMMARY:

Point of Interest : 110.000
Construction Stage: 1
Live Load Combo : 10 - NRL (TRK)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	24.00	24.00	24.00	-24.00	24.00	24.00	24.00	24.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	5.94	-5.94	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	7.26	-7.26	1.32	-1.32	1.32	-1.32
Resistance - Dead	22.68	25.32	22.68	-22.68	22.68	25.32	22.68	25.32
Design Ratio	18.18	N/A	3.30	3.30	18.18	N/A	18.18	N/A
Rating Factor	N/A	N/A	3.82	3.82	N/A	N/A	N/A	N/A

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress (ksi)

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Resistance	N/A	-30.00	N/A	-30.00	N/A	-30.00	N/A	-30.00
Dead Load Effect	1.32	-1.32	1.32	-1.32	1.32	-1.32	1.32	-1.32
Live Load Effect	0.00	0.00	5.94	-5.94	0.00	0.00	0.00	0.00
Total Load Effect	1.32	-1.32	7.26	-7.26	1.32	-1.32	1.32	-1.32
Resistance - Dead	N/A	-28.68	N/A	-28.68	N/A	-28.68	N/A	-28.68
Design Ratio	N/A	22.72	N/A	4.13	N/A	22.72	N/A	22.72
Rating Factor	N/A	N/A	N/A	4.83	N/A	N/A	N/A	N/A

Notes:
1. All effects are factored per the specified load combination.
2. The critical factored dead load actions are given here. The 1998 AASHTO LRFD Bridge Design Specification indicates that critical actions are determined by using MAXIMUM or MINIMUM dead load factors. For example, if there is a positive live load moment and a negative dead load moment, the MINIMUM dead load factors will be used to minimize dead load effect. This results in a greater positive total moment than if the MAXIMUM dead load factors had been used. See AASHTO LRFD Table 3.4.1-2 (Load Factors for Permanent Loads) for MAXIMUM and MINIMUM dead load factors. See intermediate output for detailed calculations.
3. (1 / eta) is used when MINIMUM dead load factors are used. See AASHTO LRFD 1.3.2.1.
4. Design ratios and/or rating factors enclosed in parentheses are ignored when BRASS searches for the criticals.

RATING FACTOR SUMMARY: Design Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.93	31.03	3.80	N/A	3.80	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.32	22.60	3.00	29.30	3.00	29.30	N/A	N/A
Critical	2.32	22.60	3.00	29.30	(3.00)	(29.30)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A		N/A		N/A		N/A	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical	N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	4.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.40	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 100.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A		N/A		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	5.11	45.44	6.62	58.90	6.62	58.90	N/A	N/A
2 - HL-93-TANDEM (TRK)	4.09	33.10	5.31	42.91	5.31	42.91	N/A	N/A
Critical	4.09	33.10	5.31	42.91	(5.31)	(42.91)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.41	20.61	4.41	26.72	4.41	26.72	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.75	22.26	3.56	28.85	3.56	28.85	N/A	N/A
Critical	2.75	20.61	3.56	26.72	(3.56)	(26.72)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	6.49	6.49	57.88	57.88	8.44	8.44	75.24	75.24
2 - HL-93-TANDEM (TRK)	5.20	5.20	42.17	42.17	6.76	6.76	54.82	54.82
Critical	5.20		42.17		6.76		54.82	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	8.13	N/A	N/A	72.15	10.57	N/A	N/A	N/A
2 - HL-93-TANDEM (TRK)	6.52	N/A	N/A	52.56	8.47	N/A	N/A	68.33
Critical	6.52		52.56		8.47		68.33	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	8.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	9.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	10.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	8.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	8.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	8.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	8.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	8.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical		8.04	N/A	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	5.84	32.71	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	6.36	44.90	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	7.07	35.06	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.59	43.93	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	5.57	41.30	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	5.41	40.26	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	5.37	40.26	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	5.30	39.83	N/A	N/A	N/A	N/A	N/A	N/A
Critical		5.30	32.71	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	8.27	8.27	68.00	68.00	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	9.07	9.07	74.57	74.57	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	10.01	10.01	82.56	82.56	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	8.05	8.05	61.34	61.34	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	7.89	7.89	61.34	61.34	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	7.67	7.67	60.36	60.36	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	7.60	7.60	71.48	71.48	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	7.59	7.59	60.36	60.36	N/A	N/A	N/A	N/A
Critical		7.59		60.36		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 101.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	10.37	N/A	N/A	84.76	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	11.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	12.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	10.09	N/A	N/A	76.46	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	9.89	N/A	N/A	76.46	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	9.61	N/A	N/A	75.24	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	9.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	9.51	N/A	N/A	75.23	N/A	N/A	N/A	N/A
Critical		9.51		75.23		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.94	22.98	3.81	29.79	3.81	29.79	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.42	16.74	3.14	21.70	3.14	21.70	N/A	N/A
Critical	2.42	16.74	3.14	21.70	(3.14)	(21.70)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	4.03	10.35	5.23	13.42	5.23	13.42	N/A	N/A
2 - HL-93-TANDEM (TRK)	3.34	16.44	4.33	21.31	4.33	21.31	N/A	N/A
Critical	3.34	10.35	4.33	13.42	(4.33)	(13.42)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.74	3.74	29.22	29.22	4.86	4.86	37.99	37.99
2 - HL-93-TANDEM (TRK)	3.08	3.08	21.29	21.29	4.00	4.00	27.68	27.68
Critical	3.08		21.29		4.00		27.68	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	4.70	N/A	N/A	36.36	6.11	N/A	N/A	47.26
2 - HL-93-TANDEM (TRK)	3.87	N/A	N/A	26.49	5.03	N/A	N/A	34.43
Critical	3.87		26.49		5.03		34.43	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	5.20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.17	32.78	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	5.11	32.79	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.90	32.26	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.89	32.26	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.89	32.26	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	7.07	21.39	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	7.69	31.36	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	8.56	23.23	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	6.95	28.08	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	6.97	25.98	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	6.67	26.55	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	6.74	26.55	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	6.58	29.31	N/A	N/A	N/A	N/A	N/A	N/A
Critical		6.58	21.39	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	4.92	4.92	34.33	34.33	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.36	5.36	37.65	37.65	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.95	5.95	41.68	41.68	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.89	4.89	30.97	30.97	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.83	4.83	30.97	30.97	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.64	4.64	30.47	30.47	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.67	4.67	36.09	36.09	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.63	4.63	30.47	30.47	N/A	N/A	N/A	N/A
Critical		4.63		30.47		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 102.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	6.18	N/A	N/A	42.71	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	6.73	N/A	N/A	46.84	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	7.48	N/A	N/A	51.86	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	6.15	N/A	N/A	38.53	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	6.07	N/A	N/A	38.53	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	5.82	N/A	N/A	37.91	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	5.87	N/A	N/A	44.90	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	5.81	N/A	N/A	37.91	N/A	N/A	N/A	N/A
Critical		5.81		37.91		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.31	15.42	3.00	19.99	3.00	19.99	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.98	11.23	2.56	14.56	2.56	14.56	N/A	N/A
Critical	1.98	11.23	2.56	14.56	(2.56)	(14.56)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	4.89	7.06	6.33	9.15	6.33	9.15	N/A	N/A
2 - HL-93-TANDEM (TRK)	4.18	10.56	5.42	13.68	5.42	13.68	N/A	N/A
Critical	4.18	7.06	5.42	9.15	(5.42)	(9.15)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.95	2.95	19.59	19.59	3.83	3.83	25.46	25.46
2 - HL-93-TANDEM (TRK)	2.52	2.52	14.27	14.27	3.27	3.27	18.55	18.55
Critical	2.52		14.27		3.27		18.55	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.71	N/A	N/A	24.34	4.82	N/A	N/A	31.64
2 - HL-93-TANDEM (TRK)	3.16	N/A	N/A	17.73	4.11	N/A	N/A	23.05
Critical	3.16		17.73		4.11		23.05	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	4.25	24.38	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.64	26.74	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.17	21.99	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.17	22.00	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.02	21.64	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.13	25.63	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.02	21.64	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.02	21.64	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	8.83	16.48	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	9.59	22.44	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	10.67	17.89	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	8.93	19.69	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	8.97	20.06	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	8.64	20.58	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	8.90	20.58	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	8.37	19.24	N/A	N/A	N/A	N/A	N/A	N/A
Critical		8.37	16.48	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	4.02	4.02	23.01	23.01	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.39	4.39	25.24	25.24	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.88	4.88	27.94	27.94	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.94	3.94	20.76	20.76	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.95	3.95	20.76	20.76	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.80	3.80	20.43	20.43	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.91	3.91	24.19	24.19	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.80	3.80	20.42	20.42	N/A	N/A	N/A	N/A
Critical		3.80		20.42		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 103.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	5.06	N/A	N/A	28.60	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.53	N/A	N/A	31.36	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.14	N/A	N/A	34.72	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.96	N/A	N/A	25.80	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.96	N/A	N/A	25.80	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.78	N/A	N/A	25.38	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.92	N/A	N/A	30.06	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.78	N/A	N/A	25.38	N/A	N/A	N/A	N/A
Critical		4.78		25.38		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.12	11.58	2.74	15.01	2.74	15.01	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.89	8.43	2.45	10.93	2.45	10.93	N/A	N/A
Critical	1.89	8.43	2.45	10.93	(2.45)	(10.93)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	6.09	5.45	7.90	7.07	7.90	7.07	N/A	N/A
2 - HL-93-TANDEM (TRK)	5.45	6.43	7.06	8.33	7.06	8.33	N/A	N/A
Critical	5.45	5.45	7.06	7.07	(7.06)	(7.07)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.70	2.70	14.71	14.71	3.50	3.50	19.12	19.12
2 - HL-93-TANDEM (TRK)	2.41	2.41	10.71	10.71	3.14	3.14	13.93	13.93
Critical	2.41		10.71		3.14		13.93	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.39	N/A	N/A	18.27	4.41	N/A	N/A	23.75
2 - HL-93-TANDEM (TRK)	3.03	N/A	N/A	13.31	3.94	N/A	N/A	17.30
Critical	3.03		13.31		3.94		17.30	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	4.08	18.31	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.47	20.08	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.95	22.23	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.74	16.52	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.74	16.52	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.69	16.25	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.87	19.25	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.69	16.25	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.69	16.25	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	11.46	12.04	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	12.43	14.17	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	13.85	14.22	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	11.98	13.53	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	12.15	13.91	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	12.62	15.79	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	13.40	15.79	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	11.15	12.75	N/A	N/A	N/A	N/A	N/A	N/A
Critical		11.15	12.04	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	3.86	3.86	17.28	17.28	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.23	4.23	18.95	18.95	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.68	4.68	20.98	20.98	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.54	3.54	15.58	15.58	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.54	3.54	15.59	15.59	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.49	3.49	15.34	15.34	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.66	3.66	18.16	18.16	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.49	3.49	15.33	15.33	N/A	N/A	N/A	N/A
Critical		3.49		15.33		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 104.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	4.85	N/A	N/A	21.47	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.32	N/A	N/A	23.54	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.89	N/A	N/A	26.06	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.45	N/A	N/A	19.36	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.45	N/A	N/A	19.37	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.39	N/A	N/A	19.05	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.61	N/A	N/A	22.56	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.39	N/A	N/A	19.05	N/A	N/A	N/A	N/A
Critical		4.39		19.05		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.16	9.23	2.80	11.96	2.80	11.96	N/A	N/A
2 - HL-93-TANDEM (TRK)	1.96	6.72	2.54	8.71	2.54	8.71	N/A	N/A
Critical	1.96	6.72	2.54	8.71	(2.54)	(8.71)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	7.88	4.50	10.21	5.84	10.21	5.84	N/A	N/A
2 - HL-93-TANDEM (TRK)	7.50	4.62	9.72	5.99	9.72	5.99	N/A	N/A
Critical	7.50	4.50	9.72	5.84	(9.72)	(5.84)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.75	2.75	11.73	11.73	3.57	3.57	15.24	15.24
2 - HL-93-TANDEM (TRK)	2.50	2.50	8.54	8.54	3.25	3.25	11.11	11.11
Critical	2.50		8.54		3.25		11.11	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.45	N/A	N/A	14.58	4.49	N/A	N/A	18.95
2 - HL-93-TANDEM (TRK)	3.14	N/A	N/A	10.62	4.08	N/A	N/A	13.81
Critical	3.14		10.62		4.08		13.81	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	4.24	14.59	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.64	16.00	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.14	17.72	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.89	13.16	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.89	13.16	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.81	12.95	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.90	15.34	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.81	12.95	N/A	N/A	N/A	N/A	N/A	N/A
Critical		3.81	12.95	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	15.73	8.98	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	17.01	10.15	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	18.99	10.76	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	17.07	9.73	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	17.78	9.92	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	21.67	10.16	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	24.44	10.16	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	15.45	9.12	N/A	N/A	N/A	N/A	N/A	N/A
Critical		15.45	8.98	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	4.01	4.01	13.78	13.78	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.39	4.39	15.11	15.11	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	4.87	4.87	16.73	16.73	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	3.68	3.68	12.43	12.43	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	3.68	3.68	12.43	12.43	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	3.61	3.61	12.23	12.23	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	3.69	3.69	14.48	14.48	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	3.61	3.61	12.23	12.23	N/A	N/A	N/A	N/A
Critical		3.61		12.23		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 105.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	5.04	N/A	N/A	17.13	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.52	N/A	N/A	18.79	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.12	N/A	N/A	20.80	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.62	N/A	N/A	15.45	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.62	N/A	N/A	15.45	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.54	N/A	N/A	15.20	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.64	N/A	N/A	18.01	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.53	N/A	N/A	15.20	N/A	N/A	N/A	N/A
Critical		4.53		15.20		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 106.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	2.43	7.62	3.16	9.88	3.16	9.88	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.14	5.55	2.77	7.20	2.77	7.20	N/A	N/A
Critical	2.14	5.55	2.77	7.20	(2.77)	(7.20)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	10.74	3.89	13.92	5.04	13.92	5.04	N/A	N/A
2 - HL-93-TANDEM (TRK)	11.21	3.62	14.53	4.69	14.53	4.69	N/A	N/A
Critical	10.74	3.62	13.92	4.69	(13.92)	(4.69)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.10	3.10	9.70	9.70	4.02	4.02	12.61	12.61
2 - HL-93-TANDEM (TRK)	2.72	2.72	7.07	7.07	3.53	3.53	9.19	9.19
Critical	2.72		7.07		3.53		9.19	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.88	N/A	N/A	12.08	5.05	N/A	N/A	15.70
2 - HL-93-TANDEM (TRK)	3.41	N/A	N/A	8.80	4.44	N/A	N/A	11.44
Critical	3.41		8.80		4.44		11.44	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 106.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	4.61	12.05	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.04	13.22	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.59	14.63	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.53	10.87	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.53	10.87	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.24	10.70	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.52	12.67	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.24	10.70	N/A	N/A	N/A	N/A	N/A	N/A
Critical		4.24	10.70	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	23.50	7.24	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	25.31	8.01	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	27.95	8.76	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	26.72	7.51	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	29.94	7.63	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	41.79	7.54	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	41.79	7.54	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	22.96	7.03	N/A	N/A	N/A	N/A	N/A	N/A
Critical		22.96	7.03	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	4.36	4.36	11.39	11.39	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	4.76	4.76	12.50	12.50	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	5.28	5.28	13.83	13.83	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	4.28	4.28	10.28	10.28	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	4.28	4.28	10.28	10.28	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	4.01	4.01	10.11	10.11	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	4.27	4.27	11.98	11.98	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	4.00	4.00	10.11	10.11	N/A	N/A	N/A	N/A
Critical		4.00		10.11		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 106.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	5.47	N/A	N/A	14.19	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	5.98	N/A	N/A	15.56	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.63	N/A	N/A	17.23	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.37	N/A	N/A	12.80	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	5.37	N/A	N/A	12.80	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	5.03	N/A	N/A	12.59	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	5.36	N/A	N/A	14.91	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	5.02	N/A	N/A	12.59	N/A	N/A	N/A	N/A
Critical		5.02		12.59		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 107.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.09	6.44	4.00	8.35	4.00	8.35	N/A	N/A
2 - HL-93-TANDEM (TRK)	2.75	4.69	3.56	6.08	3.56	6.08	N/A	N/A
Critical	2.75	4.69	3.56	6.08	(3.56)	(6.08)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	15.82	3.46	20.51	4.49	20.51	4.49	N/A	N/A
2 - HL-93-TANDEM (TRK)	19.40	2.99	25.15	3.88	25.15	3.88	N/A	N/A
Critical	15.82	2.99	20.51	3.88	(20.51)	(3.88)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	3.92	3.92	8.21	8.21	5.09	5.09	10.68	10.68
2 - HL-93-TANDEM (TRK)	3.48	3.48	5.98	5.98	4.53	4.53	7.78	7.78
Critical	3.48		5.98		4.53		7.78	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	4.90	N/A	N/A	10.25	6.37	N/A	N/A	13.33
2 - HL-93-TANDEM (TRK)	4.36	N/A	N/A	7.47	5.67	N/A	N/A	9.71
Critical	4.36		7.47		5.67		9.71	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 107.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	5.90	10.19	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	6.44	11.17	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	7.16	12.37	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.68	9.19	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	5.68	9.19	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	5.60	9.04	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	6.40	10.71	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	5.59	9.04	N/A	N/A	N/A	N/A	N/A	N/A
Critical		5.59	9.04	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	39.47	6.14	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	6.69	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	7.47	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	5.98	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	6.07	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	5.90	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	5.90	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	39.49	5.64	N/A	N/A	N/A	N/A	N/A	N/A
Critical		39.47	5.64	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	5.56	5.56	9.65	9.65	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	6.06	6.06	10.58	10.58	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	6.75	6.75	11.72	11.72	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	5.35	5.35	8.71	8.71	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	5.35	5.35	8.71	8.71	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	5.28	5.28	8.57	8.57	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	6.03	6.03	10.14	10.14	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	5.27	5.27	8.57	8.57	N/A	N/A	N/A	N/A
Critical		5.27		8.57		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 107.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	6.97	N/A	N/A	12.05	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	7.59	N/A	N/A	13.21	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	8.45	N/A	N/A	14.62	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	6.70	N/A	N/A	10.87	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	6.70	N/A	N/A	10.87	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	6.60	N/A	N/A	10.69	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	7.55	N/A	N/A	12.66	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	6.60	N/A	N/A	10.69	N/A	N/A	N/A	N/A
Critical		6.60		10.69		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 108.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	4.68	5.53	6.07	7.16	6.07	7.16	N/A	N/A
2 - HL-93-TANDEM (TRK)	4.67	4.03	6.06	5.22	6.06	5.22	N/A	N/A
Critical	4.67	4.03	6.06	5.22	(6.06)	(5.22)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	26.74	3.16	N/A	4.09	N/A	4.09	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	2.57	N/A	3.33	N/A	3.33	N/A	N/A
Critical	26.74	2.57	N/A	3.33	(N/A)	(3.33)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	5.92	5.92	7.07	7.07	7.70	7.70	9.19	9.19
2 - HL-93-TANDEM (TRK)	5.91	5.91	5.15	5.15	7.68	7.68	6.70	6.70
Critical	5.91		5.15		7.68		6.70	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	7.39	N/A	N/A	8.85	9.61	N/A	N/A	11.51
2 - HL-93-TANDEM (TRK)	7.37	N/A	N/A	6.45	9.59	N/A	N/A	8.38
Critical	7.37		6.45		9.59		8.38	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 108.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	9.90	8.74	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	10.79	9.59	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	12.04	10.61	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	9.81	7.88	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	9.80	7.88	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	10.94	7.76	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	15.84	9.19	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	9.78	7.76	N/A	N/A	N/A	N/A	N/A	N/A
Critical		9.78	7.76	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	5.39	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	5.82	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	6.58	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	5.01	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	5.07	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	4.88	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	4.88	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	4.73	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	4.73	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	9.30	9.30	8.31	8.31	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	10.14	10.14	9.11	9.11	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	11.32	11.32	10.08	10.08	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	9.22	9.22	7.49	7.49	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	9.21	9.21	7.49	7.49	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	10.28	10.28	7.37	7.37	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	14.89	14.89	8.73	8.73	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	9.19	9.19	7.37	7.37	N/A	N/A	N/A	N/A
Critical		9.19		7.37		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 108.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	11.61	N/A	N/A	10.40	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	12.65	N/A	N/A	11.41	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	14.12	N/A	N/A	12.63	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	11.50	N/A	N/A	9.38	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	11.49	N/A	N/A	9.38	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	12.83	N/A	N/A	9.23	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	18.57	N/A	N/A	10.93	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	11.47	N/A	N/A	9.23	N/A	N/A	N/A	N/A
Critical		11.47		9.23		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 109.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	10.14	3.42	13.14	4.43	13.14	4.43	N/A	N/A
2 - HL-93-TANDEM (TRK)	24.18	3.40	N/A	4.40	N/A	4.40	N/A	N/A
Critical	10.14	3.40	13.14	4.40	(13.14)	(4.40)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	2.93	N/A	3.80	N/A	3.80	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	2.26	N/A	2.93	N/A	2.93	N/A	N/A
Critical	N/A	2.26	N/A	2.93	(N/A)	(2.93)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	12.78	12.78	4.39	4.39	16.62	16.62	5.71	5.71
2 - HL-93-TANDEM (TRK)	30.49	30.49	4.36	4.36	39.63	39.63	5.67	5.67
Critical	12.78		4.36		16.62		5.67	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	15.89	N/A	N/A	5.52	20.65	N/A	N/A	7.18
2 - HL-93-TANDEM (TRK)	37.89	N/A	N/A	5.49	N/A	N/A	N/A	7.13
Critical	15.89		5.49		20.65		7.13	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 109.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	27.92	6.47	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	7.30	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	28.05	7.85	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	6.08	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	6.83	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	6.64	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	6.64	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	26.34	5.98	N/A	N/A	N/A	N/A	N/A	N/A
Critical		26.34	5.98	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	4.85	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	5.21	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	5.91	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	4.35	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	4.33	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	4.22	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	4.16	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	4.06	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	4.06	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	26.14	26.14	6.17	6.17	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	52.47	52.47	6.97	6.97	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	26.26	26.26	7.49	7.49	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	49.71	49.71	5.80	5.80	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	49.71	49.71	6.52	6.52	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	52.85	52.85	6.33	6.33	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	52.85	52.85	6.33	6.33	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	24.66	24.66	5.71	5.71	N/A	N/A	N/A	N/A
Critical		24.66		5.71		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 109.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	32.49	N/A	N/A	7.76	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	8.76	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	32.64	N/A	N/A	9.42	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	7.30	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	8.20	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	7.97	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	7.97	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	30.65	N/A	N/A	7.18	N/A	N/A	N/A	N/A
Critical		30.65		7.18		N/A		N/A	

RATING FACTOR SUMMARY: Design Load

Point of Interest : 110.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	2.13	N/A	2.76	N/A	2.76	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	2.79	N/A	3.62	N/A	3.62	N/A	N/A
Critical	N/A	2.13	N/A	2.76	(N/A)	(2.76)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:	STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :	(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	2.76	N/A	3.58	N/A	3.58	N/A	N/A
2 - HL-93-TANDEM (TRK)	N/A	2.04	N/A	2.65	N/A	2.65	N/A	N/A
Critical	N/A	2.04	N/A	2.65	(N/A)	(2.65)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	2.75	2.75	N/A	N/A	3.57	3.57
2 - HL-93-TANDEM (TRK)	N/A	N/A	3.61	3.61	N/A	N/A	4.69	4.69
Critical	N/A		2.75		N/A		3.57	

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:	SERVICE II				SERVICE II-O			
Effects:	(max)		(min)		(max)		(min)	
Flange :	(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo								
1 - HL-93-TRUCK (TRK)	N/A	N/A	N/A	3.48	N/A	N/A	N/A	4.52
2 - HL-93-TANDEM (TRK)	N/A	N/A	N/A	4.56	N/A	N/A	N/A	5.93
Critical	N/A		3.48		N/A		4.52	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 110.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.7, Appendix A Flexure

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	4.86	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	5.36	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	5.86	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	4.59	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	4.77	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	4.51	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	4.35	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	3.98	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	3.98	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.9 Shear Resistance

Limit State:		STRENGTH I		STRENGTH I-O		STRENGTH II		STRENGTH IV	
Effects :		(max)	(min)	(max)	(min)	(max)	(min)	(max)	(min)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	4.42	N/A	N/A	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	4.77	N/A	N/A	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	5.37	N/A	N/A	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	3.89	N/A	N/A	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	3.76	N/A	N/A	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	3.69	N/A	N/A	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	3.62	N/A	N/A	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	3.56	N/A	N/A	N/A	N/A	N/A	N/A
Critical		N/A	3.56	N/A	N/A	(N/A)	(N/A)	(N/A)	(N/A)

AASHTO Reference: LRFD 6.10.4.2.2 Flexural Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	4.66	4.66	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	5.15	5.15	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	5.62	5.62	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	4.41	4.41	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	4.58	4.58	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	4.33	4.33	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	4.17	4.17	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	3.82	3.82	N/A	N/A	N/A	N/A
Critical		N/A		3.82		N/A		N/A	

RATING FACTOR SUMMARY: Legal Load

Point of Interest : 110.000
Construction Stage: 1

AASHTO Reference: LRFD 6.10.4.2.2 Web Bend-Buckling Stress

Limit State:		SERVICE II				SERVICE II-O			
Effects:		(max)		(min)		(max)		(min)	
Flange :		(top)	(bot)	(top)	(bot)	(top)	(bot)	(top)	(bot)
Live Load Combo									
3 - TYPE3	(TRK)	N/A	N/A	N/A	5.90	N/A	N/A	N/A	N/A
4 - TYPE3S2	(TRK)	N/A	N/A	N/A	6.51	N/A	N/A	N/A	N/A
5 - TYPE3-3	(TRK)	N/A	N/A	N/A	7.10	N/A	N/A	N/A	N/A
6 - SU4	(TRK)	N/A	N/A	N/A	5.57	N/A	N/A	N/A	N/A
7 - SU5	(TRK)	N/A	N/A	N/A	5.79	N/A	N/A	N/A	N/A
8 - SU6	(TRK)	N/A	N/A	N/A	5.47	N/A	N/A	N/A	N/A
9 - SU7	(TRK)	N/A	N/A	N/A	5.28	N/A	N/A	N/A	N/A
10 - NRL	(TRK)	N/A	N/A	N/A	4.83	N/A	N/A	N/A	N/A
Critical		N/A		4.83		N/A		N/A	

CRITICAL RATING FACTOR SUMMARY: Design Load Inventory

Live Load No.	Combination Description		Total Vehicle Wt. (tons)	Controlling Point of Interest	Limit State Action Location	Rating Factor	Load Rating (tons)
Design Load Inventory							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	104.0000	STRENGTH I	2.12	76.18
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.0000	STRENGTH I	1.89	47.33
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.0000	STRENGTH I	1.89	47.33

CRITICAL RATING FACTOR SUMMARY: Design Load Operating

Design Load Operating							
1	HL-93-TRUCK + HL-93-LANE	(TRK)	36.00	104.0000	STRENGTH I-O	2.74	98.75
2	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.0000	STRENGTH I-O	2.45	61.36
Crit	HL-93-TANDEM + HL-93-LANE	(TRK)	25.00	104.0000	STRENGTH I-O	2.45	61.36

CRITICAL RATING FACTOR SUMMARY: Legal Load

Legal Load							
3	TYPE3	(TRK)	25.00	104.0000	SERVICE II	3.86	96.43
4	TYPE3S2	(TRK)	36.00	104.0000	SERVICE II	4.23	152.27
5	TYPE3-3	(TRK)	40.00	104.0000	SERVICE II	4.68	187.33
6	SU4	(TRK)	27.00	104.0000	SERVICE II	3.54	95.53
7	SU5	(TRK)	31.00	104.0000	SERVICE II	3.54	109.61
8	SU6	(TRK)	34.75	104.0000	SERVICE II	3.49	121.40
9	SU7	(TRK)	38.75	110.0000	STRENGTH I	3.62	140.21
10	NRL	(TRK)	40.00	104.0000	SERVICE II	3.49	139.66
Crit	NRL	(TRK)	40.00	104.0000	SERVICE II	3.49	139.66

LIMIT STATE LEGEND:

BRASS	Specifications
STRENGTH I	Strength I Inventory
STRENGTH I-O	Strength I Operating
STRENGTH II	Strength II
STRENGTH IV	Strength IV
SERVICE I	Service I
SERVICE II	Service II Inventory
SERVICE II-O	Service II Operating
FATIGUE I	Fatigue I
FATIGUE II	Fatigue II