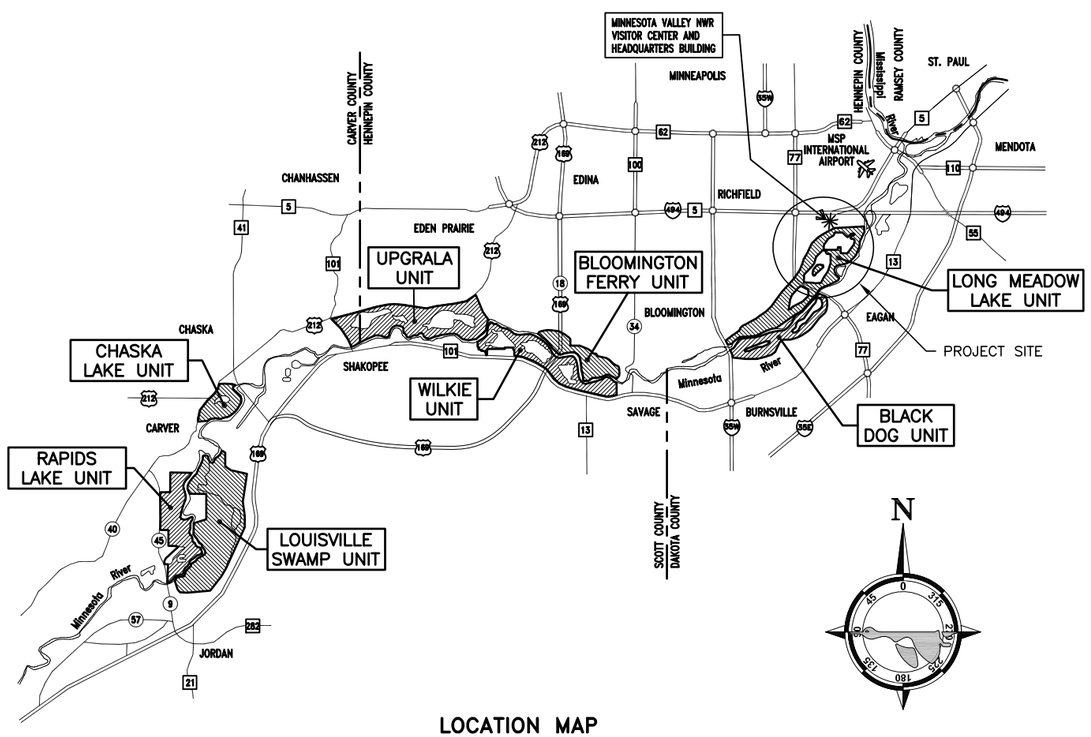
MINNESOTA VALLEY NATIONAL WILDLIFE REFUGE
LONG MEADOW LAKE UNIT
HOGBACK POND DIKE REPAIR

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MIDWEST REGION NO.3

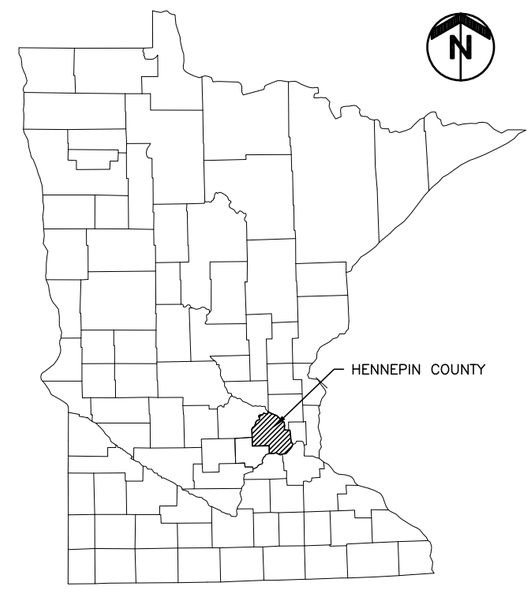
PROJECT DRAWING SET CODE:
3R-MN-839-490

Infrastructure Management Division
5600 American Blvd. West, Suite 990
Bloomington, MN 55437-1458



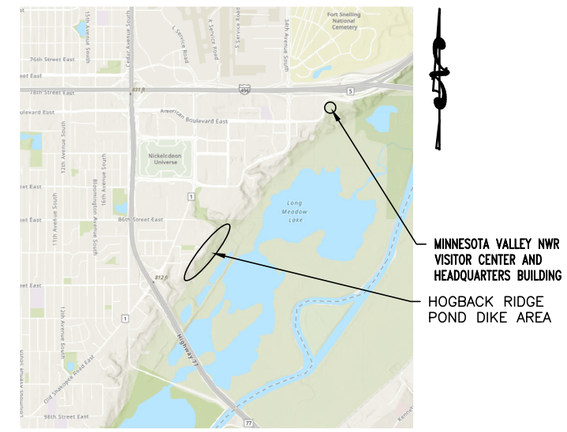
LOCATION MAP

NO SCALE



MINNESOTA COUNTY MAP

NO SCALE



SITE MAP

NO SCALE

DRAWING INDEX

SHT NO.	DESCRIPTION	CADD NAME
1	COVER SHEET, LOCATION/SITE MAPS AND DRAWING INDEX	MNV490001
2	SITE PLAN	MNV490002
3	WATER CONTROL STRUCTURE PLAN AND DETAILS	MNV490003
4	DIKE TYPICAL SECTIONS	MNV490004

GENERAL DRAWING NOTE:
THE U.S. FISH AND WILDLIFE SERVICE, REGION 3 CADD DRAWINGS ARE DRAWN ON A 22" X 34" STANDARD "D" SIZE SHEET (FULL SIZE) 100%, WHEN PLOTTING DRAWINGS AT DIFFERENT PERCENTAGES BAR SCALES ON DRAWINGS SHALL BE USED FOR MEASURING.

MINNESOTA VALLEY
NATIONAL WILDLIFE REFUGE
Refuge Headquarters and
Bloomington Education and Visitor Center

3815 American Blvd. East
Bloomington, MN 55425

Phone: (952)854-5900

REVISION	DATE	DESCRIPTION	BY

MINNESOTA VALLEY NATIONAL WILDLIFE REFUGE
HENNEPIN COUNTY LONG MEADOW LAKE UNIT MINNESOTA

HOGBACK POND DIKE REPAIR
***** DESCRIPTION ON INDEX *****

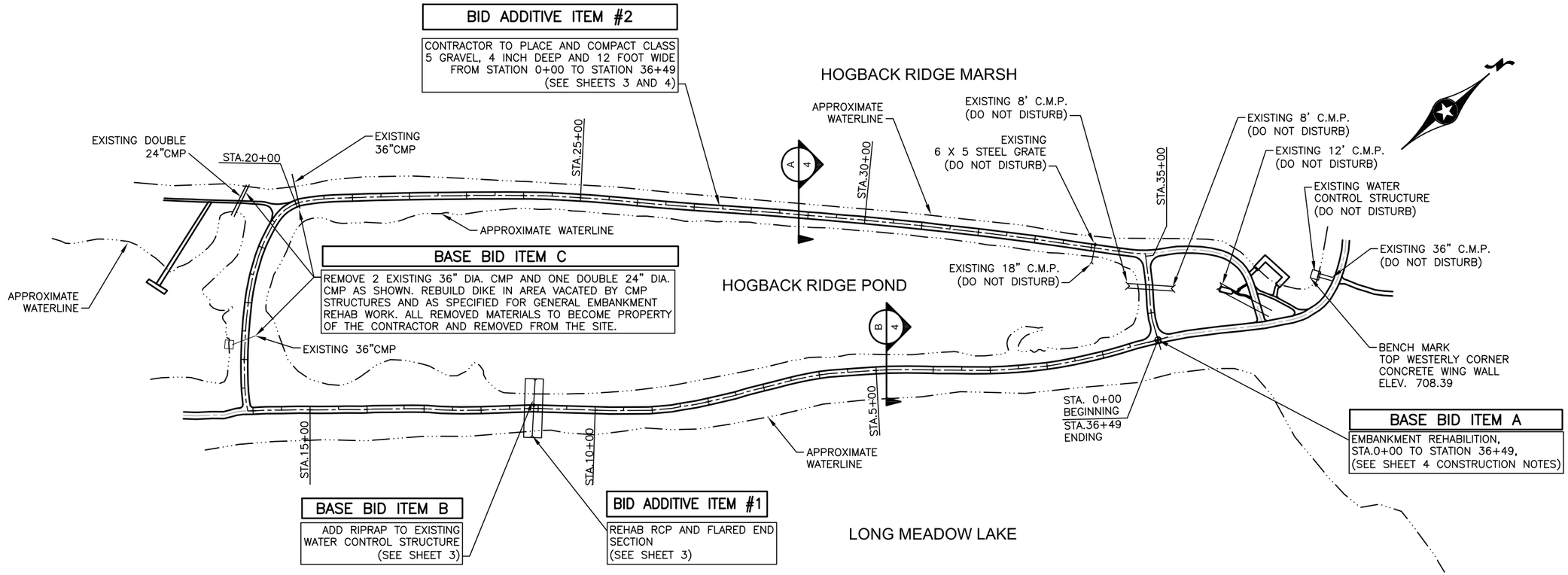
DRAWING SET CODE: 3R-MN-839-490

DESIGNED: McFADDEN | DRAWN: CASILLAS | CHECKED: ...

DATE: 06/12/2025 | CAD FILE NAME: MNV490001.DWG | SH 1 OF 4

PLOT DATE: Aug 04, 2025 - 1:24pm
DRAWING STATUS: 50% REVIEW DWG NAME: MNV490001.dwg
PROJECT LOCATION: J:_0-National_Wildlife_Refuges_NWR\MINNESOTA VALLEY-MNV\2025-490 Hogback Dike Repair\1_Working_Files\DWGS\

PLOT DATE: Aug 04, 2025 – 1:25pm
DRAWING STATUS: 50% REVIEW DWG NAME: MNV490002.dwg
PROJECT LOCATION: J:_0-National_Wildlife_Refuges_NWR\MINNESOTA VALLEY-MNV\2025-490 Hogback Dike Repair\1_Working_Files\DWGS\



1/2 HOGBACK POND DIKE SITE PLAN
SCALE: 1" = 100'

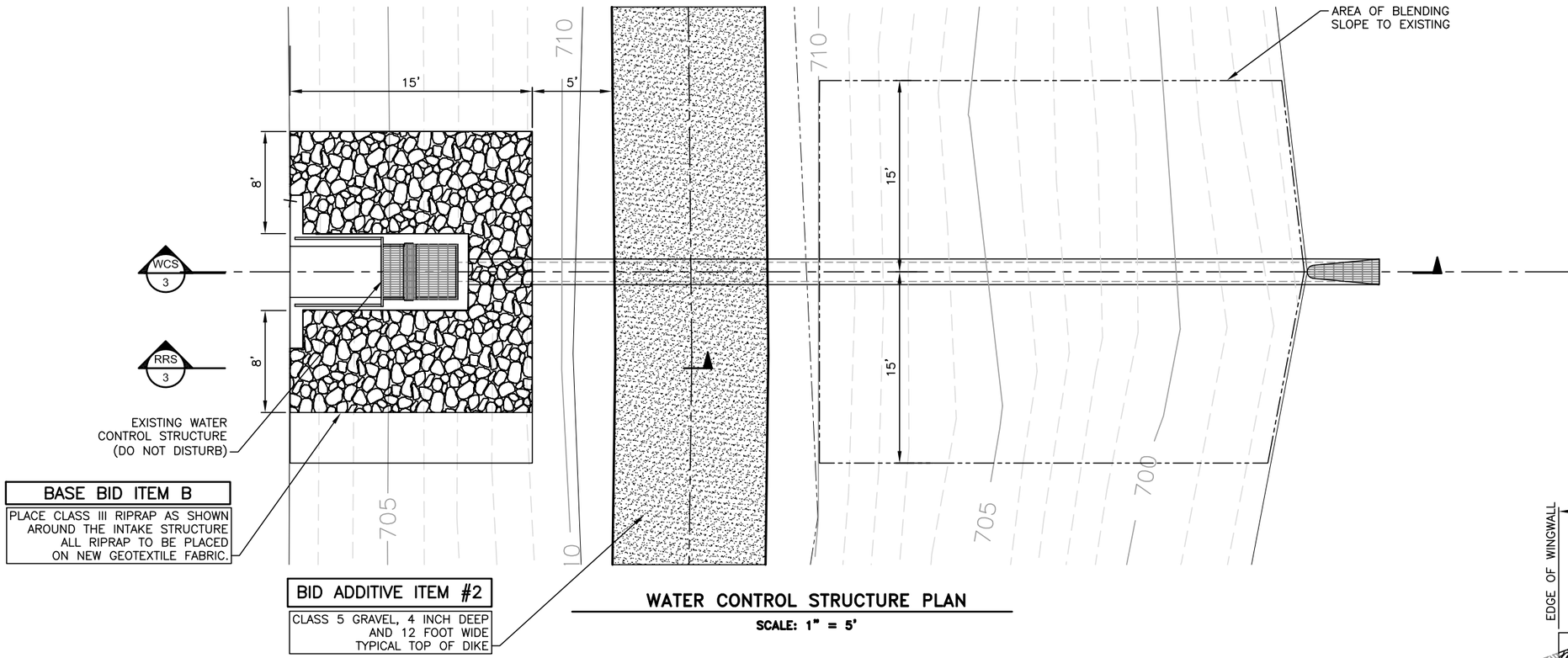
100 0 100 200
SCALE IN FEET

REVISION	DATE	DESCRIPTION	BY
△			

MINNESOTA VALLEY NATIONAL WILDLIFE REFUGE
HENNEPIN COUNTY MINNESOTA
HOGBACK POND DIKE REPAIR
SITE PLAN

DRAWING SET CODE: 3R-MN-839-490
DESIGNED: McFADDEN DRAWN: CASILLAS CHECKED: ...
DATE: 06/12/2025 CAD FILE NAME: MNV490002.DWG SH 2 OF 4

PLOT DATE: Aug 05, 2025 – 10:06am
DWG NAME: MNV490003.dwg
DRAWING STATUS: 50% REVIEW
PROJECT LOCATION: J:_0-National_Wildlife_Refuges_NWR\MINNESOTA VALLEY-MNV\2025-490 Hogback Dike Repair\1_Working_Files\DWGS\



BASE BID ITEM B

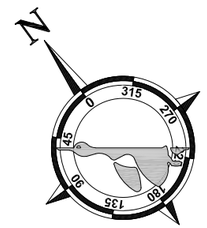
PLACE CLASS III RIPRAP AS SHOWN AROUND THE INTAKE STRUCTURE ALL RIPRAP TO BE PLACED ON NEW GEOTEXTILE FABRIC.

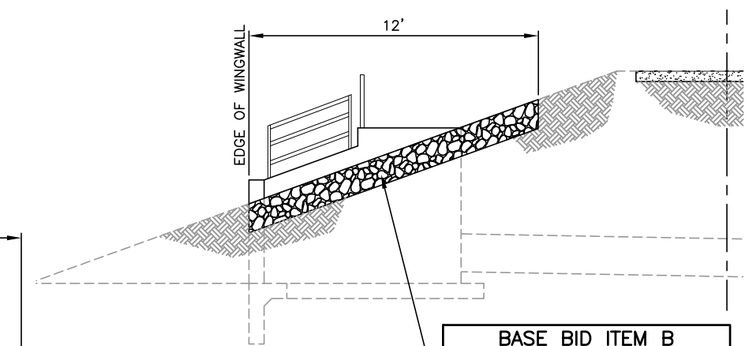
BID ADDITIVE ITEM #2

CLASS 5 GRAVEL, 4 INCH DEEP AND 12 FOOT WIDE TYPICAL TOP OF DIKE

WATER CONTROL STRUCTURE PLAN

SCALE: 1" = 5'



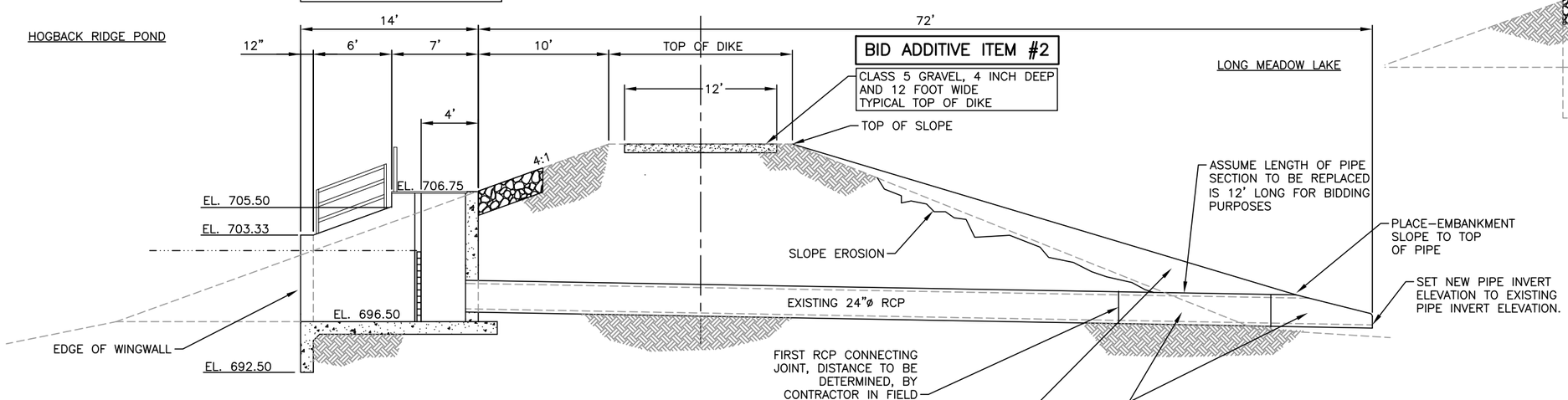


BASE BID ITEM B

REMOVE EXISTING RIPRAP AND FILTER FABRIC. STOCKPILE RIPRAP FOR LATER SPREAD AND BLENDING WITH NEW CLASS III RIPRAP @ 18"DEEP ON NEW GEOTEXTILE FABRIC.

RRS 3 RIPRAP SECTION

SCALE: 1" = 5'



BID ADDITIVE ITEM #2

CLASS 5 GRAVEL, 4 INCH DEEP AND 12 FOOT WIDE TYPICAL TOP OF DIKE

BID ADDITIVE ITEM #1

BACKFILL AND COMPACT NEW FILL OVER RCP AND ERODED EMBANKMENT AREAS AND AROUND 24" DIAMETER RCP. BLEND TO EXISTING EMBANKMENT GRADE WITHIN 15 FEET OF PIPE CENTERLINE. ADD CLAY, TOPSOIL AND SEEDING AS SPECIFIED FOR INTERIOR HOGBACK RIDGE POND EMBANKMENT REHAB WORK.

BID ADDITIVE ITEM #1

REMOVE EXISTING REINFORCED CONCRETE FLARED END SECTION AND STEEL GRATING. CONTRACTOR SHALL ALSO REMOVE THE DAMAGED 24 INCH DIAMETER REINFORCED CONCRETE PIPE BACK TO THE FIRST CONNECTING JOINT AND INSTALL NEW RCP AND FLARED END SECTION OF SAME DIAMETER ACCORDING TO SPECIFICATION SECTION 03400. ALL REMOVED MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR, AND BE REMOVED FROM THE SITE

WCS 3 WATER CONTROL STRUCTURE SECTION

SCALE: 1" = 5'

(EXISTING WATER CONTROL STRUCTURE)

0 5 10
SCALE IN FEET

REVISION	DATE	DESCRIPTION	BY
△			

MINNESOTA VALLEY NATIONAL WILDLIFE REFUGE
LONG MEADOW LAKE UNIT
HENNEPIN COUNTY MINNESOTA

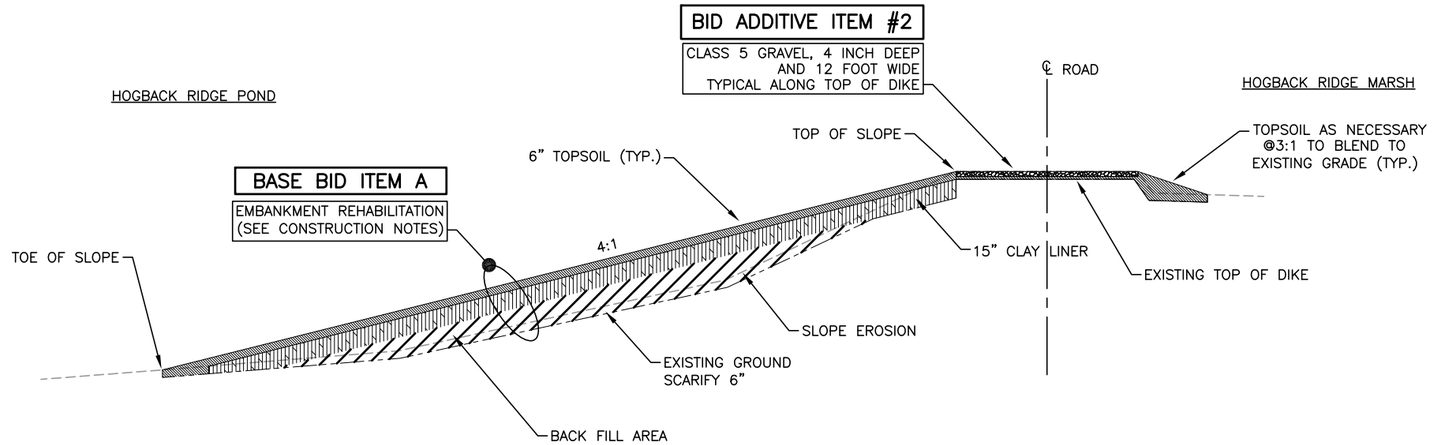
HOGBACK POND DIKE REPAIR

WATER CONTROL STRUCTURE PLAN AND DETAILS

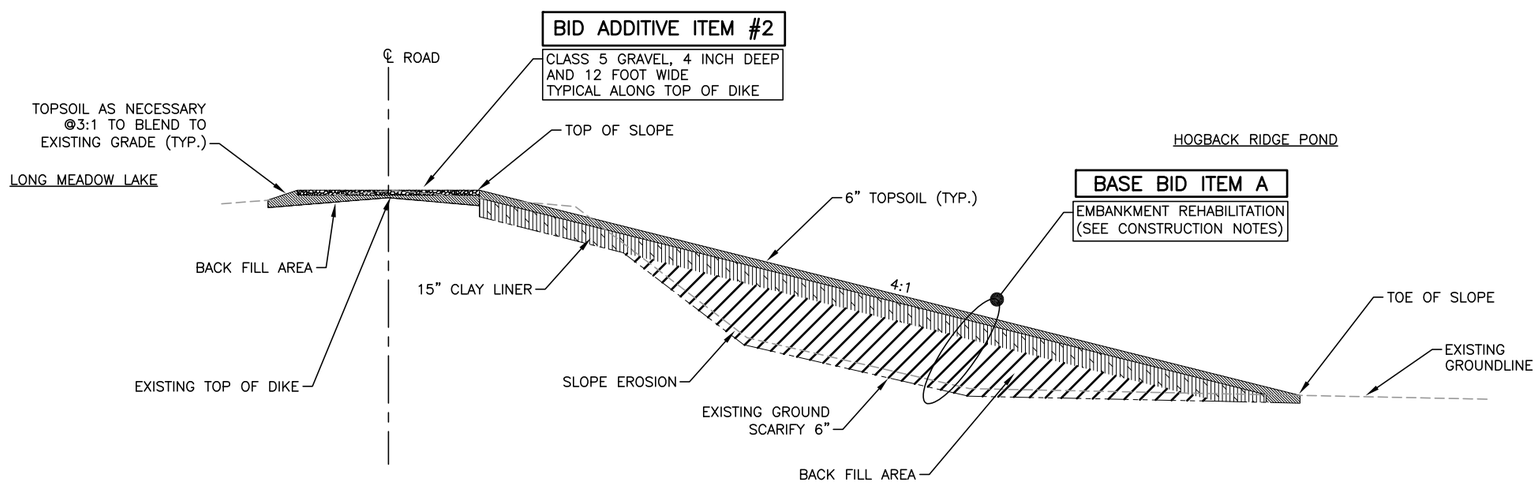
DRAWING SET CODE: 3R-MN-839-490

DESIGNED: McFADDEN | DRAWN: CASILLAS | CHECKED: ...

DATE: 06/12/2025 | CAD FILE NAME: MNV490003.DWG | SH 3 OF 4



B/4 **TYPICAL SECTION**
NO SCALE



A/4 **TYPICAL SECTION**
NO SCALE

EMBANKMENT CONSTRUCTION NOTES

REMOVE ALL VEGETATION, TREES, BUSHES, ROOTS AND/OR OTHER DELETERIOUS MATERIALS ALONG THE INTERIOR EMBANKMENT OF HOGBACK RIDGE POND TO PREPARE THE EMBANKMENT FOR NEW FILL AND RE-SLOPING AS SHOWN.

SCARIFY EXISTING GROUND TO A DEPTH OF 6 INCHES TO PREPARE EMBANKMENT SLOPES FOR NEW SOIL FILL. PLACE FILL IN MAXIMUM 8-INCH LIFTS COMPACTED TO 95% STANDARD MAXIMUM DRY DENSITY AT THE 4:1 GRADE SHOWN.

IF THE CONTRACTOR ENCOUNTERS AN EXISTING GRADE FLATTER THAN STATED SLOPES OF 4:1, THE FLATTER SLOPE WILL REMAIN IN PLACE, BUT THE VEGETATION WILL BE REMOVED FOR CLAY AND TOPSOIL PLACEMENT AND SEEDING.

SEE QUANTITIES CHART FOR BIDDING PURPOSES.

QUANTITIES CHART

EMBANKMENT FILL	11,000	CU. YD.
CLAY	3,333	CU. YD.
TOP SOIL	1,333	CU. YD.

REVISION	DATE	DESCRIPTION	BY

MINNESOTA VALLEY NATIONAL WILDLIFE REFUGE
HENNEPIN COUNTY LONG MEADOW LAKE UNIT MINNESOTA

HOGBACK POND DIKE REPAIR
DIKE TYPICAL SECTIONS

DRAWING SET CODE: 3R-MN-839-490

DESIGNED: McFADDEN | DRAWN: CASILLAS | CHECKED: ...
DATE: 06/12/2025 | CAD FILE NAME: MNV490004.DWG | SH 4 OF 4

PLOT DATE: Aug 04, 2025 - 1:58pm
DRAWING STATUS: 50% REVIEW DWG NAME: MNV490004.dwg
PROJECT LOCATION: J:_0-National_Wildlife_Refuges_NWR\MINNESOTA VALLEY-MNV\2025-490 Hogback Dike Repair\1_Working_Files\DWGS\