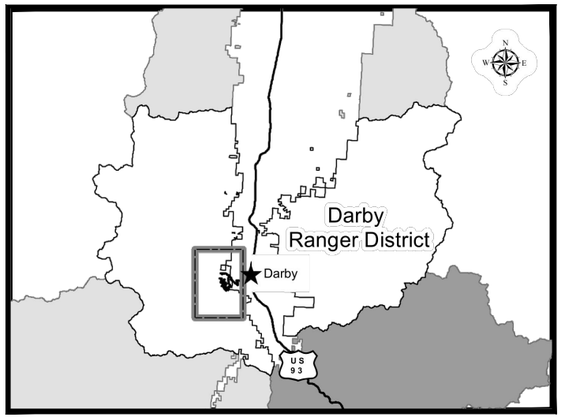
U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION ONE

CONSTRUCTION/RECONSTRUCTION PLANS FOR SPECIFIED ROADS

SQUARE TIN TIMBER SALE

BITTERROOT NATIONAL FOREST
DARBY RANGER DISTRICT
RAVALLI COUNTY MONTANA

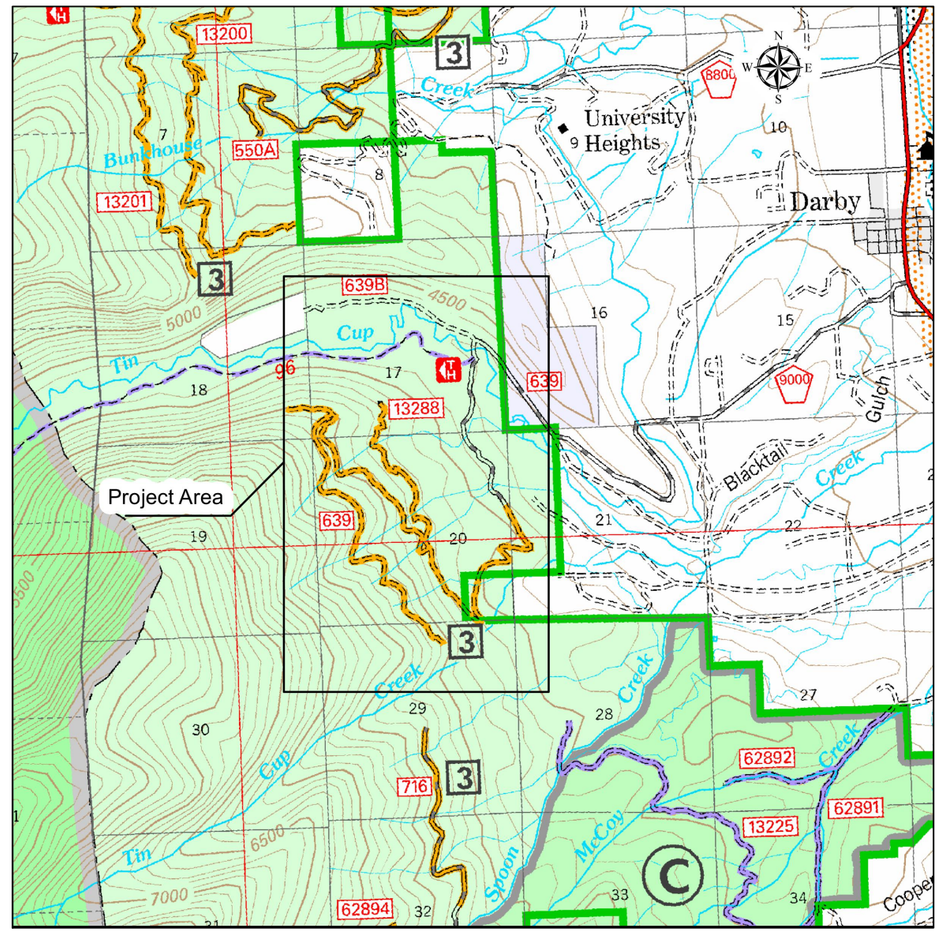
MONTANA / IDAHO INDEX MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

GOVERNMENT FURNISHED MATERIAL

CRUSHED AGGREGATE - LOCATED AT
JIM HELL PIT - MILE MARKER 14.3 US HWY 93,
APPROXIMATELY 16 MILES FROM PROJECT SITE



AREA MAP
NOT TO SCALE

SHEET INDEX

PROJECT: PROJECT NUMBER
DATE: July 8, 2024

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7	CURVE WIDEN DETAIL
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9	DRAIN DIP DETAIL
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11	WORKLIST 639B, 13287, 13288

DESIGNED BY:

PROJECT ENGINEER
BITTERROOT NATIONAL FOREST — DATE

RECOMMENDED BY:

DISTRICT RANGER
BITTERROOT NATIONAL FOREST — DATE

APPROVED BY:

FOREST ENGINEER
BITTERROOT NATIONAL FOREST — DATE

APPROVED BY:

FOREST SUPERVISOR
BITTERROOT NATIONAL FOREST — DATE

NO.	REVISION DESCRIPTION	BY	DATE
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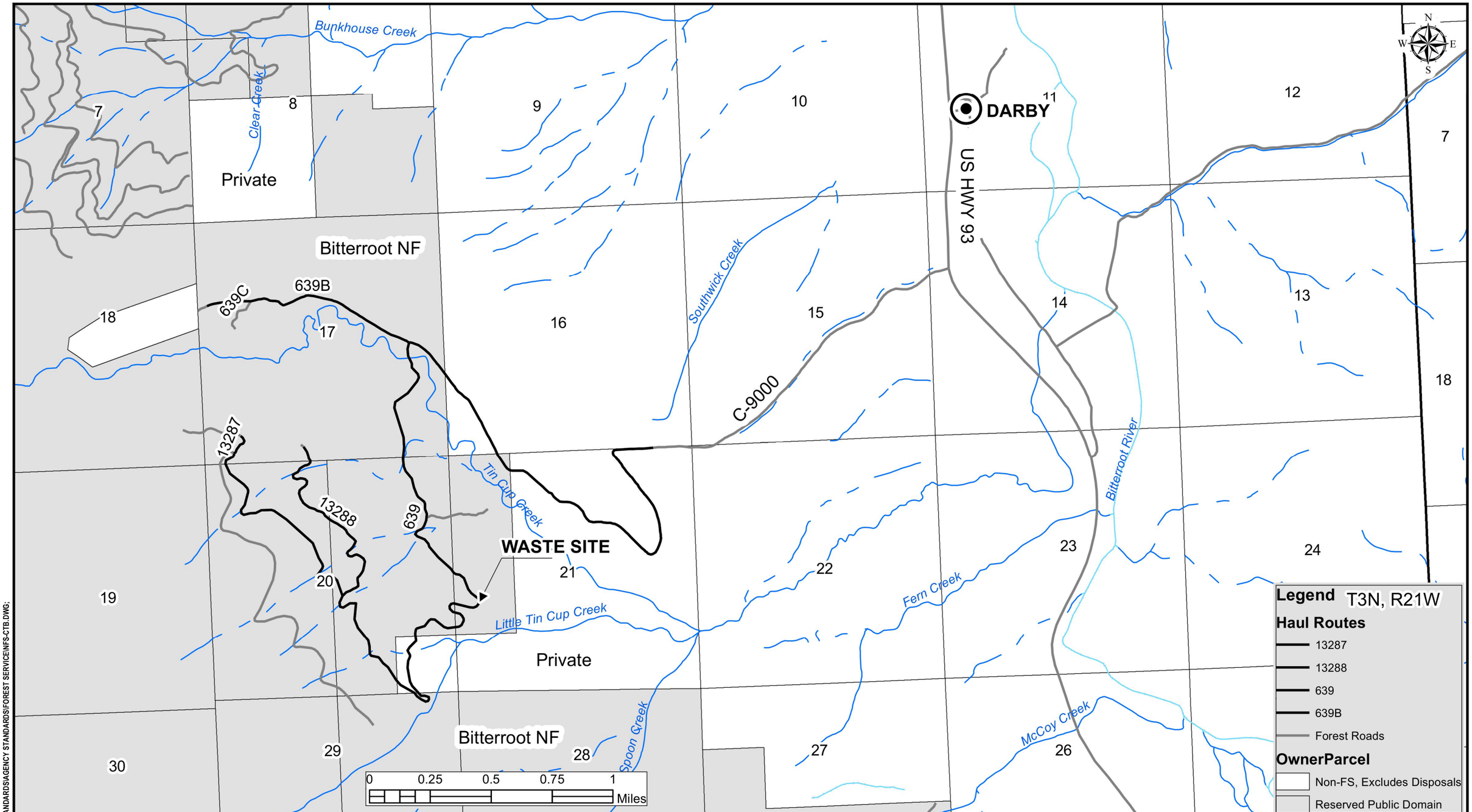
SET NO.

SHEET NO.
1

C:\7730TimberSaleSupport\Bitterroot_Front\Square_Tin_Plans and SHEETSET\SQUARE_TIN_Plans and SHEETSET\DWG\R01_Title.dwg



9/28/18 07:07 MARKL F:_CAD STANDARDS\AGENCY STANDARDS\FOREST SERVICE\INFS-CTB.DWG;

USDA FOREST SERVICE

United States Department of Agriculture
Forest Service

01
NORTHERN REGION

PROJECT NAME
SQUARE TIN TIMBER SALE
BITTERROOT NATIONAL FOREST
DARBY RANGER DISTRICT

DRAWING TITLE
PROJECT MAP

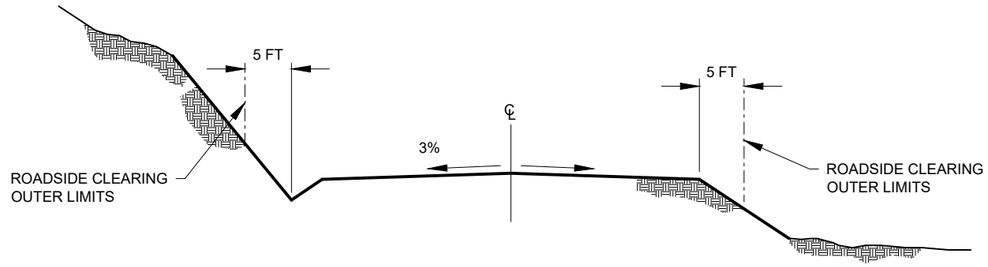
DATE	DESIGNER	CHECKED	DWG SHEET NO.	SHEET
DATE 12/20/2024	J.PINTOK	J. STUART	2	2 OF 13

NO.	REVISION DESCRIPTION	BY	DATE
△			
△			
△			

SQUARE TIN TIMBER SALE		Road No.	639	639B	13287	13288	Grand Totals
		MILES	5.87	0.90	0.10	0.94	7.81
		CON/RECON	RECON	RECON	RECON	RECON	
Pay Item	Description	UNITS					
15101	Mobilization	LS	ALL	ALL	ALL	ALL	1
20209	Selective Clearing, Type Roadway, Disposal Method (f)	MI	2.87		0.10	0.94	3.91
20425	Drainage Excavation, Type II Dip, Tolerance Class A, Compaction Method 2	EA	35			8	43
30316	Roadway Reconditioning, Compaction Method 2	MI	5.87	0.57	0.10	0.94	7.48

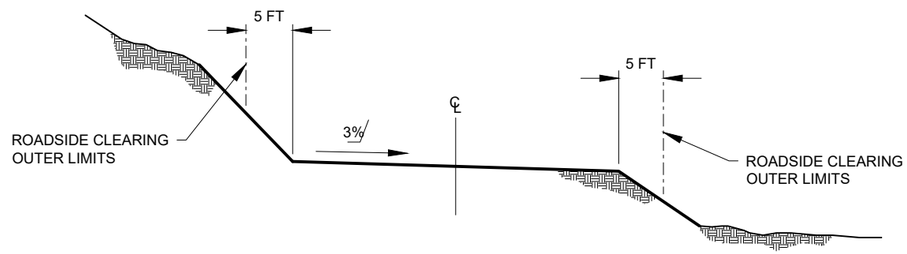
GENERAL NOTES:

1. SPECIFICATIONS: MATERIALS AND CONSTRUCTION OF THIS PROJECT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATION FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS (FP 14), FP 14 AND ALL APPLICABLE FOREST SERVICE SPECIAL SPECIFICATIONS (FSSS).
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING HAUL ROUTE DURING AND AFTER PERIODS OF HAUL IN A MANNER THAT KEEPS ROUTES SAFE AND ADEQUATELY MAINTAINED TO ACCOMMODATE PUBLIC TRAFFIC. DUST CONTROL IS REQUIRED DURING PERIODS OF ACTIVE HAUL AS REQUIRED BY SECTION 158. DEVELOP WATER SOURCES ON FOREST SERVICE LAND IN ACCORDANCE WITH FSSS 170. DUST CONTROL IS INCIDENTAL TO ITEM 15101.
3. TRAFFIC CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR, SEE 156 - PUBLIC TRAFFIC.
4. SPECIFICATION 157 - PROTECT AGAINST SOIL EROSION AND SEDIMENTATION DURING CONSTRUCTION IN ACCORDANCE WITH FP 14 SECTION 157. CONTRACTOR SHALL PREPARE AND SUBMIT A SOIL EROSION AND SEDIMENT CONTROL PLAN TO C.O. FOR APPROVAL. PLAN SHALL INCLUDE DRAWINGS AND WRITTEN OUTLINE ILLUSTRATING AND DESCRIBING PROPOSED LAYOUT AND METHODS.
5. ITEMS 204 AND 303 - UNLESS OTHERWISE SPECIFIED, DISPOSE OF ALL UNSUITABLE OR EXCESS MATERIAL AT THE WASTE SITE IDENTIFIED BY THE C.O.



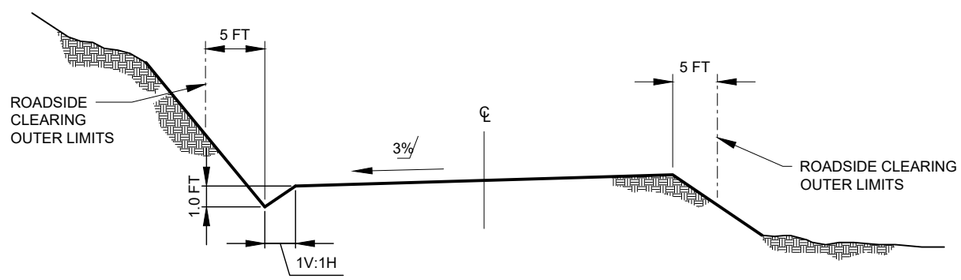
ROAD RECONDITIONING CROWN

NOT TO SCALE



ROAD RECONDITIONING OUTSLOPE

NOT TO SCALE



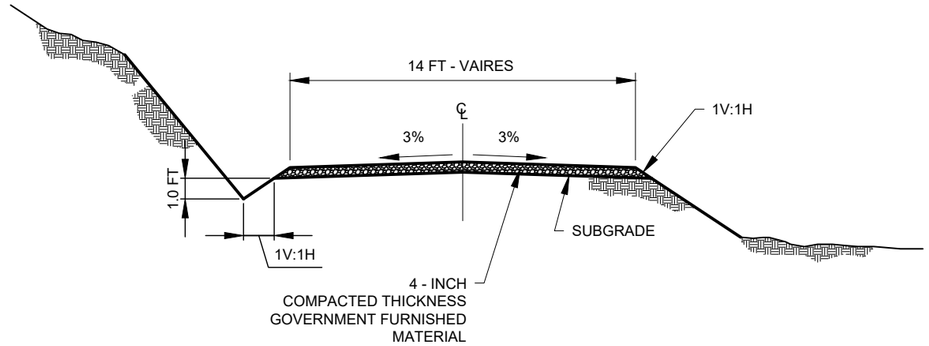
ROAD RECONDITIONING W/DITCH

NOT TO SCALE

1/ INSLOPE, OUTSLOPE, OR CROWN WHEN SPECIFIED IN THE WORKLIST. OTHERWISE MAINTAIN EXISTING.

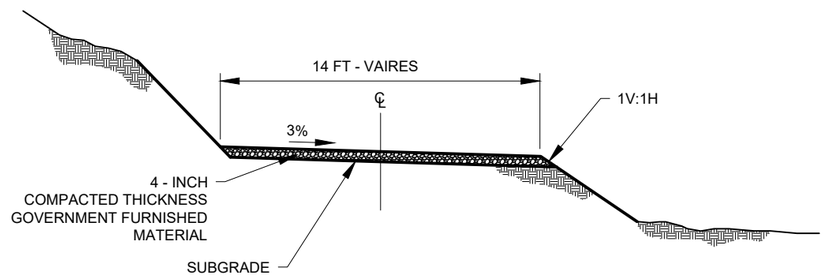
9/28/18 07:07 MARKL F:_CAD STANDARDS\AGENCY STANDARDS\FOREST SERVICE\NFS-CTB.DWG;

USDA United States Department of Agriculture Forest Service	01 NORTHERN REGION	PROJECT NAME: SQUARE TIN TIMBER SALE, BITTERROOT NATIONAL FOREST, DARBY RANGER DISTRICT	DRAWING TITLE: ROAD RECONDITIONING	DATE: DATE 12/20/2024	DESIGNER: J.PINTOK	CHECKED: J. STUART	DWG SHEET NO. 4
				NO. / REVISION DESCRIPTION / BY / DATE			SHEET 4 OF 13



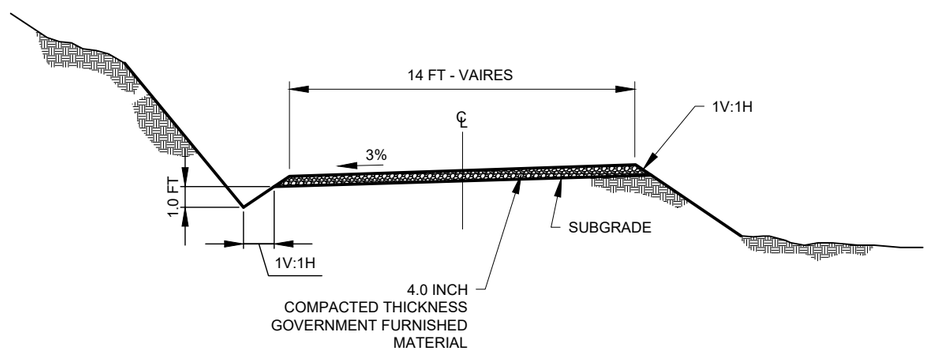
CROWNED SURFACING SECTION

NOT TO SCALE



OUTSLOPE SURFACING SECTION

NOT TO SCALE



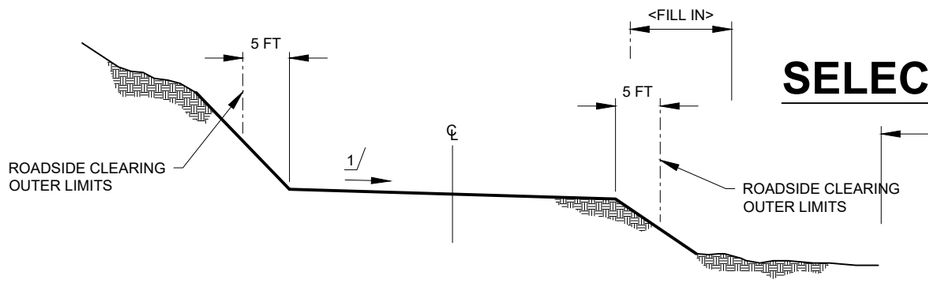
INSLOPE SURFACING SECTION

NOT TO SCALE

9/28/18 07:07 MARKL F:_CAD STANDARDS\AGENCY STANDARDS\FOREST SERVICE\NFS-CTB.DWG;

USDA Forest Service — United States Department of Agriculture Forest Service	01 NORTHERN REGION	PROJECT NAME: SQUARE TIN TIMBER SALE — BITTERROOT NATIONAL FOREST — DARBY RANGER DISTRICT	DRAWING TITLE: ROAD SURFACING DETAIL	DATE: DATE 12/20/2024	DESIGNER: J.PINTOK	CHECKED: J. STUART
				NO. / REVISION DESCRIPTION / BY / DATE	DWG SHEET NO. 5	SHEET 5 OF 13

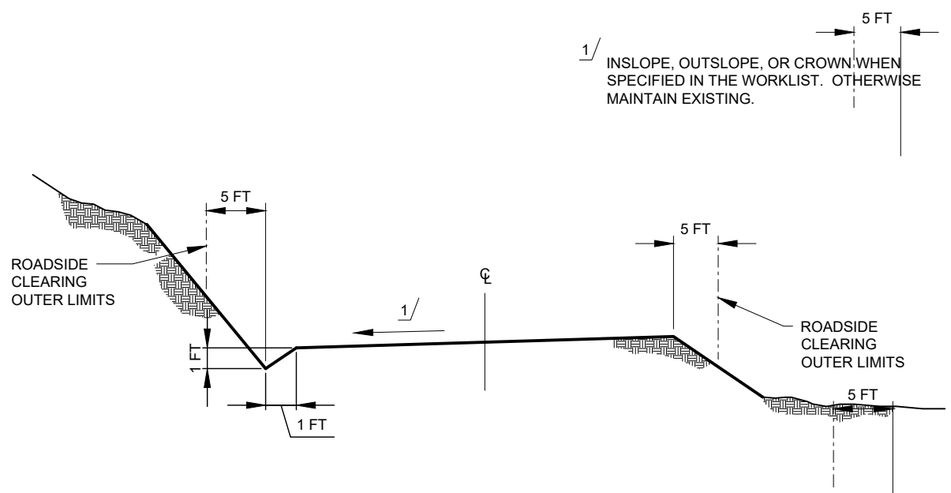
SELECTIVE CLEARING DETAIL
NOT TO SCALE



ROADSIDE CLEARING AND ROAD RECONDITIONING

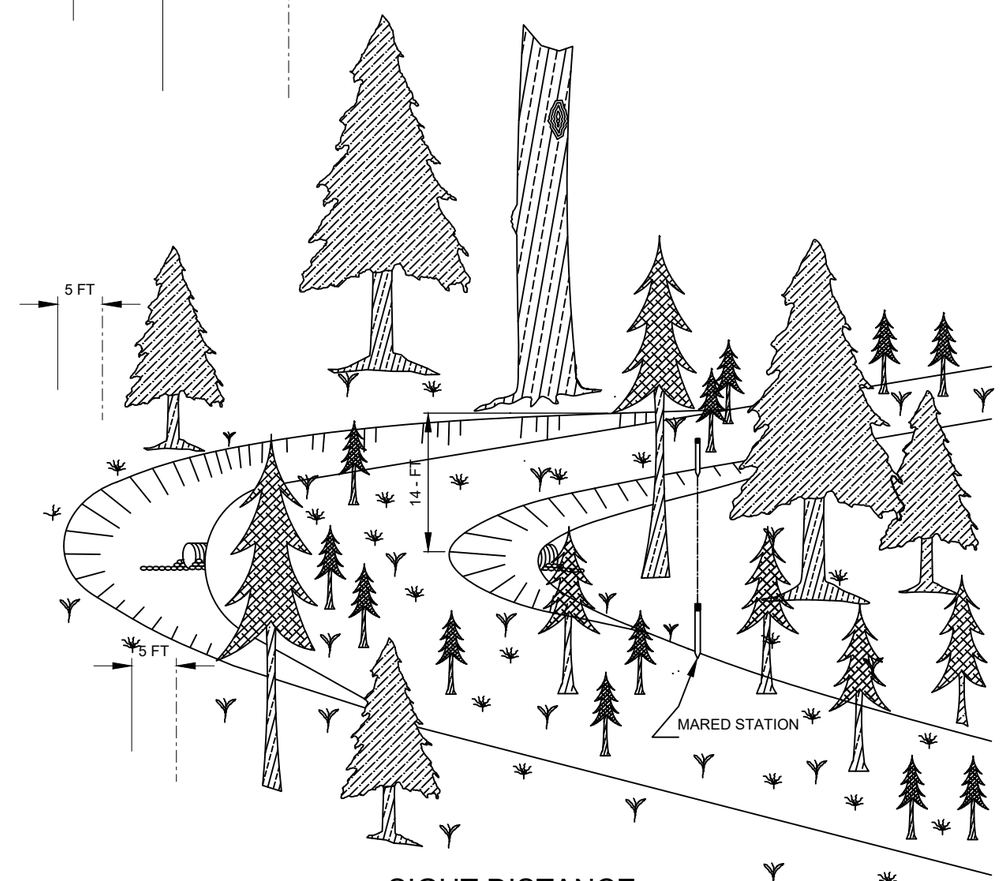
NOT TO SCALE

1/ INSLOPE, OUTSLOPE, OR CROWN WHEN SPECIFIED IN THE WORKLIST. OTHERWISE MAINTAIN EXISTING.



ROADSIDE CLEARING AND ROAD RECONDITIONING W/DITCH

NOT TO SCALE



SIGHT DISTANCE

NOTES:

1. THE AREA OF SIGHT DISTANCE CLEARING WILL BE FROM THE ROADSIDE CLEARING LIMIT TO A LINE OF SIGHT BETWEEN THE BEGINNING AND THE ENDING STATIONS MARKED ON THE GROUND. SIGHT DISTANCE CLEARING IS INCLUDED IN ROADSIDE CLEARING LIMITS AT STAKED LOCATIONS.

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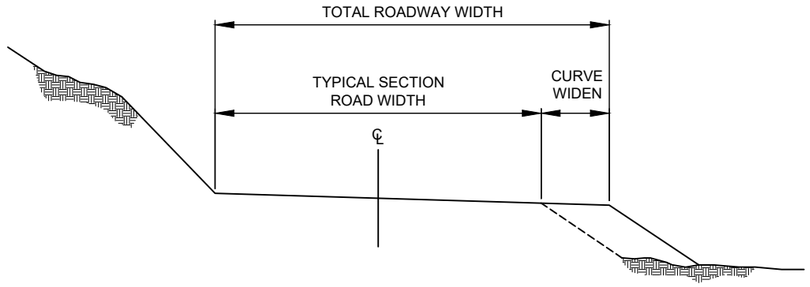
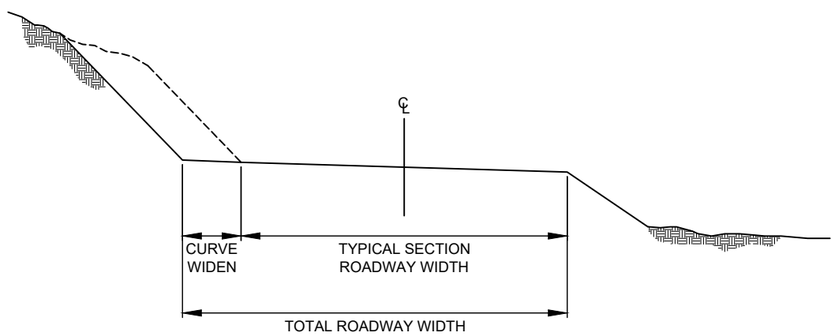
United States Department of Agriculture Forest Service	01 NORTHERN REGION	PROJECT NAME: SQUARE TIN TIMBER SALE BITTERROOT NATIONAL FOREST DARBY RANGER DISTRICT	DRAWING TITLE: ROADWAY CLEARING DETAIL	DATE: DATE 12/20/2024	DESIGNER: J.PINTOK	CHECKED: J. STUART
				NO. / REVISION DESCRIPTION / BY / DATE	DWG SHEET NO. 6	SHEET 6 OF 9



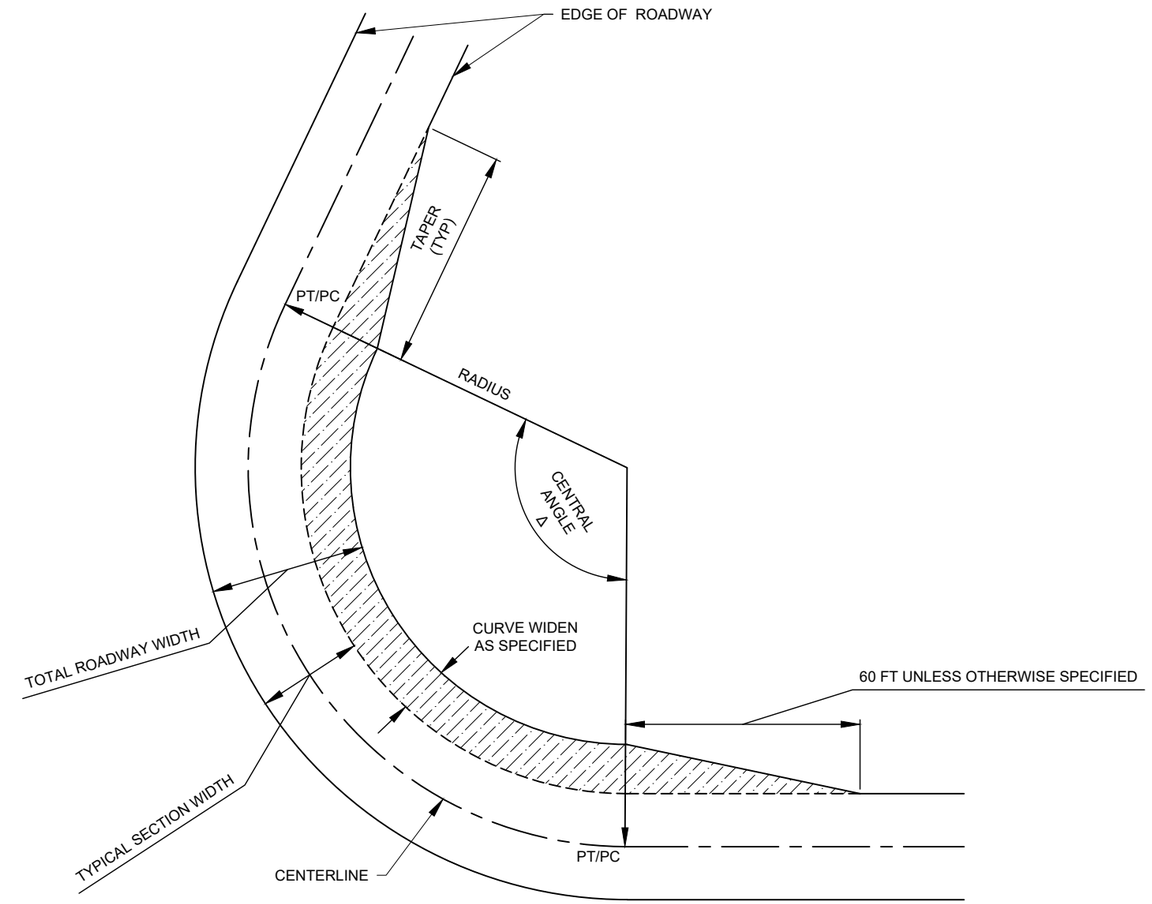
FILL SLOPE CURVE WIDENING

NOT TO SCALE



CUT SLOPE CURVE WIDENING

NOT TO SCALE

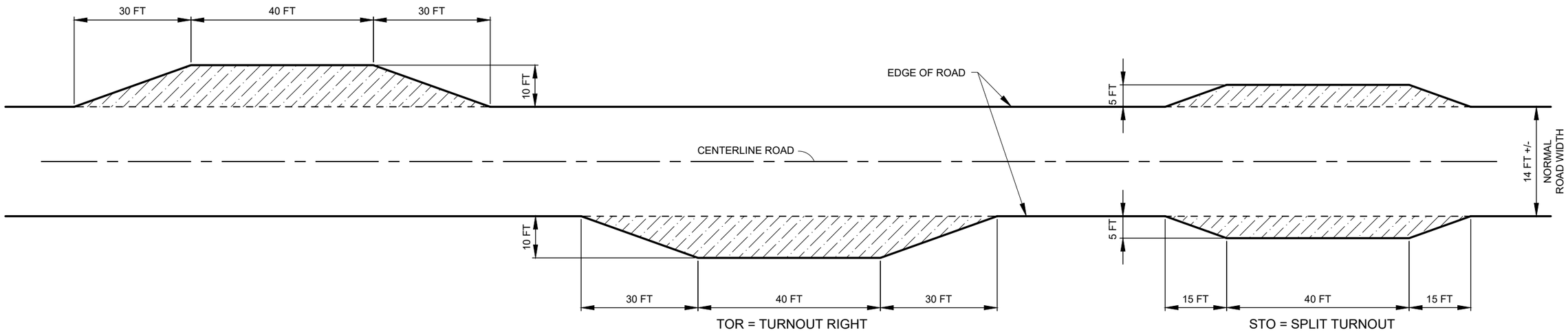


NOTES:

1. ADD HORIZONTAL CURVE WIDENING TO THE INSIDE OF CURVES. WIDENING APPLIES TO THE ROADWAY THROUGH THE ENTIRE CURVE FROM PC TO PT.

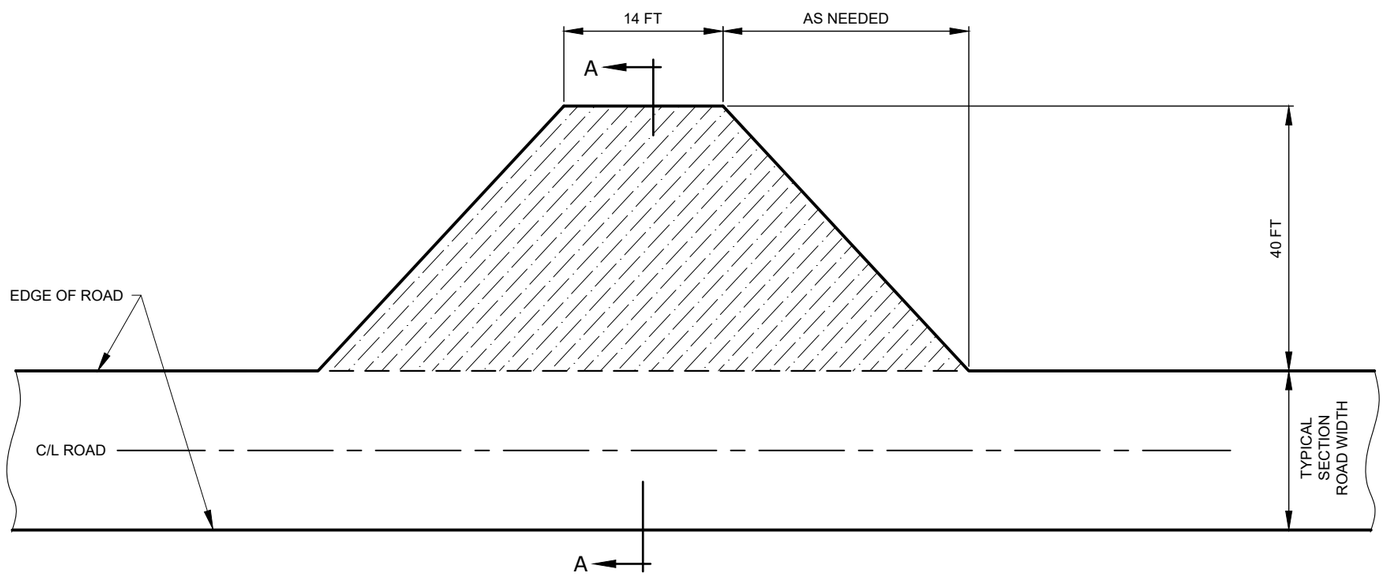
9/28/18 07:07 MARKL F:\ CAD STANDARDS\AGENCY STANDARDS\FOREST SERVICE\NFS-CTB.DWG;

United States Department of Agriculture Forest Service	01 NORTHERN REGION	PROJECT NAME SQUARE TIN TIMBER SALE BITTERROOT NATIONAL FOREST DARBY RANGER DISTRICT	DRAWING TITLE CURVE WIDEN DETAIL	DATE DATE 12/20/2024	DESIGNER J.PINTOK	CHECKED J. STUART
				NO. / REVISION DESCRIPTION / BY / DATE	DWG SHEET NO. 7	SHEET 7 OF 13

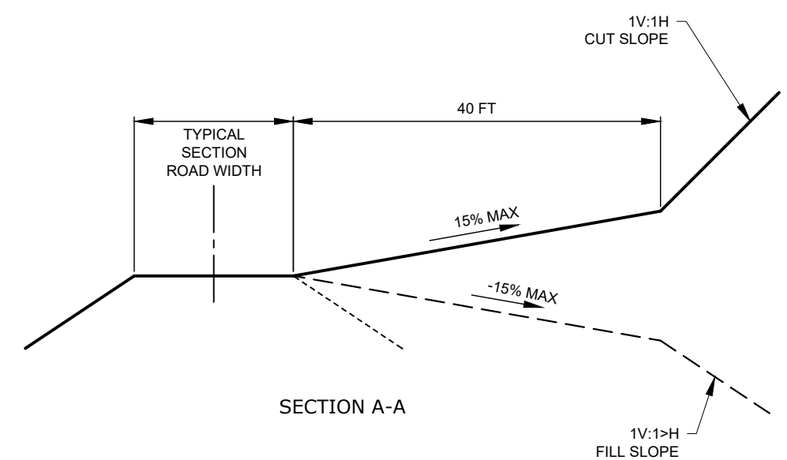


TURNOUT DETAIL

NOT TO SCALE



PLAN VIEW



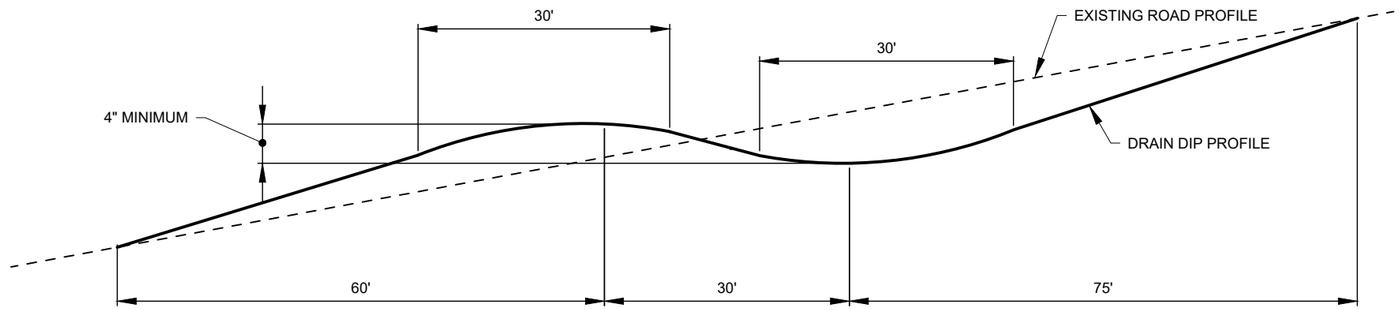
SECTION A-A

TURNAROUND DETAIL

NOT TO SCALE

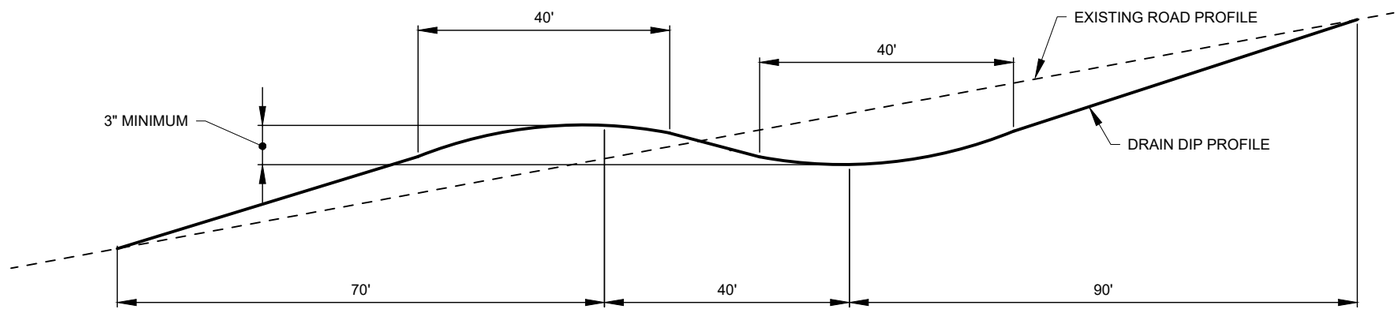
9/28/18 07:07 MARKL F:_CAD STANDARDS\AGENCY STANDARDS\FOREST SERVICE\WFS-CTB.DWG;

USDA United States Department of Agriculture Forest Service	01 NORTHERN REGION	PROJECT NAME: SQUARE TIN TIMBER SALE, BITTERROOT NATIONAL FOREST, DARBY RANGER DISTRICT	DRAWING TITLE: TURNOUT AND TURNAROUND DETAILS	DATE: DATE 12/20/2024	DESIGNER: J.PINTOK	CHECKED: J. STUART	DWG SHEET NO. 8
				NO. / REVISION DESCRIPTION / BY / DATE			SHEET 8 OF 13



DRAIN DIP - TYPE II

NOT TO SCALE



DRAIN DIP - TYPE I

NOT TO SCALE

NOTES:
1. CROSS SLOPE OF THE LOW POINT DRAINLINE SHALL BE 5%.
2. SKEW OF DRAINLINE SHALL BE 0-25 DEGREES.
3. UNLESS OTHERWISE SPECIFIED IN THE WORKLIST DO NOT INTERCEPT THE ROADWAY DITCH.

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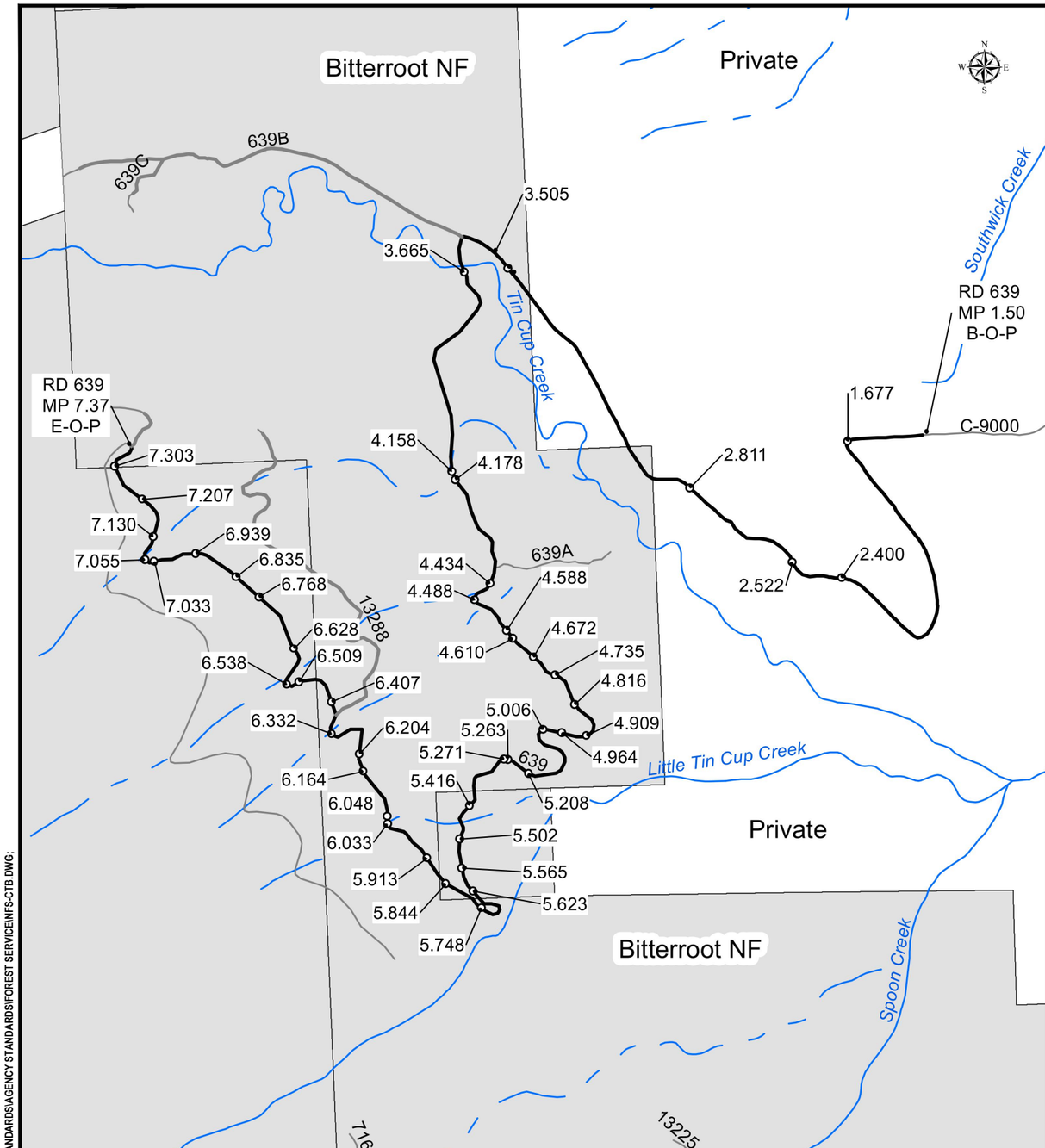
United States Department of Agriculture Forest Service	01 NORTHERN REGION	PROJECT NAME: SQUARE TIN TIMBER SALE, BITTERROOT NATIONAL FOREST, DARBY RANGER DISTRICT	DRAWING TITLE: DRAIN DIP DETAIL	DATE: DATE 12/20/2024	DESIGNER: J.PINTOK	CHECKED: J. STUART	DWG SHEET NO. 9
				NO. / REVISION DESCRIPTION / BY / DATE			SHEET 9 OF 13



RECONSTRUCTION WORKLIST

Road # 639

BEG M.P.	END M.P.	PAY ITEM	WORK DESCRIPTION	QTY	UNIT
1.50	7.37	30316	ROADWAY RECONDITIONING, COMPACTION METHOD 2	5.87	MILE
1.677		-	Existing CMP, Irrigation Ditch	-	
2.400		-	Existing CMP, Ditch Relief	-	
2.522		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
2.811		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
3.459		-	Existing CMP, Ditch Relief	-	
3.665		-	Existing Bridge	-	
4.105		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
4.158		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
4.178		-	Existing CMP, Live Stream	-	
4.434		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
4.488		-	Existing CMP, Live Stream	-	
4.500	7.37	20209	SELECTIVE CLEARING, TYPE ROADWAY, DISPOSAL METHOD (f)	2.87	MILE
4.588		-	Existing Gate	-	
4.610		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
4.672		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
4.735		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
4.816		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
4.909		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
4.964		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
5.006		-	Existing CMP, Ditch Relief	-	
5.208		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
5.263		-	Existing CMP, Live Stream	-	
5.271		-	Existing CMP, Live Stream	-	
5.416		-	Maintain Existing Drain Dip	-	
5.502		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
5.540		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
5.565		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
5.623		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
5.748		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
5.809		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
5.844		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
5.881		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
5.913		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
5.956		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
6.033		-		-	
6.048		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
6.164		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
6.204		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
6.332		-	Existing CMP, Draw Relief	-	
6.407		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
6.509		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
6.538		-	Existing CMP, Live Stream	-	
6.628		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
6.688		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
6.768		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
6.835		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
6.939		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
7.033		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
7.055		-	Existing CMP, Live Stream	-	
7.130		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
7.207		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
7.303		-	Existing CMP, Live Stream	-	
7.370			End of Project	-	

United States Department of Agriculture
Forest Service

01
NORTHERN REGION

PROJECT NAME
SQUARE TIN TIMBER SALE
BITTERROOT NATIONAL FOREST
DARBY RANGER DISTRICT

DRAWING TITLE
WORKLIST 639

DATE	DESIGNER	CHECKED	DWG SHEET NO.	SHEET
DATE 12/20/2024	J.PINTOK	J. STUART	10	10 OF 13

NO.	REVISION DESCRIPTION	BY	DATE
△			
△			
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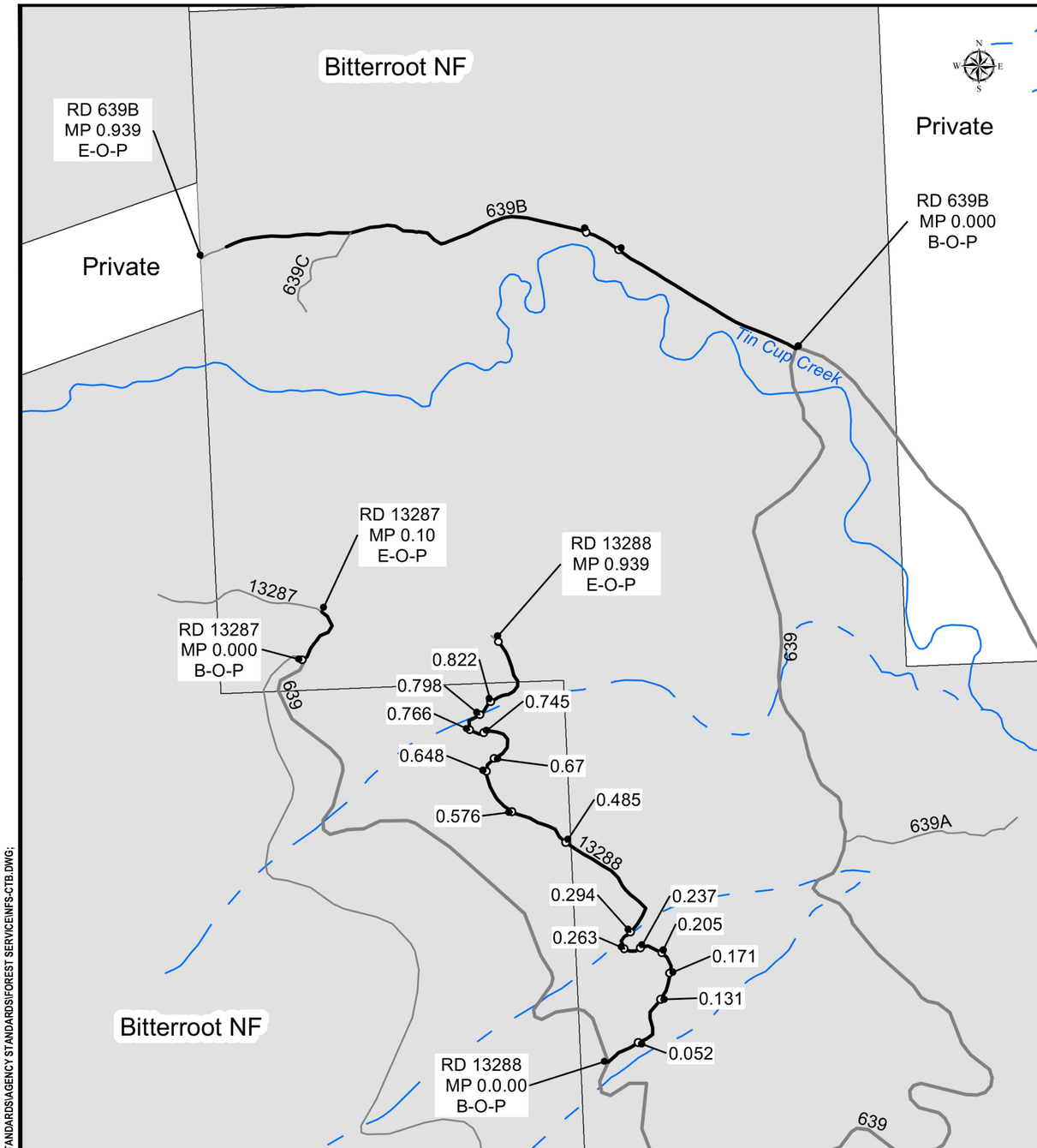
9/28/18 07:07 MARKL F:_CAD STANDARDS\AGENCY STANDARDS\FOREST SERVICE\NFS-CTB.DWG;



RECONSTRUCTION WORKLIST

Road #	639B				
BEG M.P.	END M.P.	PAY ITEM	WORK DESCRIPTION	QTY	UNIT
0.000	0.57	30316	ROADWAY RECONDITIONING, COMPACTION METHOD 2	0.57	MI

Road #	13287				
BEG M.P.	END M.P.	PAY ITEM	WORK DESCRIPTION	QTY	UNIT
0.000	0.10	20209	SELECTIVE CLEARING, TYPE ROADWAY, DISPOSAL MENTHOD (f)	0.10	MI
0.000	0.10	30316	ROADWAY RECONDITIONING, COMPACTION METHOD 2	0.10	MI

Road #	13288				
BEG M.P.	END M.P.	PAY ITEM	WORK DESCRIPTION	QTY	UNIT
0.000	0.94	20209	SELECTIVE CLEARING, TYPE ROADWAY, DISPOSAL MENTHOD (f)	0.94	MI
0.000	0.94	30316	ROADWAY RECONDITIONING, COMPACTION METHOD 2	0.94	MI
0.131		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
0.171		-	Maintain Existing Drain Dip		
0.205		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
0.237		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
0.263		-	Existing CMP, Live Stream		
0.294		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
0.485		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
0.576		-	Existing CMP, Ditch Relief		
0.648		-	Existing CMP, Ditch Relief		
0.67		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
0.745		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
0.766		-	Existing CMP, Live Stream		
0.798		20425	DRAINAGE EXCAVATION, TYPE II DIP, TOLERANCE CLASS A, COMPACTION METHOD 3	1	EA
0.822		-	Existing CMP, Live Stream		
0.939		-	End of Project		

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USDA United States Department of Agriculture Forest Service

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NORTHERN REGION

PROJECT NAME
SQUARE TIN TIMBER SALE
BITTERROOT NATIONAL FOREST
DARBY RANGER DISTRICT

DRAWING TITLE
WORKLIST 639B, 13287, 13288

DATE	DESIGNER	CHECKED	DWG SHEET NO.	SHEET
DATE 12/20/2024	J.PINTOK	A. RICHARDSON	11	11 OF 13

NO.	REVISION DESCRIPTION	BY	DATE
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