WIS

APRIL 2024

PROJECT ID: 1600-02-70

WITH: N/A

COUNTY: SHAWANO

ORDER OF SHEETS

Section No	1	Title
Section No	2	Typical Sections and Details
Section No	3	Estimate of Quantities
Section No	3	Miscellaneous Quantities
Section No	4	Right of Way Plat
Section No	5	Plan and Profile
Section No	6	Standard Detail Drawings
~~Section No~~	~~7~~	~~Sign Plates~~
~~Section No~~	~~8~~	~~Structure Plans~~
Section No	9	Computer Earthwork Data
Section No	9	Cross Sections

TOTAL SHEETS = 252

10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WITTENBERG - ANTIGO

STH 29 TO LANGLADE COUNTY LINE

USH 45

SHAWANO COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1600-02-70	WISC 2024317	1

STATE PROJECT NUMBER

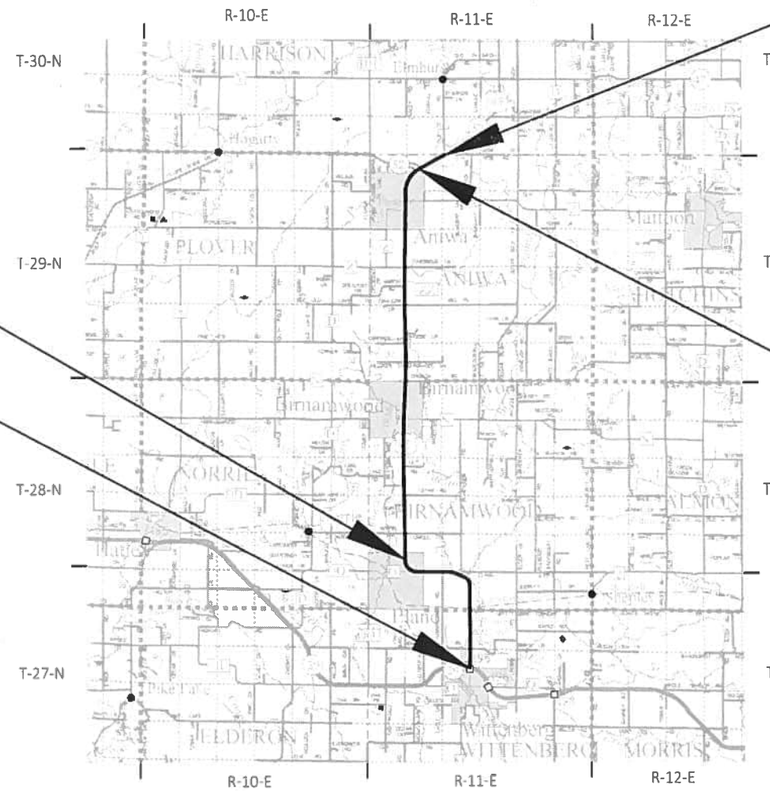
1600-02-70

END PROJECT 1600-02-70
STA 404+65

STA. 801+76.90 BK. EQUATION
STA. 364+39.88 AH.

EQUATION STA. 249+97.37 BK.
STA. 252+06.86 AH.

BEGIN PROJECT 1600-02-70
STA 42+50
Y= 293009.427
X= 714941.060



TOWN OF RINGLE

LAYOUT

SCALE 0 4 MI

TOTAL NET LENGTH OF CENTERLINE = 15.103 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), SHAWANO COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES. GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2018). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A

DESIGN DESIGNATION

A.A.D.T.	(2023)	=	6,140
A.A.D.T.	(2043)	=	6,960
D.H.V.		=	765
D.D.		=	60/40
T.		=	16.7%
DESIGN SPEED (USH 45)		=	45 - 55 MPH
DESIGN SPEED (CTH N)		=	35 MPH
ESALS		=	2,511,200

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'E8')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (955.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

ORIGINAL PLANS PREPARED BY

AECOM

WISCONSIN
ANDREW J CZECH
E-45342
MADISON WISCONSIN
PROFESSIONAL ENGINEER

DATE 11/1/23 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	AECOM
Designer	AECOM
Project Manager	PRESTON BOHN
Regional Examiner	FRED SCHUNKE
Regional Supervisor	BETH NEMEC

APPROVED FOR THE DEPARTMENT

DATE 10/31/2023 Preston Bohn Digitally signed by Preston Bohn Date: 2023.10.31 09:59:41-05'00' (Signature)

E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\010101-TI.DWG PLOT DATE : 10/22/2023 11:43 AM PLOT BY : CZECH, ANDREW PLOT NAME :

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS, AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

ALL RADIUS DIMENSIONS ON THE PLAN FOR CURB AND GUTTER ARE TO THE FLANGE LINE, UNLESS OTHERWISE NOTED.

ALL ELEVATIONS ON THE PLAN FOR CURB AND GUTTER ARE TO THE FLANGE LINE, UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE SHOWN IN THE PLANS, DRIVEWAYS WITHIN THE PROJECT LIMITS WILL NOT BE RE-PAVED AT DRIVEWAY LOCATIONS, MILL AND PAVE ONLY UP TO OUTSIDE EDGE OF PAVED SHOULDER.

THE CONTRACTOR SHALL NOT OPERATE BEYOND THE SLOPE INTERCEPTS AS SHOWN IN THE PLANS WHEN ADJACENT TO WETLANDS OR ENVIRONMENTALLY SENSITIVE AREAS.

EROSION CONTROL FEATURES ARE SHOWN ON THE PLANS AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.

WETLANDS, WATERWAYS, AND OTHER ENVIRONMENTALLY SENSITIVE AREAS SHALL BE PROTECTED AT ALL TIMES. DO NOT STORE EQUIPMENT OR MATERIALS NEAR THESE SITES UNLESS APPROVED BY THE ENGINEER.

USE BIODEGRADABLE MAT ON DISTURBED AREAS IN WETLAND AND WATERWAYS.

DISTURBED AREAS WITHIN THE RIGHT OF WAY SHALL BE FERTILIZED AND SEEDED AS DIRECTED BY THE ENGINEER.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

SECTIONS AS SHOWN ON THE CROSS SECTION SHEETS INCLUDE THE THICKNESS OF TOPSOIL.

DISTANCES SHOWN ON THE PLAN ARE GROUND DISTANCES.

THE BASE AGGREGATE DENSE 3/4-INCH CALCULATIONS ARE BASED ON A UNIT WEIGHT OF 2.1 TONS/CY.

THE BASE AGGREGATE DENSE 1 1/4-INCH CALCULATIONS ARE BASED ON A UNIT WEIGHT OF 2.0 TONS/CY.

HMA PAVEMENT CALCULATIONS ARE BASED ON A UNIT WEIGHT OF 112 LB/SY/INCH.

UTILITY CONTACTS

COMMUNICATIONS
ANDY HEIGL
ASTREA - COMMUNICATION
105 KENT ST.
P.O. BOX 190
IRON MOUNTAIN, MI 49801
OFFICE: (906) 776 - 2609
CELL: (906) 221 - 7536
ANDY.HEIGL@ASTREACONNECT.COM

COMMUNICATIONS
SCOTT KASIER
SPECTRUM - COMMUNICATION
5024 HEFFRON ST
STEVENS POINT, WI 54481
(715) 382 - 3493
SCOTT.KAISER@CHARTER.COM

COMMUNICATIONS
JEREMY ZEHM
FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION
154 E 2ND ST
NEW RICHMOND, WI 54017
(715) 243 - 9243
JEREMY.ZEHM@FTR.COM

COMMUNICATIONS
RICK VINCENT
NSIGHT TELESERVICES - COMMUNICATION
470 SECURITY BLVD
P.O. BOX 19079
GREEN BAY, WI 54313
(920) 617 - 7316
RICK.VINCENT@NSIGHT.COM

COMMUNICATIONS
LORI KETTER
WINDSTREAM KDL, LLC - COMMUNICATION
969 WAUBE LANE
GREEN BAY, WI 54303
(920) 410 - 6902
LORI.KETTER@WINDSTREAM.COM

COMMUNICATIONS
MARCUS DAVIDSON
WITTENBERG CABLE TV INC. - COMMUNICATION
109 WEST WALKER ST
WITTENBERG, WI 54499
OFFICE: (715) 253 - 2111
CELL: (715) 881 - 1360
MARCUS@CIRRINITY.NET

COMMUNICATIONS
MARCUS DAVIDSON
WITTENBERG TELEPHONE COMPANY - COMMUNICATION
109 WEST WALKER ST
WITTENBERG, WI 54499
OFFICE: (715) 253 - 2111
CELL: (715) 881 - 1360
MARCUS@CIRRINITY.NET

ELECTRICITY
MATT SCHMITZ
ALLIANT ENERGY - ELECTRIC
883 W SCOTT ST
FOND DU LAC, WI 54937
(920) 238 - 1137
MATTHEWSCHMITZ@ALLIANTENERGY.COM

ELECTRICITY - TRANSMISSION
CHRIS DAILEY
ATC MANAGEMENT, INC. - ELECTRIC-TRANSMISSION
P.O. BOX 47
WAUKESHA, WI 53187
(262) 506 - 6886
CDAILEY@ATCLLC.COM

GAS/PETROLEUM
TYLER DAHLSTROM
WISCONSIN PUBLIC SERVICE CORPORATION - GAS
1700 SHERMAN ST
WAUSAU, WI 54401
(715) 848 - 7387
(715) 432 - 9212
TYLER.DAHLSTROM@WISCONSINPUBLICSERVICE.COM

SEWER
CONNER OPPER
BIRNAMWOOD WASTEWATER TREATMENT FACILITY - SEWER
359 STATE RD
BIRNAMWOOD, WI 54414
(715) 326 - 3479
BWOODDPW@GMAIL.COM

WATER
CONNER OPPER
BIRNAMWOOD MUNICIPAL WATER UTILITY - WATER
359 STATE RD
BIRNAMWOOD, WI 54414
(715) 326 - 3479
BWOODDPW@GMAIL.COM

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 223.155 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 6.178 ACRES

WISDOT DESIGN PROJECT MANAGER
PRESTON BOHN
NORTH CENTRAL REGION, WISCONSIN RAPIDS OFFICE
1681 2ND AVE S
WISCONSIN RAPIDS, WI 54495
(715) 421-8302
PRESTON.BOHN@DOT.WI.GOV

WDNR CONTACT
JIM DOPERALSKI
DNR NORTHEAST REGIONAL HEADQUARTERS
2984 SHAWANO AVE.
GREEN BAY, WI 54313
(920) 412-0165
JAMES.DOPERALSKI@WISCONSIN.GOV

DESIGN CONTACT
AECOM
ANDREW CZECH
1350 DEMING WAY, STE 100
MIDDLETON, WI 53562
(612) 223-0301
ANDREW.CZECH@AECOM.COM

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

2

N

EQUATION
STA. 249+97.37 BK.
STA. 252+06.86 AH.

VILLAGE OF ELAND

CULVERT NO. 58045089284
STA 414+66 - STA 419+99
CULVERT CLEANING & TELEVISING

VILLAGE OF BIRNAMWOOD

CULVERT NO. 58045005913
STA 503+47
CULVERT LINING

CULVERT NO. UNKNOWN
STA 526+15
CULVERT CLEANING

MGS REPLACEMENTS
STA 554+14 - STA 559+68

CULVERT NO. 58045005929
STA 718+33
CULVERT LINING

VILLAGE OF ANIWA

CULVERT NO. 58045005885
STA 46+30
CULVERT LINING

CULVERT NO. 58045005904
STA 395+00
CULVERT REPLACEMENT

INTERSECTION WIDENING
STA 440+75 - STA 455+12

CULVERT NO. 58045005909
STA 449+44
CULVERT REPLACEMENT

CULVERT NO. 58045005914
STA 526+51
CULVERT CLEANING

CULVERT NO. 58045005921
STA 632+08
CULVERT REPLACEMENT

EQUATION
STA. 801+76.90 BK.
STA. 364+39.88 AH.

END PROJECT 1600-02-70
STA 404+65
MATCH EXISTING
BUTT JOINT REQ'D

CULVERT NO. 58045007425
STA 111+51
CULVERT REPLACEMENT

BEGIN PROJECT 1600-02-70
STA 42+50
MATCH EXISTING
BUTT JOINT REQ'D

CEDAR ST
NORRIE RD
POPPLE LN
WESTERN AVE
COUNTRY MANOR LN
ELM ST
MAPLE ST
REW LN
KILDEER LN
CARDINAL LN
SWALLOW LN
MARSH RD
CTH ZZ
1ST ST
EMMA ST
STH 52
MAPLE RD
OLD 26 RD
STH 29
HEMLOCK RD
MOUNTAIN BAY STATE TRAIL
HUMMINGBIRD RD
BLUEBIRD RD
ORIOLE RD
CEDAR RD
LILY RD
COUNTY RD N
FIELD ST
CHURCH RD
CHICKADEE LN
PHOEBE LN
HILL RD
PARTRIDGE LN
CTH Z
WITT-BIRN TOWNLINE RD
LANGLADE-SHAWANO CO LINE RD

TOWN OF WITTENBURG
TOWN OF BIRNAMWOOD
TOWN OF ANIWA

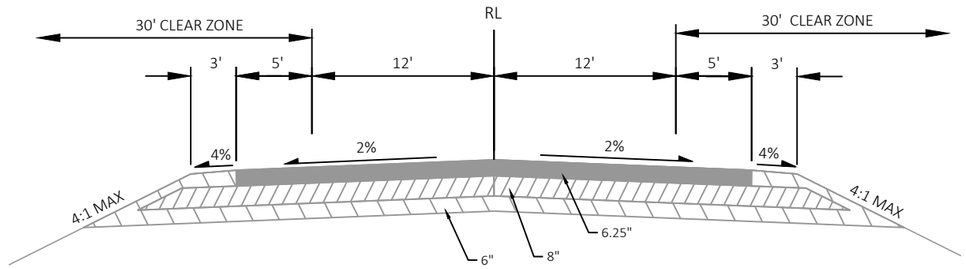
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 020201-po
PLOT DATE : 8/31/2023 3:16 PM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:1 MI
WISDOT/CADDS SHEET 42

2

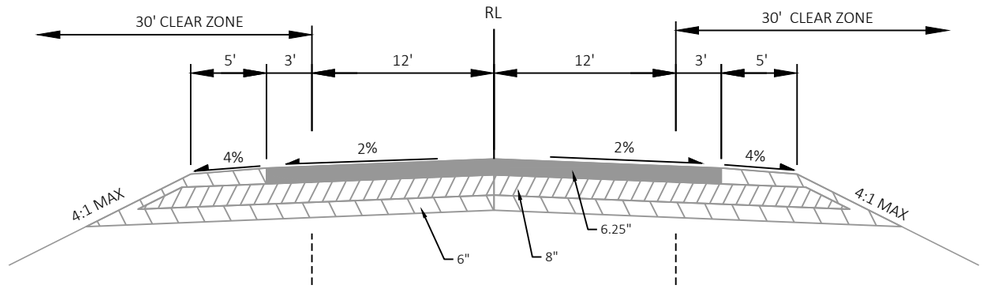
LEGEND

- EXISTING HMA PAVEMENT
- EXISTING PULVERIZED AND RELAYED HMA PAVEMENT
- EXISTING BASE COURSE



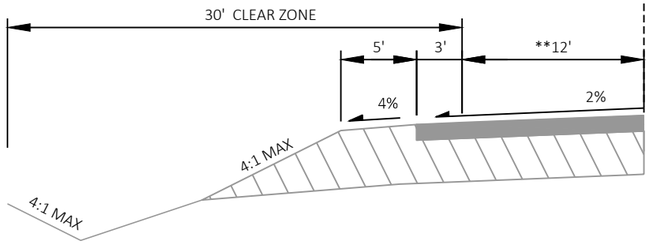
TYPICAL EXISTING SECTION - USH 45

STA 42+50 - STA 85+00
STA 101+72 - STA 109+34



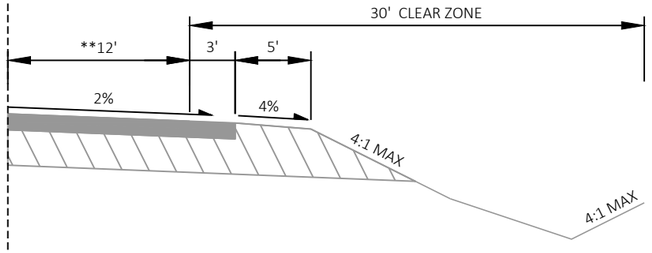
TYPICAL EXISTING SECTION - USH 45

STA 109+34 - STA 249+97.37 BK
STA 252+06.86 AH - STA 252+50
STA 373+50 - STA 435+00
STA 477+00 - STA 590+00
STA 655+00 - STA 662+00
STA 710+00 - STA 801+76.90 BK
STA 364+39.88 AH - STA 404+65



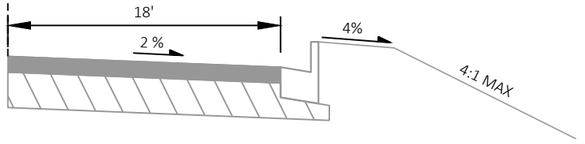
** TAPER FROM 0' TO 12', STA 304+00 - STA 311+00 LT
** TAPER FROM 12' TO 0', STA 366+50 - STA 373+50 LT
** TAPER FROM 0' TO 12', STA 662+00 - STA 669+00 LT

STA 304+00 - STA 373+50
STA 662+00 - STA 680+00



STA 252+50 - STA 289+50
STA 299+00 - STA 306+00
STA 590+00 - STA 655+00

** TAPER FROM 0' TO 12', STA 252+50 - STA 259+50 RT
** TAPER FROM 12' TO 0', STA 299+00 - STA 306+00 RT
** TAPER FROM 0' TO 12', STA 590+00 - STA 597+00 RT
** TAPER FROM 12' TO 0', STA 648+00 - STA 655+00 RT



STA 289+50 - STA 299+00

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 4	E

2

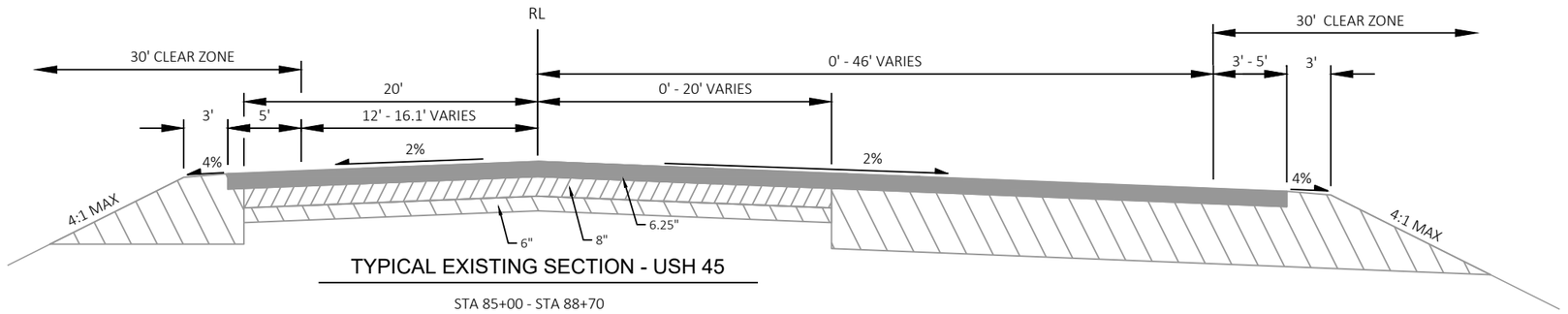
2

LEGEND

EXISTING HMA PAVEMENT

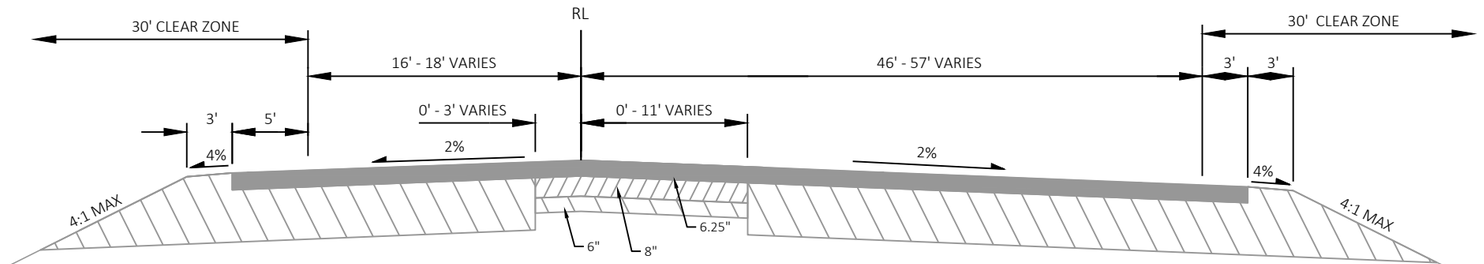
EXISTING PULVERIZED AND RELAYED HMA PAVEMENT

EXISTING BASE COURSE



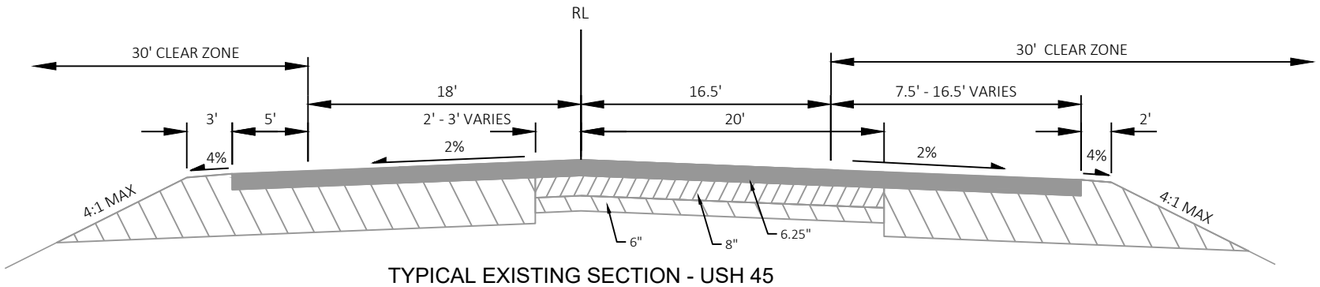
TYPICAL EXISTING SECTION - USH 45

STA 85+00 - STA 88+70



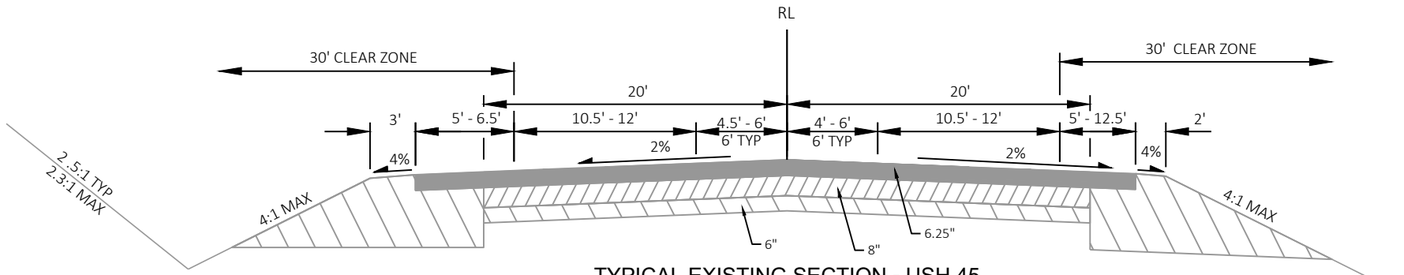
TYPICAL EXISTING SECTION - USH 45

STA 88+70 - STA 90+00



TYPICAL EXISTING SECTION - USH 45

STA 90+00 - STA 96+00



TYPICAL EXISTING SECTION - USH 45

STA 96+00 - STA 101+72

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 2

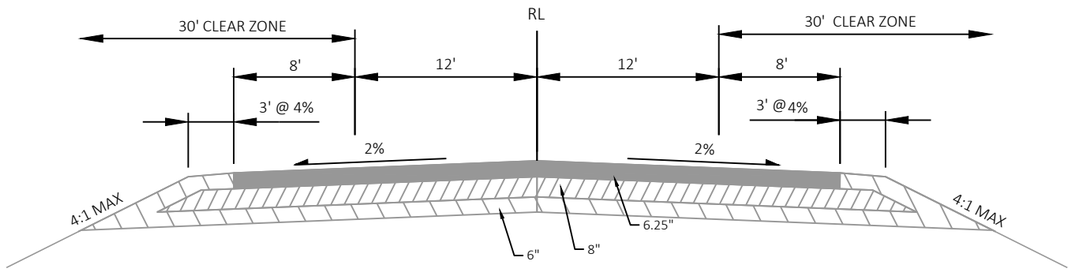
PLOT DATE : 11/1/2023 12:45 PM PLOT BY : MROZ, ZACHARY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

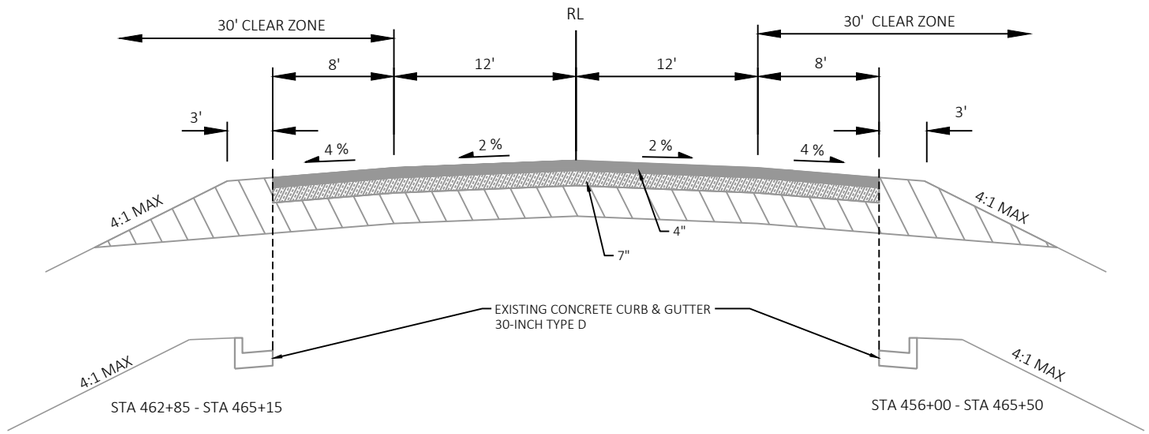
LEGEND

- EXISTING HMA PAVEMENT
- EXISTING HMA PAVEMENT (BOTTOM LAYER)
- EXISTING PULVERIZED AND RELAYED HMA PAVEMENT
- EXISTING BASE COURSE



TYPICAL EXISTING SECTION - USH 45

STA 435+00 - STA 445+50
STA 468+50 - STA 477+00



TYPICAL EXISTING SECTION - USH 45

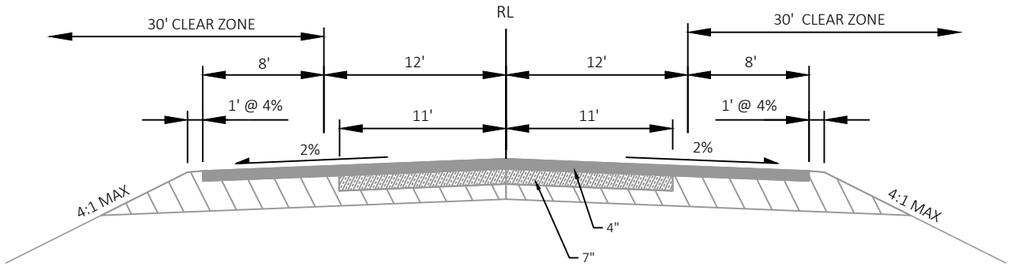
STA 445+50 - STA 450+00
STA 454+00 - STA 468+50

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 6	E

2

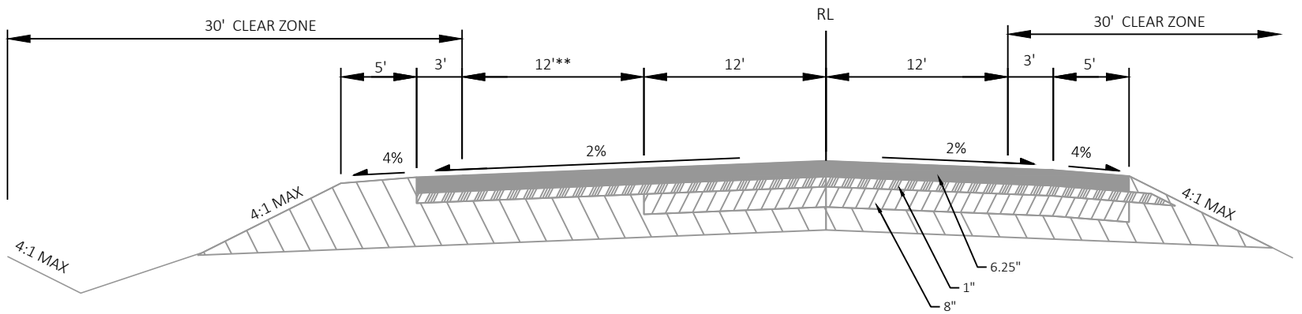
LEGEND

- EXISTING HMA PAVEMENT
- EXISTING HMA PAVEMENT (BOTTOM LAYER)
- EXISTING BASE AGGREGATE DENSE
- EXISTING PULVERIZED AND RELAYED HMA PAVEMENT
- EXISTING BASE COURSE



TYPICAL EXISTING SECTION - USH 45

STA 450+00 - STA 454+00



** TAPER FROM 12' TO 0', STA 703+00 - STA 710+00

TYPICAL EXISTING SECTION - USH 45

STA 680+00 - STA 710+00

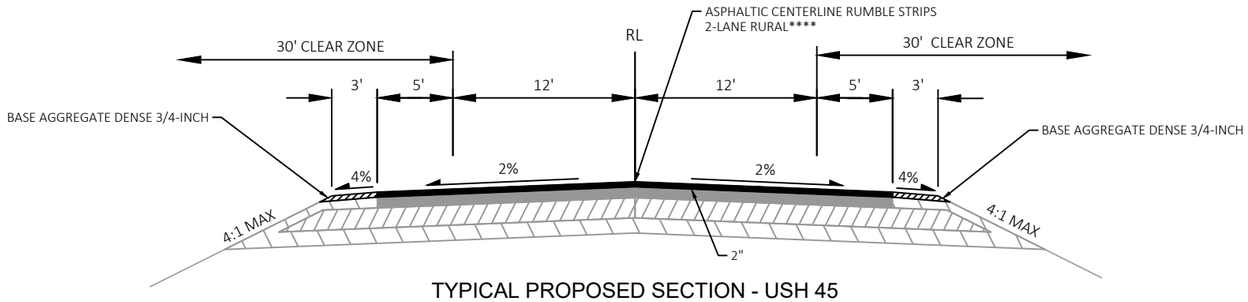
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 7	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 4
PLOT DATE : 11/1/2023 12:45 PM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- REMOVING ASPHALTIC SURFACE MILLING HMA PAVEMENT 4 MT 58-28 S
- BASE AGGREGATE DENSE 3/4-INCH
- ASPHALTIC SURFACE & HMA PAVEMENT 4 MT 58-28 S
- ASPHALTIC SURFACE
- BASE AGGREGATE DENSE 1 $\frac{1}{4}$"
- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE
- EXISTING PULVERIZED AND RELAYED HMA PAVEMENT
- EXISTING BASE COURSE



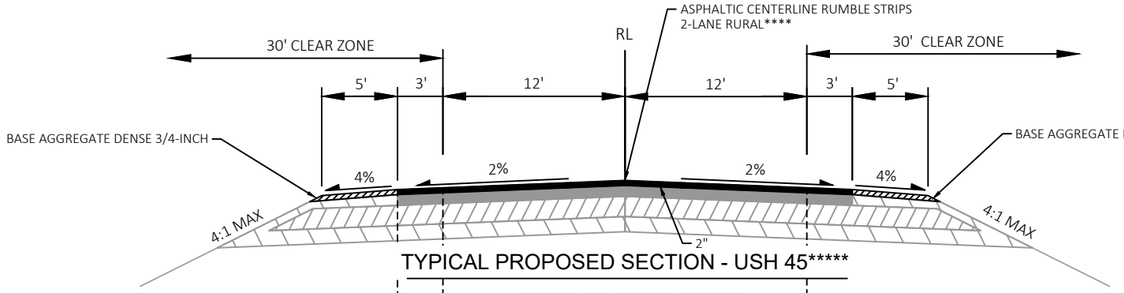
TYPICAL PROPOSED SECTION - USH 45

STA 42+50 - STA 85+00
STA 101+72 - STA 109+34

**** SEE MISCELLANEOUS QUANTITIES FOR APPLICABLE STATION RANGES

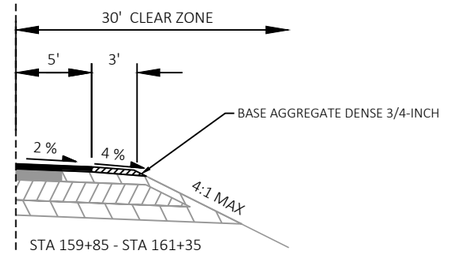
LEGEND

- REMOVING ASPHALTIC SURFACE MILLING HMA PAVEMENT 4 MT 58-28 S
- BASE AGGREGATE DENSE 3/4-INCH
- ASPHALTIC SURFACE & HMA PAVEMENT 4 MT 58-28 S
- ASPHALTIC SURFACE
- BASE AGGREGATE DENSE 1 ¼"
- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE
- EXISTING PULVERIZED AND RELAYED HMA PAVEMENT
- EXISTING BASE COURSE



TYPICAL PROPOSED SECTION - USH 45*****

STA 109+34 - STA 249+97.37 BK
STA 252+06.86 AH - STA 252+50
STA 373+50 - STA 435+00
STA 477+00 - STA 590+00
STA 655+00 - STA 662+00
STA 710+00 - STA 801+76.90 BK
STA 364+39.88 AH - STA 404+65

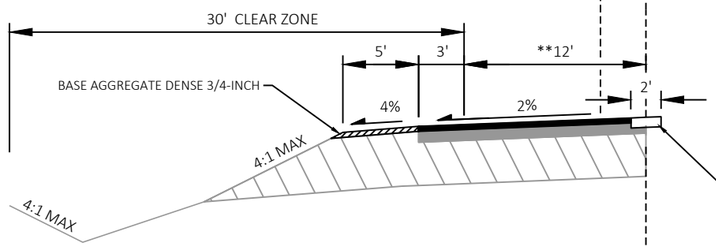


STA 159+85 - STA 161+35

**** SEE MISCELLANEOUS QUANTITIES FOR APPLICABLE STATION RANGES

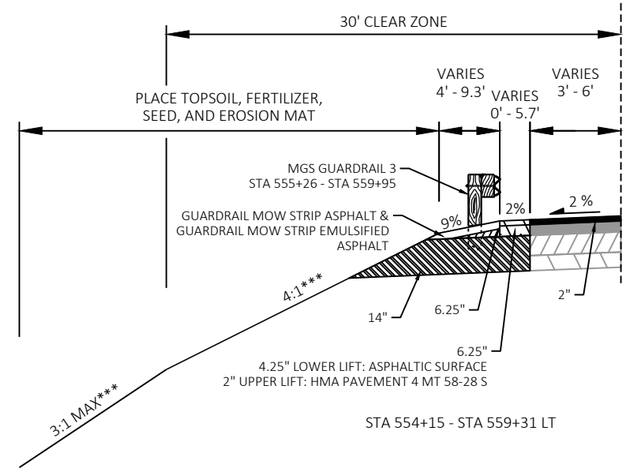
***** SEE OTHER TYPICAL SECTIONS FOR PERMANENT GRADING AT CULVERT REPLACEMENTS WITHIN THE FOLLOWING STATION RANGES:
- STA 109+68 - STA 113+39 LT
- STA 109+87 - STA113+20 RT
- STA 392+87 - STA 397+18 LT
- STA 393+21 - STA 395+96 RT
- STA 630+07 - STA 633+85 RT

THE TYPICAL SECTIONS ON THIS SHEET STILL APPLY FOR THE MILL & OVERLAY OPERATIONS.



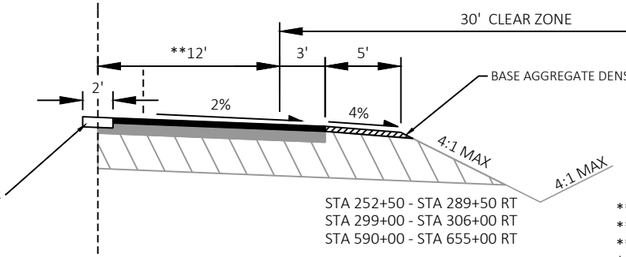
** TAPER FROM 0' TO 12', STA 304+00 - STA 311+00 LT
** TAPER FROM 12' TO 0', STA 366+50 - STA 373+50 LT
** TAPER FROM 0' TO 12', STA 662+00 - STA 669+00 LT

STA 304+00 - STA 373+50 LT
STA 662+00 - STA 680+00 LT



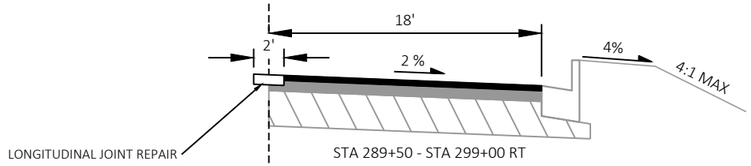
*** STA 556+50 - STA 557+25 LT: 2:1 MAX

STA 554+15 - STA 559+31 LT

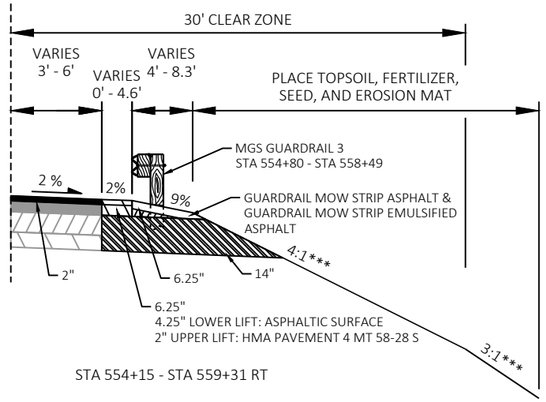


STA 252+50 - STA 289+50 RT
STA 299+00 - STA 306+00 RT
STA 590+00 - STA 655+00 RT

** TAPER FROM 0' TO 12', STA 252+50 - STA 259+50 RT
** TAPER FROM 12' TO 0', STA 299+00 - STA 306+00 RT
** TAPER FROM 0' TO 12', STA 590+00 - STA 597+00 RT
** TAPER FROM 12' TO 0', STA 648+00 - STA 655+00 RT



STA 289+50 - STA 299+00 RT



*** STA 556+50 - STA 557+25 RT: 2:1 MAX

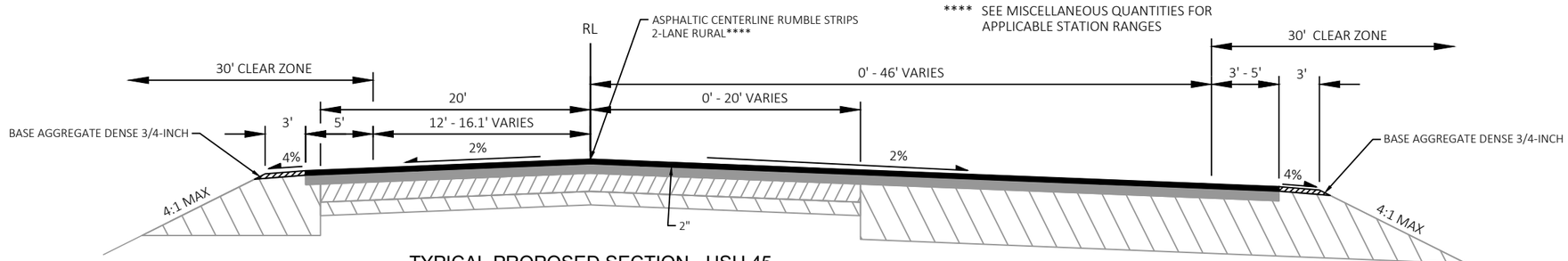
STA 554+15 - STA 559+31 RT

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 9	E

2

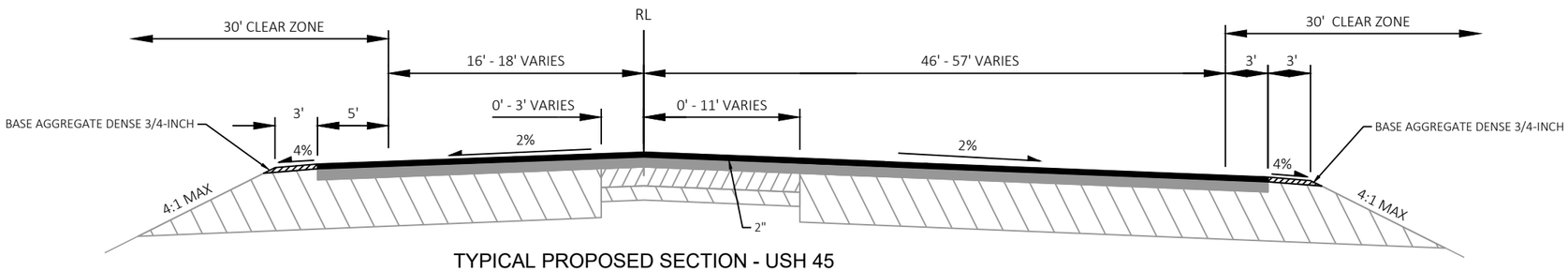
LEGEND

- REMOVING ASPHALTIC SURFACE MILLING HMA PAVEMENT 4 MT 58-28 S
- BASE AGGREGATE DENSE 3/4-INCH
- ASPHALTIC SURFACE & HMA PAVEMENT 4 MT 58-28 S
- ASPHALTIC SURFACE
- BASE AGGREGATE DENSE 1 $\frac{1}{4}$"
- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE
- EXISTING PULVERIZED AND RELAYED HMA PAVEMENT
- EXISTING BASE COURSE



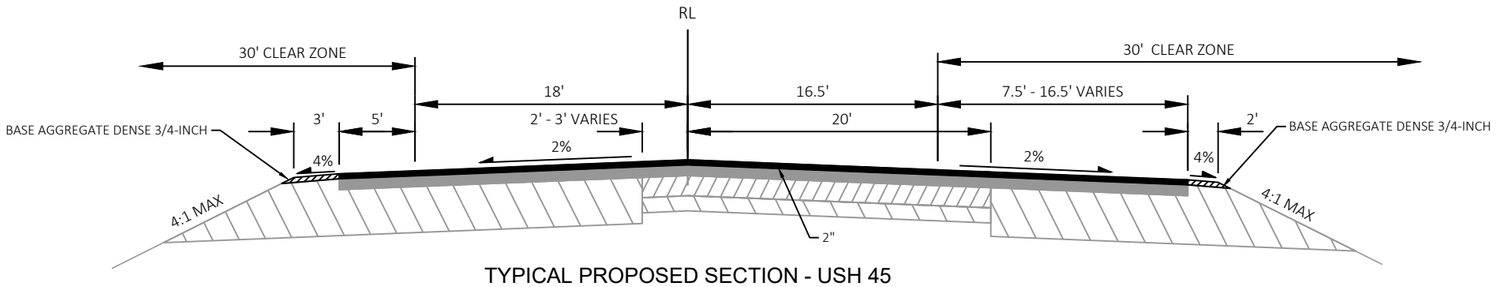
TYPICAL PROPOSED SECTION - USH 45

STA 85+00 - STA 88+70



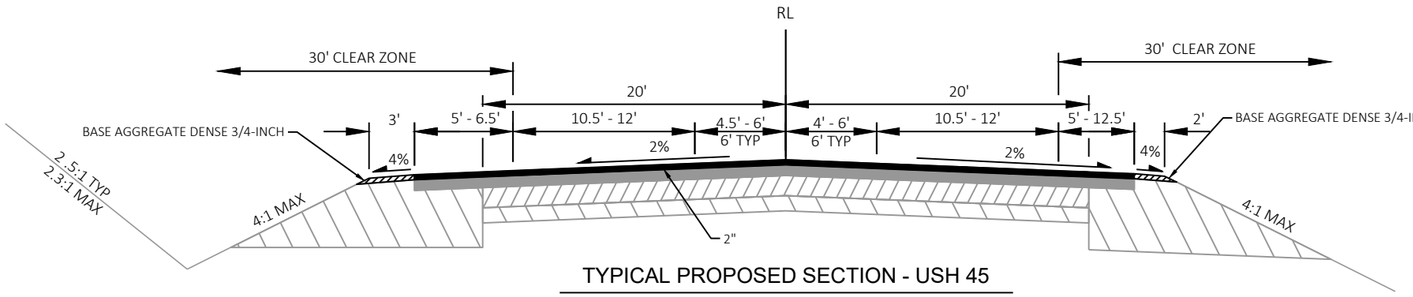
TYPICAL PROPOSED SECTION - USH 45

STA 88+70 - STA 90+00



TYPICAL PROPOSED SECTION - USH 45

STA 90+00 - STA 96+00



TYPICAL PROPOSED SECTION - USH 45

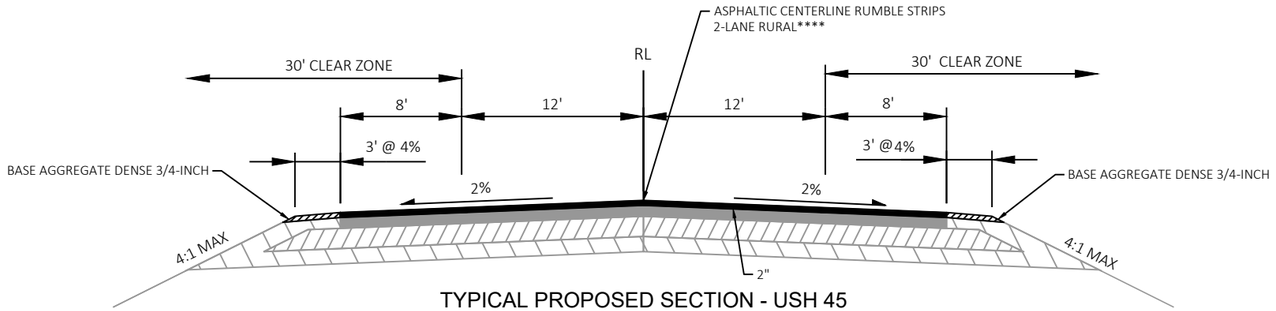
STA 96+00 - STA 101+72

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 10	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 7
PLOT DATE : 11/1/2023 12:45 PM PLOT BY : MROZ, ZACHARY PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

LEGEND

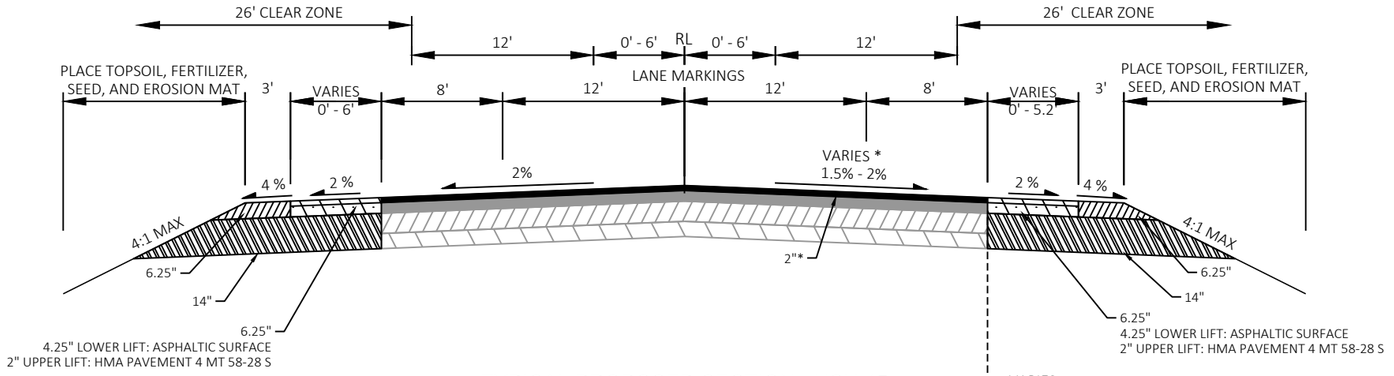
- REMOVING ASPHALTIC SURFACE MILLING HMA PAVEMENT 4 MT 58-28 S
- BASE AGGREGATE DENSE 3/4-INCH
- ASPHALTIC SURFACE & HMA PAVEMENT 4 MT 58-28 S
- ASPHALTIC SURFACE
- BASE AGGREGATE DENSE 1 $\frac{1}{4}$"
- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE
- EXISTING PULVERIZED AND RELAYED HMA PAVEMENT
- EXISTING BASE COURSE



TYPICAL PROPOSED SECTION - USH 45

STA 435+00 - STA 440+75
STA 468+50 - STA 477+00

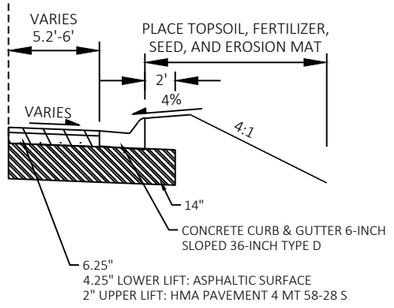
**** SEE MISCELLANEOUS QUANTITIES FOR APPLICABLE STATION RANGES



TYPICAL PROPOSED SECTION - USH 45

STA 440+75 - STA 445+50

* SEE CONSTRUCTION DETAIL "USH 45 PROFILE REVISION AT CTH N INTERSECTION" FOR VARIATIONS IN PAVEMENT THICKNESS AND CROSS SLOPE



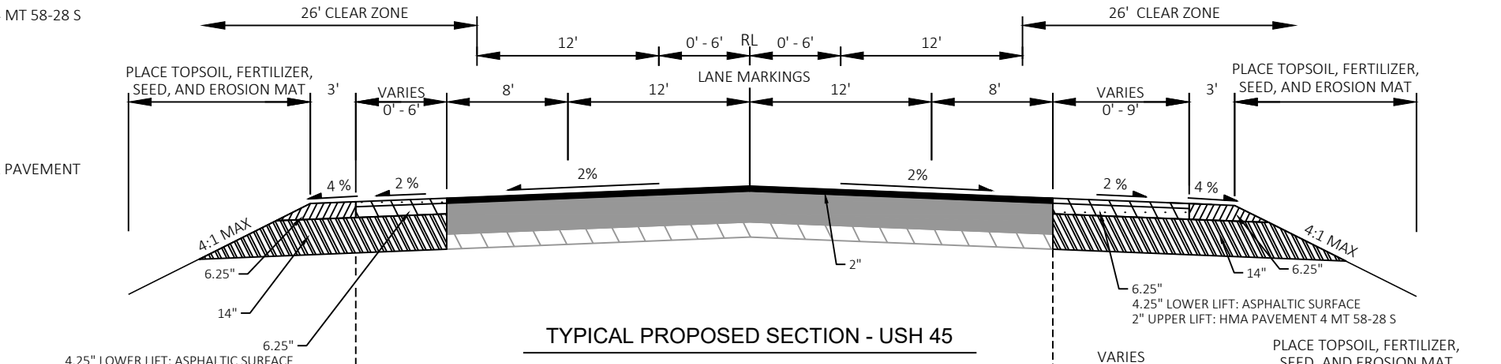
STA 443+36 - STA 445+50 RT

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 11	E

2

LEGEND

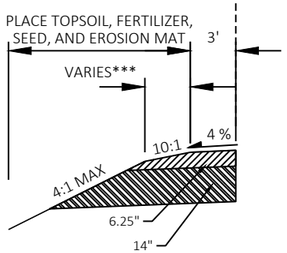
- REMOVING ASPHALTIC SURFACE MILLING HMA PAVEMENT 4 MT 58-28 S
- BASE AGGREGATE DENSE 3/4-INCH
- ASPHALTIC SURFACE & HMA PAVEMENT 4 MT 58-28 S
- ASPHALTIC SURFACE
- BASE AGGREGATE DENSE 1 ¼"
- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE
- EXISTING PULVERIZED AND RELAYED HMA PAVEMENT
- EXISTING BASE COURSE



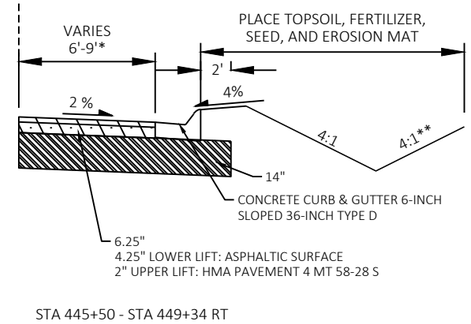
TYPICAL PROPOSED SECTION - USH 45

STA 445+50 - STA 455+13

*** STA 451+50, WIDTH = 0'
STA 452+00, WIDTH = 3' (GRADE 10:1 SLOPE TO 32' LT)
STA 452+55, WIDTH = 3.8' (GRADE 10:1 SLOPE TO 32' LT)



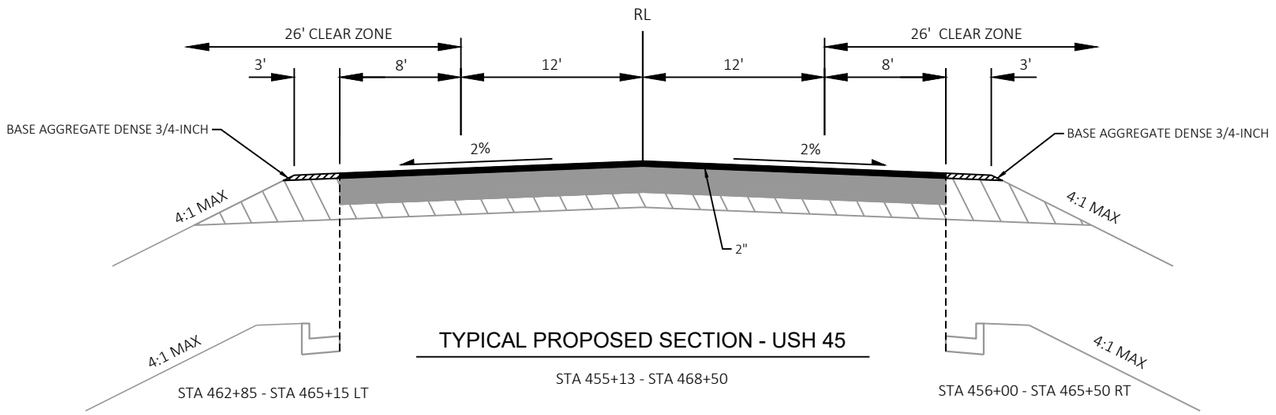
STA 451+50 - STA 452+63 LT



STA 445+50 - STA 449+34 RT

* STA 445+50 - STA 447+82 RT, WIDTH = 6'
STA 447+82 - STA 449+37 RT, WIDTH = 9'

** CUT DITCH BACKSLOPE ONLY AT
STA 445+50 - STA 446+80 RT



TYPICAL PROPOSED SECTION - USH 45

STA 455+13 - STA 468+50

STA 462+85 - STA 465+15 LT

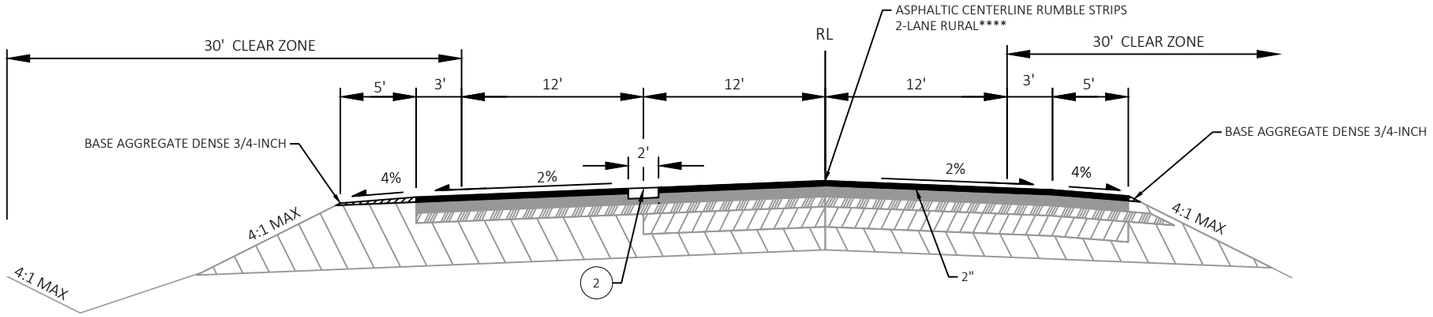
STA 456+00 - STA 465+50 RT

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 12	E

2

LEGEND

- REMOVING ASPHALTIC SURFACE MILLING HMA PAVEMENT 4 MT 58-28 S
- BASE AGGREGATE DENSE 3/4-INCH
- ASPHALTIC SURFACE & HMA PAVEMENT 4 MT 58-28 S
- ASPHALTIC SURFACE
- BASE AGGREGATE DENSE 1 $\frac{1}{4}$"
- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE
- EXISTING PULVERIZED AND RELAYED HMA PAVEMENT
- EXISTING BASE COURSE



**** SEE MISCELLANEOUS QUANTITIES FOR APPLICABLE STATION RANGES

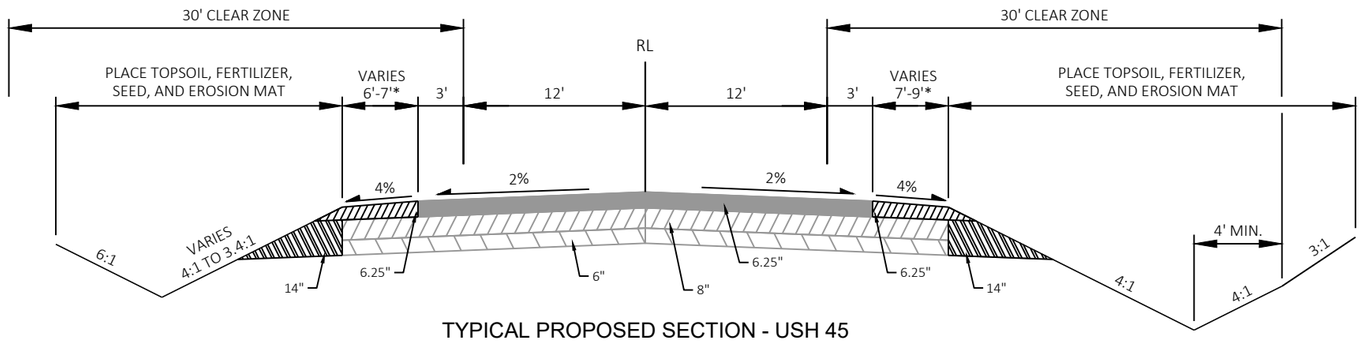
TYPICAL PROPOSED SECTION - USH 45

STA 680+00 - STA 710+00

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 13	E

LEGEND

- REMOVING ASPHALTIC SURFACE MILLING HMA PAVEMENT 4 MT 58-28 S
- BASE AGGREGATE DENSE 3/4-INCH
- ASPHALTIC SURFACE & HMA PAVEMENT 4 MT 58-28 S
- ASPHALTIC SURFACE
- BASE AGGREGATE DENSE 1 $\frac{1}{4}$"
- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE
- EXISTING PULVERIZED AND RELAYED HMA PAVEMENT
- EXISTING BASE COURSE



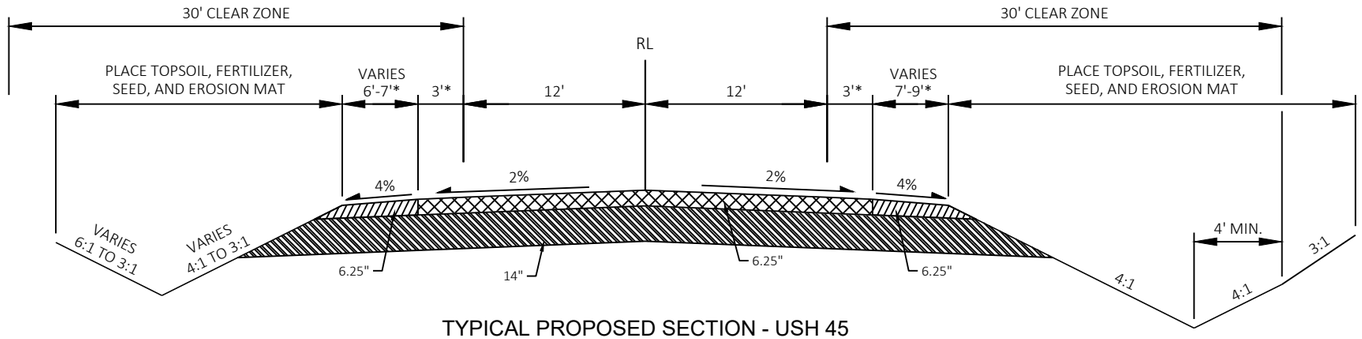
TYPICAL PROPOSED SECTION - USH 45
PERMANENT GRADING FOR CULVERT 58045007425 REPLACEMENT

SEE OTHER TYPICAL SECTIONS FOR MAINLINE USH 45 WORK WITHIN THIS STATION RANGE

STA 109+68 - STA 110+99 LT
STA 112+03 - STA 113+39 LT

STA 109+87 - STA 110+99 RT
STA 112+03 - STA 113+20 RT

* MATCH EXISTING SHOULDER WIDTH



TYPICAL PROPOSED SECTION - USH 45
CULVERT 58045007425 REPLACEMENT

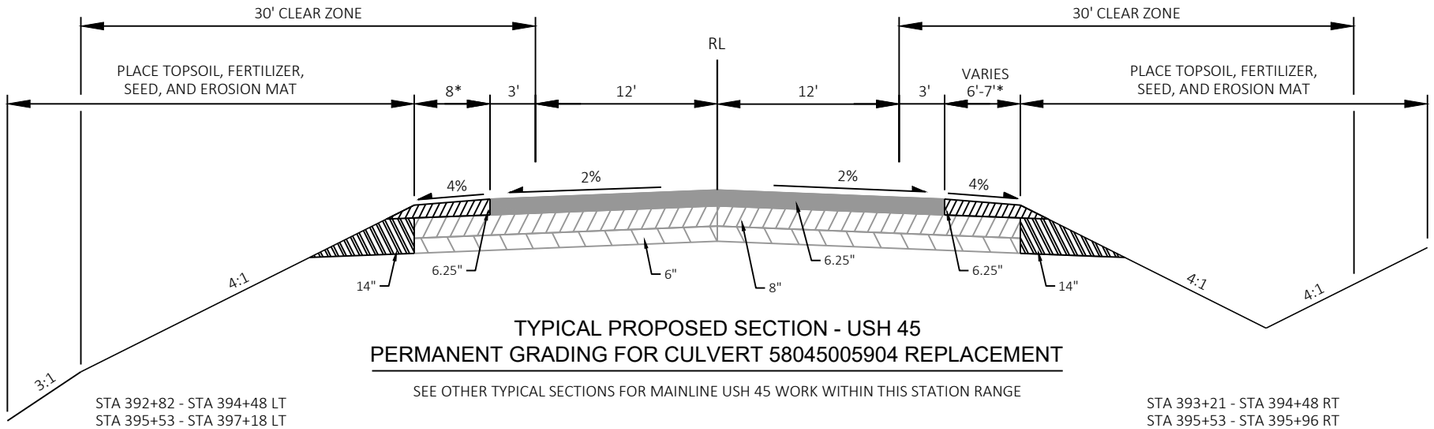
SEE OTHER TYPICAL SECTIONS FOR MAINLINE USH 45 WORK WITHIN THIS STATION RANGE

STA 110+99 - STA 112+03

2

LEGEND

- REMOVING ASPHALTIC SURFACE MILLING HMA PAVEMENT 4 MT 58-28 S
- BASE AGGREGATE DENSE 3/4-INCH
- ASPHALTIC SURFACE & HMA PAVEMENT 4 MT 58-28 S
- ASPHALTIC SURFACE
- BASE AGGREGATE DENSE 1 $\frac{1}{4}$"
- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE
- EXISTING PULVERIZED AND RELAYED HMA PAVEMENT
- EXISTING BASE COURSE



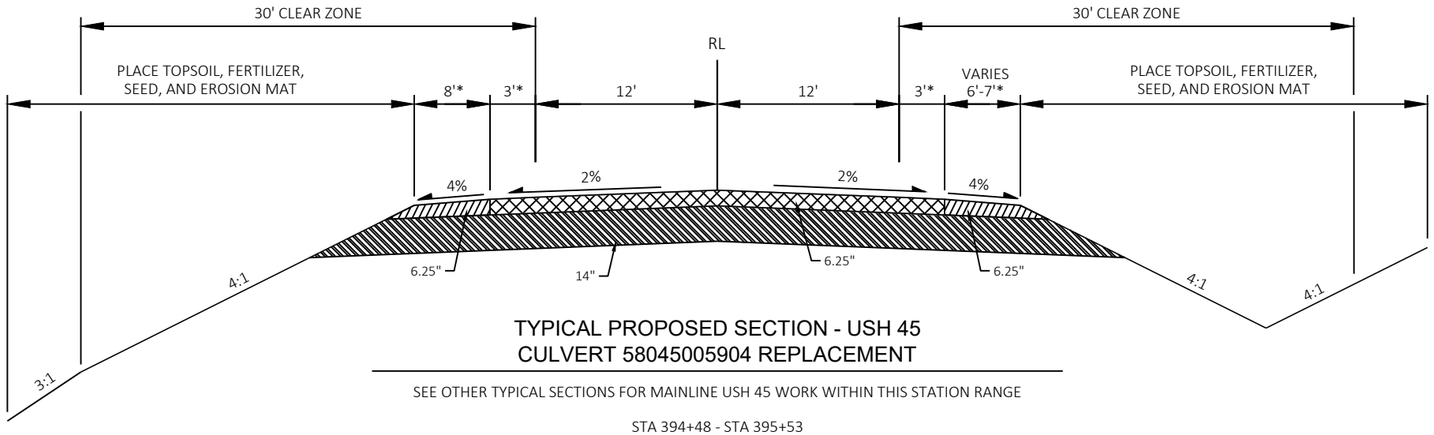
TYPICAL PROPOSED SECTION - USH 45
PERMANENT GRADING FOR CULVERT 58045005904 REPLACEMENT

SEE OTHER TYPICAL SECTIONS FOR MAINLINE USH 45 WORK WITHIN THIS STATION RANGE

STA 392+82 - STA 394+48 LT
STA 395+53 - STA 397+18 LT

STA 393+21 - STA 394+48 RT
STA 395+53 - STA 395+96 RT

* MATCH EXISTING SHOULDER WIDTH



TYPICAL PROPOSED SECTION - USH 45
CULVERT 58045005904 REPLACEMENT

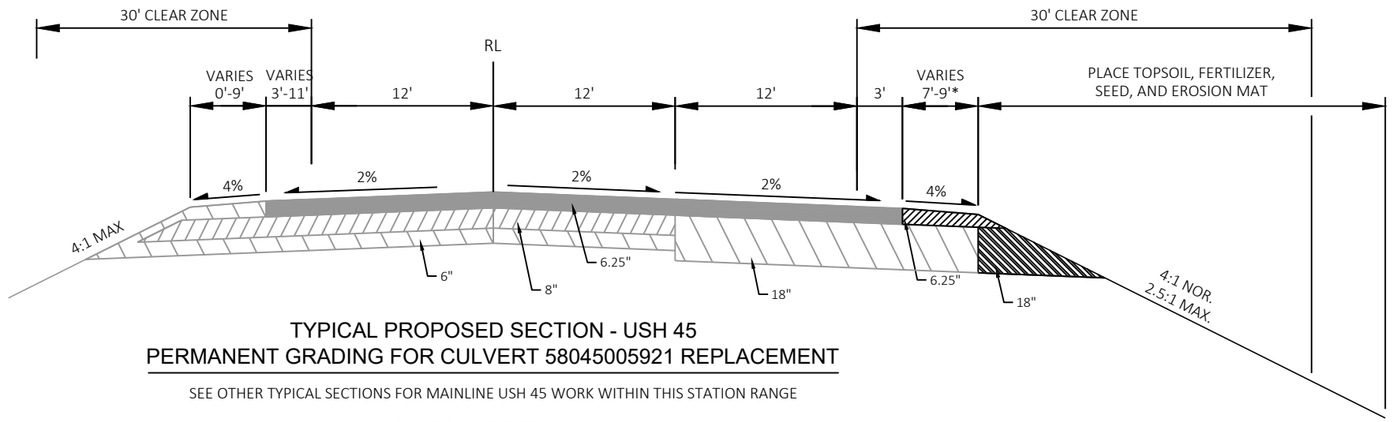
SEE OTHER TYPICAL SECTIONS FOR MAINLINE USH 45 WORK WITHIN THIS STATION RANGE

STA 394+48 - STA 395+53

2

LEGEND

- REMOVING ASPHALTIC SURFACE MILLING HMA PAVEMENT 4 MT 58-28 S
- BASE AGGREGATE DENSE 3/4-INCH
- ASPHALTIC SURFACE & HMA PAVEMENT 4 MT 58-28 S
- ASPHALTIC SURFACE
- BASE AGGREGATE DENSE 1 ¼"
- EXISTING HMA PAVEMENT
- EXISTING BASE AGGREGATE DENSE
- EXISTING PULVERIZED AND RELAYED HMA PAVEMENT
- EXISTING BASE COURSE

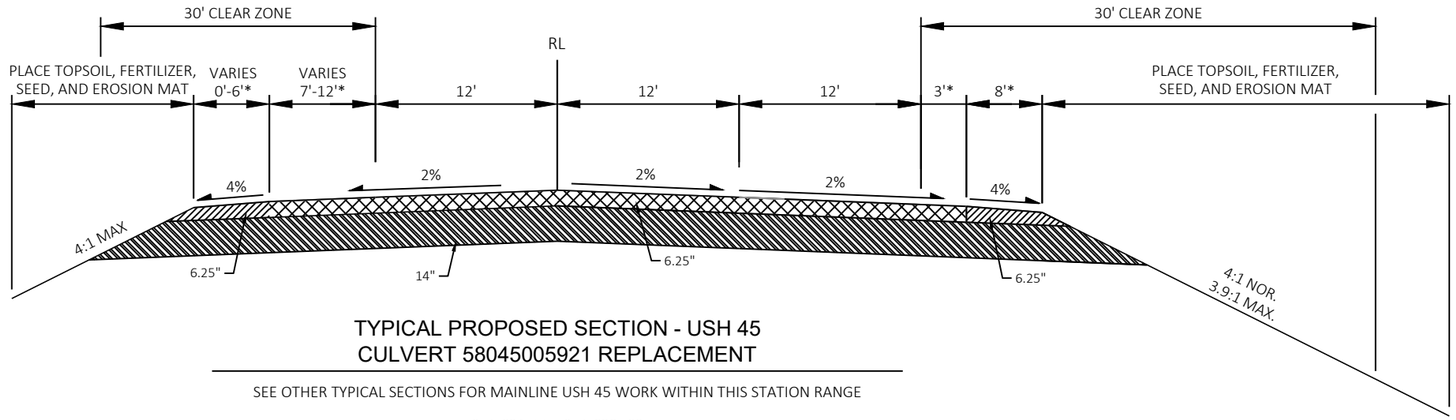


TYPICAL PROPOSED SECTION - USH 45
PERMANENT GRADING FOR CULVERT 58045005921 REPLACEMENT

SEE OTHER TYPICAL SECTIONS FOR MAINLINE USH 45 WORK WITHIN THIS STATION RANGE

STA 630+07 - STA 631+55 RT
STA 632+60 - STA 633+85 RT

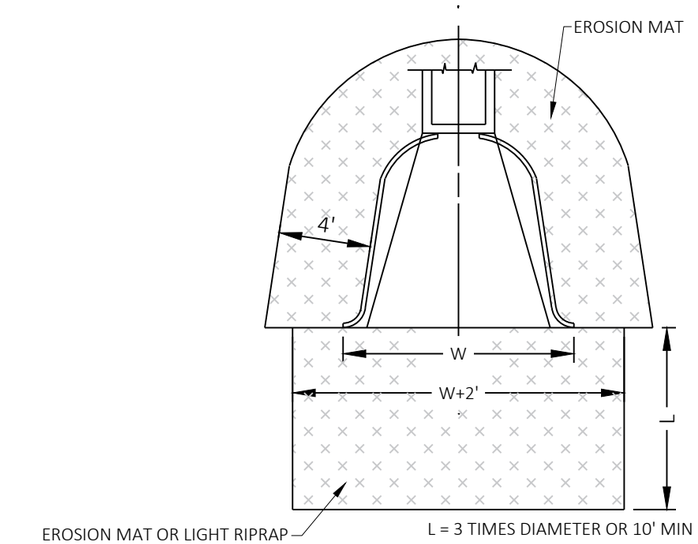
* MATCH EXISTING SHOULDER WIDTH



TYPICAL PROPOSED SECTION - USH 45
CULVERT 58045005921 REPLACEMENT

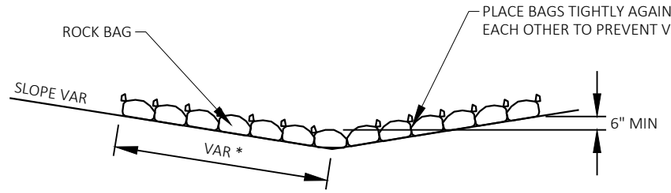
SEE OTHER TYPICAL SECTIONS FOR MAINLINE USH 45 WORK WITHIN THIS STATION RANGE

STA 631+55 - STA 632+60

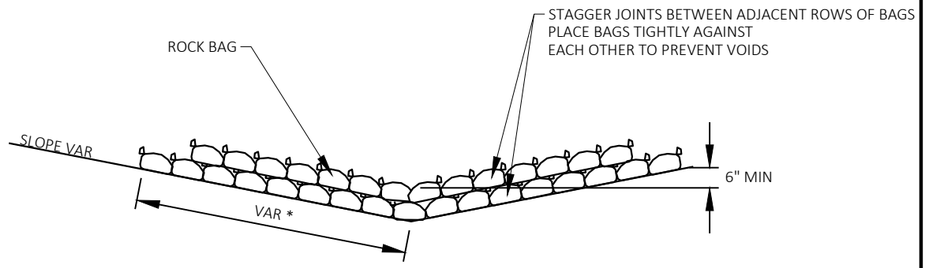


EROSION MAT AT CULVERT END

SEE PLAN DETAILS FOR CULVERT REPLACEMENTS FOR LOCATIONS

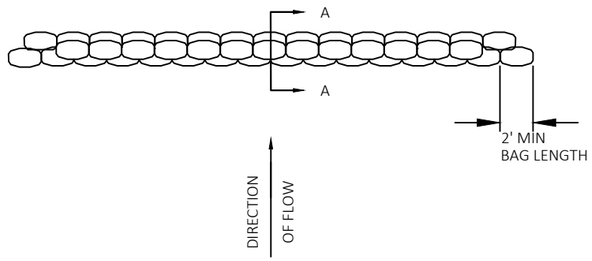


SIDE VIEW (SINGLE LAYER)

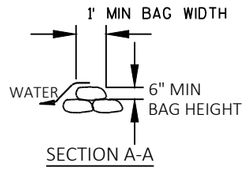


* LENGTH AND NUMBER OF BAGS MAY VARY
DEPENDING ON DESIRED DEPTH OF WATER POOL

SIDE VIEW (MULTIPLE LAYER)

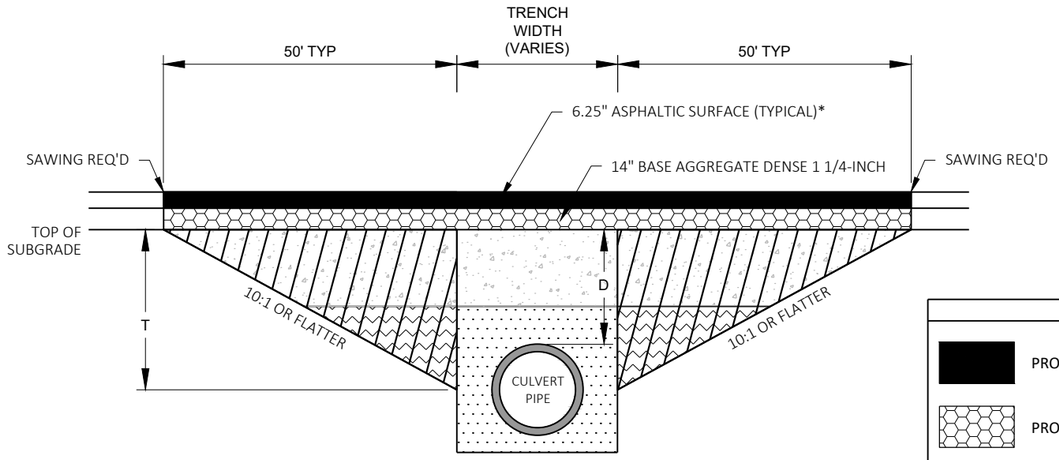


TOP VIEW (MULTIPLE LAYER)



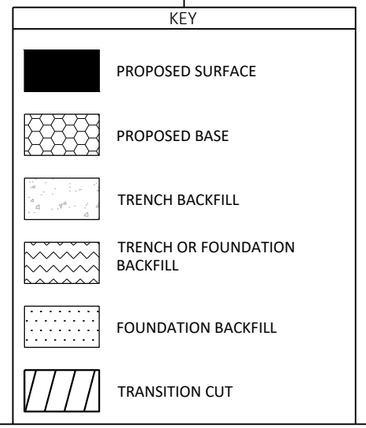
SECTION A-A

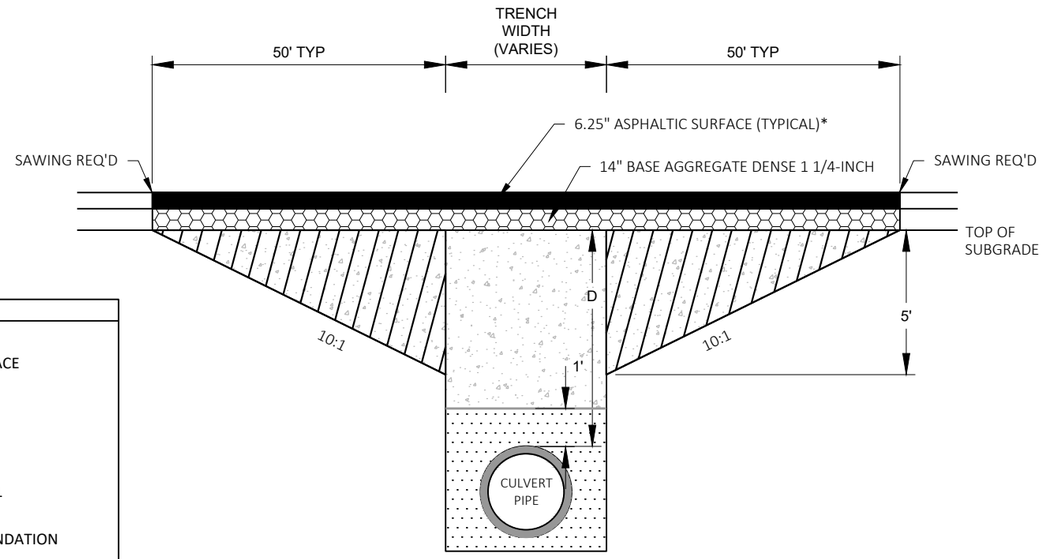
ROCK BAGS USED FOR DITCH CHECKS



TRANSITION CUT DEPTH (T) = THE LESSER OF DEPTH TO CENTER OF PIPE OR 5 FT.
DO NOT EXTEND TRANSITION CUT BELOW HORIZONTAL CENTER OF PIPE.

DEPTH D < 6 FT





*11" ASPHALTIC SURFACE AT STA 449+44

DEPTH D ≥ 6 FT

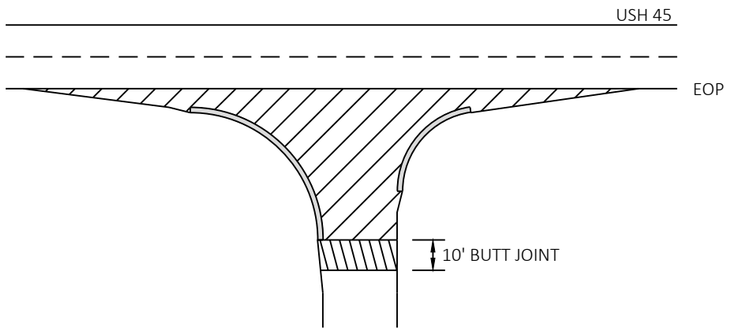
NOTES

TRANSITION CUT IS PAID AS EXCAVATION COMMON.
TRANSITION CUT WIDTH IS FROM SUBGRADE SHOULDER POINT TO SUBGRADE SHOULDER POINT.
BACKFILL THE TRANSITION CUT AREAS WITH FOUNDATION AND TRENCH BACKFILL AS SPECIFIED IN STANDARD SPEC 520.
PERFORM CULVERT PIPE INSTALLATION BEFORE MILLING AND PAVING.

CULVERT PIPE TRANSITION

ROUTE	STA (CL)	APPROX. DEPTH D (FT)	PIPE DIA (IN)	APPROX. TRENCH WIDTH (FT)	REMARKS
USH 45	111+51	2.0	24	5	CULVERT #58045007425
USH 45	395+00	4.8	24	5	CULVERT #58045005904
USH 45	449+44	1.3	19x30	21 (SKEWED)	CULVERT #58045005909
USH 45	632+07	3.9	24	5	CULVERT #58045005921

CULVERT REPLACEMENT DETAIL



REMOVING ASPHALTIC SURFACE MILLING 2-INCH

REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

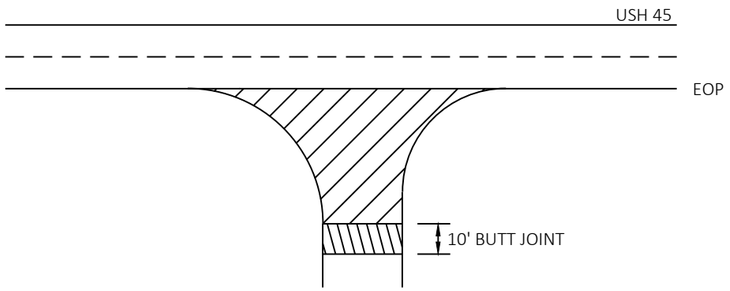
NOTE: WHEN MATCHING TO AN UNPAVED SURFACE BUTT JOINT IS NOT REQUIRED

SIDE ROADS

WITH CURB AND GUTTER

HEMLOCK RD. (E) (W)
WAYSIDE PARK ENTRANCE
WITT-BIRN TOWNLINE RD.
BLUEBIRD RD.
HUMMINGBIRD RD.
CEDAR ST.
ORIOLE RD.
NORRIE RD.
CEDAR RD.
WESTERN AVE.
LILY RD.
COUNTRY MANOR LN.
CTH N (E) (W)
ELM ST.
MAPLE ST. (E) (W)
FIELD ST.
REW LN.

CHURCH RD.
KILDEER LN.
CHICKADEE LN.
CARDINAL LN.
PHOEBE LN.
SWALLOW LN.
HILL RD.
MARSH RD.
PARTRIDGE LN.
CTH ZZ
1ST ST.
EMMA ST.
CTH Z
STH 52
MAPLE RD.



REMOVING ASPHALTIC SURFACE MILLING 2-INCH

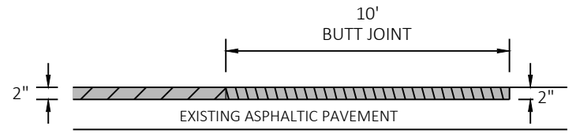
REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

NOTE: WHEN MATCHING TO AN UNPAVED SURFACE BUTT JOINT IS NOT REQUIRED

SIDE ROADS

WITHOUT CURB AND GUTTER

SHORT LN.
POPPLE LN.



HMA PAVEMENT

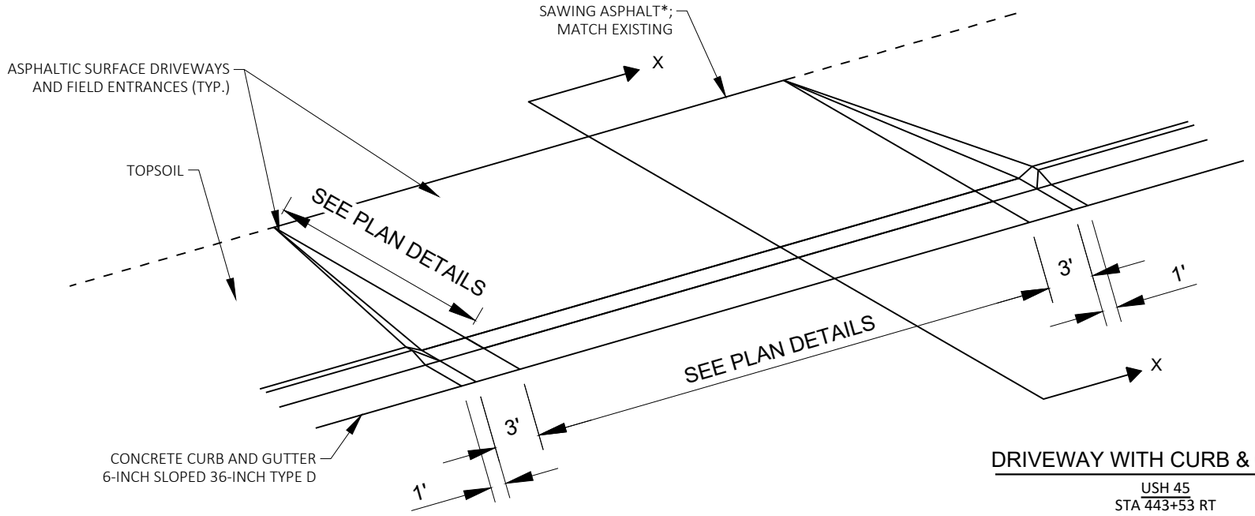
REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS

BUTT JOINT

MAINLINE AND SIDE ROADS

2

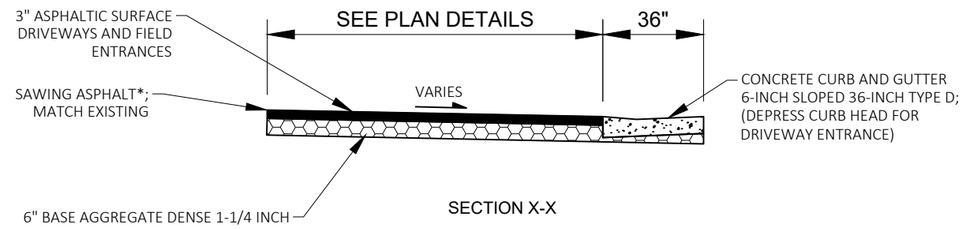


DRIVEWAY WITH CURB & GUTTER

USH 45
STA 443+53 RT
STA 445+28 RT

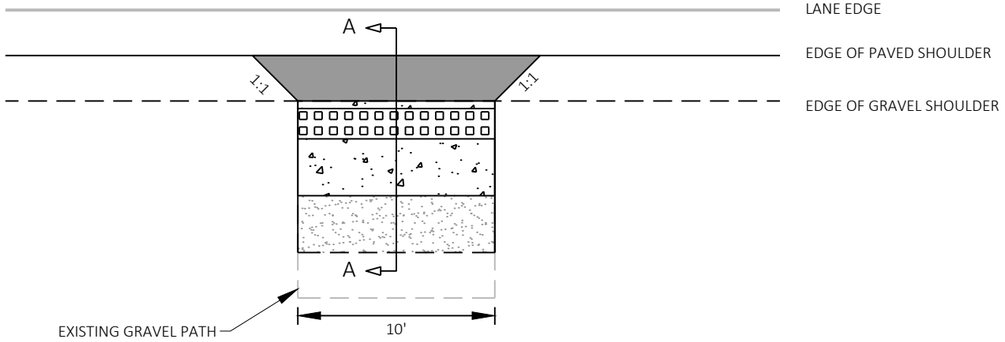
CTH N - WEST
STA 19+14 RT

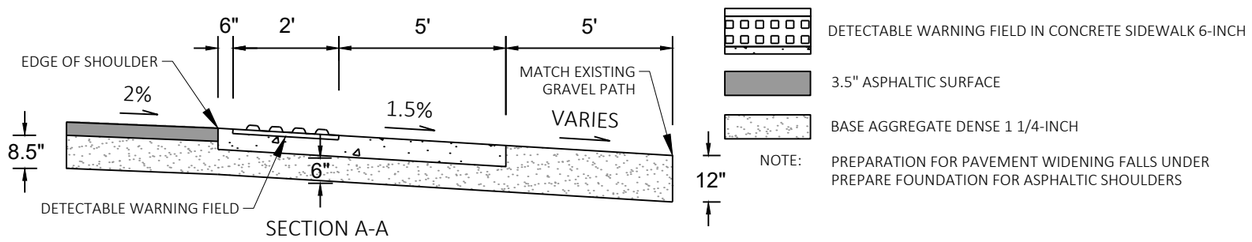
CTH N - EAST
STA 11+28 RT



SECTION X-X

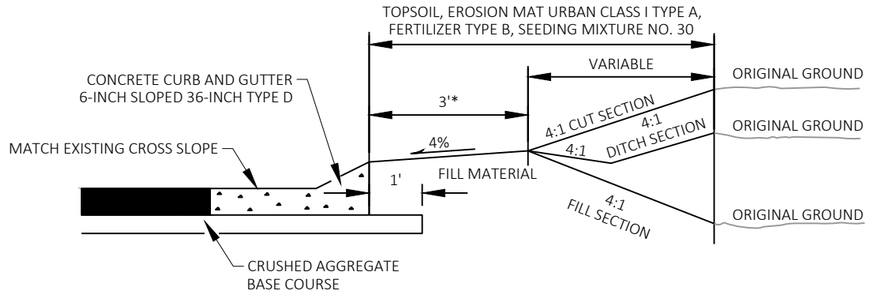
* SAWING ASPHALT REQUIRED ONLY AT STA 443+53 RT AND 11+28 RT





TRAIL CROSSING WITH DETECTABLE WARNING FIELD

STA 109+28 LT & RT

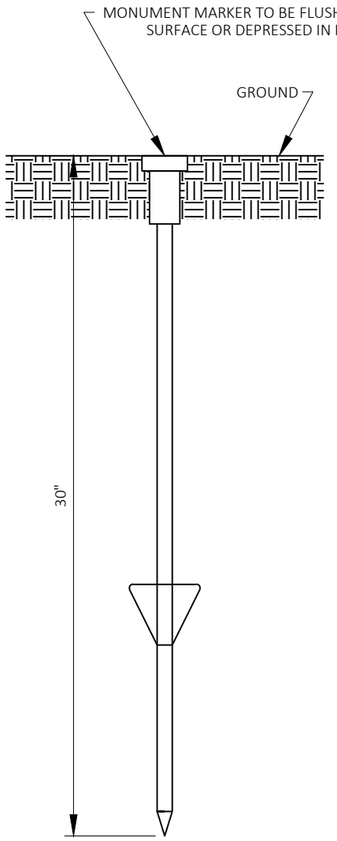


*PROVIDE WHERE APPLICABLE

TYPICAL FOR SLOPE TREATMENT BEHIND CURB AND GUTTER AT RURAL SIDEROAD INTERSECTIONS

WIS DOT MONUMENT CAP MARKER LOGO (SSDR130)

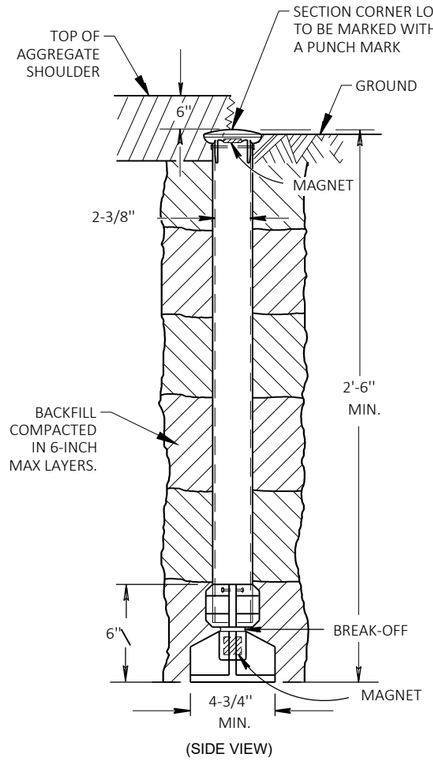
CONTRACTOR TO ORDER LANDMARK REFERENCE MONUMENTS WITH THE ABOVE STAMPING



(FRONT VIEW)

BERNSTEN DRIVABLE MONUMENT SSDR130

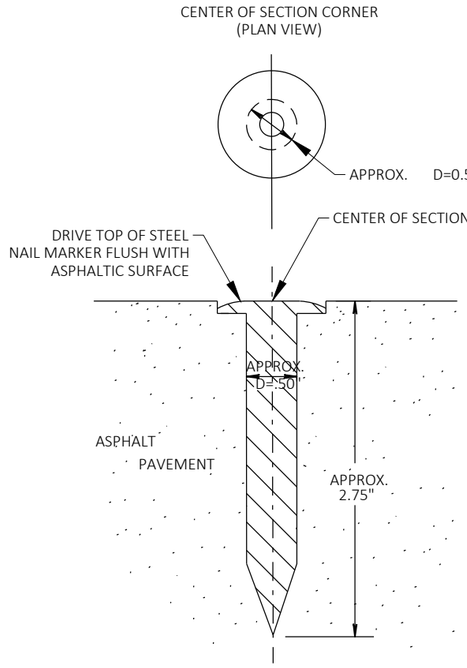
LANDMARK REFERENCE MONUMENT (TIES ONLY)



(SIDE VIEW)

OUTSIDE OF PAVEMENT

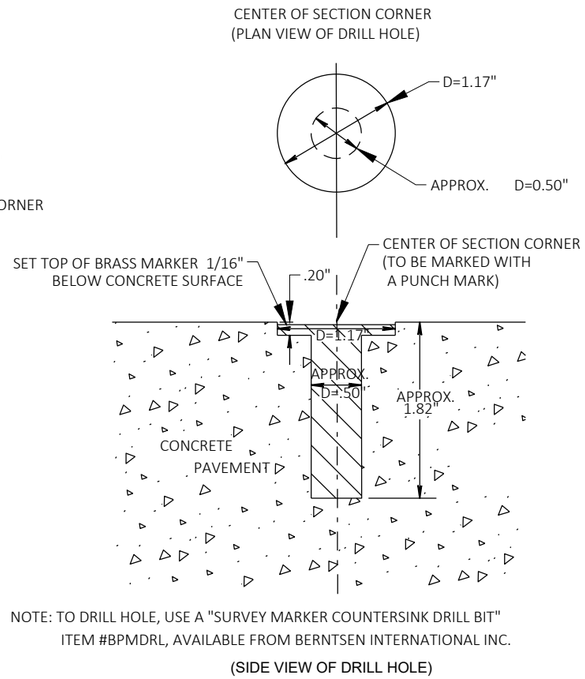
BERNTSEN A1BR30 ALUMINUM BREAK-OFF MONUMENT



(SIDE VIEW)

IN ASPHALTIC PAVEMENT

BERNTSEN SNM1 STEEL NAIL MARKER



NOTE: TO DRILL HOLE, USE A "SURVEY MARKER COUNTERSINK DRILL BIT" ITEM #BPMDRL, AVAILABLE FROM BERNTSEN INTERNATIONAL INC.

(SIDE VIEW OF DRILL HOLE)

IN CONCRETE PAVEMENT

BERNTSEN BP - 1 BRASS MARKER WITH ANCHOR PLUG

SECTION CORNER MONUMENTS

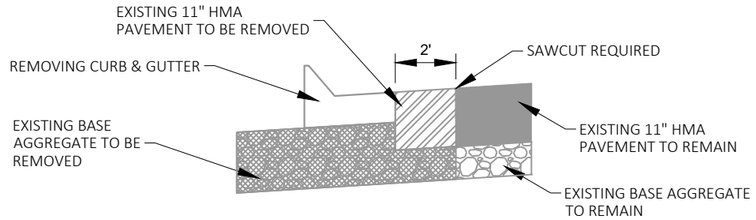
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

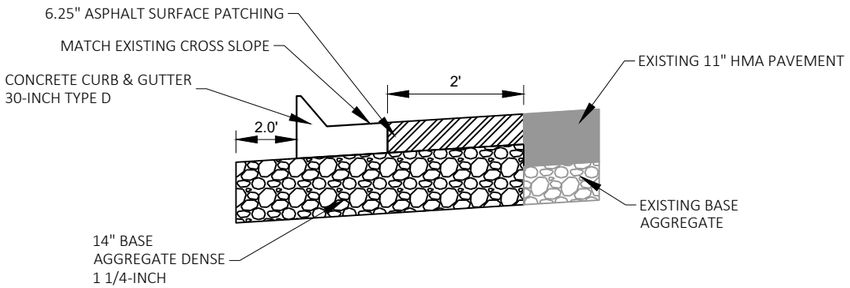
LOCATE LANDMARK REFERENCE MONUMENTS OUTSIDE THE CONSTRUCTION LIMITS AND WITHIN WISDOT RIGHT OF WAY. LOCATION TO BE APPROVED BY THE ENGINEER.

CONTRACTOR WILL SUPPLY ALL REQUIRED SURVEY MONUMENTS.

SECTION CORNER MONUMENT AND LANDMARK REFERENCE MONUMENT DETAIL

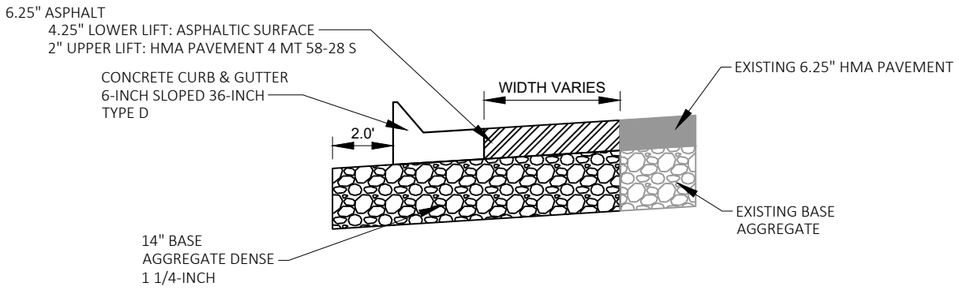


REMOVING CURB & GUTTER



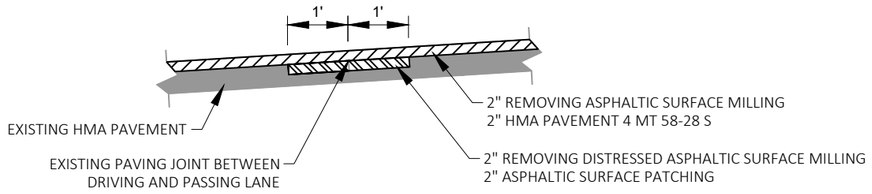
CURB & GUTTER SPOT REPLACEMENT DETAILS

BETWEEN ELM ST AND MAPLE ST



INTERSECTION CURB & GUTTER DETAILS

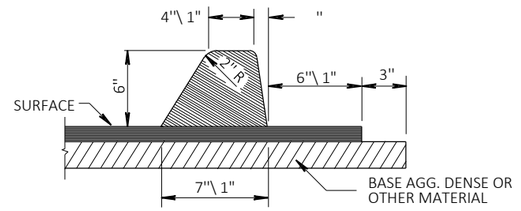
AT USH 45 & CTH N INTERSECTION



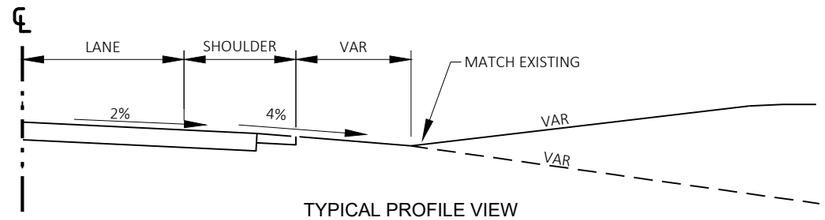
LONGITUDINAL JOINT REPAIR DETAIL

SEE PLAN SHEETS AND MISCELLANEOUS QUANTITIES FOR LOCATIONS

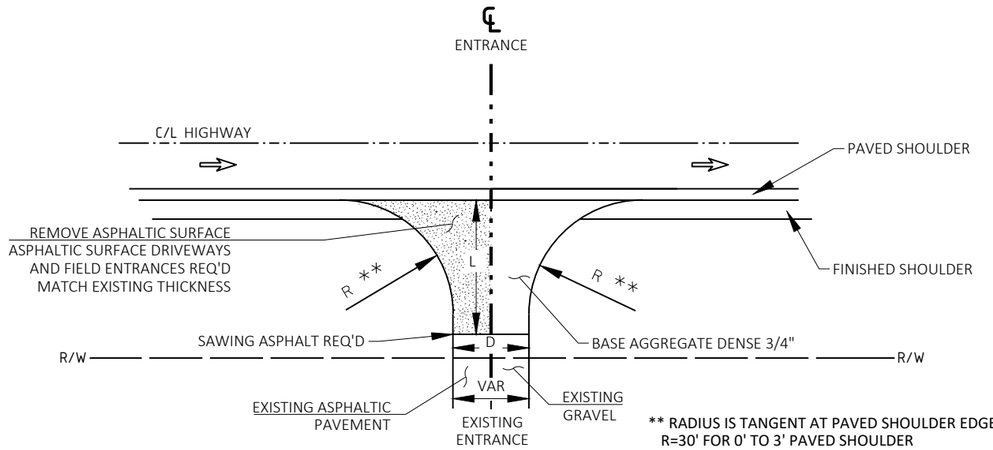
2



ASPHALTIC CURB DETAIL



TYPICAL PROFILE VIEW



** RADIUS IS TANGENT AT PAVED SHOULDER EDGE
R=30' FOR 0' TO 3' PAVED SHOULDER
R=25' FOR GREATER THAN 3' PAVED SHOULDER

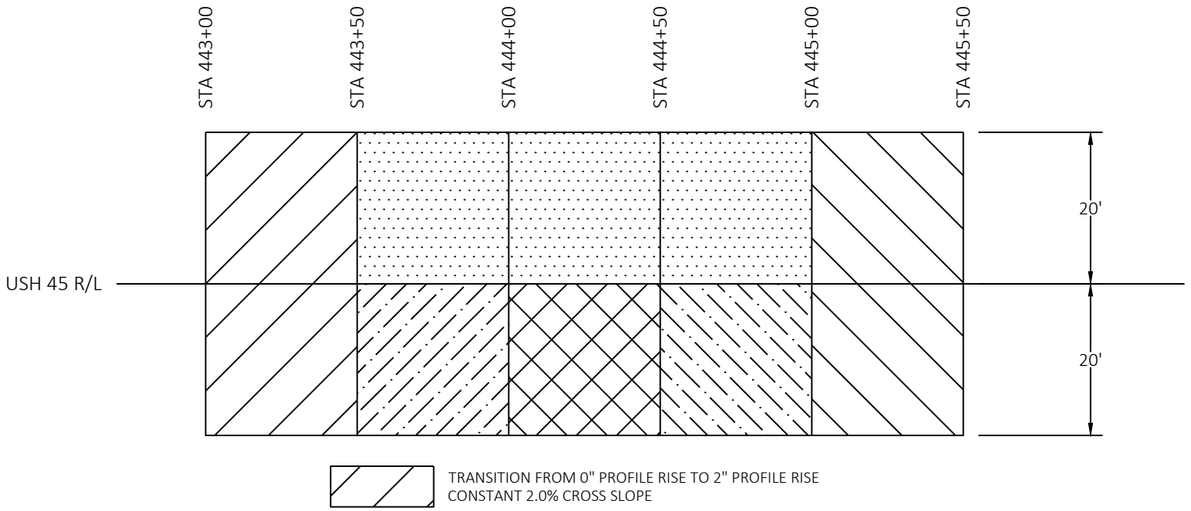
L=VARIABLE, EXACT LENGTH TO BE DETERMINED IN THE FIELD BY THE ENGINEER

D=DRIVEWAY WIDTH
D=20'TYP(PE & FE) (16'MIN-24'MAX)
D=28'TYP(CE & FARM ENT) (24'MIN-35'MAX)

PLAN VIEW

RURAL DRIVEWAY (PE, FE & CE)

USH 45
STA 442+61 LT
STA 445+80 LT
STA 449+52 LT
STA 453+00 LT/RT



TRANSITION FROM 0" PROFILE RISE TO 2" PROFILE RISE
CONSTANT 2.0% CROSS SLOPE

CONSTANT 2" PROFILE RISE
TRANSITION FROM 2.0% TO 1.5% CROSS SLOPE

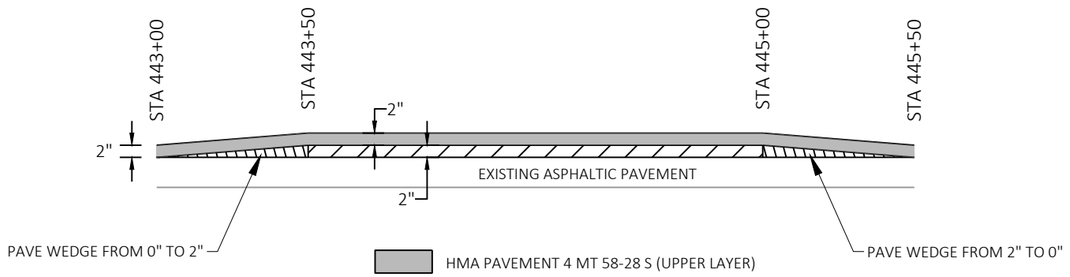
CONSTANT 2" PROFILE RISE
CONSTANT 1.5% CROSS SLOPE

CONSTANT 2" PROFILE RISE
TRANSITION FROM 1.5% TO 2.0% CROSS SLOPE

TRANSITION FROM 2" PROFILE RISE TO 0" PROFILE RISE
CONSTANT 2.0% CROSS SLOPE

CONSTANT 2" PROFILE RISE
CONSTANT 2.0% CROSS SLOPE

PLAN VIEW



HMA PAVEMENT 4 MT 58-28 S (UPPER LAYER)

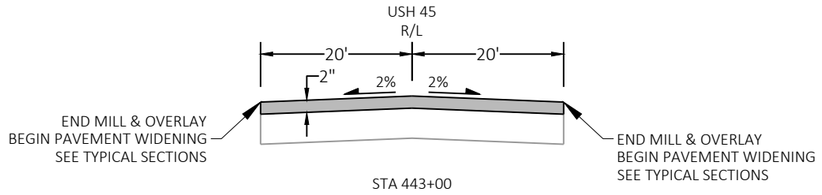
HMA PAVEMENT 4 MT 58-28 S (LOWER LAYER)

HMA PAVEMENT 4 MT 58-28 S (LOWER LAYER PAVING WEDGE)

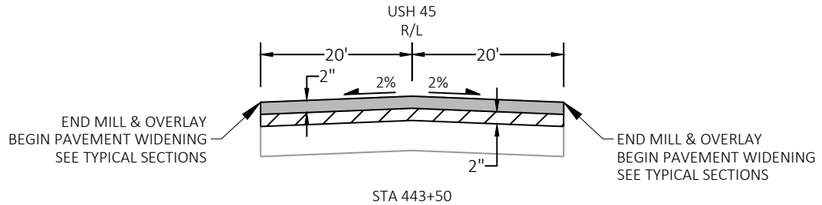
ELEVATION VIEW (ALONG USH 45 R/L)

NOTE:

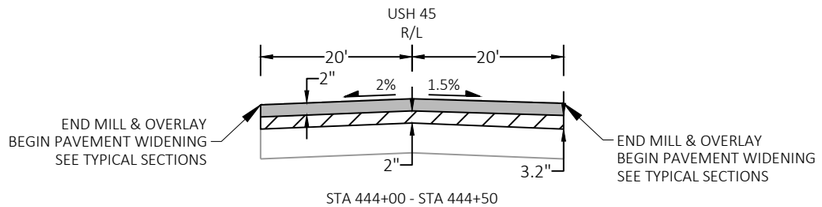
PERFORM CONSTANT 2" DEPTH OF REMOVING ASPHALTIC SURFACE MILLING THROUGHOUT THE PROFILE REVISION STATION RANGE (MILLING NOT SHOWN)



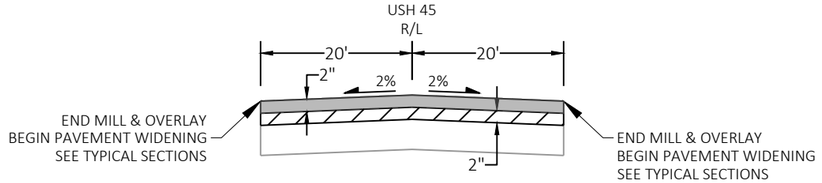
STA 443+00



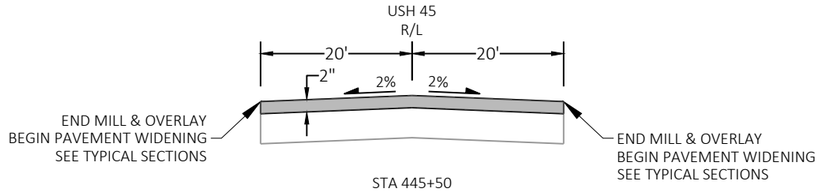
STA 443+50



STA 444+00 - STA 444+50



STA 445+00



STA 445+50

HMA PAVEMENT 4 MT 58-28 S (UPPER LAYER)

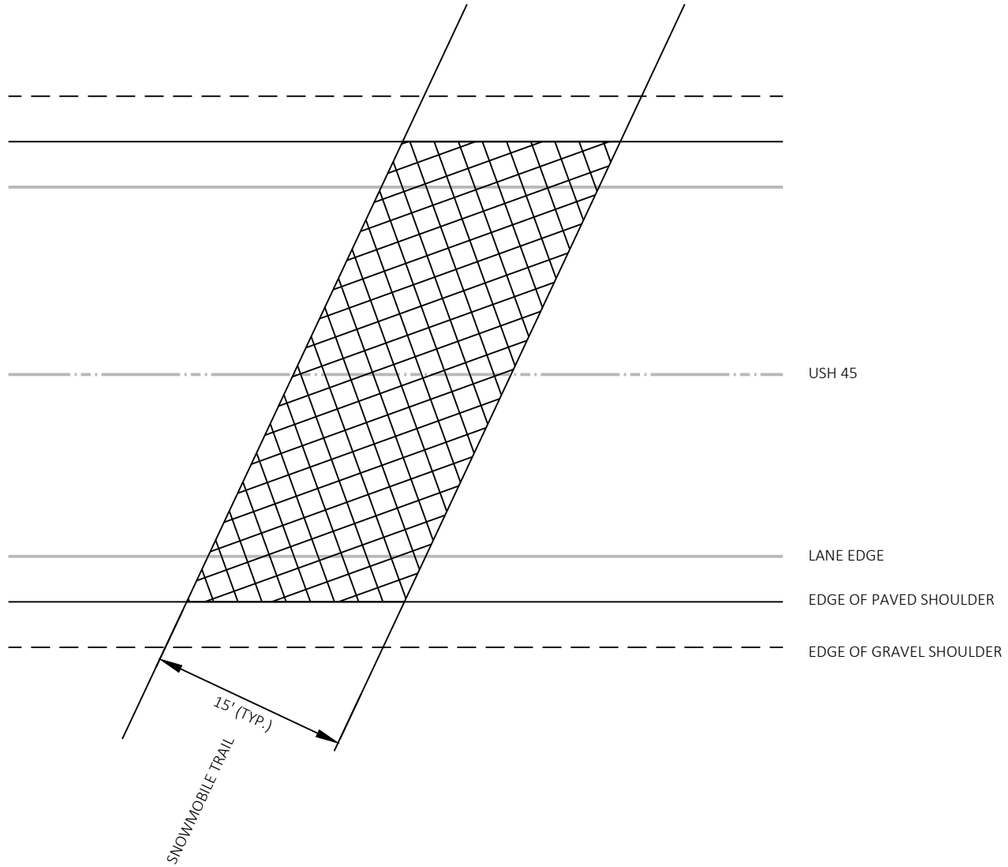
HMA PAVEMENT 4 MT 58-28 S (LOWER LAYER)

SECTION VIEW

USH 45 PROFILE REVISION AT CTH N INTERSECTION

STA 443+00 - STA 445+50

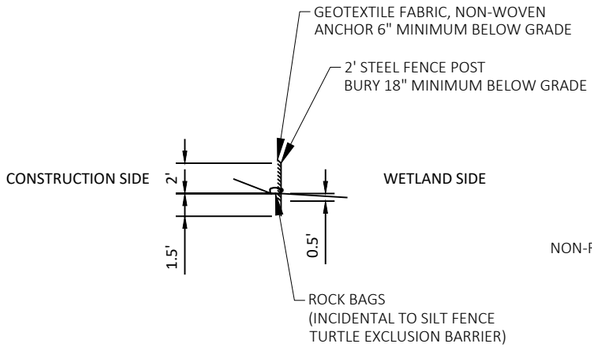
2

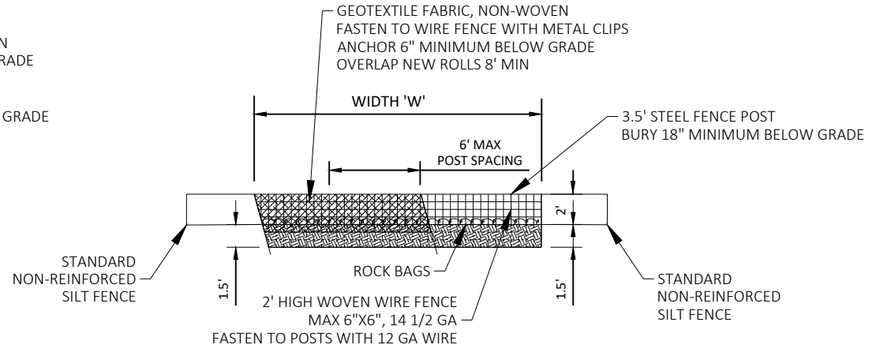


PROTECTIVE THERMOPLASTIC COATING AT SNOWMOBILE TRAIL CROSSING

SNOWMOBILE TRAIL CROSSING DETAIL

STA 109+28 (MOUNTAIN BAY STATE TRAIL)
STA 459+00 (ELM ST)
STA 405+15 (OLD 26 RD)





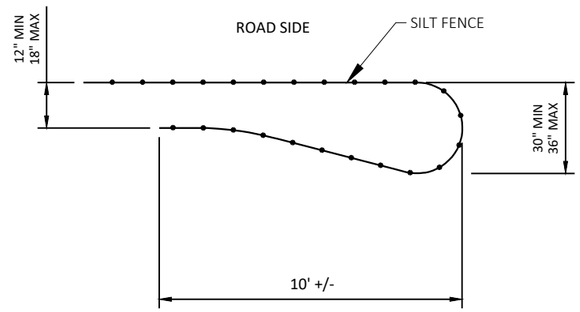
SILT FENCE TURTLE EXCLUSION BARRIER

SEE PLANS FOR LOCATIONS

WOVEN WIRE FENCE LOCATION AND WIDTH 'W' TABLE

STA (CL)	OFFSET	APPROX. WIDTH 'W'
46+28	89.5' RT	5 FT
109+37	46.0' LT	10 FT
109+47	44.5' RT	10 FT
109+69	37.5' RT	10 FT
111+53	60.0' RT	15 FT
113+29	34.5' RT	10 FT
113+43	31.3' LT	10 FT
393+10	35.5' RT	15 FT
393+77	39.0' LT	5 FT
394+97	54.0' LT	30 FT
395+93	40.0' RT	5 FT
397+33	41.5' LT	15 FT
440+70	45.0' LT	10 FT
442+00	55.0' RT	15 FT
502+72	65.5' RT	10 FT
503+17	54.5' LT	5 FT
503+26	96.0' RT	10 FT
503+87	67.5' RT	10 FT
504+16	70.0' LT	10 FT
504+20	57.5' LT	5 FT
525+20	51.0' LT	15 FT
526+48	104.0' RT	15 FT
527+20	57.0' LT	15 FT
630+01	50.5' RT	10 FT
632+16	71.5' LT	20 FT
633+74	46.5' RT	10 FT

NOTES:
1. SEE STANDARD DETAIL DRAWING "SILT FENCE" FOR TRENCH, ANCHOR, AND BACKFILL DETAILS. TRENCHING IS NOT REQUIRED IF EXCLUSION BARRIER IS INSTALLED IN STANDING WATER.
2. FASTEN GEOTEXTILE FABRIC TO THE ROADWAY SIDE OF THE FENCE.
3. THROUGH WETLAND AREAS ANCHOR THE EXCLUSION BARRIER TO THE EXISTING GROUND WITH ROCK BAGS LAID END TO END WITH NO GAPS. ANCHORING IS INCIDENTAL TO SILT FENCE TURTLE EXCLUSION BARRIER.
4. INSTALLED BY OTHERS PRIOR TO CONSTRUCTION.
5. MAINTENANCE IS MEASURED AND PAID FOR UNDER 628.1520 SILT FENCE MAINTENANCE.
6. REMOVAL IS MEASURED AND PAID FOR UNDER 204.9090.S.01 REMOVING SILT FENCE.
7. WIDTHS IN THE TABLE ABOVE ARE APPROXIMATE AND SHALL BE ADJUSTED TO MATCH FIELD CONDITIONS.



SILT FENCE TURN-AROUND DETAIL

SEE PLANS FOR LOCATIONS

2

2

LEGEND

1 REMOVING CURB & GUTTER

2 CONCRETE CURB & GUTTER 6" SLOPED 36" TYPE D

3 SAWING ASPHALT

4 SAWING CONCRETE

5 END SECTION CURB & GUTTER

6 ASPHALTIC FLUME

2" HMA PAVEMENT 4 MT 58-28 S OVER 4.25" ASPHALTIC SURFACE

3" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES OVER 6" BASE AGGREGATE DENSE 1 1/4-INCH

6" BASE AGGREGATE DENSE 1 1/4-INCH

N

MATCHLINE STA 444+00

MATCHLINE STA 451+00

CTH N

18+00

19+00

11+00

12+00

PI: 17+99.38

BEGIN CONSTRUCTION
STA 18+47.03
Y=325975.819
X=705586.046

EXISTING R/W

WETLAND BOUNDARY

FIELD ENTRANCE CULVERT TO BE REPLACED. SEE PLAN SHEETS FOR ADDITIONAL INFORMATION.

SLOPE INTERCEPT

PROPOSED TLE

PROPOSED R/W

STA. 443+00 - STA. 445+50
USH 45 PROFILE AND CROSS SLOPE REVISION
SEE CONSTRUCTION DETAIL

PC: 444+62.40

USH 45

445+00

446+00

447+00

448+00

449+00

450+00

EP: 20+00.00

BP: 10+00.00

NOTE:
PETROLEUM-CONTAMINATED SOILS PRESENT FROM STA 11+00 TO 12+00, FROM APPROXIMATELY THE EDGE OF PAVEMENT TO THE CONSTRUCTION LIMITS RT, AND FROM GROUND SURFACE TO THE MAXIMUM DEPTH OF RECONSTRUCTION EXCAVATION.
EXCAVATION, HAULING, AND DISPOSAL REQUIRED.
BACKFILL WITH SELECT BORROW REQUIRED.
SEE MISCELLANEOUS QUANTITIES.

END CONSTRUCTION
STA 12+10.00
Y=325967.759
X=705948.800

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CTH N INTERSECTION DETAILS	SHEET 26	E

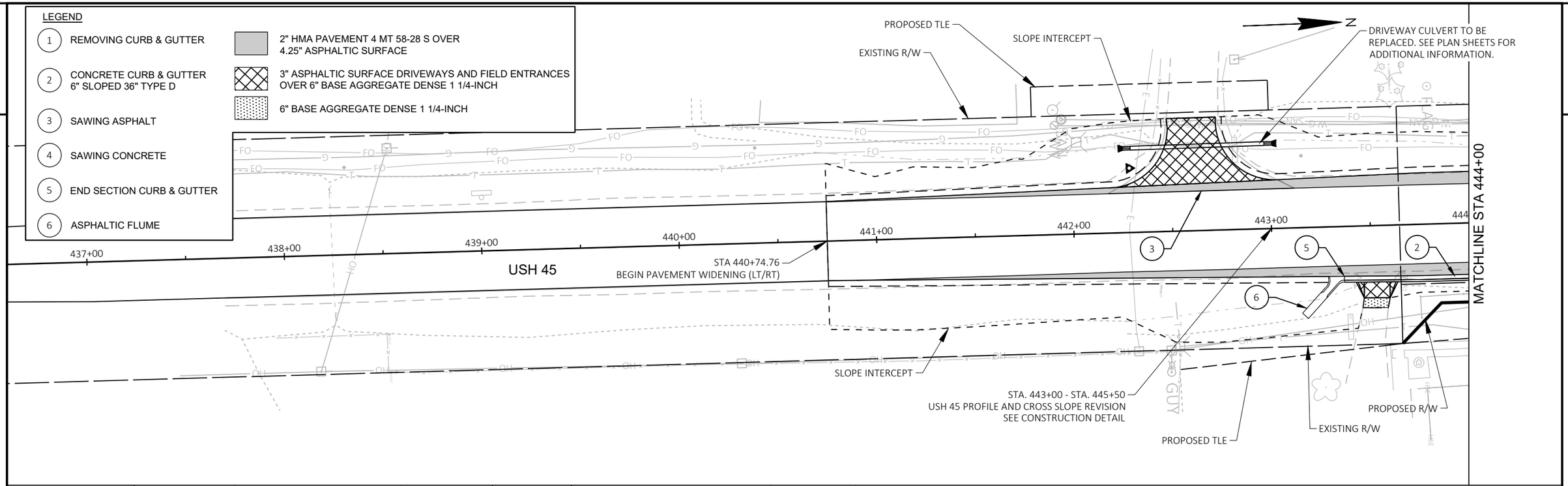
LEGEND

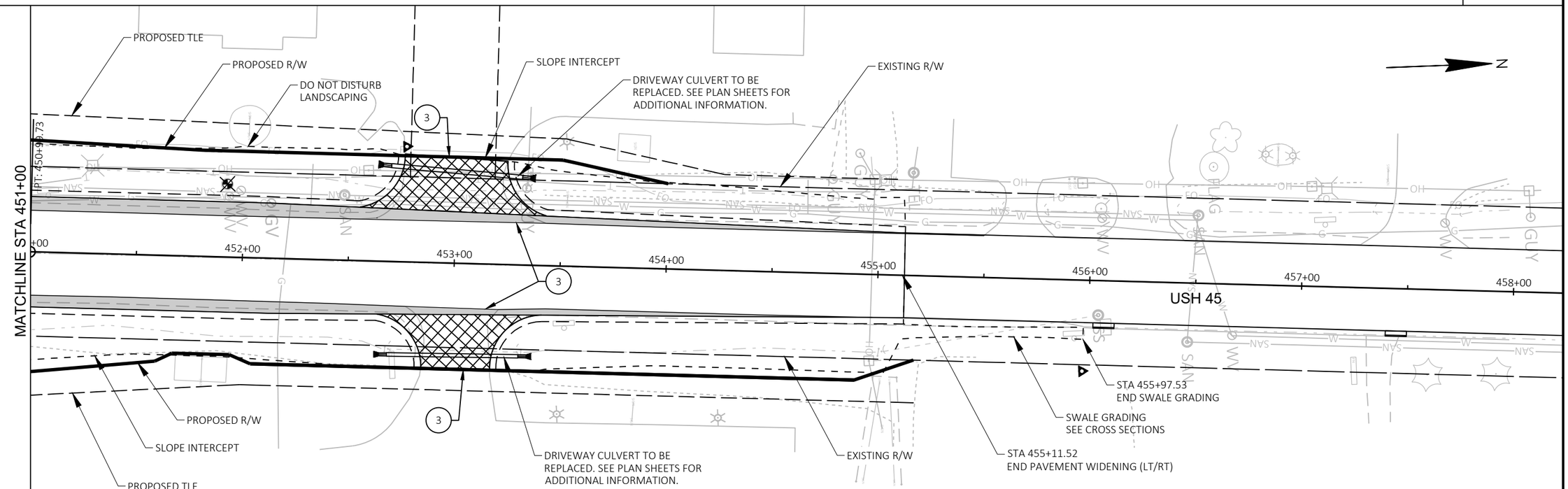
1. REMOVING CURB & GUTTER
2. CONCRETE CURB & GUTTER 6" SLOPED 36" TYPE D
3. SAWING ASPHALT
4. SAWING CONCRETE
5. END SECTION CURB & GUTTER
6. ASPHALTIC FLUME

2" HMA PAVEMENT 4 MT 58-28 S OVER 4.25" ASPHALTIC SURFACE

3" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES OVER 6" BASE AGGREGATE DENSE 1 1/4-INCH

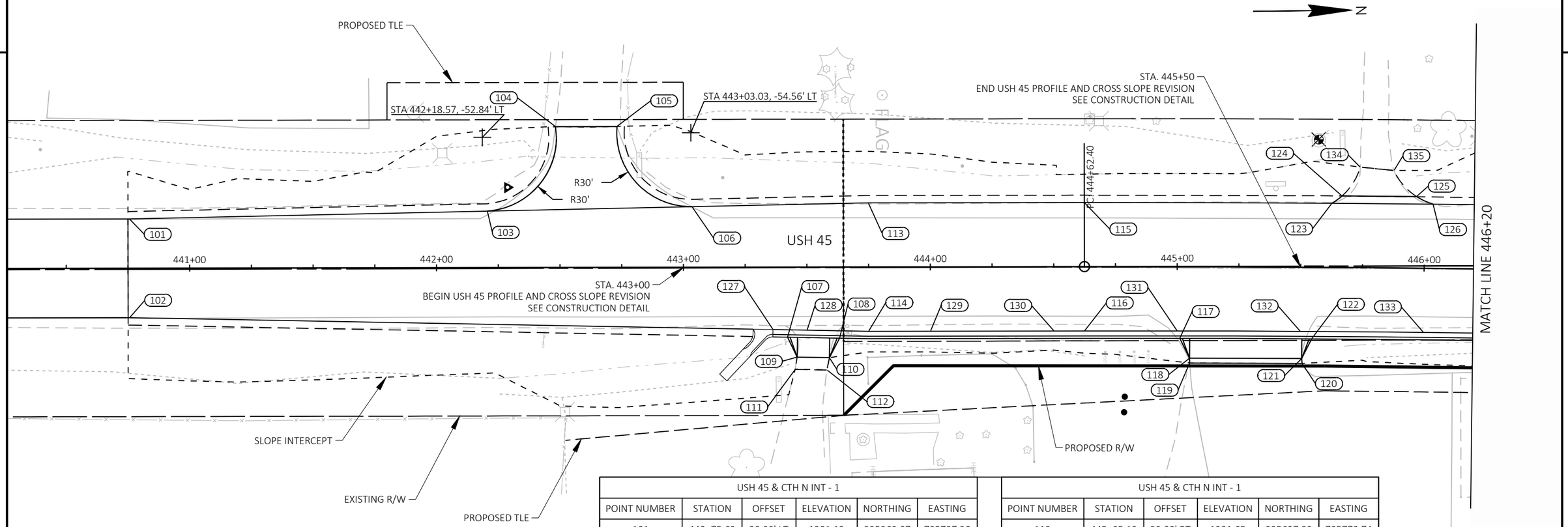
6" BASE AGGREGATE DENSE 1 1/4-INCH





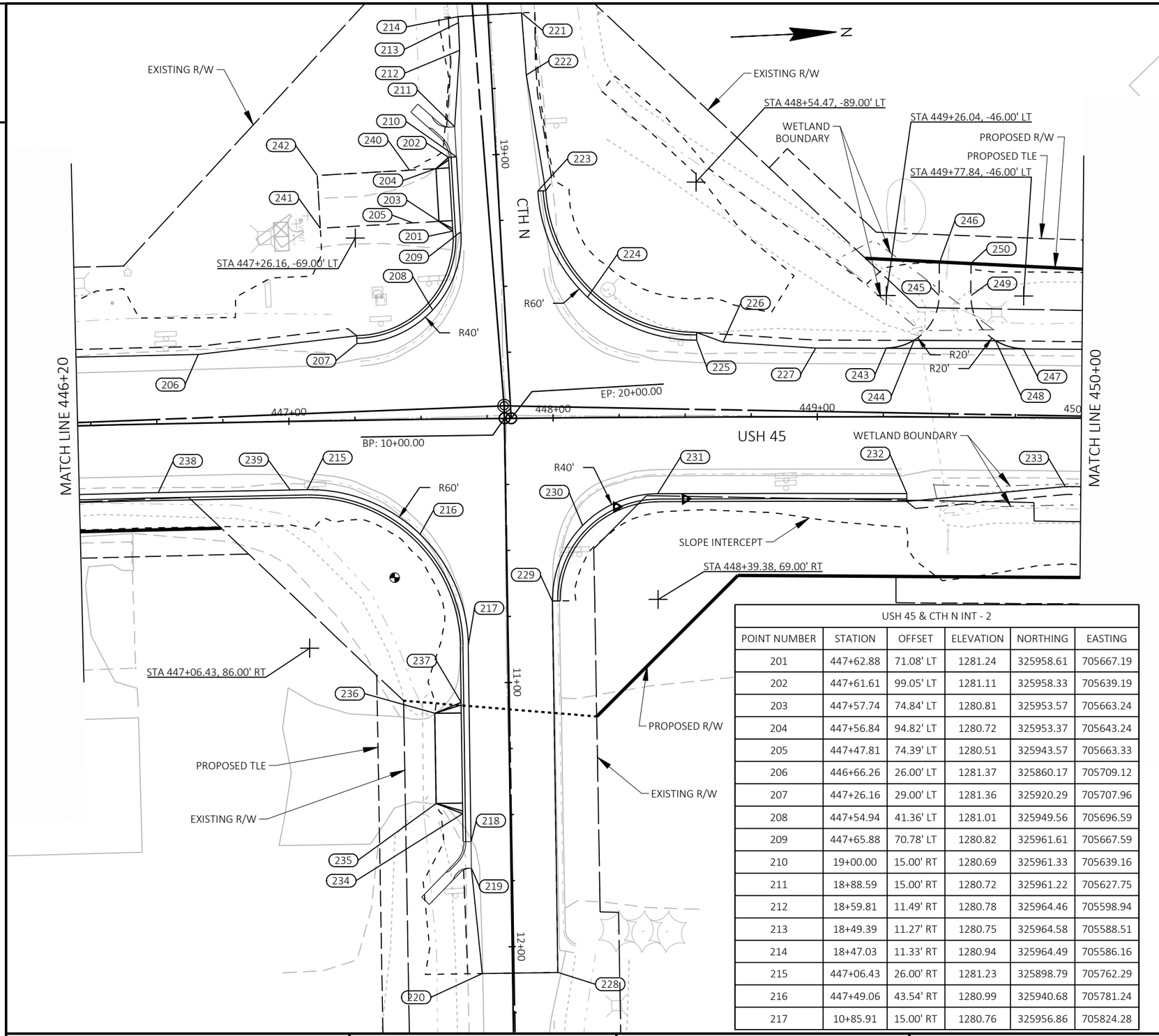
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CTH N INTERSECTION DETAILS	SHEET 27	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 021102-id
PLOT DATE : 2/21/2024 10:44 AM
PLOT BY : CZECH, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42



USH 45 & CTH N INT - 1					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
101	440+75.62	20.00' LT	1281.13	325269.07	705707.28
102	440+75.65	20.00' RT	1281.13	325268.69	705747.28
103	442+20.58	22.91' LT	1281.74	325414.05	705705.86
104	442+48.27	57.07' LT	1281.90	325442.09	705671.98
105	442+73.14	57.15' LT	1281.93	325466.97	705672.15
106	443+03.45	24.57' LT	1281.88	325496.94	705705.04
107	443+42.12	28.34' RT	1282.34	325535.06	705758.34
108	443+63.19	28.77' RT	1282.40	325556.14	705758.98
109	443+45.96	36.42' RT	1282.01	325538.82	705766.46
110	443+59.03	36.68' RT	1282.15	325551.90	705766.86
111	443+45.18	41.41' RT	1282.15	325537.99	705771.44
112	443+58.05	41.66' RT	1282.23	325550.86	705771.83
113	443+74.92	26.00' LT	1282.00	325568.42	705704.34
114	443+74.92	26.00' RT	1282.02	325567.89	705756.33
115	444+62.40	26.00' LT	1281.84	325655.89	705705.23
116	444+62.40	26.00' RT	1281.89	325655.36	705757.23
117	445+01.07	29.00' RT	1282.16	325693.90	705760.69
118	445+05.08	37.00' RT	1281.68	325697.79	705768.74

USH 45 & CTH N INT - 1					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
119	445+05.13	39.00' RT	1281.65	325697.82	705770.74
120	445+50.80	39.00' RT	1281.62	325743.33	705771.46
121	445+50.60	37.00' RT	1281.65	325743.16	705769.46
122	445+54.61	29.00' RT	1281.95	325747.31	705761.53
123	445+62.46	26.00' LT	1281.46	325756.17	705706.69
124	445+66.55	29.00' LT	1281.32	325760.33	705703.77
125	445+96.59	29.00' LT	1281.27	325790.44	705704.39
126	446+03.32	26.00' LT	1281.38	325797.11	705707.54
127	443+36.18	25.22' RT	1281.90	325529.16	705755.16
128	443+50.00	25.50' RT	1281.95	325542.98	705755.58
129	444+00.00	26.00' RT	1282.10	325592.97	705756.59
130	444+50.00	26.00' RT	1281.95	325642.97	705757.10
131	445+00.00	26.00' RT	1281.74	325692.88	705757.67
132	445+50.00	26.00' RT	1281.54	325742.76	705758.45
133	446+00.00	26.00' RT	1281.44	325792.64	705759.45
134	445+73.82	40.72' LT	1281.67	325767.85	705692.19
135	445+87.42	39.48' LT	1281.66	325781.47	705693.72

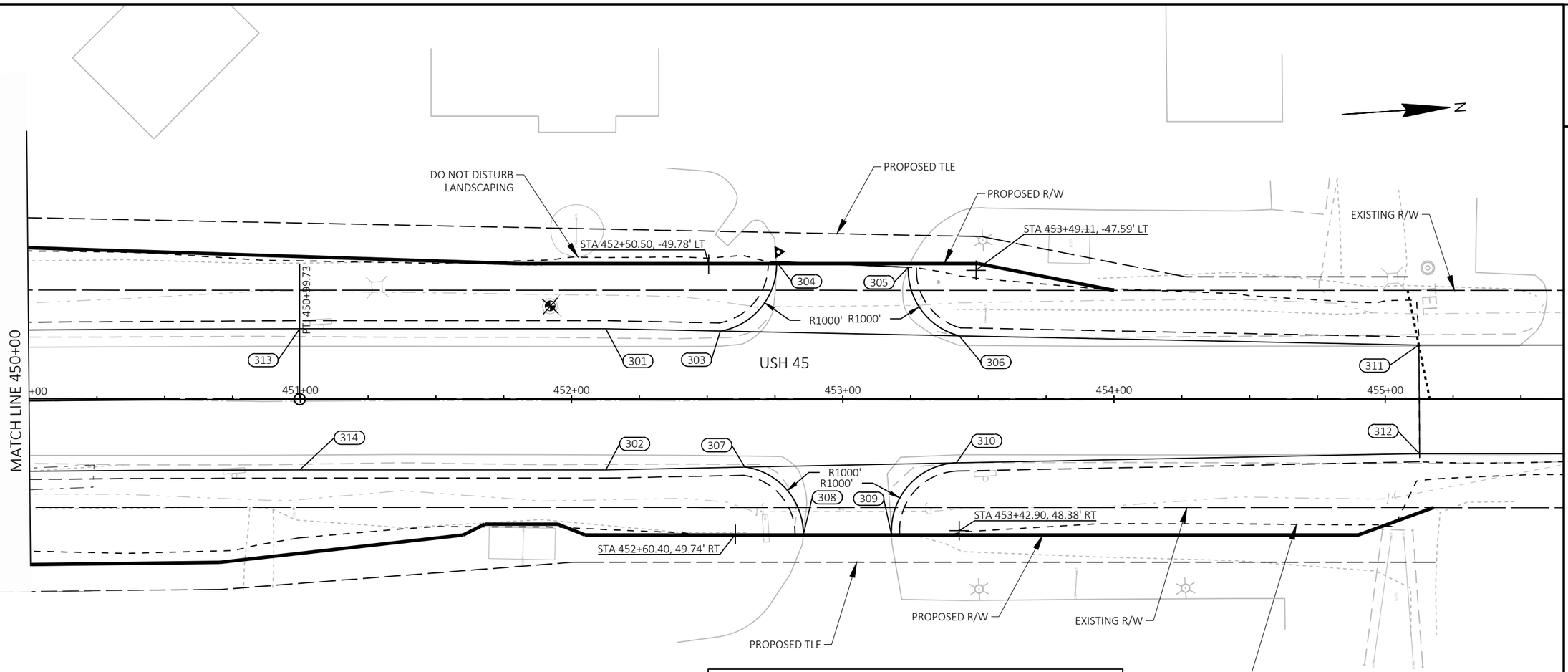


USH 45 & CTH N INT - 2					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
201	447+62.88	71.08' LT	1281.24	325958.61	705667.19
202	447+61.61	99.05' LT	1281.11	325958.33	705639.19
203	447+57.74	74.84' LT	1280.81	325953.57	705663.24
204	447+56.84	94.82' LT	1280.72	325953.37	705643.24
205	447+47.81	74.39' LT	1280.51	325943.57	705663.33
206	446+66.26	26.00' LT	1281.37	325860.17	705709.12
207	447+26.16	29.00' LT	1281.36	325920.29	705707.96
208	447+54.94	41.36' LT	1281.01	325949.56	705696.59
209	447+65.88	70.78' LT	1280.82	325961.61	705667.59
210	19+00.00	15.00' RT	1280.69	325961.33	705639.16
211	18+88.59	15.00' RT	1280.72	325961.22	705627.75
212	18+59.81	11.49' RT	1280.78	325964.46	705598.94
213	18+49.39	11.27' RT	1280.75	325964.58	705588.51
214	18+47.03	11.33' RT	1280.94	325964.49	705586.16
215	447+06.43	26.00' RT	1281.23	325898.79	705762.29
216	447+49.06	43.54' RT	1280.99	325940.68	705781.24
217	10+85.91	15.00' RT	1280.76	325956.86	705824.28

USH 45 & CTH N INT - 2					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
218	11+60.00	15.00' RT	1280.45	325954.38	705898.32
219	11+70.08	15.00' RT	1280.39	325954.04	705908.39
220	12+10.00	11.50' RT	1280.24	325956.20	705948.41
221	18+47.03	12.78' LT	1280.83	325988.60	705585.92
222	18+70.56	13.21' LT	1280.79	325989.26	705609.45
223	19+14.71	15.00' LT	1280.75	325991.47	705653.58
224	448+13.36	45.52' LT	1280.93	326008.32	705694.68
225	448+54.47	29.00' LT	1281.61	326048.82	705712.94
226	448+64.44	28.33' LT	1281.65	326058.78	705714.05
227	448+99.40	26.00' LT	1281.81	326093.67	705718.01
228	12+10.00	17.12' LT	1280.01	325984.80	705949.37
229	10+69.40	17.12' LT	1280.66	325989.52	705808.84
230	448+10.86	40.81' RT	1280.99	326002.31	705780.84
231	448+39.38	29.00' RT	1281.56	326031.21	705770.22
232	449+34.00	29.00' RT	1281.85	326125.49	705774.67
233	449+94.09	26.00' RT	1282.37	326185.52	705774.89
234	447+64.04	149.47' RT	1280.91	325951.74	705887.63

USH 45 & CTH N INT - 2					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
235	447+53.90	145.49' RT	1280.21	325941.88	705883.29
236	447+53.83	111.32' RT	1280.28	325943.02	705849.14
237	447+63.92	107.30' RT	1281.09	325953.15	705845.48
238	446+50.00	26.00' RT	1281.34	325842.51	705760.66
239	447+00.00	26.00' RT	1281.24	325892.37	705762.09
240	447+46.93	94.37' LT	1280.08	325943.37	705643.33
241	447+13.07	72.88' LT	1280.51	325908.57	705663.67
242	447+12.24	92.86' LT	1280.00	325908.37	705643.67
243	449+26.04	26.00' LT	1281.89	326120.34	705719.33
244	449+36.54	29.00' LT	1281.82	326131.01	705716.87
245	449+45.96	45.97' LT	1280.90	326141.32	705700.41
246	449+45.97	58.27' LT	1280.18	326141.97	705688.13
247	449+77.84	26.00' LT	1282.24	326172.18	705722.07
248	449+67.33	29.00' LT	1282.05	326161.83	705718.50
249	449+57.92	45.97' LT	1280.71	326153.31	705701.04
250	449+57.91	58.27' LT	1279.79	326153.95	705688.76

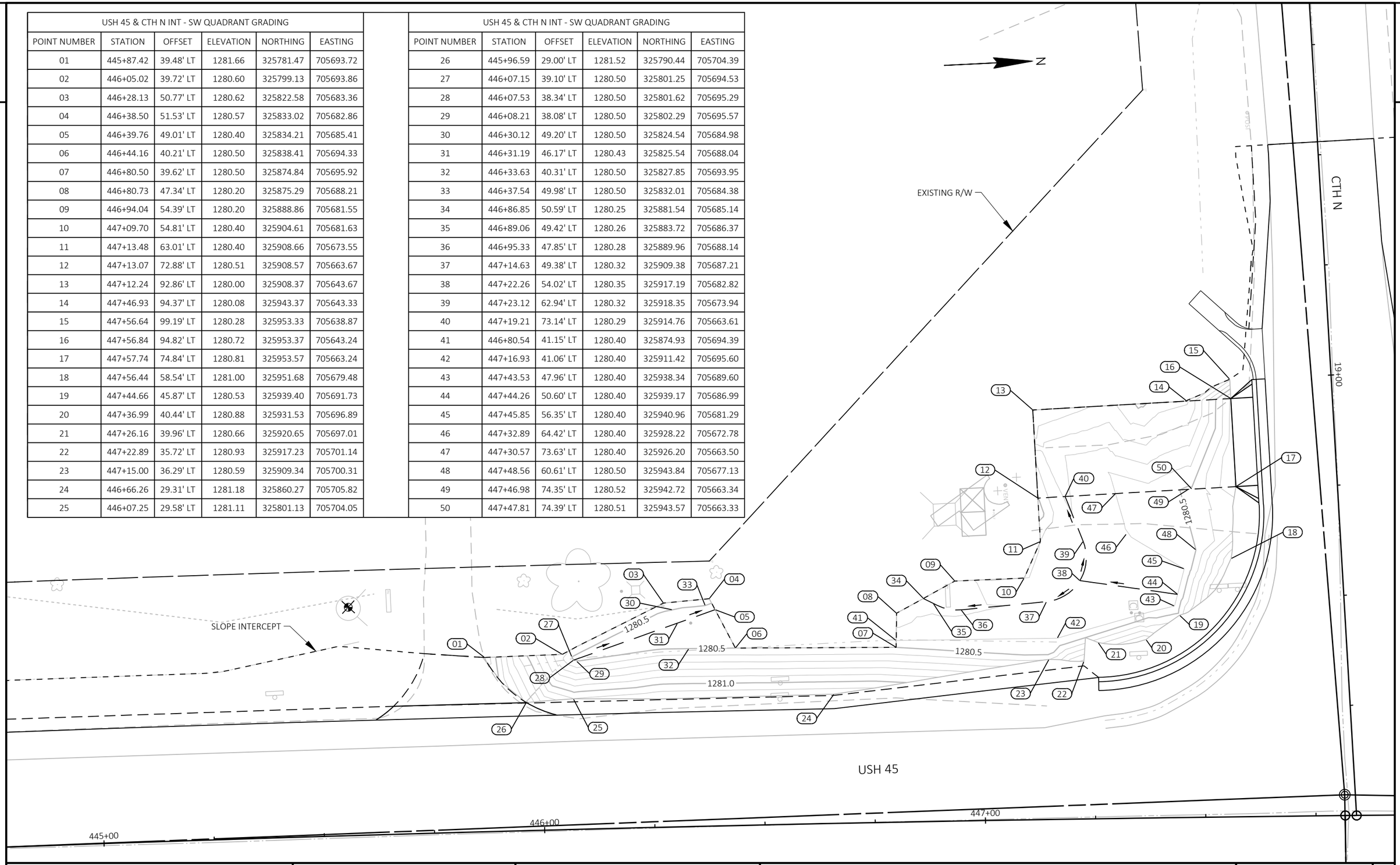
2



USH 45 & CTH N INT - 3					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
301	452+12.58	26.00' LT	1283.84	326406.73	705736.83
302	452+12.58	26.00' RT	1283.84	326403.32	705788.72
303	452+54.80	25.15' LT	1284.20	326448.81	705740.45
304	452+75.48	50.75' LT	1283.33	326471.12	705716.26
305	453+24.14	48.67' LT	1283.82	326519.53	705721.53
306	453+42.89	23.38' LT	1285.03	326536.59	705747.99
307	452+63.83	24.97' RT	1284.29	326454.53	705791.05
308	452+85.40	50.00' RT	1283.41	326474.42	705817.44
309	453+17.95	49.95' RT	1283.69	326506.90	705819.52
310	453+41.81	23.41' RT	1285.02	326532.45	705794.60
311	455+12.38	20.00' LT	1285.93	326705.49	705762.47
312	455+12.62	20.00' RT	1285.95	326703.11	705802.40
313	450+99.73	26.00' LT	1283.00	326294.13	705729.43
314	450+99.73	26.00' RT	1283.00	326290.72	705781.32

USH 45 & CTH N INT - SW QUADRANT GRADING					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
01	445+87.42	39.48' LT	1281.66	325781.47	705693.72
02	446+05.02	39.72' LT	1280.60	325799.13	705693.86
03	446+28.13	50.77' LT	1280.62	325822.58	705683.36
04	446+38.50	51.53' LT	1280.57	325833.02	705682.86
05	446+39.76	49.01' LT	1280.40	325834.21	705685.41
06	446+44.16	40.21' LT	1280.50	325838.41	705694.33
07	446+80.50	39.62' LT	1280.50	325874.84	705695.92
08	446+80.73	47.34' LT	1280.20	325875.29	705688.21
09	446+94.04	54.39' LT	1280.20	325888.86	705681.55
10	447+09.70	54.81' LT	1280.40	325904.61	705681.63
11	447+13.48	63.01' LT	1280.40	325908.66	705673.55
12	447+13.07	72.88' LT	1280.51	325908.57	705663.67
13	447+12.24	92.86' LT	1280.00	325908.37	705643.67
14	447+46.93	94.37' LT	1280.08	325943.37	705643.33
15	447+56.64	99.19' LT	1280.28	325953.33	705638.87
16	447+56.84	94.82' LT	1280.72	325953.37	705643.24
17	447+57.74	74.84' LT	1280.81	325953.57	705663.24
18	447+56.44	58.54' LT	1281.00	325951.68	705679.48
19	447+44.66	45.87' LT	1280.53	325939.40	705691.73
20	447+36.99	40.44' LT	1280.88	325931.53	705696.89
21	447+26.16	39.96' LT	1280.66	325920.65	705697.01
22	447+22.89	35.72' LT	1280.93	325917.23	705701.14
23	447+15.00	36.29' LT	1280.59	325909.34	705700.31
24	446+66.26	29.31' LT	1281.18	325860.27	705705.82
25	446+07.25	29.58' LT	1281.11	325801.13	705704.05

USH 45 & CTH N INT - SW QUADRANT GRADING					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
26	445+96.59	29.00' LT	1281.52	325790.44	705704.39
27	446+07.15	39.10' LT	1280.50	325801.25	705694.53
28	446+07.53	38.34' LT	1280.50	325801.62	705695.29
29	446+08.21	38.08' LT	1280.50	325802.29	705695.57
30	446+30.12	49.20' LT	1280.50	325824.54	705684.98
31	446+31.19	46.17' LT	1280.43	325825.54	705688.04
32	446+33.63	40.31' LT	1280.50	325827.85	705693.95
33	446+37.54	49.98' LT	1280.50	325832.01	705684.38
34	446+86.85	50.59' LT	1280.25	325881.54	705685.14
35	446+89.06	49.42' LT	1280.26	325883.72	705686.37
36	446+95.33	47.85' LT	1280.28	325889.96	705688.14
37	447+14.63	49.38' LT	1280.32	325909.38	705687.21
38	447+22.26	54.02' LT	1280.35	325917.19	705682.82
39	447+23.12	62.94' LT	1280.32	325918.35	705673.94
40	447+19.21	73.14' LT	1280.29	325914.76	705663.61
41	446+80.54	41.15' LT	1280.40	325874.93	705694.39
42	447+16.93	41.06' LT	1280.40	325911.42	705695.60
43	447+43.53	47.96' LT	1280.40	325938.34	705689.60
44	447+44.26	50.60' LT	1280.40	325939.17	705686.99
45	447+45.85	56.35' LT	1280.40	325940.96	705681.29
46	447+32.89	64.42' LT	1280.40	325928.22	705672.78
47	447+30.57	73.63' LT	1280.40	325926.20	705663.50
48	447+48.56	60.61' LT	1280.50	325943.84	705677.13
49	447+46.98	74.35' LT	1280.52	325942.72	705663.34
50	447+47.81	74.39' LT	1280.51	325943.57	705663.33



PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - USH 45 & CTH N INTERSECTION - SW QUADRANT GRADING	SHEET 31	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\021201_PD_INT-SW-QUAD-GRADING.DWG PLOT DATE : 10/28/2023 12:35 AM PLOT BY : MROZ, ZACHARY PLOT NAME : PLOT SCALE : 1 IN:20 FT
LAYOUT NAME - 021201-pd-int-sw-quad-grading
WISDOT/CADDS SHEET 44

2

N

USH 45 & CTH N INT - NW QUADRANT GRADING					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
01	448+19.39	123.37' LT	1277.38	326017.57	705617.15
02	448+19.41	123.39' LT	1277.38	326017.59	705617.12
03	448+23.95	129.36' LT	1278.63	326022.42	705611.35
04	448+38.24	107.12' LT	1277.67	326035.92	705634.18
05	448+39.03	108.15' LT	1277.45	326036.75	705633.18
06	448+43.19	113.63' LT	1278.60	326041.18	705627.89
07	448+56.50	90.05' LT	1278.13	326053.57	705652.04
08	448+58.70	92.95' LT	1277.52	326055.91	705649.24
09	448+59.44	93.93' LT	1277.73	326056.70	705648.30
10	448+72.22	69.59' LT	1279.31	326068.46	705673.19
11	448+78.43	77.78' LT	1277.59	326075.08	705665.29

USH 45 & CTH N INT - NW QUADRANT GRADING					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
12	448+79.20	78.81' LT	1277.81	326075.90	705664.31
13	448+91.22	53.40' LT	1279.60	326086.78	705690.25
14	448+98.21	62.65' LT	1277.67	326094.24	705681.35
15	448+99.55	64.43' LT	1278.04	326095.67	705679.64
16	449+08.78	39.35' LT	1279.76	326103.71	705705.14
17	449+16.08	49.03' LT	1277.73	326111.51	705695.83
18	449+17.47	50.87' LT	1278.11	326112.99	705694.06
19	449+18.75	36.08' LT	1279.98	326113.55	705708.90
20	449+18.75	45.03' LT	1277.74	326113.99	705699.96
21	449+18.75	49.03' LT	1277.74	326114.19	705695.96
22	449+18.75	50.38' LT	1278.08	326114.26	705694.62

CTH N

19+00

EXISTING R/W

PROPOSED TLE

SLOPE INTERCEPT

DITCH FLOW LINE

WETLAND BOUNDARY

PROPOSED R/W

USH 45

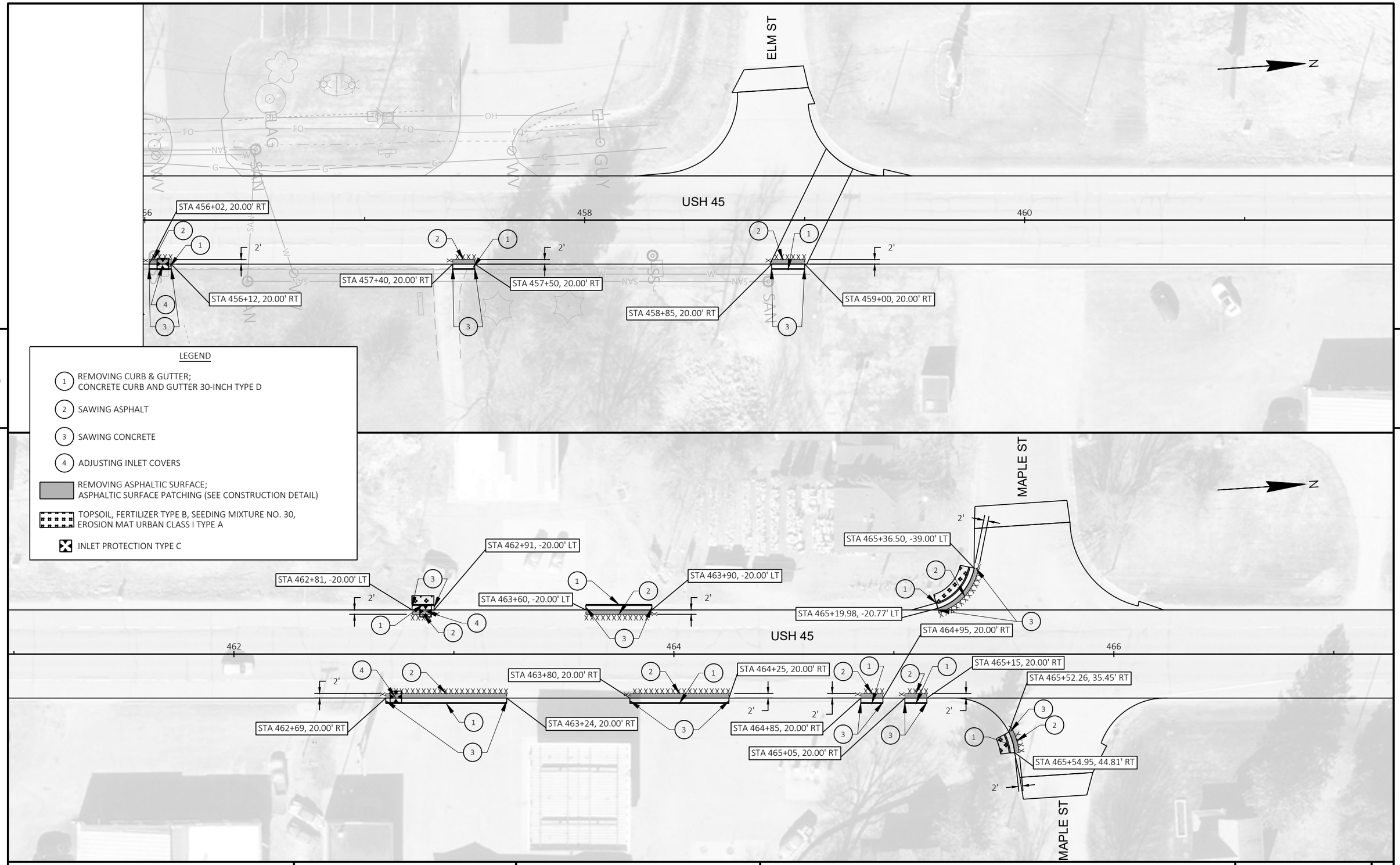
448+00

449+00

450+00

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - USH 45 & CTH N INTERSECTION - NW QUADRANT GRADING	SHEET 32	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\021201_PD_INT-NW-QUAD-GRADING.DWG PLOT DATE : 10/25/2023 12:36 PM PLOT BY : MROZ, ZACHARY PLOT NAME : PLOT SCALE : 1 IN:20 FT
LAYOUT NAME - 021201-pd-int-nw-quad-grading
WISDOT/CADDS SHEET 44



PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - CURB & GUTTER	SHEET 33	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\021202_PD_C&G.DWG
LAYOUT NAME - 021205-pd
PLOT DATE : 1/28/2024 9:36 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

EXISTING R/W

ASTREA
(COMMUNICATIONS)

PERMANENT GRADING SLOPE INTERCEPT

FO

110+00

111+00

112+00

113+00

USH 45

58045007425

110+99
-13.46'LT
1199.94

111+25
-13.54'LT
1200.06

111+51
-13.61'LT
1200.19

111+75
-13.61'LT
1200.33

112+03
-13.62'LT
1200.51

110+99
0.00'
1200.18

111+25
0.00'
1200.30

111+25
16.39'RT
1200.02

111+51
0.00'
1200.42

111+51
16.31'RT
1200.15

111+75
0.00'
1200.58

111+75
16.30'RT
1200.30

112+03
0.00'RT
1200.78

112+03
16.28'RT
1200.49

110+99
16.47'RT
1199.89

HO

WETLAND BOUNDARY

PERMANENT GRADING SLOPE INTERCEPT

AMERICAN TRANSMISSION COMPANY
(ELECTRIC)

WITTENBURG TELEPHONE
COMPANY
(COMMUNICATIONS)

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - CULVERT NO. 58045007425 REPLACEMENT EXISTING PAVEMENT GRADE	SHEET 34	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\021203-PD_CULVERTS-REPLACE.DWG
LAYOUT NAME - 021201-pd

PLOT DATE : 11/1/2023 1:03 PM PLOT BY : DAY, JOHN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

N

EXISTING R/W

WISCONSIN PUBLIC SERVICE
(GAS)

PERMANENT GRADING SLOPE INTERCEPT

WETLAND BOUNDARY

ASTREA
(COMMUNICATIONS)

394+48
-13.86'LT
1277.18

394+75
-13.83'LT
1277.54

395+00
-13.85'LT
1277.88

395+25
-13.96'LT
1278.30

395+53
-14.11'LT
1278.79

394+48
0.00'
1277.42

394+75
0.00'
1277.78

395+25
0.00'
1278.56

395+53
0.00'
1279.06

USH 45

394+00

395+00

396+00

58045005904

395+00
0.00'
1278.13

394+48
16.07'RT
1277.10

394+75
16.05'RT
1277.46

395+00
15.97'RT
1277.82

395+25
15.90'RT
1278.26

395+53
15.79'RT
1278.78

PERMANENT GRADING SLOPE INTERCEPT

ALLIANT ENERGY
(ELECTRIC)

EXISTING R/W

FRONTIER
(COMMUNICATIONS)

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - CULVERT NO. 58045005904 REPLACEMENT EXISTING PAVEMENT GRADE	SHEET 35	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\021203-PD_CULVERTS-REPLACE.DWG
LAYOUT NAME - 021202-pd
PLOT DATE : 11/1/2023 1:03 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

2

N

PROPOSED TLE

PROPOSED R/W

PERMANENT GRADING SLOPE INTERCEPT

WETLAND BOUNDARY

ASTREA
(COMMUNICATIONS)

ALLIANT ENERGY
(ELECTRIC)

ALLIANT ENERGY
(ELECTRIC)

FRONTIER
(COMMUNICATIONS)

EXISTING R/W

WISCONSIN PUBLIC SERVICE
(GAS)

448+77
-20.27'LT
1281.77

448+76
0.00'
1282.25

449+00
-20.11'LT
1281.87

449+00
0.00'
1282.33

449+28
-20.05'LT
1282.01

449+34
0.00'
1282.44

449+40
-20.02'LT
1282.08

449+44
0.00'
1282.52

449+75
-19.81'LT
1282.30

449+75
0.00'
1282.74

449+97
-19.67'LT
1282.45

449+97
0.00'
1282.92

USH 45

448+00

449+00

450+00

451+00

PT : 450+99.73

58045005909

EXISTING CURB & GUTTER TO BE
REMOVED AND REPLACED

448+76
19.76'RT
1281.79

449+00
19.79'RT
1281.85

449+41
20.57'RT
1281.97

449+47
20.05'RT
1282.02

449+75
20.07'RT
1282.18

449+97
20.20'RT
1282.30

WETLAND BOUNDARY

EXISTING R/W

ALLIANT ENERGY
(ELECTRIC)

PERMANENT GRADING SLOPE INTERCEPT

CTH N

PROPOSED R/W

PROPOSED TLE

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - CULVERT NO. 58045005909 REPLACEMENT EXISTING PAVEMENT GRADE	SHEET 36	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\021203-PD_CULVERTS-REPLACE.DWG
LAYOUT NAME - 021203-pd

PLOT DATE : 11/1/2023 1:04 PM PLOT BY : DAY, JOHN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

N

MARSH RD

ASTREA
(COMMUNICATIONS)

ALLIANT ENERGY
(ELECTRIC)

EXISTING R/W

PERMANENT GRADING SLOPE INTERCEPT

EXISTING CURB & GUTTER TO BE
REMOVED AND REPLACED

WETLAND BOUNDARY

631+91
-48.24'LT
1370.63

631+62
-46.50'LT
1370.39

631+88
-46.48'LT
1370.31

631+62
-17.97'LT
1371.34

631+75
-24.00'LT
1371.23

632+07
-20.37'LT
1371.45

631+55
-17.88'LT
1371.29

631+75
-12.00'LT
1371.54

631+75
0.00'
1371.72

632+41
-21.91'LT
1371.64

632+50
-12.00'LT
1371.94

632+25
-12.00'LT
1371.79

632+25
0.00'
1371.99

632+50
0.00'
1372.14

632+60
-20.72'LT
1371.74

631+00

632+00

633+00

USH 45

58045005921

631+55
7.22'RT
1371.49

631+75
12.00'RT
1371.53

632+25
12.00'RT
1371.79

632+08
6.81'RT
1371.79

632+60
6.38'RT
1372.05

631+55
25.34'RT
1371.16

631+75
25.38'RT
1371.27

632+08
25.46'RT
1371.42

632+50
12.00'RT
1371.89

632+60
25.54'RT
1371.72

632+25
25.50'RT
1371.51

632+50
25.50'RT
1371.65

PERMANENT GRADING SLOPE INTERCEPT

WITTENBERG CABLE TV
(COMMUNICATIONS)

FRONTIER
(COMMUNICATIONS)

EXISTING R/W

WETLAND BOUNDARY

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - CULVERT NO. 58045005921 REPLACEMENT EXISTING PAVEMENT GRADE	SHEET 37	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\021203-PD_CULVERTS-REPLACE.DWG
LAYOUT NAME - 021204-pd
PLOT DATE : 11/1/2023 1:04 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

6-INCH BASE AGGREGATE DENSE 1 1/4 INCH

3-INCH ASPHALTIC SURFACE TEMPORARY OVER 6-INCH BASE AGGREGATE DENSE 1 1/4-INCH

N

EXISTING R/W

ASTREA (COMMUNICATIONS)

SLOPE INTERCEPT

110+90 -30.50'LT

112+13 -30.50'LT

109+68 -14.28'LT

113+39 -13.69'LT

108+00 109+00 110+00 111+00 112+00 113+00 114+00 115+00

58045007425

USH 45

109+87 16.93'RT

SLOPE INTERCEPT

110+90 30.60'RT

112+13 30.60'RT

113+20 16.22'RT

AMERICAN TRANSMISSION COMPANY (ELECTRIC)

WETLAND BOUNDARY

WITTENBERG TELEPHONE COMPANY (COMMUNICATIONS)

EXISTING R/W

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - TEMPORARY WIDENING AT CULVERT NO. 58045007425	SHEET 38	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\021204-PD_TEMP-WIDENING.DWG
LAYOUT NAME - 021201-pd

PLOT DATE : 11/1/2023 2:00 PM PLOT BY : DAY, JOHN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

6-INCH BASE AGGREGATE DENSE 1 1/4 INCH

3-INCH ASPHALTIC SURFACE TEMPORARY OVER
6-INCH BASE AGGREGATE DENSE 1 1/4-INCH

N

EXISTING R/W

WETLAND BOUNDARY

WISCONSIN PUBLIC SERVICE
(GAS)

SLOPE INTERCEPT

ASTREA
(COMMUNICATIONS)

PC: 392+37.39

394+39
-33.11'LT

395+61
-33.11'LT

392+82
-14.06'LT

397+18
-14.12'LT

PT: 397+35.83

FO

G

392+00 393+00 394+00 39 00 396+00 397+00 398+00

58045005904

USH 45

393+21
15.85'RT

396+79
15.90'RT

SLOPE INTERCEPT

394+39
32.72'RT

395+62
32.72'RT

POST

OH

ALLIANT ENERGY
(ELECTRIC)

EXISTING R/W

FRONTIER
(COMMUNICATIONS)

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - TEMPORARY WIDENING AT CULVERT NO. 58045005904	SHEET 39	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\021204-PD_TEMP-WIDENING.DWG
LAYOUT NAME - 021202-pd
PLOT DATE : 11/1/2023 2:00 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

6-INCH BASE AGGREGATE DENSE 1 1/4 INCH

3-INCH ASPHALTIC SURFACE TEMPORARY OVER 6-INCH BASE AGGREGATE DENSE 1 1/4-INCH

N

WETLAND BOUNDARY

ASTREA (COMMUNICATIONS)

ALLIANT ENERGY (ELECTRIC)

ALLIANT ENERGY (ELECTRIC)

448+33 -24.22'LT

448+77 -29.71'LT

448+33 -23.59'LT

448+13 27.51'RT

448+14 29.00'RT

449+32 29.73'RT

450+11 -29.71'LT

SLOPE INTERCEPT

PT: 450+90.73

FRONTIER (COMMUNICATIONS)

450+93 -19.56'LT

WISCONSIN PUBLIC SERVICE (GAS)

450+75 20.55'RT

450+11 29.54'RT

PROPOSED TLE

PROPOSED R/W

EXISTING R/W

446+00 447+00 448+00 449+00 450+00 451+00 452+00 453+00

USH 45

CTH N

ASPHALTIC CURB REQUIRED

ALLIANT ENERGY (ELECTRIC)

SLOPE INTERCEPT

WETLAND BOUNDARY

EXISTING R/W

PROPOSED R/W

PROPOSED TLE

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - TEMPORARY WIDENING AT CULVERT NO. 58045005909	SHEET 40	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\021204-PD_TEMP-WIDENING.DWG
LAYOUT NAME - 021203-pd
PLOT DATE : 11/1/2023 2:00 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

LEGEND

6-INCH BASE AGGREGATE DENSE 1 1/4 INCH

3-INCH ASPHALTIC SURFACE TEMPORARY OVER
6-INCH BASE AGGREGATE DENSE 1 1/4-INCH

N

MARSH RD

ALLIANT ENERGY
(ELECTRIC)

EXISTING CURB & GUTTER TO BE
REMOVED AND REPLACED

EXISTING R/W

ASTREA
(COMMUNICATIONS)

EXISTING R/W

WETLAND BOUNDARY

SLOPE INTERCEPT

PT: 634+69.13

629+00 630+00 631+00 632+00 633+00 USH 45 634+00 635+00

58045005921

630+07
24.95'RT

633+85
25.26'RT

SLOPE INTERCEPT

631+47
42.79'RT

WETLAND BOUNDARY

632+69
41.80'RT

EXISTING R/W

WITTENBERG CABLE TV
(COMMUNICATIONS)

FRONTIER
(COMMUNICATIONS)

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - TEMPORARY WIDENING AT CULVERT NO. 58045005921	SHEET 41	E

2

LEGEND

1 SAWING ASPHALT

6.25"
4.25" LOWER LIFT: ASPHALTIC SURFACE
2" UPPER LIFT: HMA PAVEMENT 4 MT 58-28 S
(PLACED WITH MAINLINE RESURFACING)

N

MGS TERMINAL EAT: STA. 555+26.18 - STA. 555+79.30 LT,
MGS GUARDRAIL 3: STA. 555+79.30 - STA. 556+41.80 LT
MGS GUARDRAIL 3 K: STA. 556+41.80 - STA. 557+54.30 LT
MGS GUARDRAIL 3: STA. 557+54.30 - STA. 558+41.80 LT
MGS TERMINAL EAT: STA. 558+41.80 - STA. 558+94.92 LT

STA. 555+26.18 - STA. 555+79.30 LT, GUARDRAIL MOW STRIP EMULSIFIED ASPHALT REQ'D
STA. 555+79.30 - STA. 558+41.80 LT, GUARDRAIL MOW STRIP ASPHALT REQ'D
STA. 558+41.80 - STA. 558+94.92 LT, GUARDRAIL MOW STRIP EMULSIFIED ASPHALT REQ'D

WETLAND BOUNDARY

SLOPE INTERCEPT

BEGIN PROPOSED MGS GUARDRAIL
EAT POST 1 STA. 555+26.18

END PROPOSED MGS GUARDRAIL
EAT POST 1 STA. 558+94.92

EXISTING R/W

+59.39, -23.55' LT
+50.52, -23.63' LT
+26.18, -28.00' LT
+26.18, -22.00' LT
+51.18, -25.33' LT
+76.18, -24.00' LT
+41.80, -24.00' LT
+66.80, -22.00' LT
+29.30, -22.00' LT
+54.30, -24.00' LT
+69.92, -25.33' LT
+44.92, -24.00' LT
+94.92, -28.00' LT
+94.92, -22.00' LT
+47.08, -24.52' LT
+67.86, -23.97' LT
+50.52, -14.43' LT
+96.81, -14.53' LT
+51.65, -18.00' LT
+76.18, -20.00' LT
+44.92, -20.00' LT
+98.50, -18.00' LT
+59.03, -14.77' LT
+67.86, -14.71' LT

554 556 558 560

USH 45

1

+14.80, 15.53' RT
+15.44, 15.54' RT
+23.41, 15.53' RT
+66.98, 18.00' RT
+80.08, 22.00' RT
+30.08, 20.00' RT
+39.49, 18.00' RT
+98.82, 20.00' RT
+16.67, 15.22' RT
+87.70, 15.28' RT
+31.11, 15.20' RT
+14.80, 23.65' RT
+80.08, 28.00' RT
+30.08, 24.00' RT
+05.08, 25.33' RT
+45.70, 24.00' RT
+70.70, 22.00' RT
+33.20, 22.00' RT
+58.20, 24.00' RT
+98.82, 24.00' RT
+23.82, 25.33' RT
+48.82, 22.00' RT
+48.82, 28.00' RT
+31.11, 22.51' RT

BEGIN PROPOSED MGS GUARDRAIL
EAT POST 1 STA. 554+80.08

END PROPOSED MGS GUARDRAIL
EAT POST 1 STA. 558+48.82

WETLAND BOUNDARY

EXISTING R/W

PACKARD CREEK

C-58-0670

SLOPE INTERCEPT

MGS TERMINAL EAT: STA. 554+80.08 - STA. 555+33.20 RT
MGS GUARDRAIL 3: STA. 555+33.20 - STA. 556+45.70 RT
MGS GUARDRAIL 3 K: STA. 556+45.70 - STA. 557+58.20 RT
MGS GUARDRAIL 3: STA. 557+58.20 - STA. 557+95.70 RT
MGS TERMINAL EAT: STA. 557+95.70 - STA. 558+48.82 RT

STA. STA. 554+80.08 - STA. 555+33.20 RT, GUARDRAIL MOW STRIP EMULSIFIED ASPHALT REQ'D
STA. STA. 555+33.20 - 557+95.70 RT, GUARDRAIL MOW STRIP ASPHALT REQ'D
STA. 557+95.70 - STA. 558+48.82 RT, GUARDRAIL MOW STRIP EMULSIFIED ASPHALT REQ'D

ENGINEER'S NOTE:
CONTRACTOR TO INSTALL GUARDRAIL POSTS WITH CAUTION OVER STRUCTURE C-58-0670. CLEARANCE FROM BOTTOM OF POSTS TO TOP OF STRUCTURE IS ESTIMATED TO BE 1.5'. INSTALLING THE POSTS BY SETTING IN EXCAVATED POST HOLES IS RECOMMENDED.

2

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - MGS REPLACEMENT	SHEET 42	E

2

LEGEND

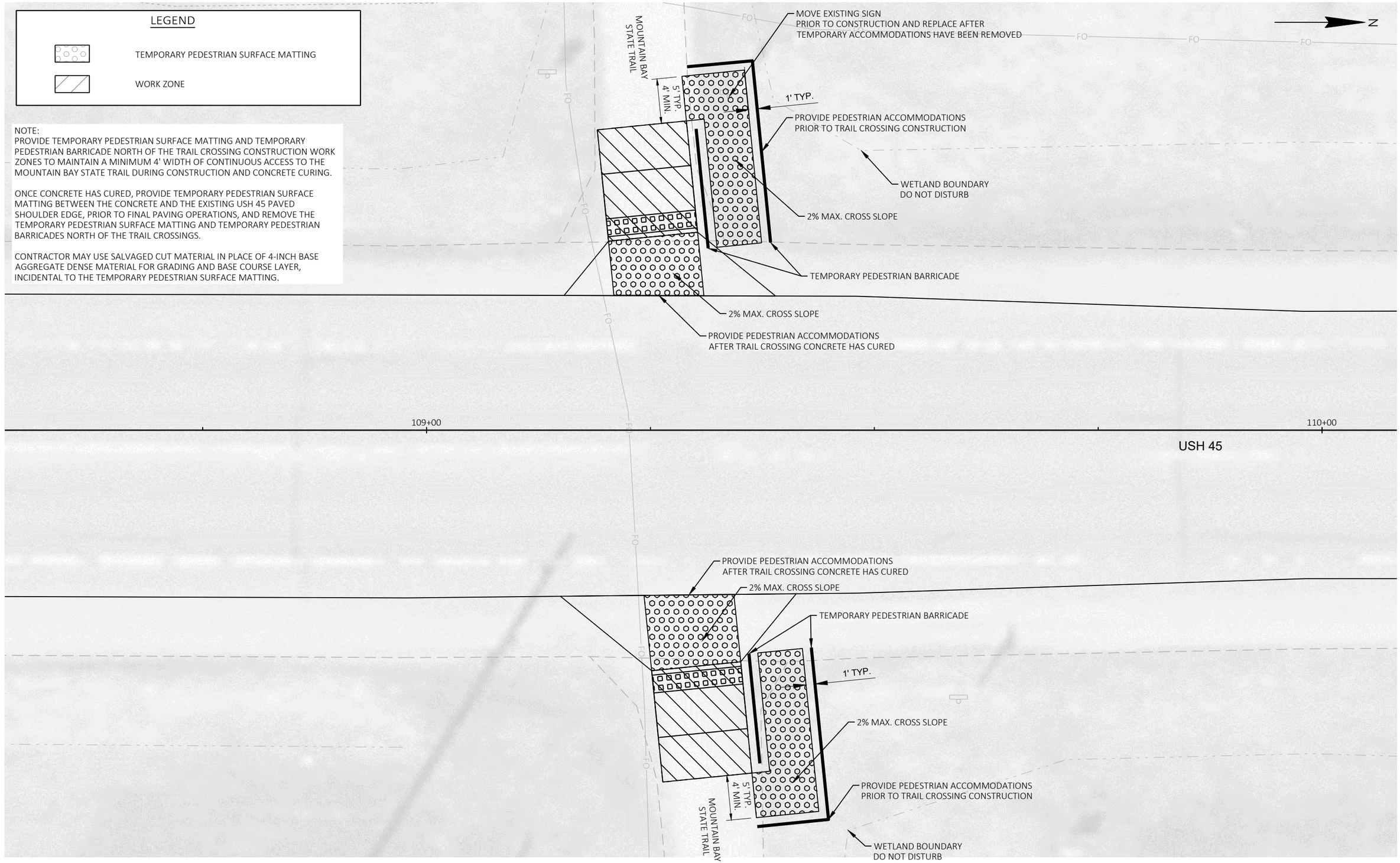
TEMPORARY PEDESTRIAN SURFACE MATTING

WORK ZONE

NOTE:
PROVIDE TEMPORARY PEDESTRIAN SURFACE MATTING AND TEMPORARY PEDESTRIAN BARRICADE NORTH OF THE TRAIL CROSSING CONSTRUCTION WORK ZONES TO MAINTAIN A MINIMUM 4' WIDTH OF CONTINUOUS ACCESS TO THE MOUNTAIN BAY STATE TRAIL DURING CONSTRUCTION AND CONCRETE CURING.

ONCE CONCRETE HAS CURED, PROVIDE TEMPORARY PEDESTRIAN SURFACE MATTING BETWEEN THE CONCRETE AND THE EXISTING USH 45 PAVED SHOULDER EDGE, PRIOR TO FINAL PAVING OPERATIONS, AND REMOVE THE TEMPORARY PEDESTRIAN SURFACE MATTING AND TEMPORARY PEDESTRIAN BARRICADES NORTH OF THE TRAIL CROSSINGS.

CONTRACTOR MAY USE SALVAGED CUT MATERIAL IN PLACE OF 4-INCH BASE AGGREGATE DENSE MATERIAL FOR GRADING AND BASE COURSE LAYER, INCIDENTAL TO THE TEMPORARY PEDESTRIAN SURFACE MATTING.



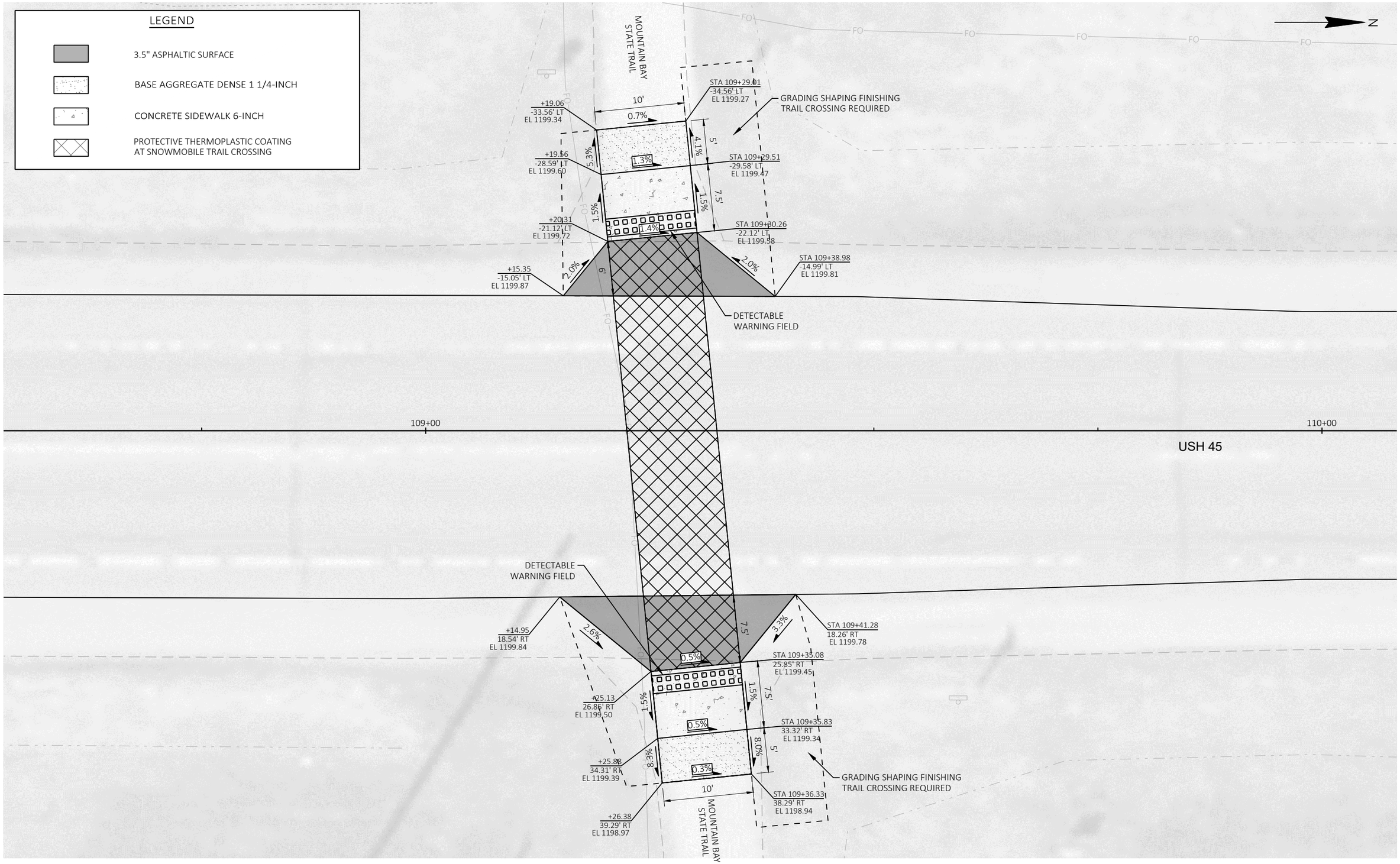
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - TEMPORARY PEDESTRIAN ACCOMMODATIONS AT TRAIL CROSSING	SHEET 43	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\021205-PD_TRAIL-CROSSING_TEMP_PED_ACCOM.DWG PLOT DATE : 10/30/2023 4:16 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - MBST Crossing
WISDOT/CADDS SHEET 42

2

LEGEND

- 3.5" ASPHALTIC SURFACE
- BASE AGGREGATE DENSE 1 1/4-INCH
- CONCRETE SIDEWALK 6-INCH
- PROTECTIVE THERMOPLASTIC COATING AT SNOWMOBILE TRAIL CROSSING



PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - TRAIL CROSSING AND SNOWMOBILE TRAIL CROSSING	SHEET 44	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\021206-PD_TRAIL-CROSSING.DWG
LAYOUT NAME - MBST Crossing

PLOT DATE : 10/30/2023 4:19 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:10 FT

LEGEND

PROTECTIVE THERMOPLASTIC COATING
AT SNOWMOBILE TRAIL CROSSING

N

SNOWMOBILE TRAIL

15'

45+00

45+11

SNOWMOBILE TRAIL

15'

ELM ST

USH 45

NOTE: LOCATION OF SNOWMOBILE TRAIL CROSSING IS APPROXIMATE AND IS TO BE VERIFIED AND ADJUSTED, IF NECESSARY, IN THE FIELD.

OLD 26 RD

N

SNOWMOBILE TRAIL

15'

EP: 405+24.95

USH 45

405+25

405+00

15'

SNOWMOBILE TRAIL

NOTE: LOCATION OF SNOWMOBILE TRAIL CROSSING IS APPROXIMATE AND IS TO BE VERIFIED AND ADJUSTED, IF NECESSARY, IN THE FIELD.

2

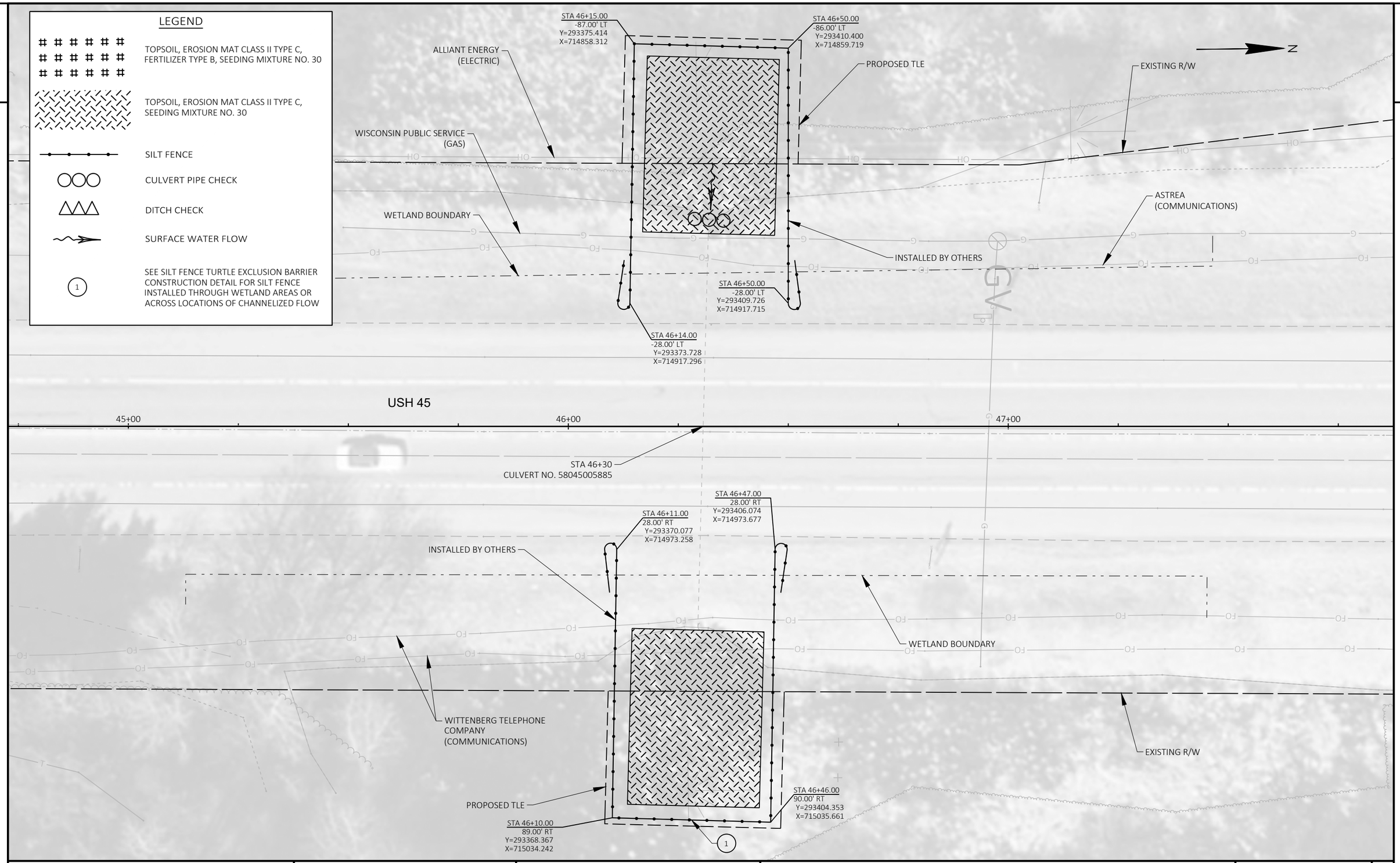
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN DETAILS - SNOWMOBILE TRAIL CROSSINGS	SHEET 45	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\021206-PD_TRAIL-CROSSING.DWG
LAYOUT NAME - Elm and Old 26
PLOT DATE : 10/30/2023 4:19 PM
PLOT BY : CZECH, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- TOPSOIL, EROSION MAT CLASS II TYPE C, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30
- TOPSOIL, EROSION MAT CLASS II TYPE C, SEEDING MIXTURE NO. 30
- SILT FENCE
- CULVERT PIPE CHECK
- DITCH CHECK
- SURFACE WATER FLOW
- (1) SEE SILT FENCE TURTLE EXCLUSION BARRIER CONSTRUCTION DETAIL FOR SILT FENCE INSTALLED THROUGH WETLAND AREAS OR ACROSS LOCATIONS OF CHANNELIZED FLOW



PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - CULVERT LININGS; CULVERT NO. 58045005885	SHEET 46	E

FILE NAME : C:\USERS\JOHN.DAY\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\022001-EC_CULVERT-LINING.DWG
LAYOUT NAME - 021201-pd
PLOT DATE : 2/13/2024 2:14 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- TOPSOIL, EROSION MAT CLASS II TYPE C, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30
- TOPSOIL, EROSION MAT CLASS II TYPE C, SEEDING MIXTURE NO. 30
- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30
- LIGHT RIPRAP OVER GEOTEXTILE TYPE R
- SILT FENCE
- CULVERT PIPE CHECK
- DITCH CHECK
- SURFACE WATER FLOW
- (1) SEE SILT FENCE TURTLE EXCLUSION BARRIER CONSTRUCTION DETAIL FOR SILT FENCE INSTALLED THROUGH WETLAND AREAS OR ACROSS LOCATIONS OF CHANNELIZED FLOW

FRONTIER (COMMUNICATIONS)

SPECTRUM (COMMUNICATIONS)

ALLIANT ENERGY (ELECTRIC)

ASTREA (COMMUNICATIONS)

INSTALLED BY OTHERS

STA 503+17.00
-61.00' LT
Y=331505.143
X=705945.290

STA 503+20.00
-31.00' LT
Y=331507.122
X=705975.375

STA 503+48.00
-64.00' LT
Y=331536.227
X=705943.345

STA 503+51.00
-79.00' LT
Y=331539.735
X=705928.455

STA 503+82.00
-78.00' LT
Y=331570.683
X=705930.508

STA 503+85.00
-66.00' LT
Y=331573.274
X=705942.603

PROPOSED TLE

STA 504+07.00
-73.00' LT
Y=331595.499
X=705936.354

STA 504+15.00
-72.00' LT
Y=331603.460
X=705937.625

EXISTING R/W

STA 504+20.00
-62.00' LT
Y=331608.118
X=705947.789

WETLAND BOUNDARY

STA 504+20.00
-26.00' LT
Y=331606.895
X=705983.769

INSTALLED BY OTHERS

SLOPE INTERCEPT FOR GRADING SHAPING FINISHING CULVERT (SEE PLAN SHEETS FOR DETAILS)

WISCONSIN PUBLIC SERVICE (GAS)

USH 45

503+00

504+00

505+00

N

INSTALLED BY OTHERS

STA 502+72.00
27.00' RT
Y=331457.180
X=706031.711

STA 503+47
CULVERT NO. 58045005913

WETLAND BOUNDARY

SLOPE INTERCEPT FOR GRADING SHAPING FINISHING CULVERT (SEE PLAN SHEETS FOR DETAILS)

STA 503+87.00
27.00' RT
Y=331572.113
X=706035.617

FRONTIER (COMMUNICATIONS)

WITTENBERG CABLE TV (COMMUNICATIONS)

STA 503+09.00
73.00' RT
Y=331492.596
X=706078.941

STA 502+72.00
73.00' RT
Y=331455.617
X=706077.684

STA 503+04.00
90.00' RT
Y=331487.021
X=706095.761

STA 503+46.00
73.00' RT
Y=331529.574
X=706080.198

PROPOSED TLE

STA 503+39.00
100.00' RT
Y=331521.661
X=706106.944

STA 503+87.00
73.00' RT
Y=331570.551
X=706081.591

EXISTING R/W

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - CULVERT LININGS; CULVERT NO. 58045005913	SHEET 47	E

FILE NAME : C:\USERS\JOHN.DAY\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\022001-EC_CULVERT-LINING.DWG
LAYOUT NAME - 021202-pd
PLOT DATE : 2/13/2024 2:15 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

TOPSOIL, EROSION MAT CLASS II TYPE C, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30

TOPSOIL, EROSION MAT CLASS II TYPE C, SEEDING MIXTURE NO. 30

TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30

SILT FENCE

CULVERT PIPE CHECK

DITCH CHECK

SURFACE WATER FLOW

PROPOSED TLE

EXISTING R/W

ALLIANT ENERGY (ELECTRIC)

ASTREA (COMMUNICATIONS)

SLOPE INTERCEPT FOR GRADING SHAPING FINISHING CULVERT (SEE PLAN SHEETS FOR DETAILS)

USH 45

717+00

718+00

719+00

STA 718+33
CULVERT NO. 58045005929

FRONTIER (COMMUNICATIONS)

WITTENBERG CABLE TV (COMMUNICATIONS)

PROPOSED TLE

SLOPE INTERCEPT FOR GRADING SHAPING FINISHING CULVERT (SEE PLAN SHEETS FOR DETAILS)

EXISTING R/W

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - CULVERT LININGS; CULVERT NO. 58045005929	SHEET 48	E

2

2

EXISTING R/W

SLOPE INTERCEPT FOR GRADING SHAPING FINISHING CULVERT (SEE PLAN SHEETS FOR DETAILS)

PC: 414+85.88

410+00 411+00 412+00 413+00 414+00 415+00

USH 45

EXISTING R/W

LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30
- SILT FENCE
- CULVERT PIPE CHECK
- DITCH CHECK
- SURFACE WATER FLOW

EXISTING R/W

PT: 418+40.39

SLOPE INTERCEPT FOR GRADING SHAPING FINISHING CULVERT (SEE PLAN SHEETS FOR DETAILS)

416+00 417+00 418+00 419+00 420+00 421+00

USH 45

EXISTING R/W

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - GRADING SHAPING FINISHING CULVERT	SHEET 49	E

FILE NAME : C:\USERS\JOHN.DAY\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\022001-EC-GRADING-CULVERT.DWG
LAYOUT NAME - 1
PLOT DATE : 2/13/2024 2:20 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30
- SILT FENCE
- CULVERT PIPE CHECK
- DITCH CHECK
- SURFACE WATER FLOW
- (1) SEE SILT FENCE TURTLE EXCLUSION BARRIER CONSTRUCTION DETAIL FOR SILT FENCE INSTALLED THROUGH WETLAND AREAS OR ACROSS LOCATIONS OF CHANNELIZED FLOW

N

KILDEER LN

STA 525+98.00
-123.00' LT
Y=333786.933
X=705960.812

STA 526+30.00
-123.00' LT
Y=333818.914
X=705961.899

INSTALLED BY OTHERS

SLOPE INTERCEPT FOR GRADING SHAPING FINISHING CULVERT (SEE PLAN SHEETS FOR DETAILS)

STA 525+93.00
-113.00' LT
Y=333781.596
X=705970.636

STA 525+93.00
-93.00' LT
Y=333780.917
X=705990.625

STA 525+34.00
-58.00' LT
Y=333720.762
X=706023.600

EXISTING R/W

INSTALLED BY OTHERS

SLOPE INTERCEPT FOR GRADING SHAPING FINISHING CULVERT (SEE PLAN SHEETS FOR DETAILS)

SPECTRUM (COMMUNICATIONS

STA 527+20.00
-77.00' LT
Y=333907.300
X=706010.930

WETLAND BOUNDARY

ASTREA (COMMUNICATIONS)

ALLIANT ENERGY (ELECTRIC)

EXISTING R/W

STA 525+20.00
-58.00' LT
Y=333706.770
X=706023.125

(1)

STA 525+20.00
-28.00' LT
Y=333705.751
X=706053.107

STA 527+20.00
-28.00' LT
Y=333905.635
X=706059.901

PC: 527+60.93

524+00 525+00 526+00 527+00 528+00 529+00

USH 45

STA 526+70.00
28.00' RT
Y=333853.762
X=706114.170

WETLAND BOUNDARY

WITTENBERG CABLE TV (COMMUNICATIONS)

INSTALLED BY OTHERS

STA 526+40.00
104.00' RT
Y=333821.197
X=706189.107

EXISTING R/W

SLOPE INTERCEPT FOR GRADING SHAPING FINISHING CULVERT (SEE PLAN SHEETS FOR DETAILS)

FRONTIER (COMMUNICATIONS)

EXISTING R/W

STA 526+70.00
104.00' RT
Y=333851.180
X=706190.127

(1)

CHICKADEE LN

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - GRADING SHAPING FINISHING CULVERT	SHEET 50	E

FILE NAME : C:\USERS\JOHN.DAY\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\022001-EC-GRADING-CULVERT.DWG
LAYOUT NAME - 2
PLOT DATE : 2/13/2024 2:21 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- CULVERT PIPE CHECK
- DITCH CHECK
- SURFACE WATER FLOW
- (1) SEE SILT FENCE TURTLE EXCLUSION BARRIER CONSTRUCTION DETAIL FOR SILT FENCE INSTALLED THROUGH WETLAND AREAS OR ACROSS LOCATIONS OF CHANNELIZED FLOW

N

EXISTING R/W

SLOPE INTERCEPT FOR GRADING SHAPING FINISHING TRAIL CROSSING (SEE PLAN SHEETS FOR DETAILS)

STA 109+32.00
-50.00' LT
Y=299691.266
X=714895.508

STA 109+50.00
-35.00' LT
Y=299709.291
X=714910.479

STA 110+00.00
-42.00' LT
Y=299759.279
X=714903.398

INSTALLED BY OTHERS

ASTREA
(COMMUNICATIONS)

SLOPE INTERCEPT

STA 113+40.00
-42.00' LT
Y=300099.279
X=714902.846

STA 113+45.00
-24.00' LT
Y=300104.308
X=714920.838

109+00 110+00 111+00 112+00 113+00 114+00

USH 45

58045007425

STA 113+35.00
27.00' RT
Y=300094.391
X=714971.854

STA 113+20.00
45.00' RT
Y=300079.420
X=714989.878

SLOPE INTERCEPT FOR GRADING SHAPING FINISHING TRAIL CROSSING (SEE PLAN SHEETS FOR DETAILS)

STA 109+60.00
35.00' RT
Y=299719.404
X=714980.462

STA 109+85.00
42.00' RT
Y=299744.415
X=714987.422

STA 109+40.00
50.00' RT
Y=299699.428
X=714995.495

STA 111+50.00
60.00' RT
Y=299909.444
X=715005.154

AMERICAN TRANSMISSION COMPANY
(ELECTRIC)

INSTALLED BY OTHERS

WITTENBERG TELEPHONE
COMPANY
(COMMUNICATIONS)

WETLAND BOUNDARY

NOTE: SLOPE INTERCEPTS SHOWN REPRESENT THE LIMITS OF THE TEMPORARY LANE SHIFT WIDENING WORK.

EROSION CONTROL DEVICES SHOWN ARE TEMPORARY AND WILL BE IN PLACE DURING CONSTRUCTION.

DISTURBED AREAS FOR TEMPORARY WIDENING SHALL NOT REMAIN IN PLACE FOR MORE THAN 7 DAYS. IF DISTURBED AREAS ARE IN PLACE FOR MORE THAN 7 DAYS, ADDITIONAL EROSION CONTROL MEASURES NOT SHOWN ON THIS PLAN WILL BE REQUIRED.

CULVERT NO. 58045007425

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - CULVERT REPLACEMENT (TEMPORARY GRADING CONDITION)	SHEET 51	E

2

2

LEGEND

- SILT FENCE
- CULVERT PIPE CHECK
- DITCH CHECK
- SURFACE WATER FLOW
- (1) SEE SILT FENCE TURTLE EXCLUSION BARRIER CONSTRUCTION DETAIL FOR SILT FENCE INSTALLED THROUGH WETLAND AREAS OR ACROSS LOCATIONS OF CHANNELIZED FLOW

N

EXISTING R/W

STA 392+80.00
-35.00' LT
Y=320473.803
X=705609.301

STA 392+60.00
-25.00' LT
Y=320453.870
X=705619.535

STA 393+60.00
-35.00' LT
Y=320554.042
X=705608.707

STA 394+40.00
-54.00' LT
Y=320634.339
X=705589.667

STA 395+00.00
-54.00' LT
Y=320694.617
X=705590.000

STA 395+50.00
-57.00' LT
Y=320744.885
X=705587.517

INSTALLED BY OTHERS

STA 397+15.00
-53.00' LT
Y=320910.556
X=705594.755

STA 397+58.00
-25.00' LT
Y=320952.838
X=705623.950

WETLAND BOUNDARY

WISCONSIN PUBLIC SERVICE
(GAS)

SLOPE INTERCEPT

ASTREA
(COMMUNICATIONS)

USH 45

392+00 393+00 394+00 395+00 396+00 397+00 398+00

58045005904

PC: 392+37.39

PT: 397+35.83

STA 393+00.00
26.00' RT
Y=320494.419
X=705670.098

STA 393+25.00
50.00' RT
Y=320519.529
X=705693.897

ALLIANT ENERGY
(ELECTRIC)

EXISTING R/W

SLOPE INTERCEPT

INSTALLED BY OTHERS

FRONTIER
(COMMUNICATIONS)

STA 395+75.00
50.00' RT
Y=320768.445
X=705694.844

STA 396+00.00
36.00' RT
Y=320793.568
X=705681.236

NOTE: SLOPE INTERCEPTS SHOWN REPRESENT THE LIMITS OF THE TEMPORARY LANE SHIFT WIDENING WORK.

EROSION CONTROL DEVICES SHOWN ARE TEMPORARY AND WILL BE IN PLACE DURING CONSTRUCTION.

DISTURBED AREAS FOR TEMPORARY WIDENING SHALL NOT REMAIN IN PLACE FOR MORE THAN 7 DAYS. IF DISTURBED AREAS ARE IN PLACE FOR MORE THAN 7 DAYS, ADDITIONAL EROSION CONTROL MEASURES NOT SHOWN ON THIS PLAN WILL BE REQUIRED.

CULVERT NO. 58045005904

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - CULVERT REPLACEMENT (TEMPORARY GRADING CONDITION)	SHEET 52	E

FILE NAME : C:\USERS\JOHN.DAY\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\022001-EC-CULVERT-REPLACEMENT.DWG
LAYOUT NAME - 2-temp
PLOT DATE : 2/13/2024 3:23 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

INSTALL IN STAGE 1 PRIOR TO THE TEMPORARY GRADING CONDITION

WETLAND BOUNDARY

PROPOSED TLE

PROPOSED R/W

ASTREA (COMMUNICATIONS)

ALLIANT ENERGY (ELECTRIC)

SLOPE INTERCEPT

ALLIANT ENERGY (ELECTRIC)

FRONTIER (COMMUNICATIONS)

EXISTING R/W

WISCONSIN PUBLIC SERVICE (GAS)

PT: 450+99.73

USH 45

448+00

449+00

450+00

451+00

58045005909

EXISTING CURB & GUTTER TO BE REMOVED AND REPLACED

CTH N

ALLIANT ENERGY (ELECTRIC)

INSTALL IN STAGE 1 PRIOR TO THE TEMPORARY GRADING CONDITION

SLOPE INTERCEPT

WETLAND BOUNDARY

EXISTING R/W

PROPOSED R/W

PROPOSED TLE

NOTE: SLOPE INTERCEPTS SHOWN REPRESENT THE LIMITS OF THE TEMPORARY LANE SHIFT WIDENING WORK.

EROSION CONTROL DEVICES SHOWN ARE TEMPORARY AND WILL BE IN PLACE DURING CONSTRUCTION.

DISTURBED AREAS FOR TEMPORARY WIDENING SHALL NOT REMAIN IN PLACE FOR MORE THAN 7 DAYS. IF DISTURBED AREAS ARE IN PLACE FOR MORE THAN 7 DAYS, ADDITIONAL EROSION CONTROL MEASURES NOT SHOWN ON THIS PLAN WILL BE REQUIRED.

SEE "EROSION CONTROL - CTH N INTERSECTION" SHEETS FOR PERMANENT EROSION CONTROL CONDITIONS AT THIS LOCATION.

LEGEND

- SILT FENCE
- CULVERT PIPE CHECK
- DITCH CHECK
- SURFACE WATER FLOW

CULVERT NO. 58045005909

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - CULVERT REPLACEMENT (TEMPORARY GRADING CONDITION)	SHEET 53	E

FILE NAME : C:\USERS\JOHN.DAY\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\022001-EC-CULVERT-REPLACEMENT.DWG
LAYOUT NAME - 3-temp
PLOT DATE : 2/13/2024 3:23 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

SILT FENCE

CULVERT PIPE CHECK

DITCH CHECK

SURFACE WATER FLOW

1 SEE SILT FENCE TURTLE EXCLUSION BARRIER CONSTRUCTION DETAIL FOR SILT FENCE INSTALLED THROUGH WETLAND AREAS OR ACROSS LOCATIONS OF CHANNELIZED FLOW

N

MARSH RD

ALLIANT ENERGY (ELECTRIC)

ASTREA (COMMUNICATIONS)

STA 631+85.00
-80.00' LT
Y=344368.549
X=705829.422

STA 632+15.00
-76.00' LT
Y=344398.531
X=705833.839

STA 632+19.00
-62.00' LT
Y=344402.337
X=705847.895

INSTALLED BY OTHERS

EXISTING CURB & GUTTER TO BE REMOVED AND REPLACED

WETLAND BOUNDARY

EXISTING R/W

STA 632+60.00
-29.00' LT
Y=344442.883
X=705881.490

SLOPE INTERCEPT

58045005921

USH 45

PT: 634+69.13

630+00 631+00 632+00 633+00 634+00 635+00

STA 629+85.00
37.00' RT
Y=344167.096
X=705944.034

STA 630+10.00
57.00' RT
Y=344191.867
X=705964.292

WITTENBERG CABLE TV (COMMUNICATIONS)

FRONTIER (COMMUNICATIONS)

SLOPE INTERCEPT

INSTALLED BY OTHERS

EXISTING R/W

WETLAND BOUNDARY

STA 633+95.00
37.00' RT
Y=344576.792
X=705949.658

STA 633+50.00
57.00' RT
Y=344531.497
X=705968.895

NOTE: SLOPE INTERCEPTS SHOWN REPRESENT THE LIMITS OF THE TEMPORARY LANE SHIFT WIDENING WORK.

EROSION CONTROL DEVICES SHOWN ARE TEMPORARY AND WILL BE IN PLACE DURING CONSTRUCTION.

DISTURBED AREAS FOR TEMPORARY WIDENING SHALL NOT REMAIN IN PLACE FOR MORE THAN 7 DAYS. IF DISTURBED AREAS ARE IN PLACE FOR MORE THAN 7 DAYS, ADDITIONAL EROSION CONTROL MEASURES NOT SHOWN ON THIS PLAN WILL BE REQUIRED.

CULVERT NO. 58045005921

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - CULVERT REPLACEMENT (TEMPORARY GRADING CONDITION)	SHEET 54	E

2

2

LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30
- TOPSOIL, EROSION MAT CLASS II TYPE C, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30
- SILT FENCE
- CULVERT PIPE CHECK
- DITCH CHECK
- SURFACE WATER FLOW
- (1) SEE SILT FENCE TURTLE EXCLUSION BARRIER CONSTRUCTION DETAIL FOR SILT FENCE INSTALLED THROUGH WETLAND AREAS OR ACROSS LOCATIONS OF CHANNELIZED FLOW

N

EXISTING R/W

ASTREA (COMMUNICATIONS)

INSTALLED BY OTHERS

ASTREA (COMMUNICATIONS)

SLOPE INTERCEPT

SLOPE INTERCEPT FOR GRADING SHAPING FINISHING TRAIL CROSSING (SEE PLAN SHEETS FOR DETAILS)

STA 109+32.00
-50.00' LT
Y=299691.266
X=714895.508

STA 109+50.00
-35.00' LT
Y=299709.291
X=714910.479

STA 110+00.00
-42.00' LT
Y=299759.279
X=714903.398

STA 113+40.00
-42.00' LT
Y=300099.279
X=714902.846

STA 113+45.00
-24.00' LT
Y=300104.308
X=714920.838

109+00 110+00 111+00 112+00 113+00 114+00

USH 45

58045007425

STA 109+60.00
35.00' RT
Y=299719.404
X=714980.462

STA 109+85.00
42.00' RT
Y=299744.415
X=714987.422

STA 109+40.00
50.00' RT
Y=299699.428
X=714995.495

STA 111+50.00
60.00' RT
Y=299909.444
X=715005.154

STA 113+35.00
27.00' RT
Y=300094.391
X=714971.854

STA 113+20.00
45.00' RT
Y=300079.420
X=714989.878

SLOPE INTERCEPT FOR GRADING SHAPING FINISHING TRAIL CROSSING (SEE PLAN SHEETS FOR DETAILS)

SLOPE INTERCEPT

INSTALLED BY OTHERS

AMERICAN TRANSMISSION COMPANY (ELECTRIC)

WETLAND BOUNDARY

WITTENBERG TELEPHONE COMPANY (COMMUNICATIONS)

CULVERT NO. 58045007425

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - CULVERT REPLACEMENT (PERMANENT GRADING CONDITION)	SHEET 55	E

FILE NAME : C:\USERS\JOHN.DAY\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\022001-EC-CULVERT-REPLACEMENT.DWG
LAYOUT NAME - 1-perm
PLOT DATE : 2/13/2024 3:23 PM PLOT BY : DAY, JOHN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30
- TOPSOIL, EROSION MAT CLASS II TYPE C, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30
- SILT FENCE
- CULVERT PIPE CHECK
- DITCH CHECK
- SURFACE WATER FLOW
- (1) SEE SILT FENCE TURTLE EXCLUSION BARRIER CONSTRUCTION DETAIL FOR SILT FENCE INSTALLED THROUGH WETLAND AREAS OR ACROSS LOCATIONS OF CHANNELIZED FLOW

N

EXISTING R/W

STA 392+80.00
-35.00' LT
Y=320473.803
X=705609.301

STA 392+60.00
-25.00' LT
Y=320453.870
X=705619.535

STA 393+60.00
-35.00' LT
Y=320554.042
X=705608.707

STA 394+40.00
-54.00' LT
Y=320634.339
X=705589.667

STA 395+00.00
-54.00' LT
Y=320694.617
X=705590.000

STA 395+50.00
-57.00' LT
Y=320744.885
X=705587.517

INSTALLED BY OTHERS

SLOPE INTERCEPT

STA 397+15.00
-53.00' LT
Y=320910.556
X=705594.755

STA 397+58.00
-25.00' LT
Y=320952.838
X=705623.950

USH 45

WETLAND BOUNDARY

WISCONSIN PUBLIC SERVICE
(GAS)

ASTREA
(COMMUNICATIONS)

392+00 393+00 394+00 395+00 396+00 397+00 398+00

58045005904

STA 393+00.00
26.00' RT
Y=320494.419
X=705670.098

PC: 392+37.39

PT: 397+35.83

STA 393+25.00
50.00' RT
Y=320519.529
X=705693.897

ALLIANT ENERGY
(ELECTRIC)

EXISTING R/W

INSTALLED BY OTHERS

SLOPE INTERCEPT

FRONTIER
(COMMUNICATIONS)

STA 395+75.00
50.00' RT
Y=320768.445
X=705694.844

STA 396+00.00
36.00' RT
Y=320793.568
X=705681.236

CULVERT NO. 58045005904

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - CULVERT REPLACEMENT (PERMANENT GRADING CONDITION)	SHEET 56	E

LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30
- TOPSOIL, EROSION MAT CLASS II TYPE C, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30
- SILT FENCE
- CULVERT PIPE CHECK
- DITCH CHECK
- SURFACE WATER FLOW
- (1) SEE SILT FENCE TURTLE EXCLUSION BARRIER CONSTRUCTION DETAIL FOR SILT FENCE INSTALLED THROUGH WETLAND AREAS OR ACROSS LOCATIONS OF CHANNELIZED FLOW

N

MARSH RD

ASTREA (COMMUNICATIONS)

ALLIANT ENERGY (ELECTRIC)

STA 631+85.00
-80.00' LT
Y=344368.549
X=705829.422

STA 632+15.00
-76.00' LT
Y=344398.531
X=705833.839

STA 632+19.00
-62.00' LT
Y=344402.337
X=705847.895

STA 632+60.00
-29.00' LT
Y=344442.883
X=705881.490

INSTALLED BY OTHERS

SLOPE INTERCEPT

EXISTING CURB & GUTTER TO BE REMOVED AND REPLACED

WETLAND BOUNDARY

EXISTING R/W

58045005921

USH 45

PT: 634+69.13

629+00 630+00 631+00 632+00 633+00 634+00 635+00

STA 629+85.00
37.00' RT
Y=344167.096
X=705944.034

STA 630+10.00
57.00' RT
Y=344191.867
X=705964.292

FRONTIER (COMMUNICATIONS)

WITTENBERG CABLE TV (COMMUNICATIONS)

SLOPE INTERCEPT

INSTALLED BY OTHERS

WETLAND BOUNDARY

STA 633+95.00
37.00' RT
Y=344576.792
X=705949.658

STA 633+50.00
57.00' RT
Y=344531.497
X=705968.895

EXISTING R/W

CULVERT NO. 58045005921

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - CULVERT REPLACEMENT (PERMANENT GRADING CONDITION)	SHEET 57	E

FILE NAME : C:\USERS\JOHN.DAY\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\022001-EC-CULVERT-REPLACEMENT.DWG
LAYOUT NAME - 3-perm
PLOT DATE : 2/13/2024 3:24 PM PLOT BY : DAY, JOHN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, FERTILIZER TYPE B, SEEDING MIXTURE NO. 40

SILT FENCE

CULVERT PIPE CHECK

DITCH CHECK

SURFACE WATER FLOW

N

MATCHLINE STA 444+00

MATCHLINE STA 451+00

USH 45

USH 45

CTH N

CTH N

18+00

19+00

11+00

12+00

PI: 17+99.38

BEGIN CONSTRUCTION
STA 18+47.03
Y=325975.819
X=705586.046

EP: 20+00.00

BP: 10+00.00

444+62.40

445+00

446+00

447+00

448+00

449+00

450+00

EXISTING R/W

EXISTING R/W

EXISTING R/W

EXISTING R/W

SLOPE INTERCEPT

SLOPE INTERCEPT

SLOPE INTERCEPT

WETLAND BOUNDARY

WETLAND BOUNDARY

PROPOSED TLE

PROPOSED R/W

PROPOSED TLE

PROPOSED R/W

PROPOSED TLE

PROPOSED R/W

PROPOSED TLE

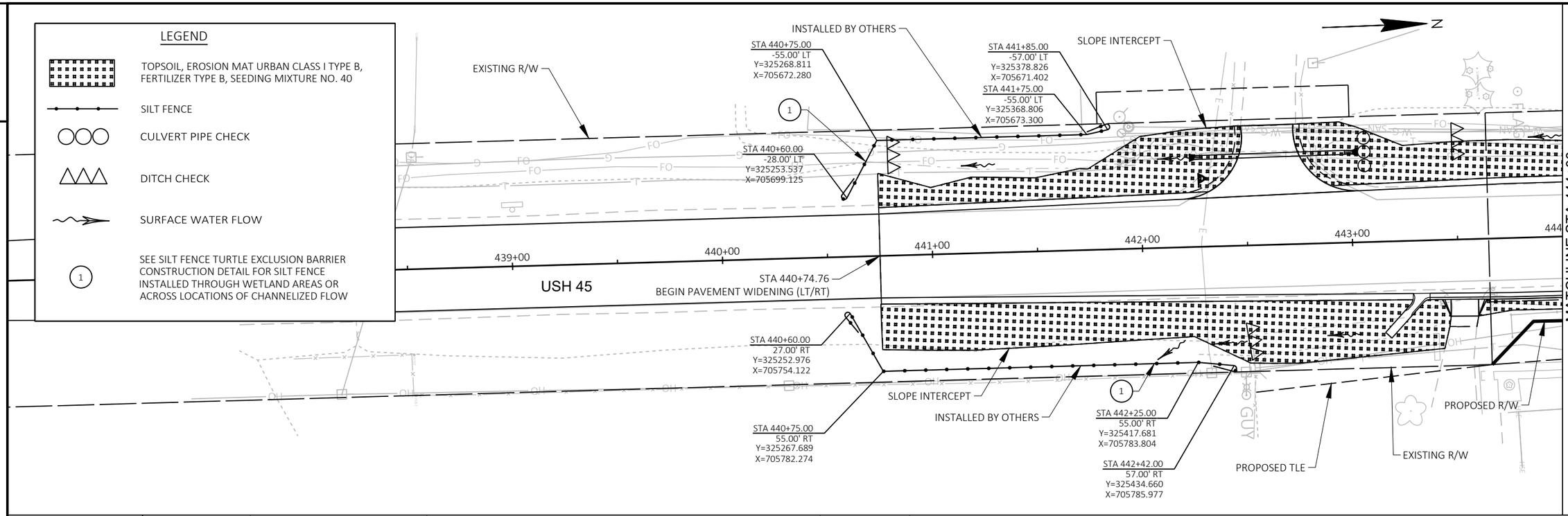
END CONSTRUCTION
STA 12+10.00
Y=325967.759
X=705948.800

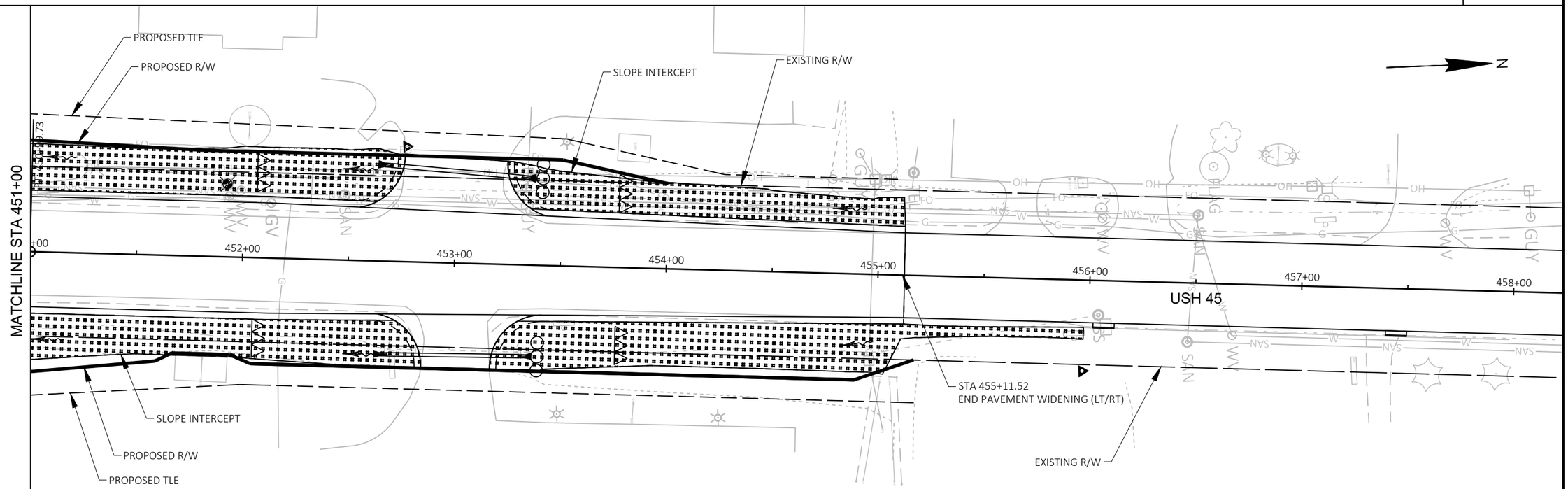
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - CTH N INTERSECTION	SHEET 58	E

2

LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, FERTILIZER TYPE B, SEEDING MIXTURE NO. 40
- SILT FENCE
- CULVERT PIPE CHECK
- DITCH CHECK
- SURFACE WATER FLOW
- (1) SEE SILT FENCE TURTLE EXCLUSION BARRIER CONSTRUCTION DETAIL FOR SILT FENCE INSTALLED THROUGH WETLAND AREAS OR ACROSS LOCATIONS OF CHANNELIZED FLOW





PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - CTH N INTERSECTION	SHEET 59	E

FILE NAME : C:\USERS\JOHN.DAY\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\022001-EC-INT.DWG
LAYOUT NAME - 022002-ec
PLOT DATE : 2/13/2024 3:42 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30

SILT FENCE

SURFACE WATER FLOW

N

STA 554+40.00
-25.00' LT
Y=336623.470
X=706021.741

STA 554+50.00
-44.00' LT
Y=336633.036
X=706002.518

STA 554+80.00
-44.00' LT
Y=336663.028
X=706001.836

STA 555+25.00
-55.00' LT
Y=336707.766
X=705989.816

STA 555+75.00
-50.00' LT
Y=336757.867
X=705993.678

STA 556+25.00
-55.00' LT
Y=336807.740
X=705987.543

STA 556+50.00
-56.00' LT
Y=336832.711
X=705985.975

STA 556+78.00
-48.00' LT
Y=336860.886
X=705993.336

STA 556+83.00
-37.00' LT
Y=336866.134
X=706004.219

STA 557+00.00
-37.00' LT
Y=336883.130
X=706003.833

STA 557+04.00
-48.00' LT
Y=336886.879
X=705992.745

STA 557+25.00
-56.00' LT
Y=336907.692
X=705984.269

STA 557+55.00
-54.00' LT
Y=336937.729
X=705985.587

STA 558+20.00
-44.00' LT
Y=337002.940
X=705994.107

STA 558+65.00
-44.00' LT
Y=337047.928
X=705993.084

STA 558+95.00
-50.00' LT
Y=337077.784
X=705986.403

STA 559+45.00
-45.00' LT
Y=337127.885
X=705990.265

STA 559+70.00
-45.00' LT
Y=337152.878
X=705989.697

STA 559+80.00
-26.00' LT
Y=337163.308
X=706008.465

INSTALLED BY OTHERS

SLOPE INTERCEPT

WETLAND BOUNDARY

EXISTING R/W

554 555 556 558 560

USH 45

STA 554+05.00
26.00' RT
Y=336589.639
X=706073.523

STA 554+12.00
48.00' RT
Y=336597.137
X=706095.358

STA 554+60.00
57.00' RT
Y=336645.329
X=706103.265

STA 554+80.00
57.00' RT
Y=336665.324
X=706102.810

STA 555+30.00
53.00' RT
Y=336715.220
X=706097.674

STA 555+75.00
55.00' RT
Y=336760.254
X=706098.651

STA 556+25.00
50.00' RT
Y=336810.127
X=706092.516

STA 556+50.00
53.00' RT
Y=336835.189
X=706094.946

STA 556+82.00
47.00' RT
Y=336867.044
X=706088.220

STA 556+83.00
37.00' RT
Y=336867.817
X=706078.200

STA 557+00.00
46.00' RT
Y=336885.017
X=706086.811

STA 557+00.00
37.00' RT
Y=336884.812
X=706077.814

STA 557+25.00
55.00' RT
Y=336910.215
X=706095.241

STA 557+60.00
55.00' RT
Y=336945.206
X=706094.445

STA 558+25.00
51.00' RT
Y=337010.098
X=706088.968

STA 558+45.00
57.00' RT
Y=337030.230
X=706094.512

STA 558+75.00
55.00' RT
Y=337060.176
X=706091.831

STA 559+30.00
45.00' RT
Y=337114.935
X=706080.583

STA 559+45.00
25.00' RT
Y=337129.476
X=706060.247

C-58-0670

PACKARD CREEK

INSTALLED BY OTHERS

SLOPE INTERCEPT

WETLAND BOUNDARY

EXISTING R/W

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	EROSION CONTROL - MGS REPLACEMENT	SHEET 60	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\022001-EC-MGS.DWG
LAYOUT NAME - 022001-ec

PLOT DATE : 2/7/2024 1:58 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

BEGIN PROJECT
STA 42+50
Y = 293009.427
X = 714941.060

BP: 42+00.00

6GW

USH 45

6GSSY

PC: 52+05.67

50'

HEMLOCK RD

PT: 56+00.69

6GW

12'

MATCH LINE STA 57+00

N

44 46 48 50 52 54 56

12'

12'

70'

12'

LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

HEMLOCK RD

N

MATCH LINE STA 57+00

12'

USH 45

58 60 62 64 66 68 70

12'

6GW

6GSSY

60'

6GW

12'

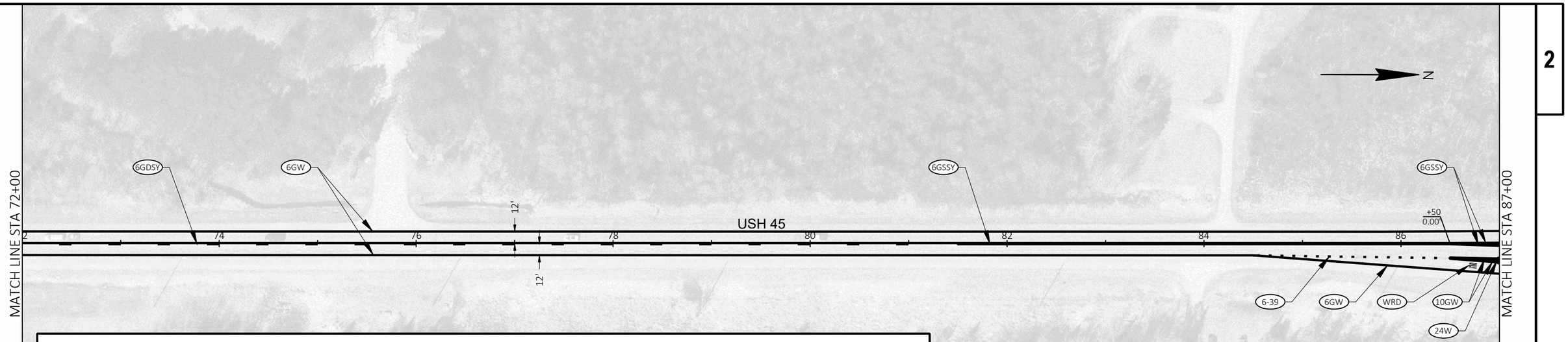
WAYSIDE PARK

MATCH LINE STA 72+00

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 61	E

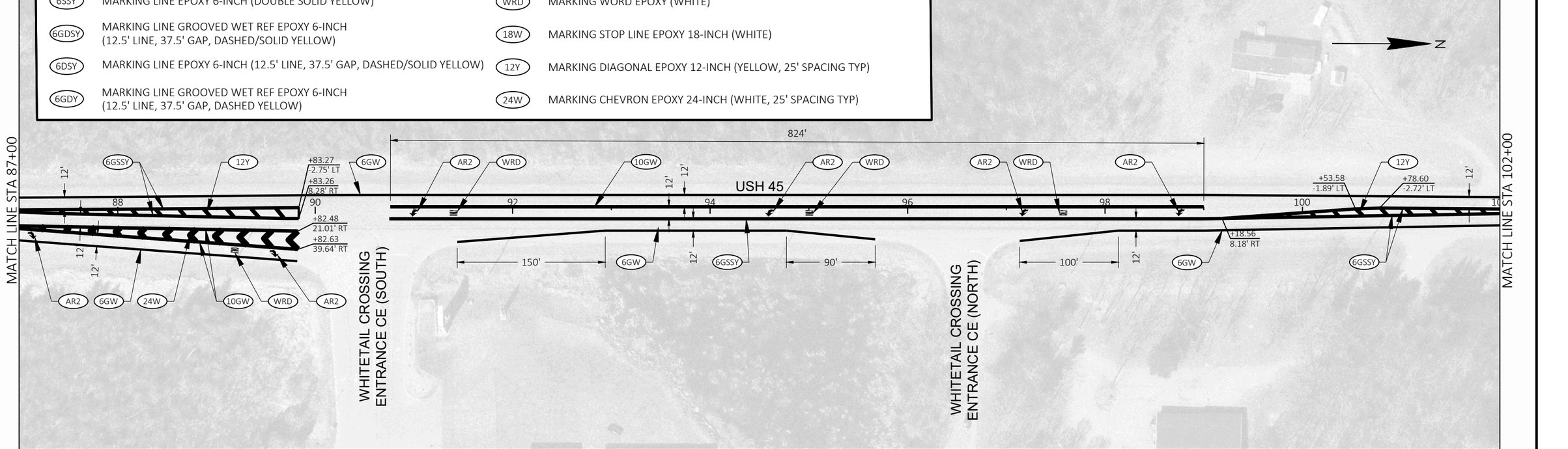
FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 050201-pn
PLOT DATE : 10/19/2023 11:08 AM
PLOT BY : ROTH, THOMAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)



PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 62	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 050202-pn
PLOT DATE : 10/19/2023 11:08 AM
PLOT BY : ROTH, THOMAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

MATCH LINE STA 102+00

MOUNTAIN-BAY STATE TRAIL

N

USH 45

6GSSY 6GDSY 6GW

102 104 106 108 110 112 114 116

+00
0.00'

12' 12' 12'

50'

12Y 6DSY 6GDY

WITT-BIRN TOWNLINE RD

18W

MATCH LINE STA 117+00

LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

MATCH LINE STA 117+00

N

USH 45

118 120 122 124 126 128 130

12' 12'

6GDY 6GW 6GDSY

MATCH LINE STA 132+00

2

2

MATCH LINE STA 132+00

MATCH LINE STA 147+00

N

USH 45

PC: 141+25.49

12'

12'

6GW

6GDSY

6GSSY

132

134

136

138

140

142

144

146

LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

MATCH LINE STA 147+00

N

6LN

+40.52
-12.00' LT

12'

12'

MATCH LINE STA 162+00

BLUEBIRD RD

PT: 154+63.87

USH 45

12'

12'

6GW

6GSSY

6GDSY

6GSSY

148

150

152

154

156

158

160

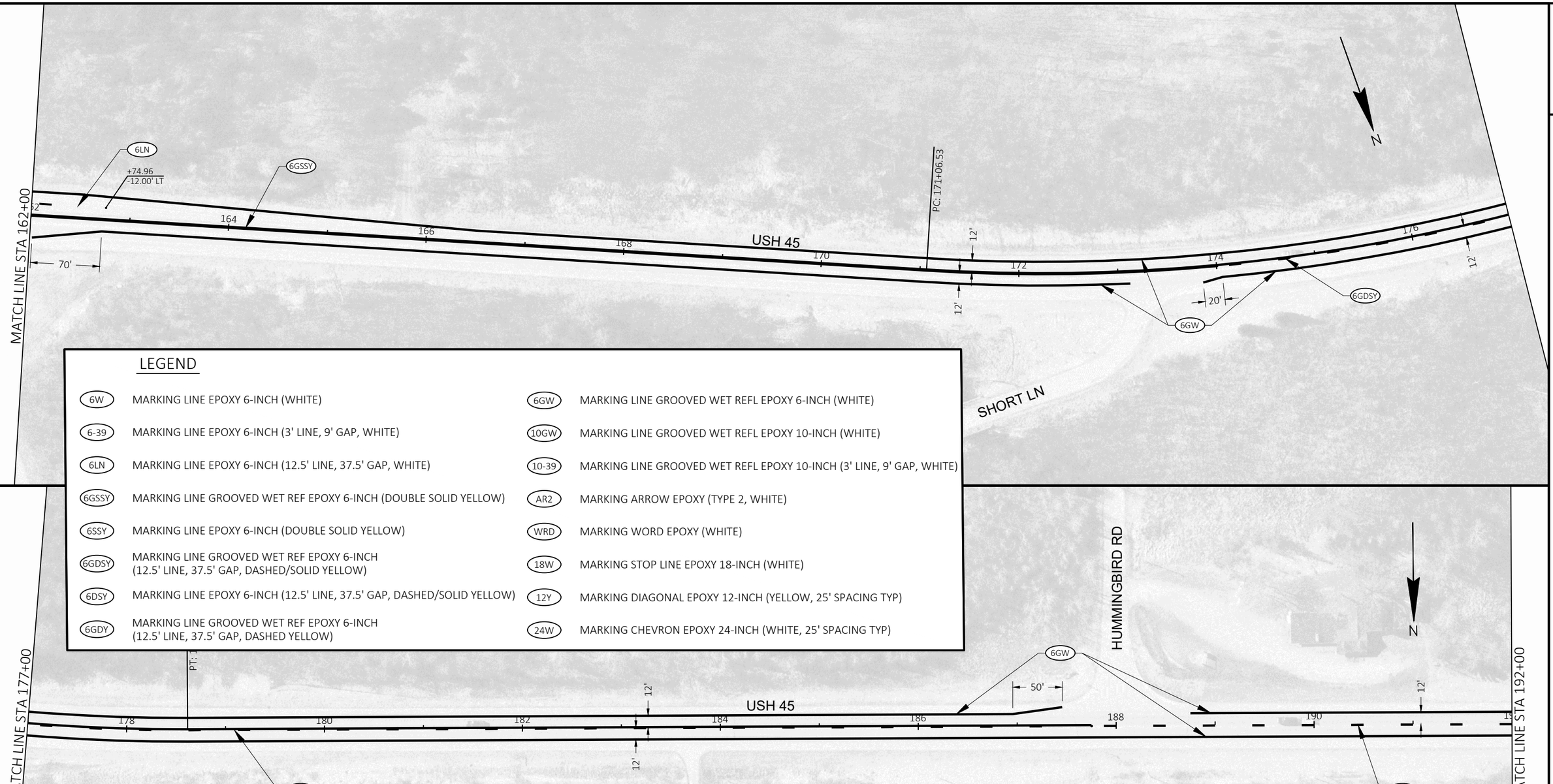
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 64	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 050204-pn

PLOT DATE : 10/19/2023 11:08 AM PLOT BY : ROTH, THOMAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2



LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

2

MATCH LINE STA 192+00

USH 45

192 194 196 198 200 202 204 206

12'

12'

6GW

6GDY

N

LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

MATCH LINE STA 207+00

N

USH 45

208 210 212 214 216 218 220

12'

12'

6GW

6GDY

6GDSY

MATCH LINE STA 222+00

2

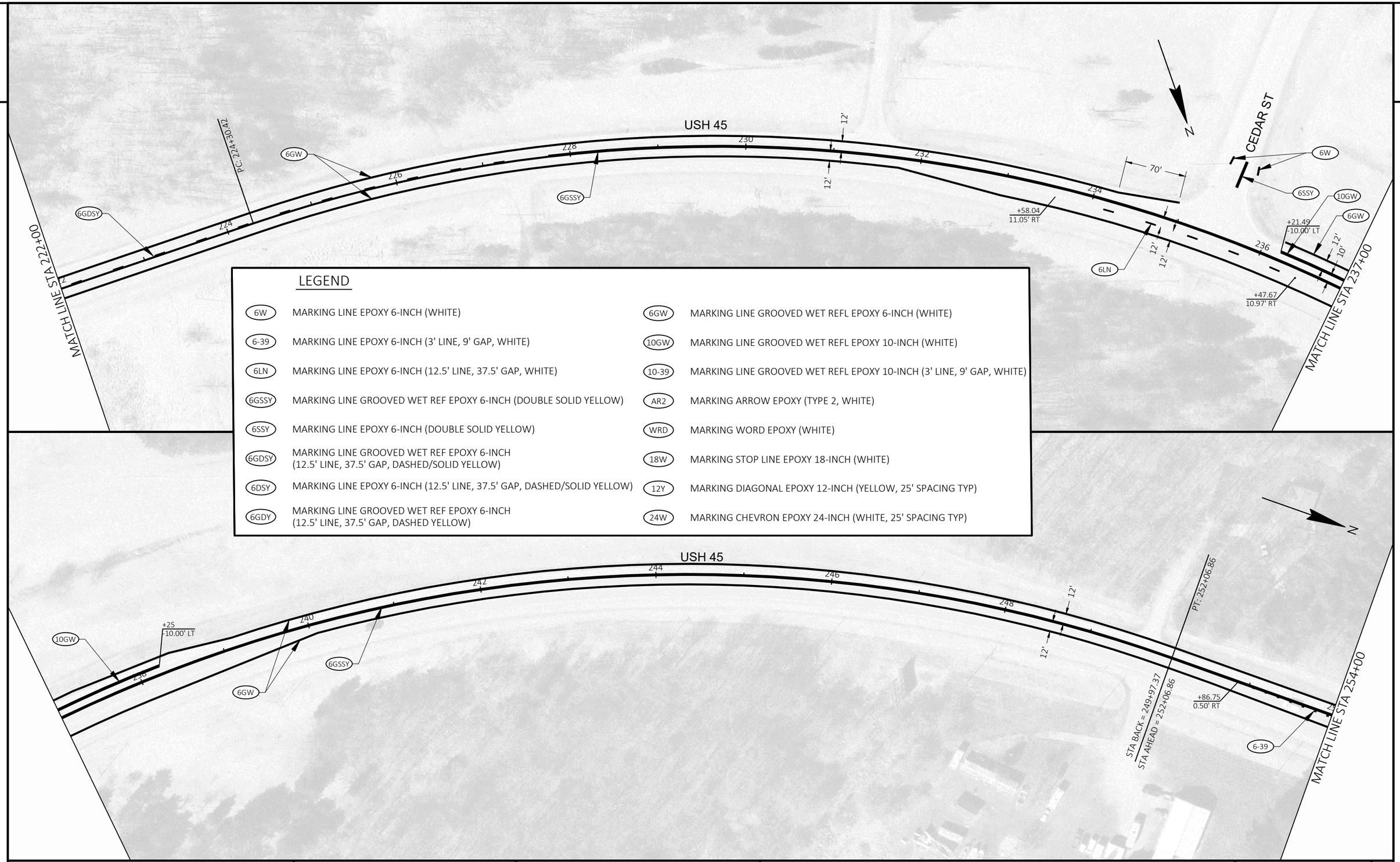
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 66	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 050206-pn

PLOT DATE : 10/19/2023 11:08 AM PLOT BY : ROTH, THOMAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2



LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 67	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 050207-pn
PLOT DATE : 10/19/2023 11:09 AM
PLOT BY : ROTH, THOMAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

MATCH LINE STA 254+00

N

6GSSY

USH 45

254 256 258 260 262 264 266 268

12'

6GW

6GDSY

+50.04
12.00' RT

6-39

6LN

12'

12'

MATCH LINE STA 269+00

2

LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

N

MATCH LINE STA 269+00

6GW

6GDSY

12'

USH 45

270 272 274 276 278 280 282

12'

12'

6LN

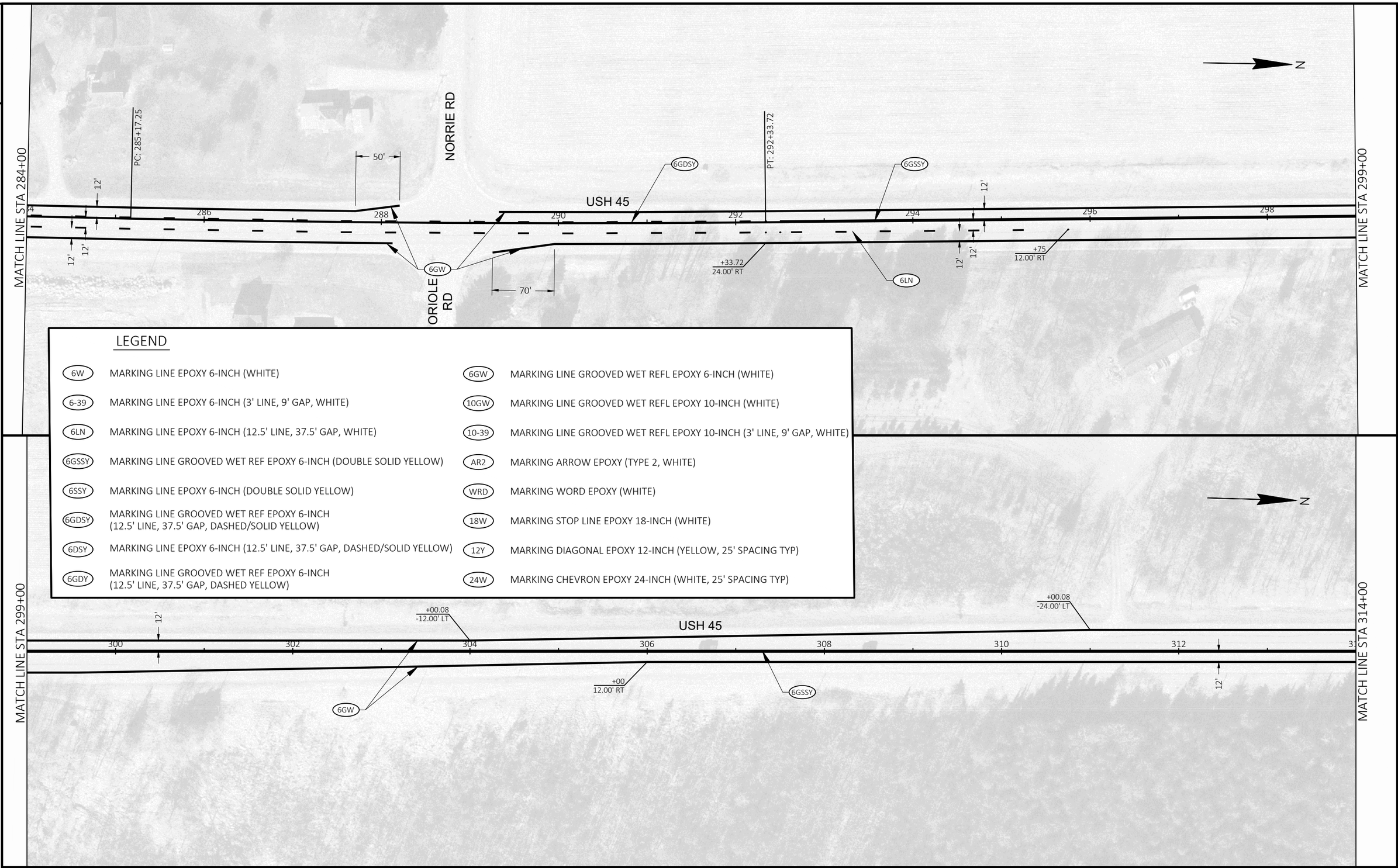
MATCH LINE STA 284+00

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 68	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 050208-pn

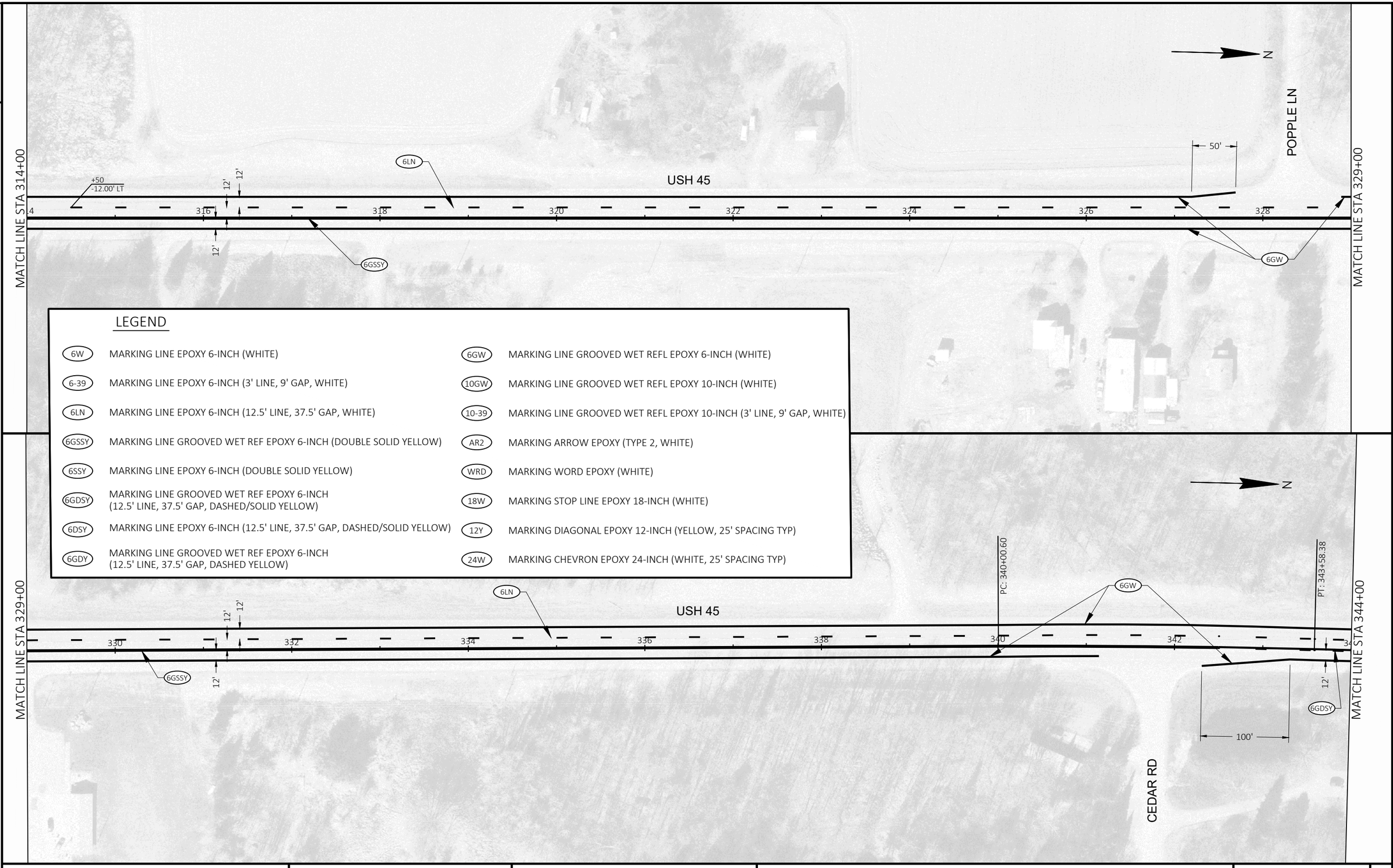
PLOT DATE : 10/19/2023 11:09 AM PLOT BY : ROTH, THOMAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)



LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
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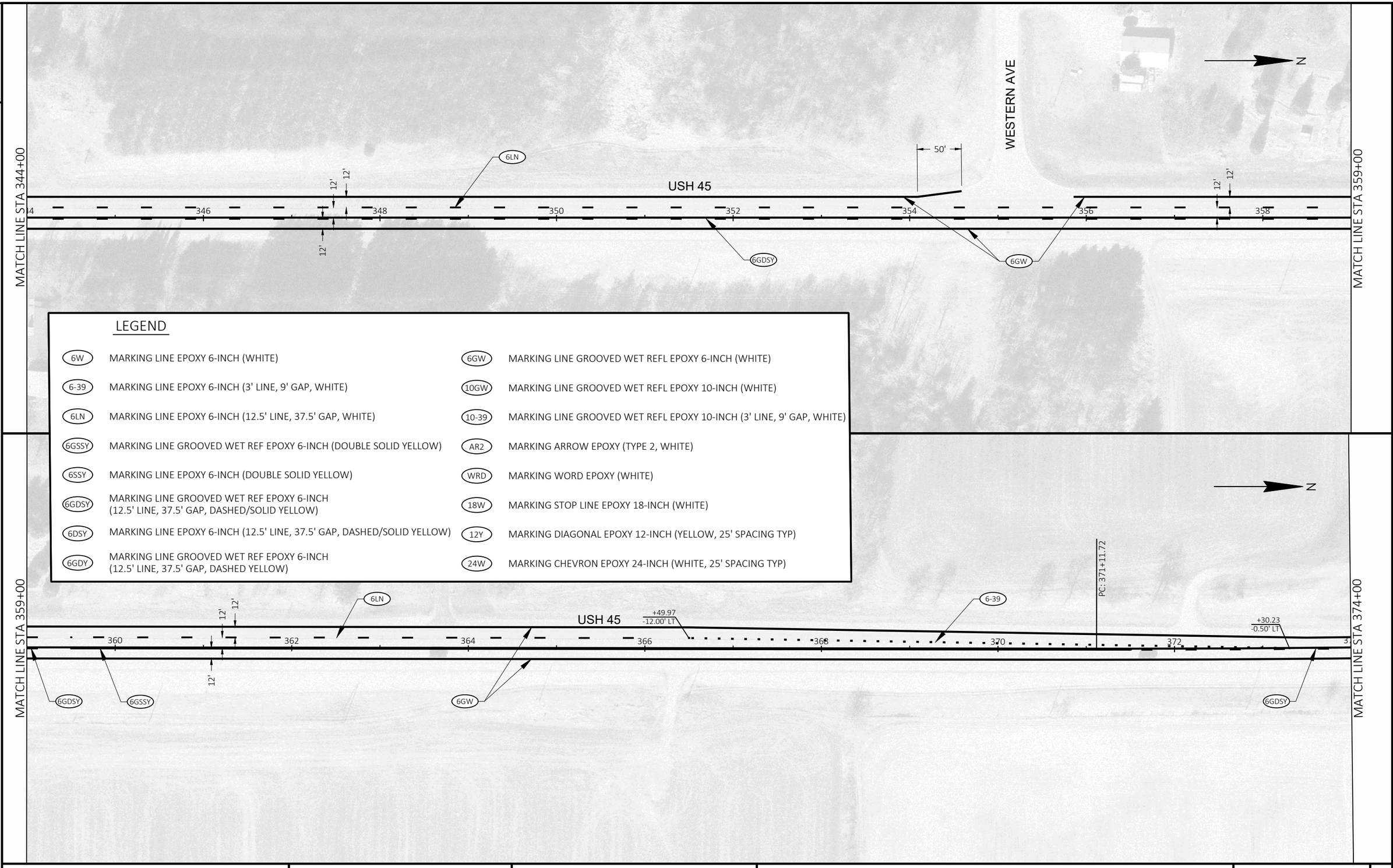
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 70	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 050210-pn
PLOT DATE : 10/19/2023 11:09 AM
PLOT BY : ROTH, THOMAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
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6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
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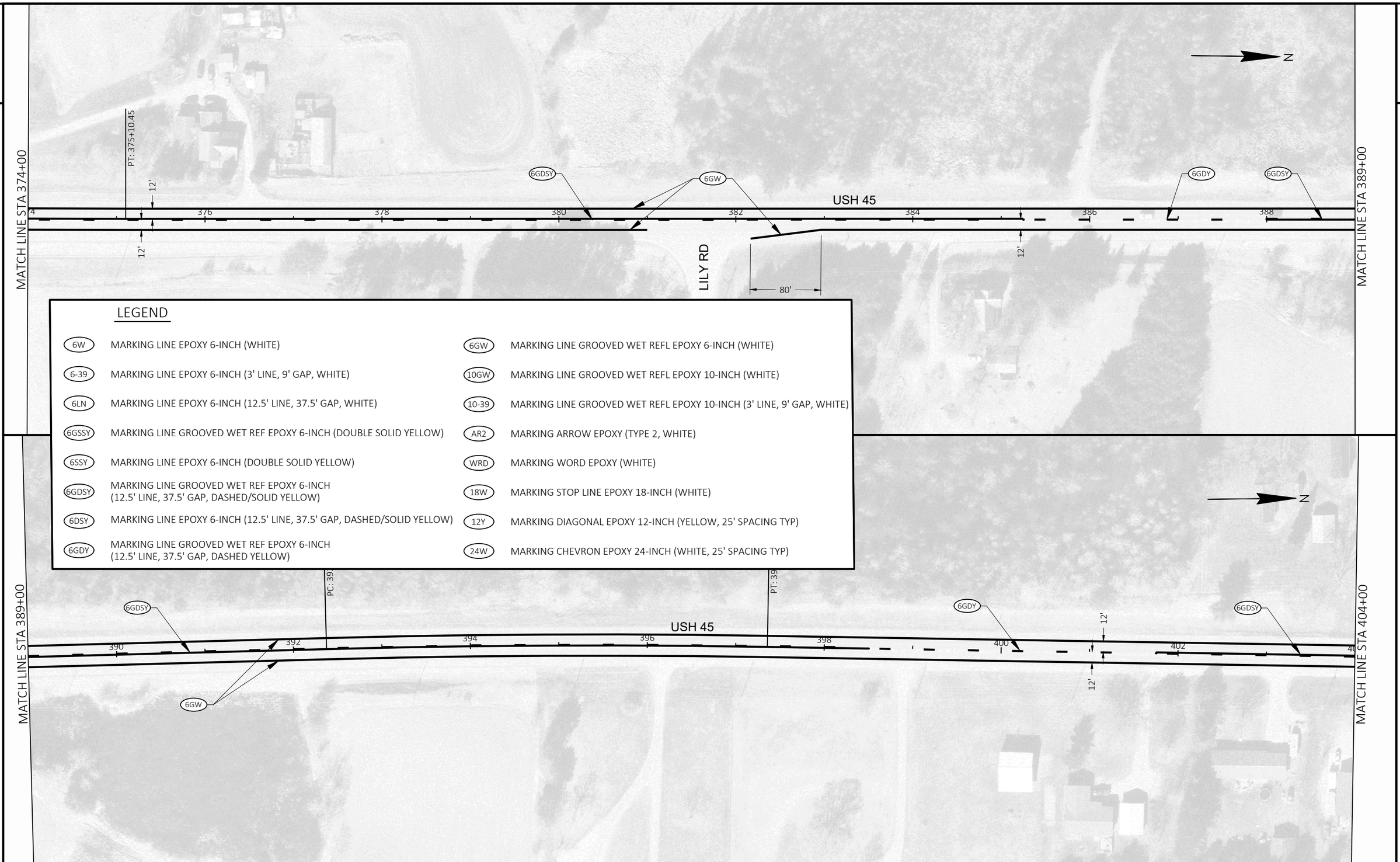
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

PROJECT NO:	HWY:	COUNTY:		SHEET	
1600-02-70	USH 45	SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	71	E

2



LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 72	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 050212-pn
PLOT DATE : 10/19/2023 11:09 AM
PLOT BY : ROTH, THOMAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

MATCH LINE STA 404+00

USH 45

404 406 408 410 412 414 416 418

6GDSY

6GW

6GDY

PC: 414+35.98

PT: 418+40.39

12'

12'

N

MATCH LINE STA 419+00

2

LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
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6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

MATCH LINE STA 419+00

BREEZEWOOD LN

60'

COUNTRY MANOR LN

USH 45

420 422 424 426 428 430 432

12'

12'

6GW

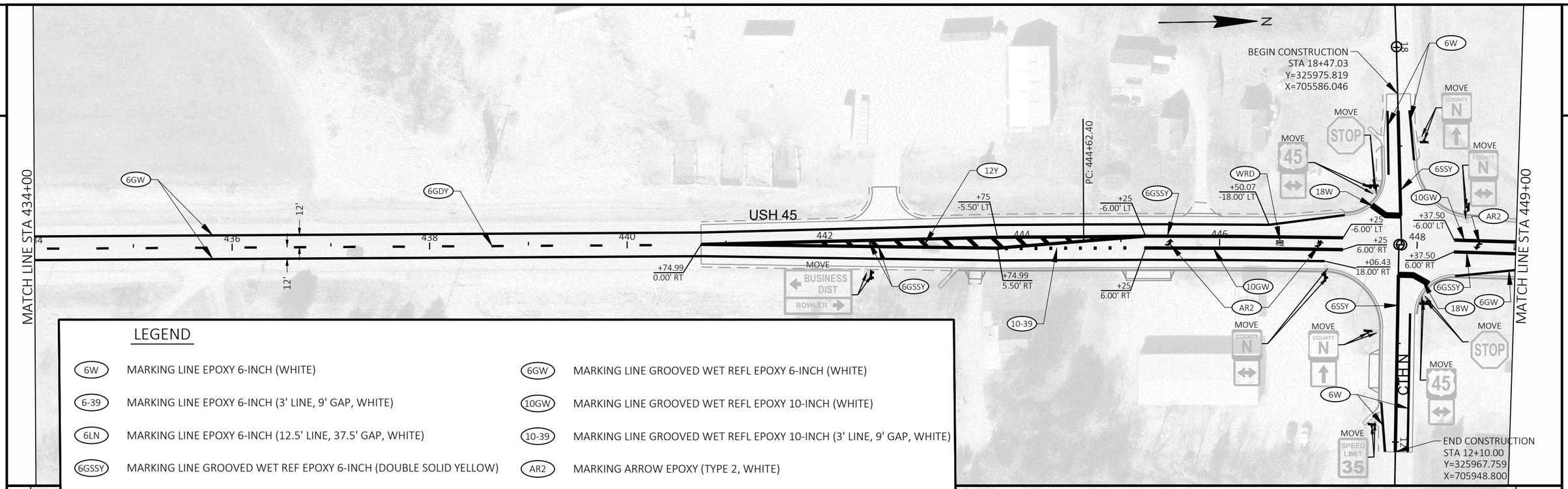
6GDY

N

MATCH LINE STA 434+00

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 73	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 050213-pn
PLOT DATE : 10/19/2023 11:10 AM PLOT BY : ROTH, THOMAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
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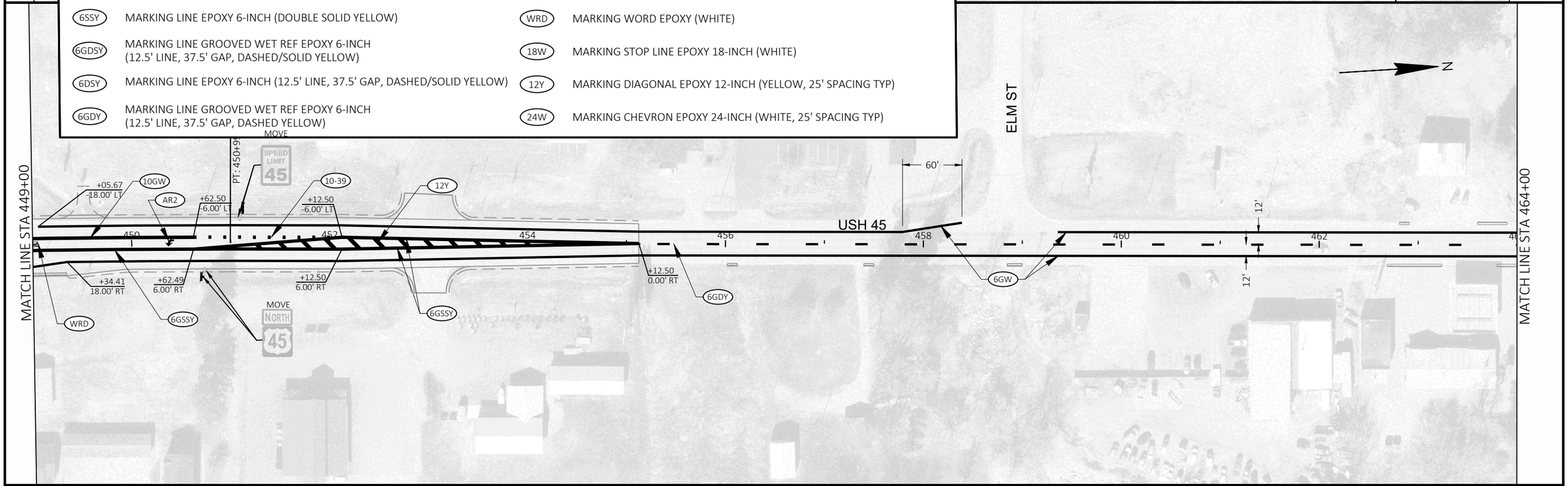

2

MATCH LINE STA 464+00

MAPLE ST

60'

12'

6GDSY

6GW

466

468

470

USH 45

472

6GDY

474

476

6GDSY

478

12'

12'

70'

12'

90'

6GW

12'

MATCH LINE STA 479+00

2

FIELD ST

LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
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MATCH LINE STA 479+00

6GDSY

6GDY

USH 45

480

482

484

486

488

490

12'

492

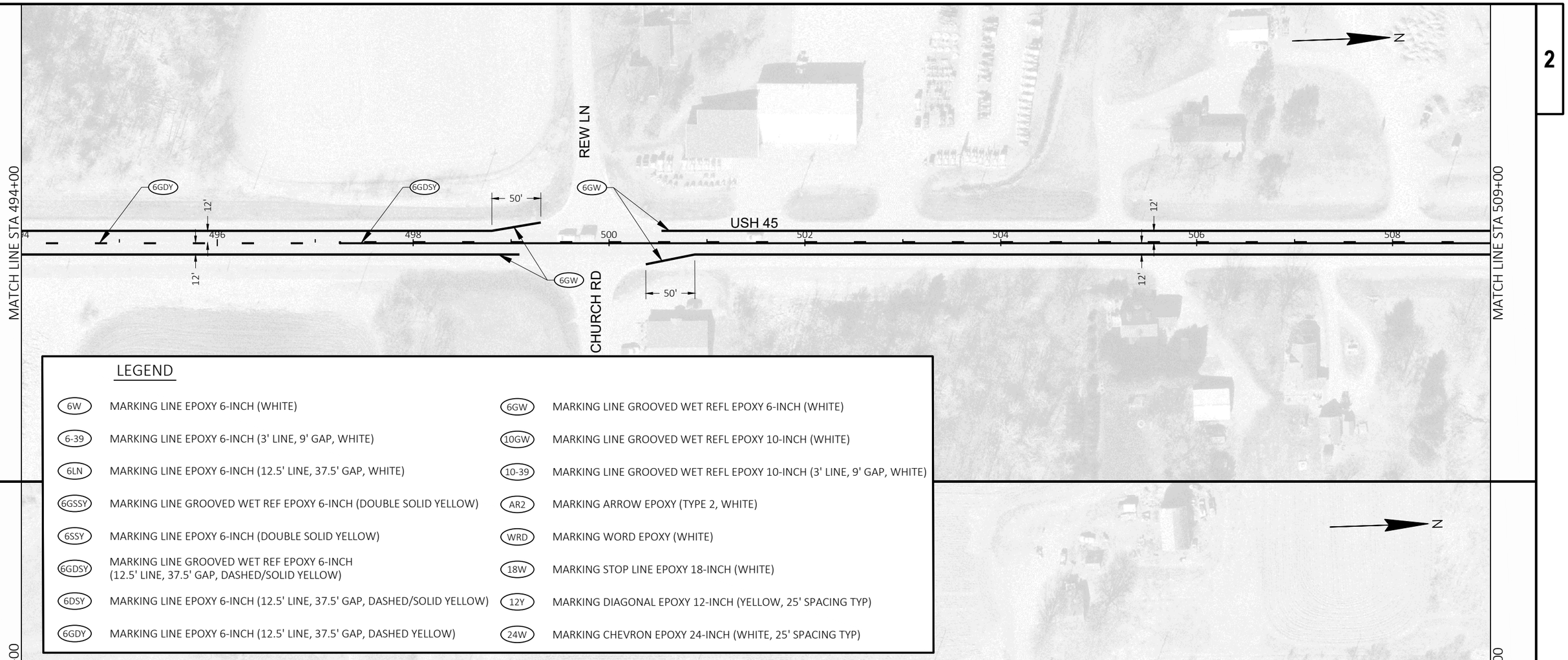
12'

6GW

MATCH LINE STA 494+00

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 75	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024502-PM.DWG
LAYOUT NAME - 050215-pn
PLOT DATE : 10/19/2023 11:13 AM PLOT BY : ROTH, THOMAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
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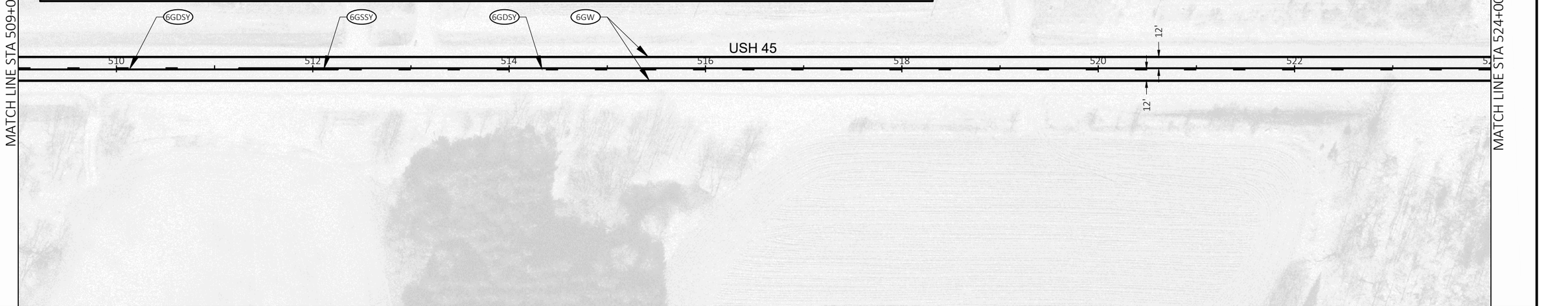

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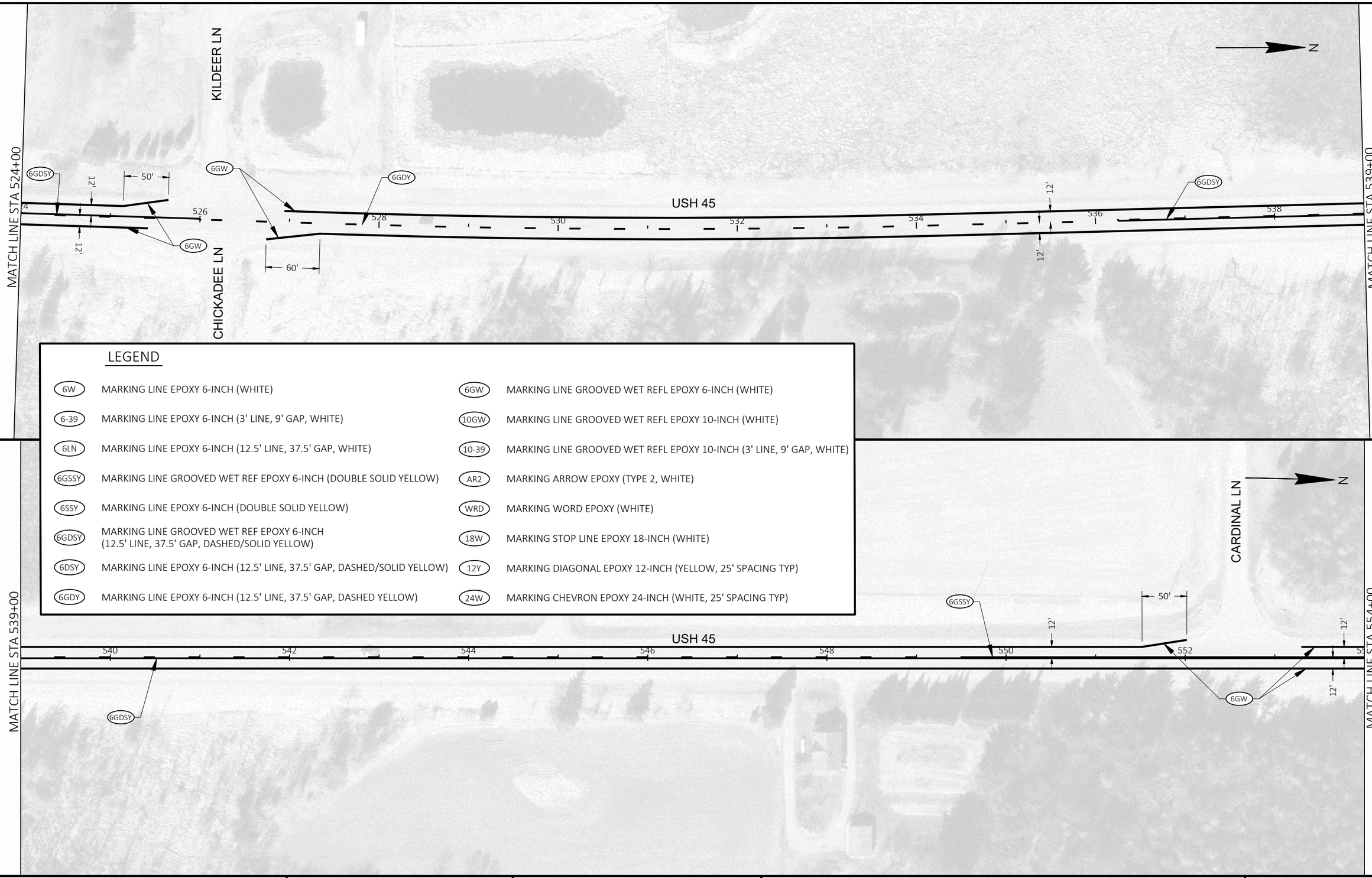

LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
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2

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 77	E

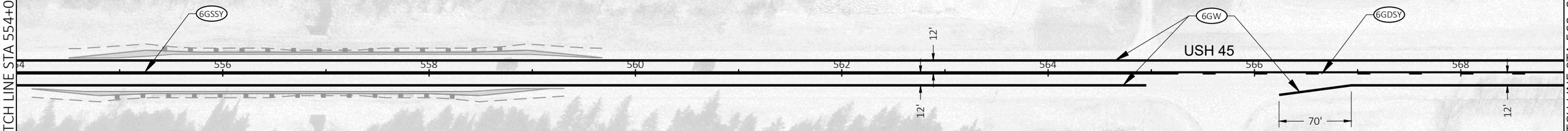
FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024502-PM.DWG
LAYOUT NAME - 050217-pn
PLOT DATE : 10/19/2023 11:14 AM PLOT BY : ROTH, THOMAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCH LINE STA 554+00

MATCH LINE STA 569+00



PHOEBE LN

LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
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6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
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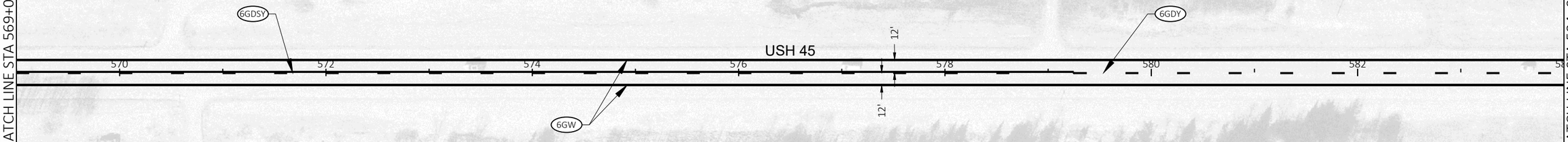
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

MATCH LINE STA 569+00

MATCH LINE STA 584+00

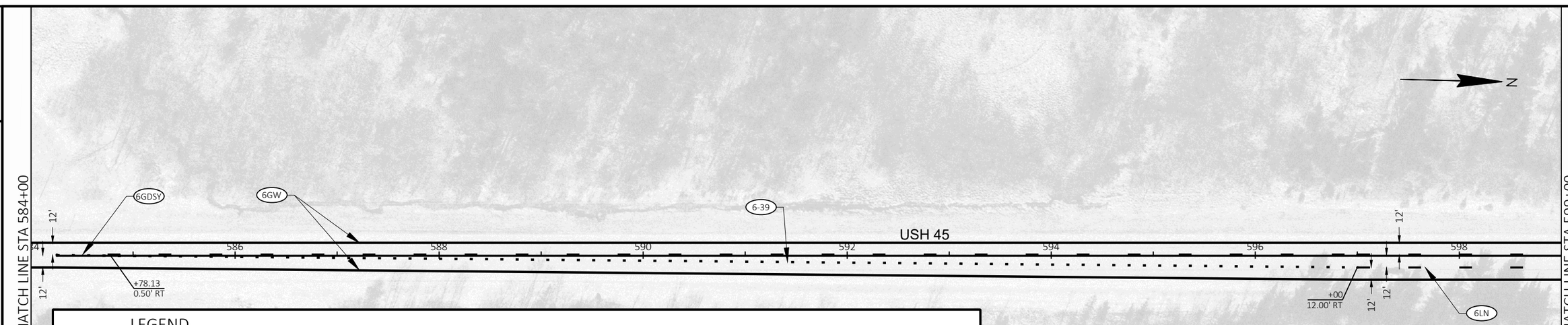


PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 78	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024502-PM.DWG
LAYOUT NAME - 050218-pn
PLOT DATE : 10/19/2023 11:14 AM
PLOT BY : ROTH, THOMAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

MATCH LINE STA 584+00

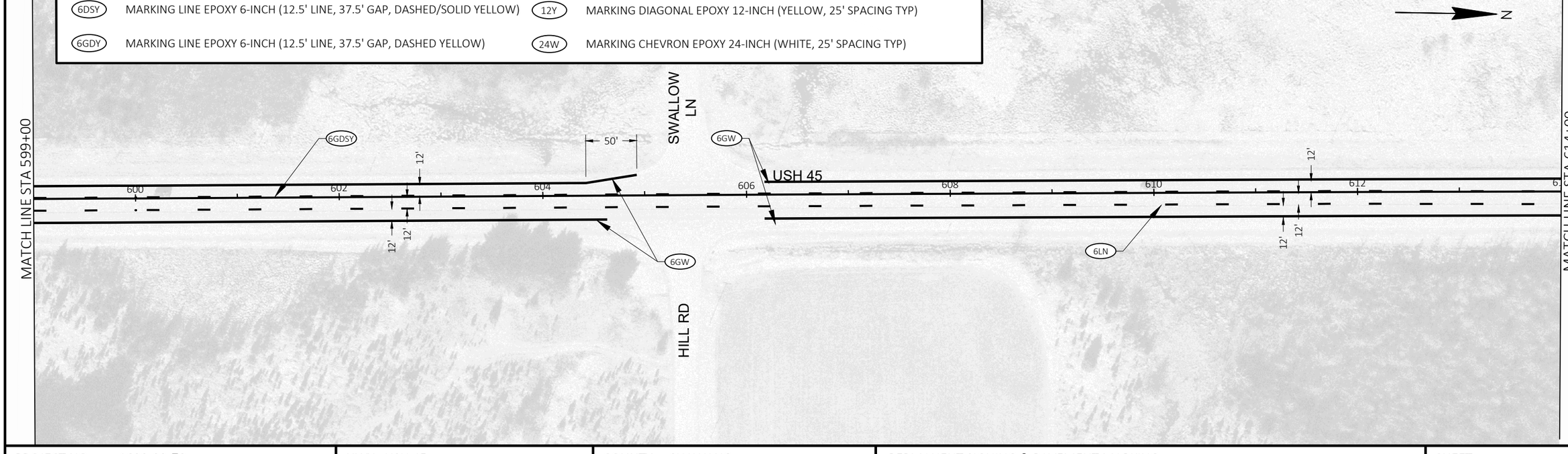


MATCH LINE STA 599+00

LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

MATCH LINE STA 599+00



MATCH LINE STA 614+00

2

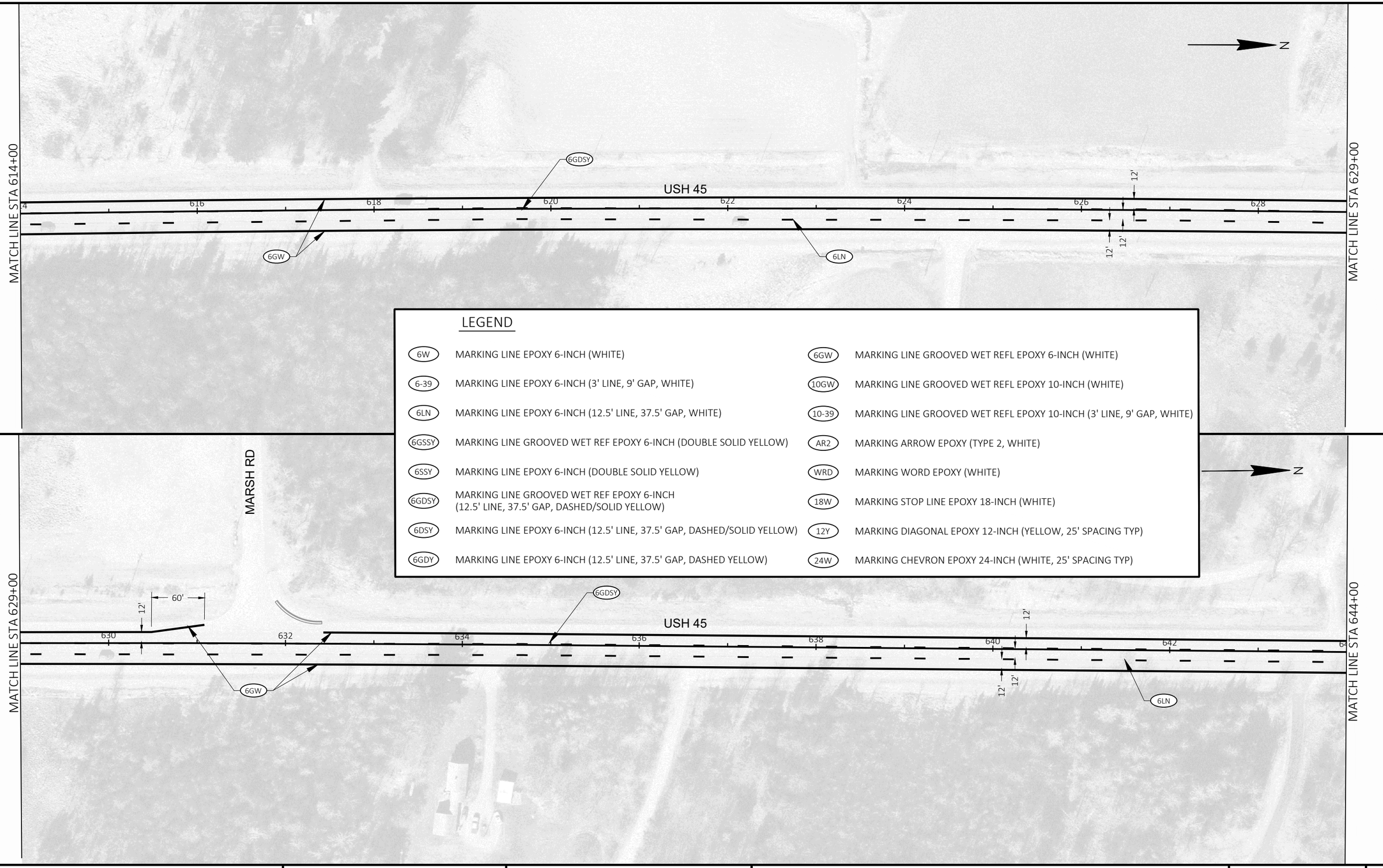
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 79	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024502-PM.DWG
LAYOUT NAME - 050219-pn

PLOT DATE : 10/19/2023 11:14 AM PLOT BY : ROTH, THOMAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

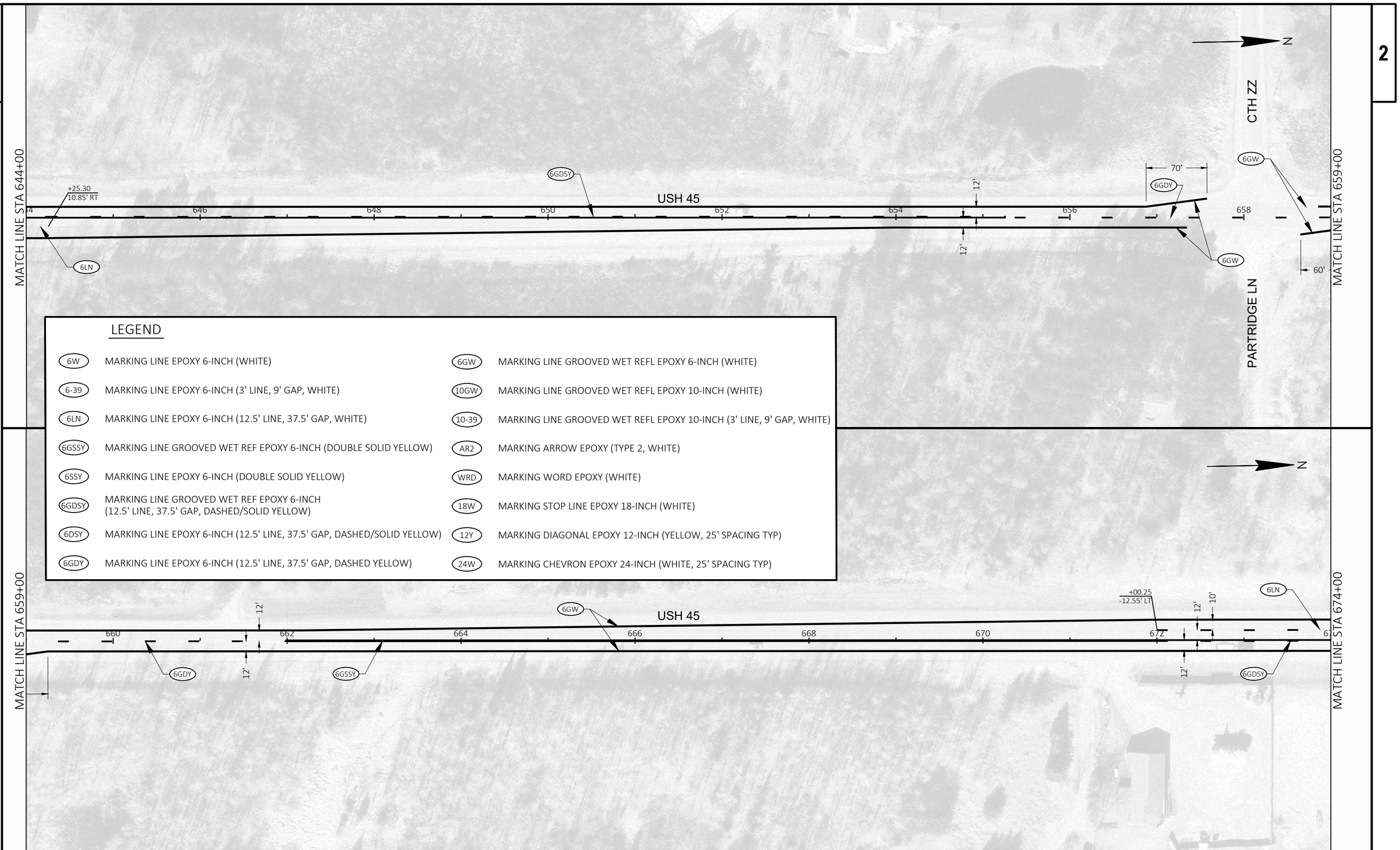


LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 80	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024502-PM.DWG
LAYOUT NAME - 050220-pn
PLOT DATE : 10/19/2023 11:14 AM
PLOT BY : ROTH, THOMAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



LEGEND

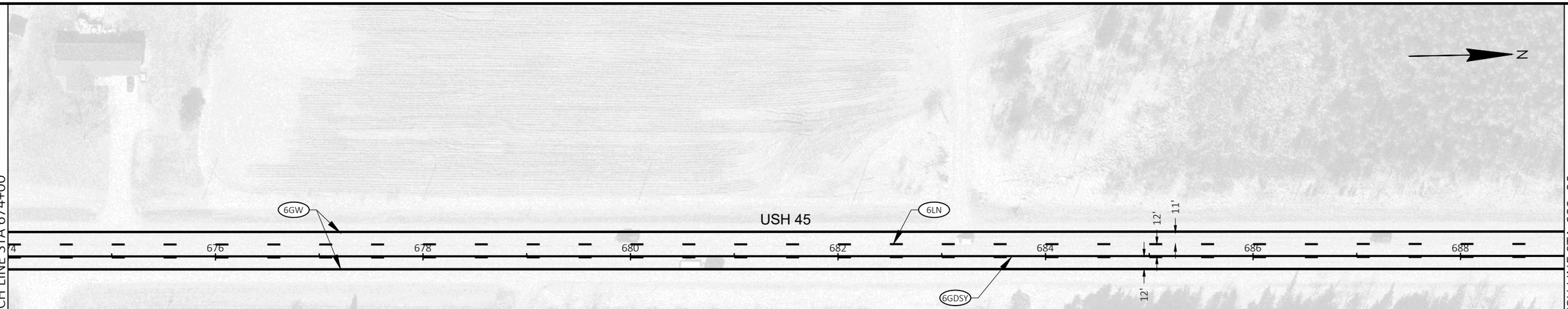
6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 81 E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024502-PM.DWG
LAYOUT NAME - 050221-pn
PLOT DATE : 10/19/2023 11:14 AM
PLOT BY : ROTH, THOMAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

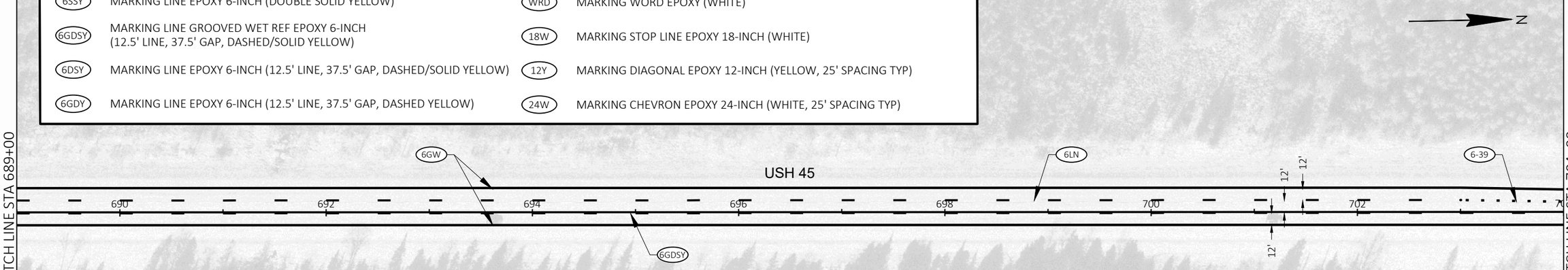
MATCH LINE STA 674+00



MATCH LINE STA 689+00

LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)



MATCH LINE STA 704+00

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 82	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024502-PM.DWG
LAYOUT NAME - 050222-pn
PLOT DATE : 10/19/2023 11:14 AM PLOT BY : ROTH, THOMAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

2

MATCH LINE STA 704+00

N

6-39

+25.27
0.34' RT

USH 45

6GW

12'

12'

704 706 708 710 712 714 716 718

6GDSY 6GSSY 6GDSY

LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

MATCH LINE STA 719+00

N

6GW

USH 45

12'

12'

720 722 724 726 728 730 732

6GDSY 6GSSY 6GDSY

MATCH LINE STA 734+00

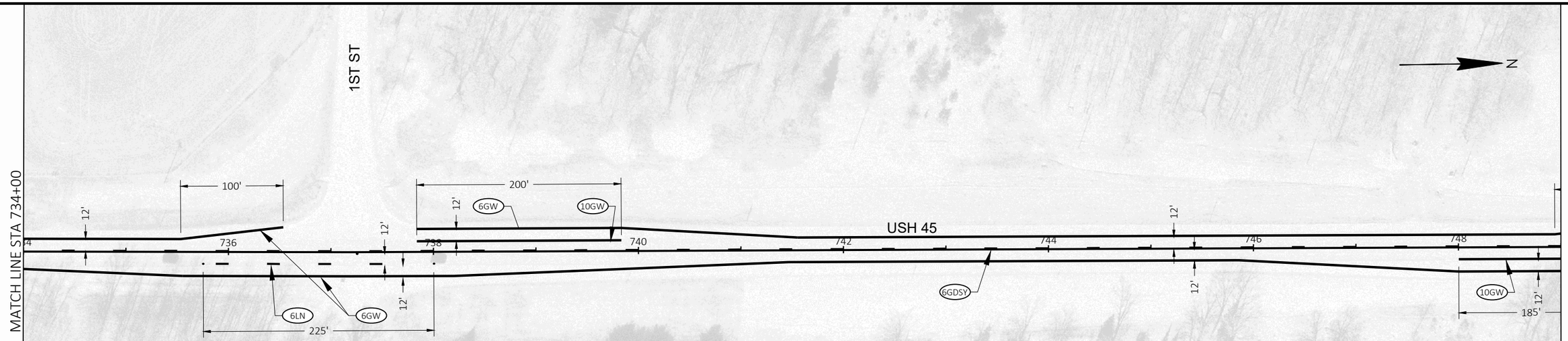
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 83	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024502-PM.DWG
LAYOUT NAME - 050223-pn

PLOT DATE : 10/19/2023 11:14 AM PLOT BY : ROTH, THOMAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

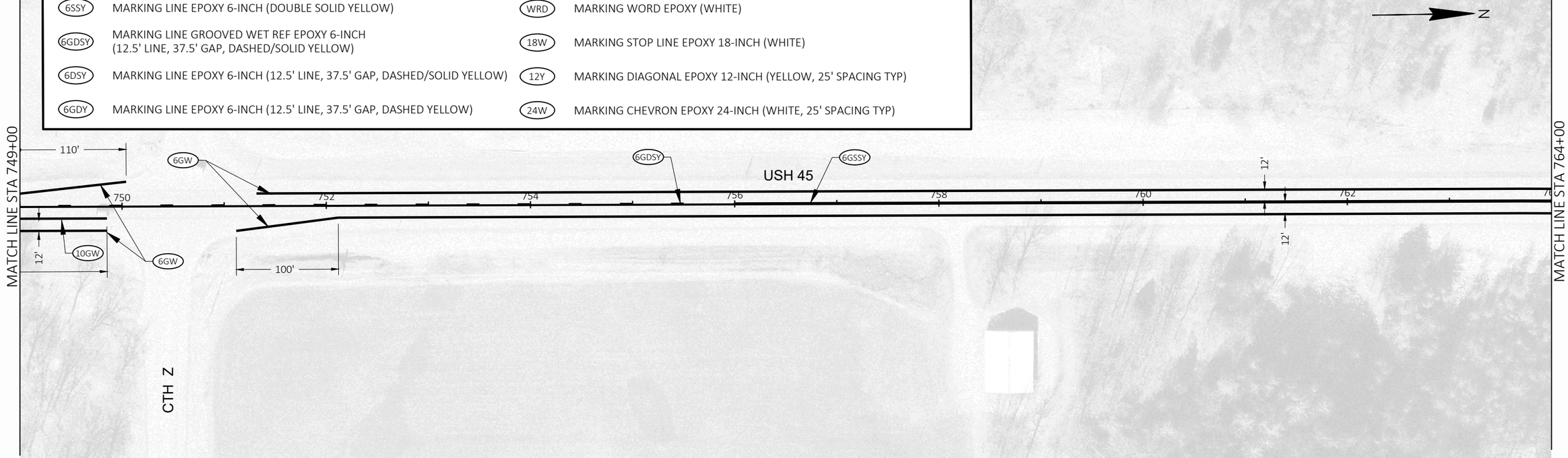
WISDOT/CADDS SHEET 44

2



LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)

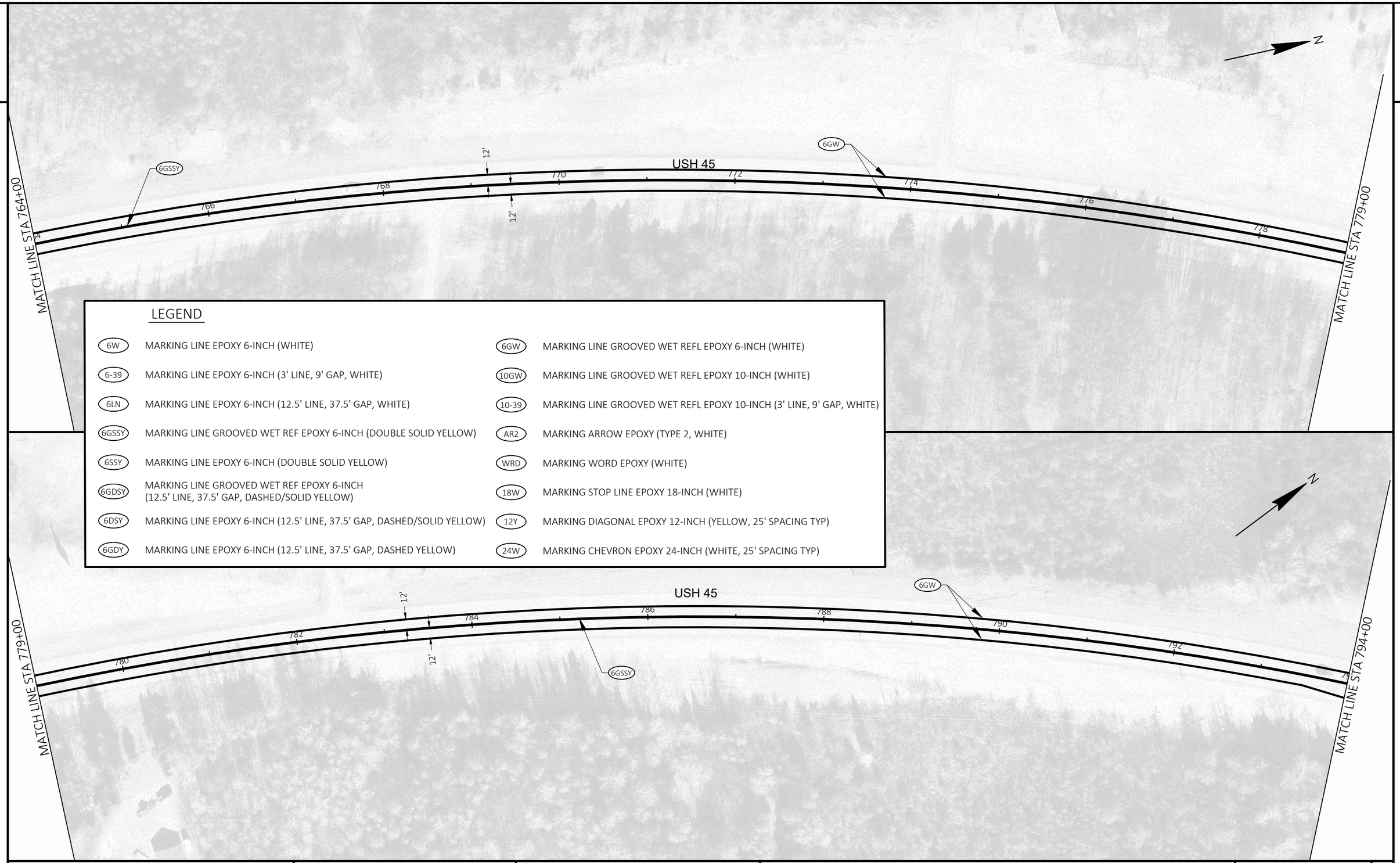


PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 84	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\024502-PM.DWG
LAYOUT NAME - 050224-pn

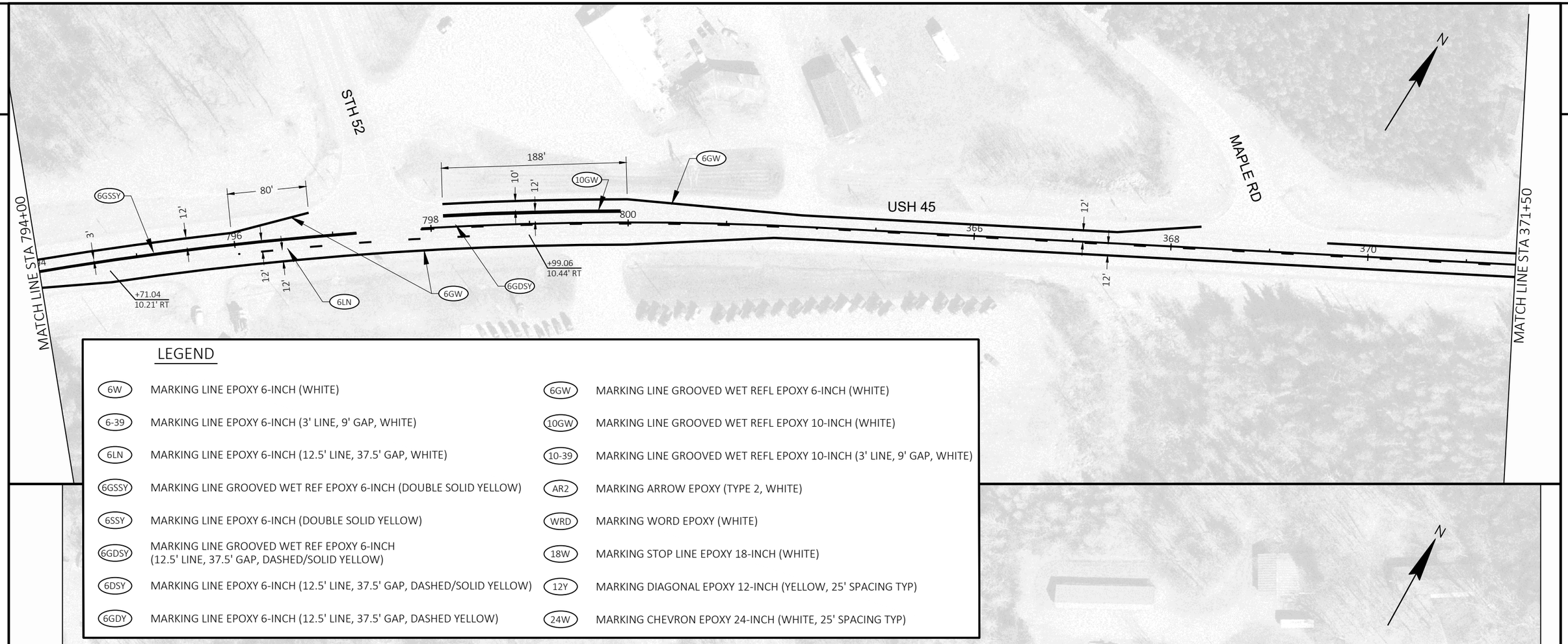
PLOT DATE : 10/19/2023 11:15 AM PLOT BY : ROTH, THOMAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)



LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
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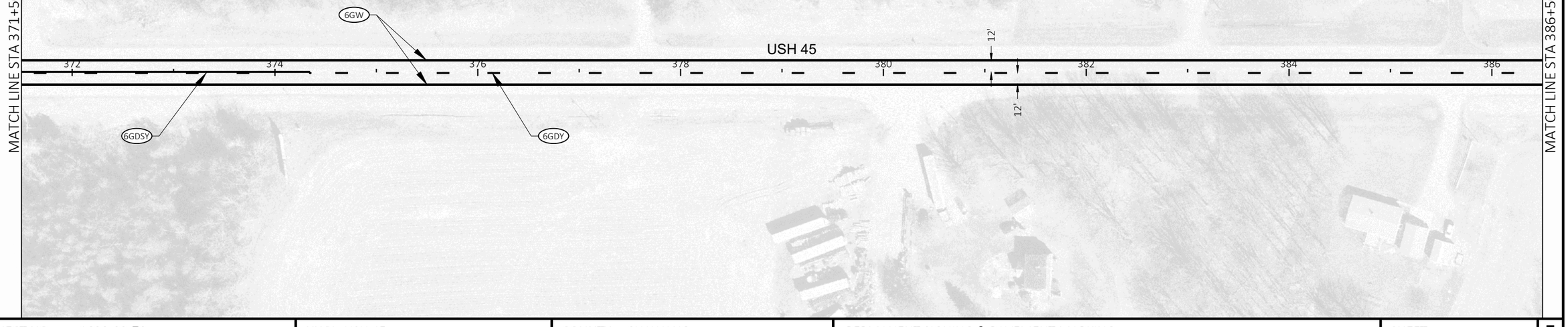
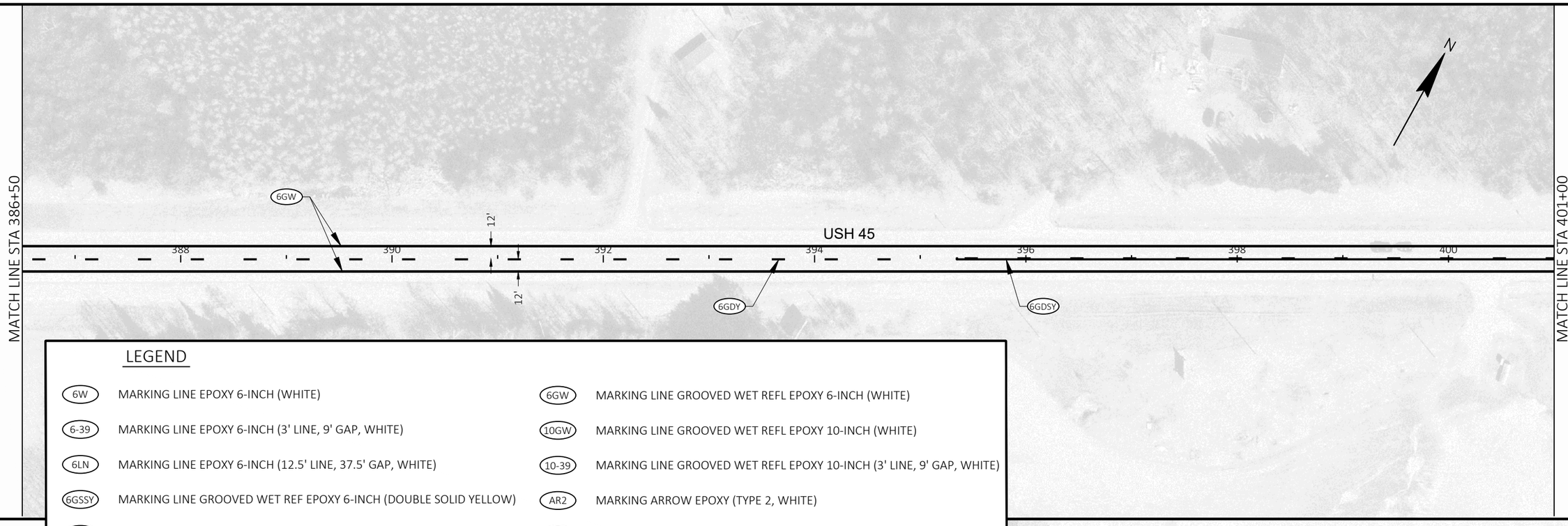
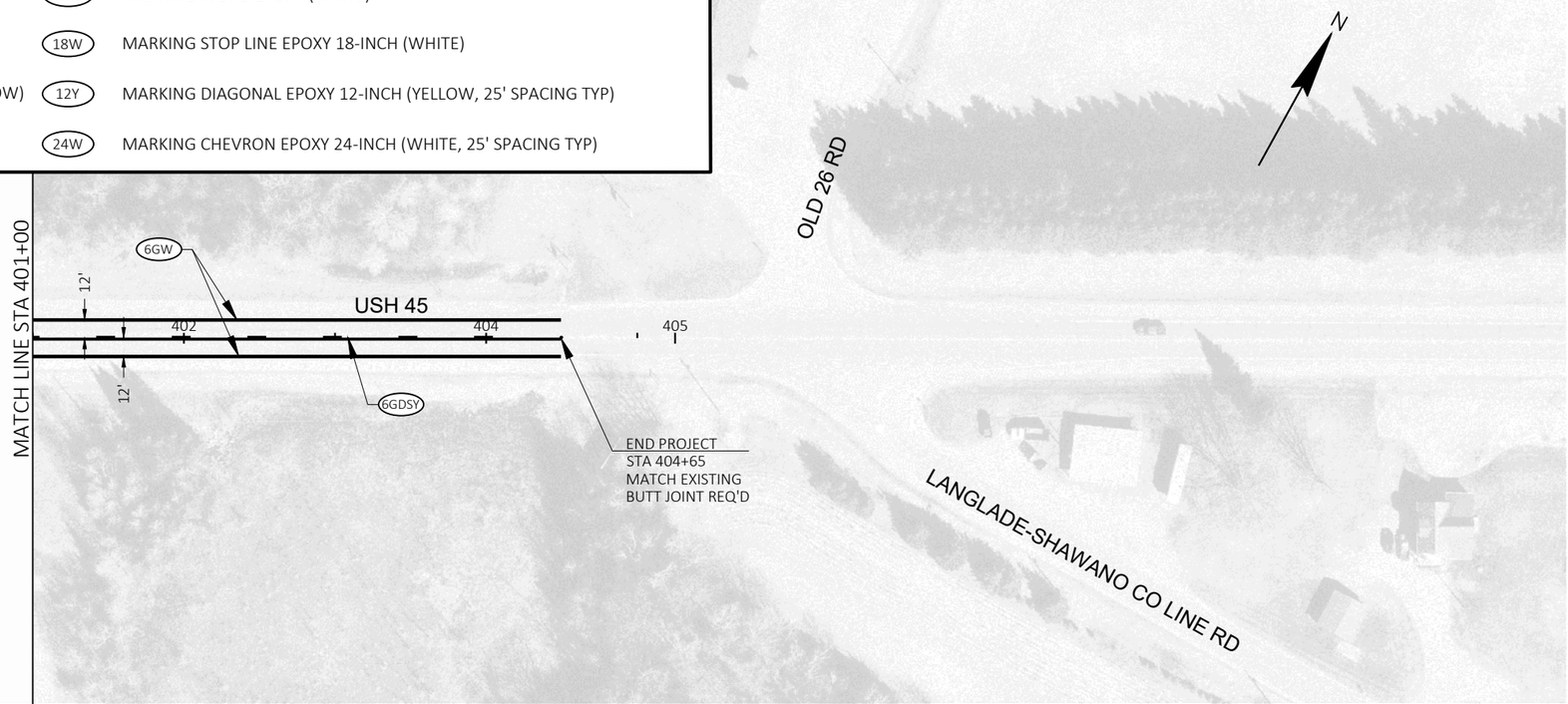


PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 86	E



LEGEND

6W	MARKING LINE EPOXY 6-INCH (WHITE)	6GW	MARKING LINE GROOVED WET REFL EPOXY 6-INCH (WHITE)
6-39	MARKING LINE EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)	10GW	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (WHITE)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)	10-39	MARKING LINE GROOVED WET REFL EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
6GSSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE SOLID YELLOW)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
6SSY	MARKING LINE EPOXY 6-INCH (DOUBLE SOLID YELLOW)	WRD	MARKING WORD EPOXY (WHITE)
6GDSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	18W	MARKING STOP LINE EPOXY 18-INCH (WHITE)
6DSY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED/SOLID YELLOW)	12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW, 25' SPACING TYP)
6GDY	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, DASHED YELLOW)	24W	MARKING CHEVRON EPOXY 24-INCH (WHITE, 25' SPACING TYP)



GENERAL NOTES FOR TRAFFIC CONTROL

CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL MUTCD AND WISDOT STANDARD DETAIL DRAWING (SDD) GUIDELINES.

PROVIDE FLAGGERS AT ALL SIDE ROADS, AS REQUIRED, TO MAINTAIN ACCESS DURING CONSTRUCTION OPERATIONS.

LONGITUDINAL JOINT REPAIRS WORK TO BE COMPLETED WITH FLAGGING OPERATION. COMPLETE LONGITUDINAL JOINT REPAIRS SEQUENTIALLY FOLLOWING THE REMOVING ASPHALTIC SURFACE MILLING WORK OPERATIONS.

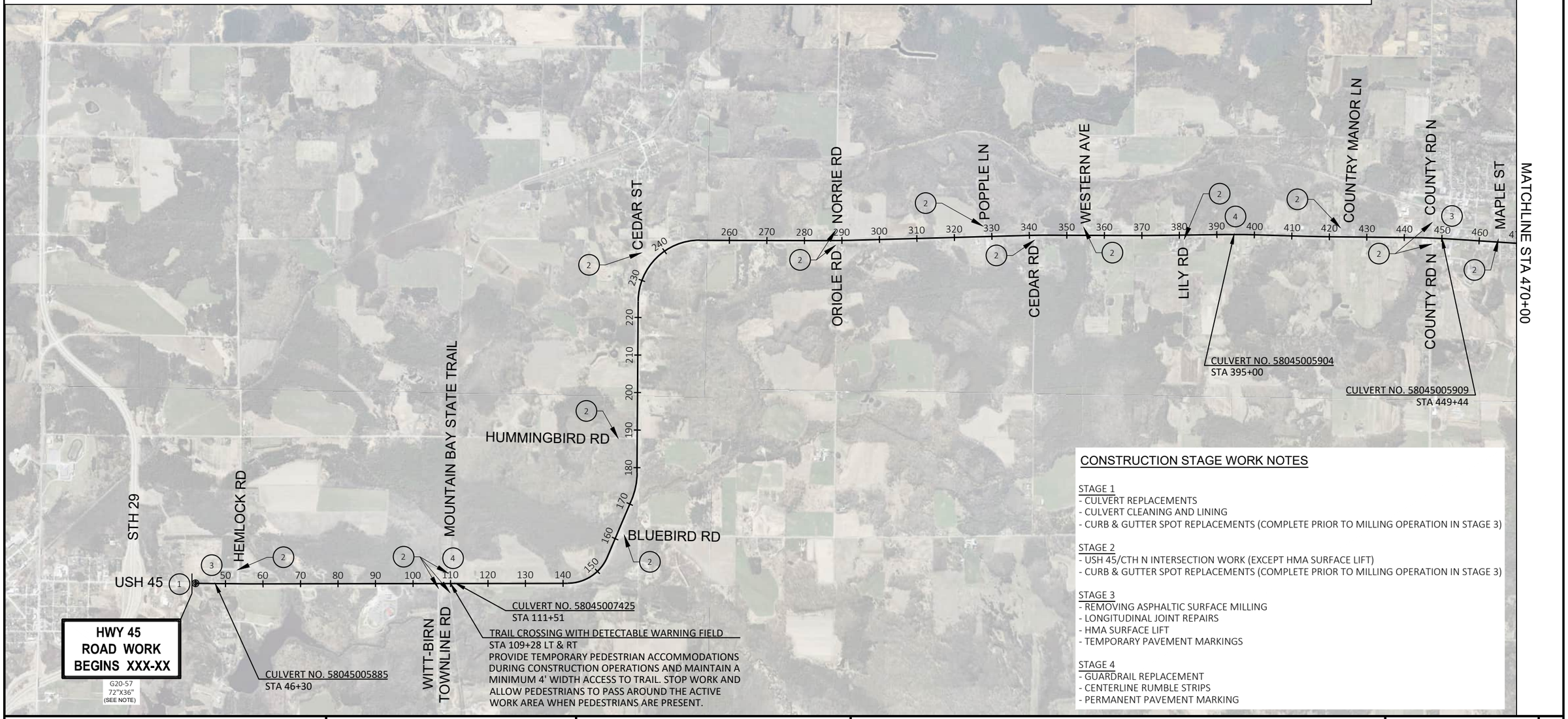
PLACE FIXED MESSAGE SIGNS (G20-57) 7 DAYS PRIOR TO BEGINNING CONSTRUCTION AND REMOVE WHEN CONSTRUCTION BEGINS.

LEGEND - TRAFFIC CONTROL SYMBOLS

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL CONE (42-INCHES)
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

LEGEND

1. SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
2. SEE "TYPICAL SIDE ROAD APPROACH WARNING DETAIL" ON SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
3. SEE SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" AND SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"
4. SEE SDD "TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION" AND SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"



CONSTRUCTION STAGE WORK NOTES

STAGE 1
- CULVERT REPLACEMENTS
- CULVERT CLEANING AND LINING
- CURB & GUTTER SPOT REPLACEMENTS (COMPLETE PRIOR TO MILLING OPERATION IN STAGE 3)

STAGE 2
- USH 45/CTH N INTERSECTION WORK (EXCEPT HMA SURFACE LIFT)
- CURB & GUTTER SPOT REPLACEMENTS (COMPLETE PRIOR TO MILLING OPERATION IN STAGE 3)

STAGE 3
- REMOVING ASPHALTIC SURFACE MILLING
- LONGITUDINAL JOINT REPAIRS
- HMA SURFACE LIFT
- TEMPORARY PAVEMENT MARKINGS

STAGE 4
- GUARDRAIL REPLACEMENT
- CENTERLINE RUMBLE STRIPS
- PERMANENT PAVEMENT MARKING

GENERAL NOTES FOR TRAFFIC CONTROL

CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL MUTCD AND WISDOT STANDARD DETAIL DRAWING (SDD) GUIDELINES.

PROVIDE FLAGGERS AT ALL SIDE ROADS, AS REQUIRED, TO MAINTAIN ACCESS DURING CONSTRUCTION OPERATIONS.

LONGITUDINAL JOINT REPAIRS WORK TO BE COMPLETED WITH FLAGGING OPERATION. COMPLETE LONGITUDINAL JOINT REPAIRS SEQUENTIALLY FOLLOWING THE REMOVING ASPHALTIC SURFACE MILLING WORK OPERATIONS.

PLACE FIXED MESSAGE SIGNS (G20-57) 7 DAYS PRIOR TO BEGINNING CONSTRUCTION AND REMOVE WHEN CONSTRUCTION BEGINS.

LEGEND - TRAFFIC CONTROL SYMBOLS

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL CONE (42-INCHES)
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

LEGEND

1. SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
2. SEE "TYPICAL SIDE ROAD APPROACH WARNING DETAIL" ON SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
3. SEE SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" AND SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"
4. SEE SDD "TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION" AND SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"

N

CONSTRUCTION STAGE WORK NOTES

STAGE 1
- CULVERT REPLACEMENTS
- CULVERT CLEANING AND LINING
- CURB & GUTTER SPOT REPLACEMENTS (COMPLETE PRIOR TO MILLING OPERATION IN STAGE 3)

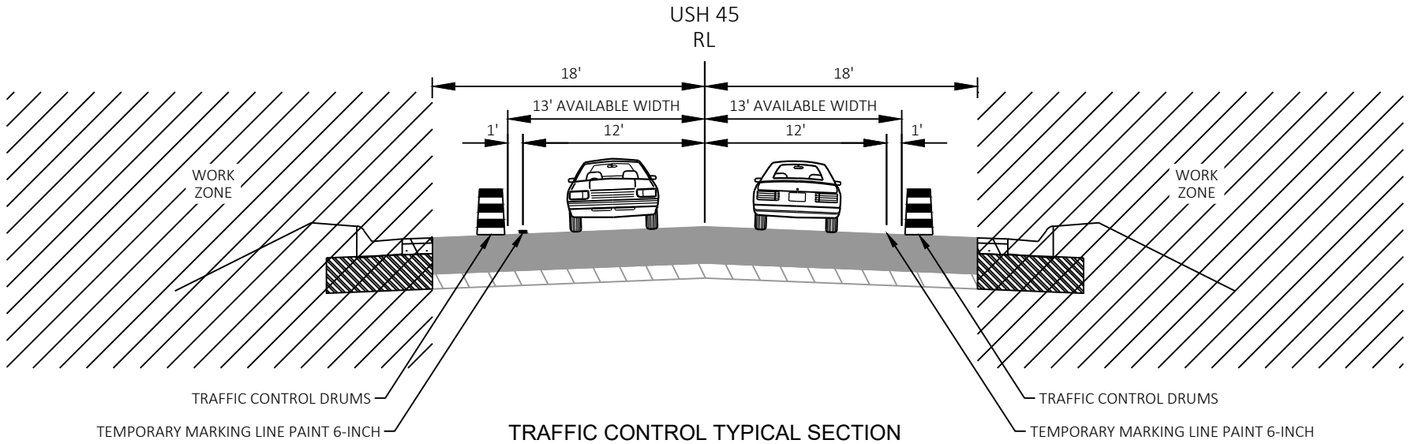
STAGE 2
- USH 45/CTH N INTERSECTION WORK (EXCEPT HMA SURFACE LIFT)
- CURB & GUTTER SPOT REPLACEMENTS (COMPLETE PRIOR TO MILLING OPERATION IN STAGE 3)

STAGE 3
- REMOVING ASPHALTIC SURFACE MILLING
- LONGITUDINAL JOINT REPAIRS
- HMA SURFACE LIFT
- TEMPORARY PAVEMENT MARKINGS

STAGE 4
- GUARDRAIL REPLACEMENT
- CENTERLINE RUMBLE STRIPS
- PERMANENT PAVEMENT MARKING

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	TRAFFIC CONTROL - OVERVIEW	SHEET 89	E

2

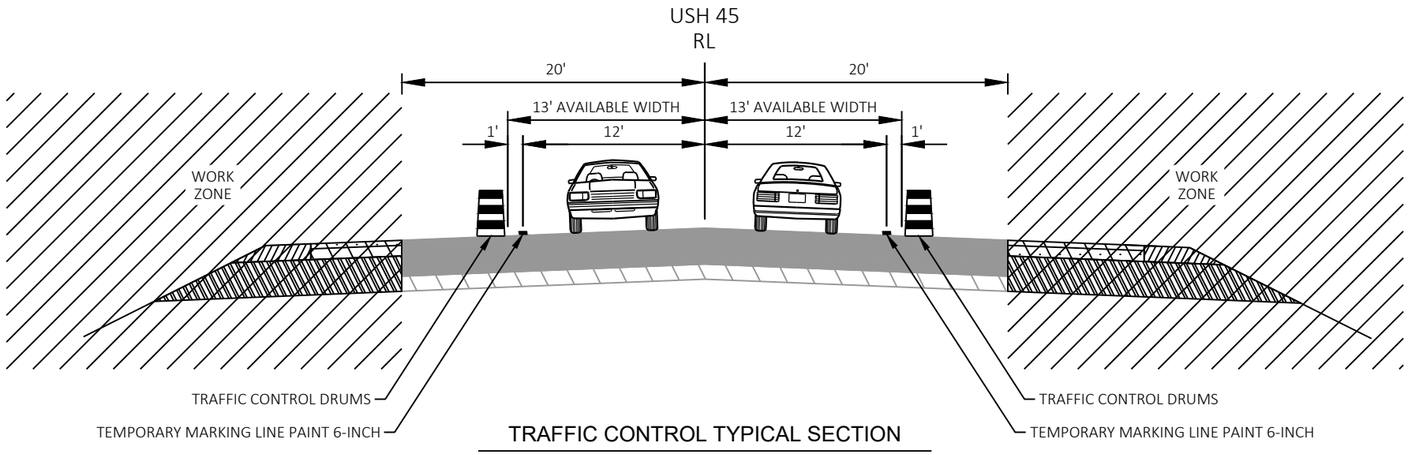


TRAFFIC CONTROL TYPICAL SECTION

USH 45 AT CURB & GUTTER SPOT REPLACEMENTS
MAY BE COMPLETED IN STAGE 1 OR STAGE 2
(COMPLETE PRIOR TO MILLING OPERATION IN STAGE 3)

NOTE:
IN STAGE 1, REDUCED LANE WIDTHS AND SHOULDER CLOSURES ARE ALLOWED DURING WORKING HOURS FOR COMPLETING CURB & GUTTER SPOT REPLACEMENTS. LANE CLOSURES ARE NOT ALLOWED IN STAGE 1.
MOVE TRAFFIC CONTROL DRUMS OUT TO EDGE OF ACTIVE WORK ZONE DURING NON-WORKING HOURS.

IN STAGE 2, LANE CLOSURES IN ONE DIRECTION UNDER FLAGGING OPERATION ARE ALLOWED DURING WORKING HOURS.
MOVE TRAFFIC CONTROL DRUMS OUT TO EDGE OF ACTIVE WORK ZONE DURING NON-WORKING HOURS.

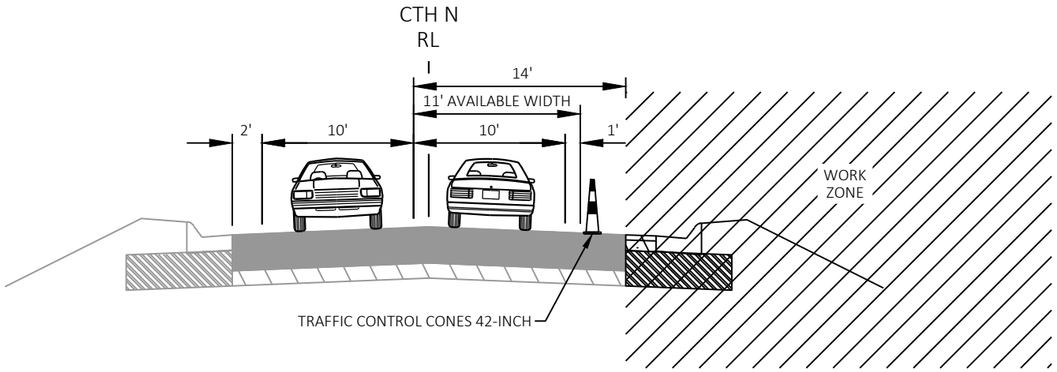


TRAFFIC CONTROL TYPICAL SECTION

USH 45 AT CTH N INTERSECTION WIDENING - STAGE 2

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 90	E

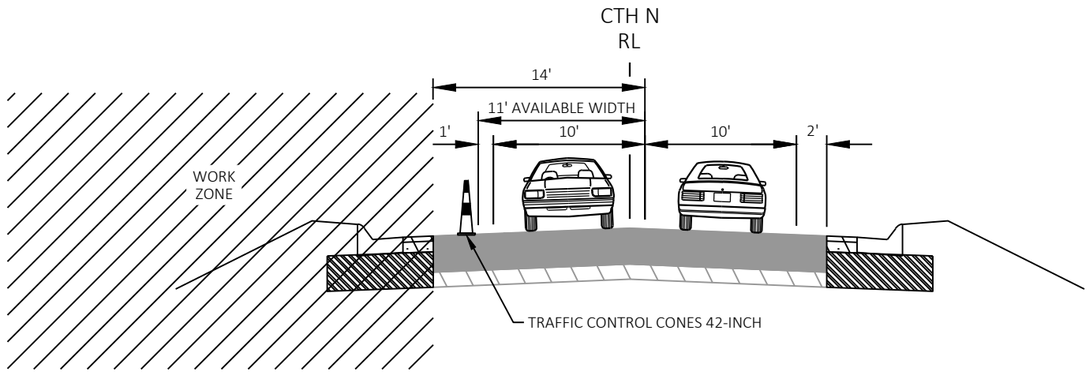
2



TRAFFIC CONTROL TYPICAL SECTION

CTH N WIDENING - STAGE 2 - EASTBOUND

NOTE:
LANE CLOSURES IN ONE DIRECTION UNDER FLAGGING OPERATION ARE ALLOWED DURING WORKING HOURS.
MOVE TRAFFIC CONTROL DRUMS AND CONES OUT TO EDGE OF ACTIVE WORK ZONE DURING NON-WORKING HOURS.

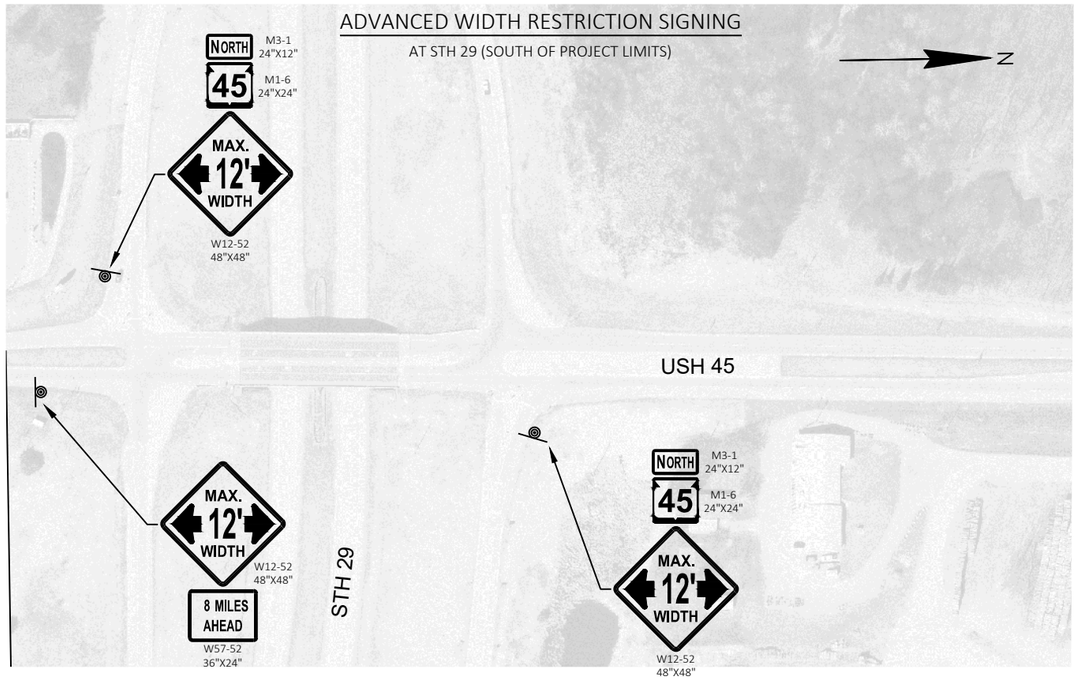


TRAFFIC CONTROL TYPICAL SECTION

CTH N WIDENING - STAGE 2 - WESTBOUND

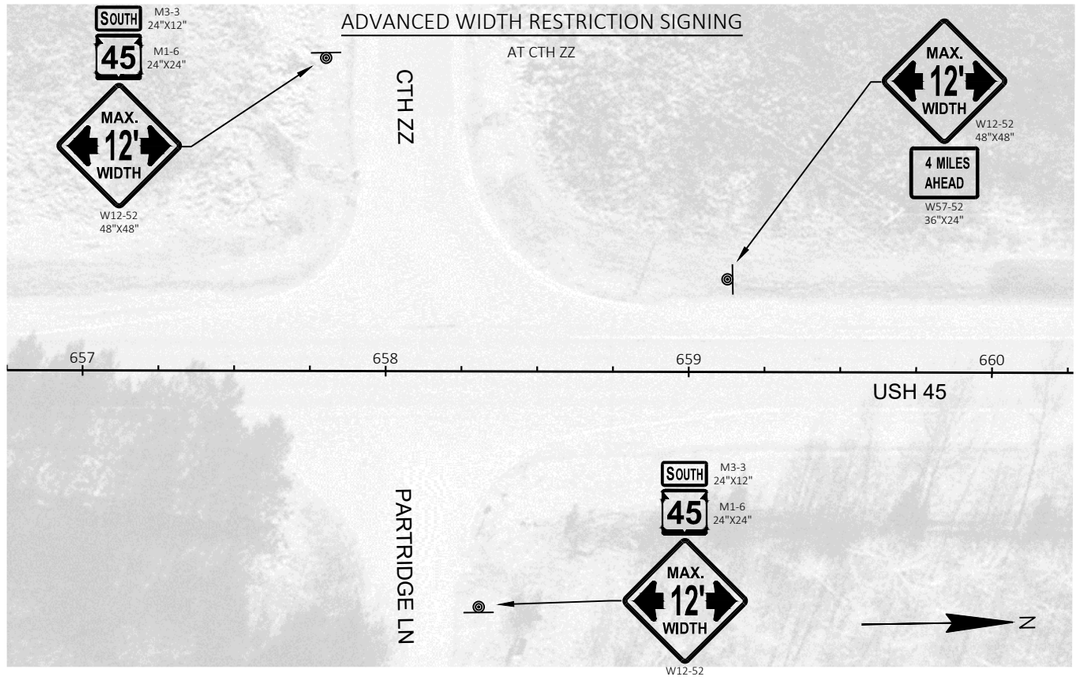
ADVANCED WIDTH RESTRICTION SIGNING

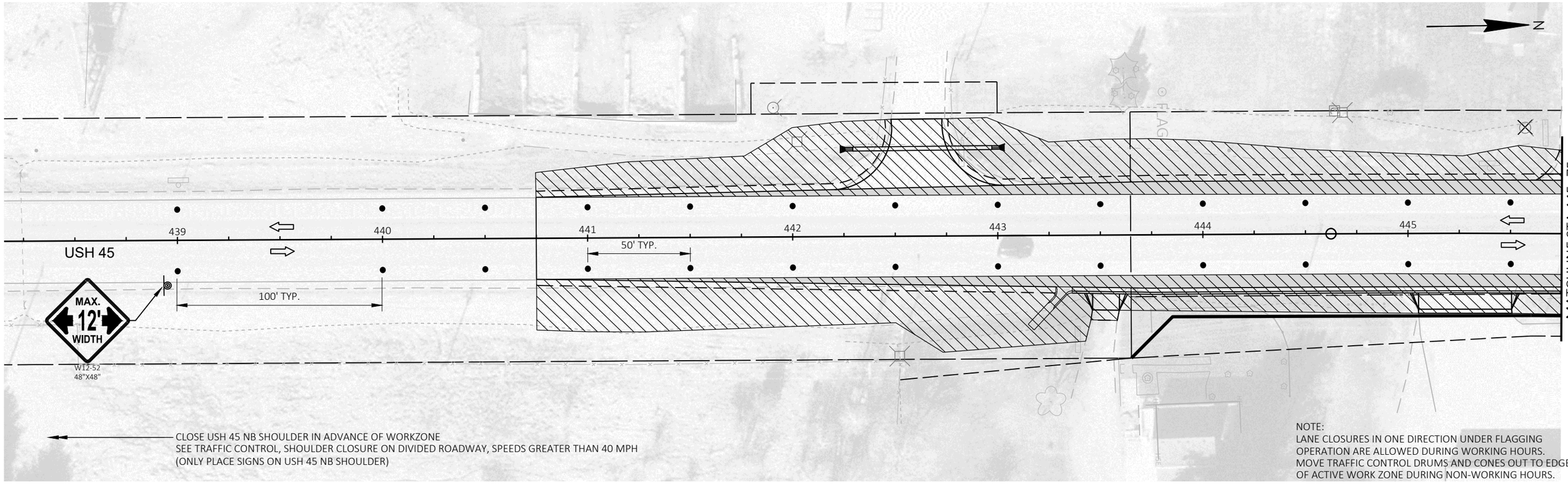
AT STH 29 (SOUTH OF PROJECT LIMITS)



ADVANCED WIDTH RESTRICTION SIGNING

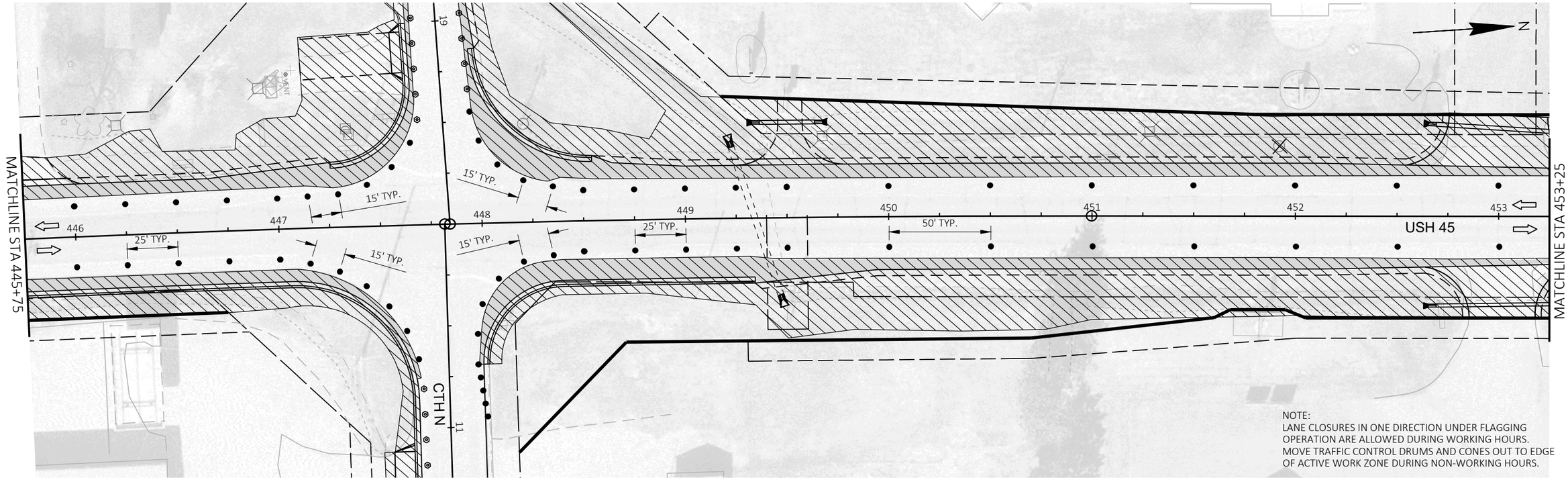
AT CTH ZZ



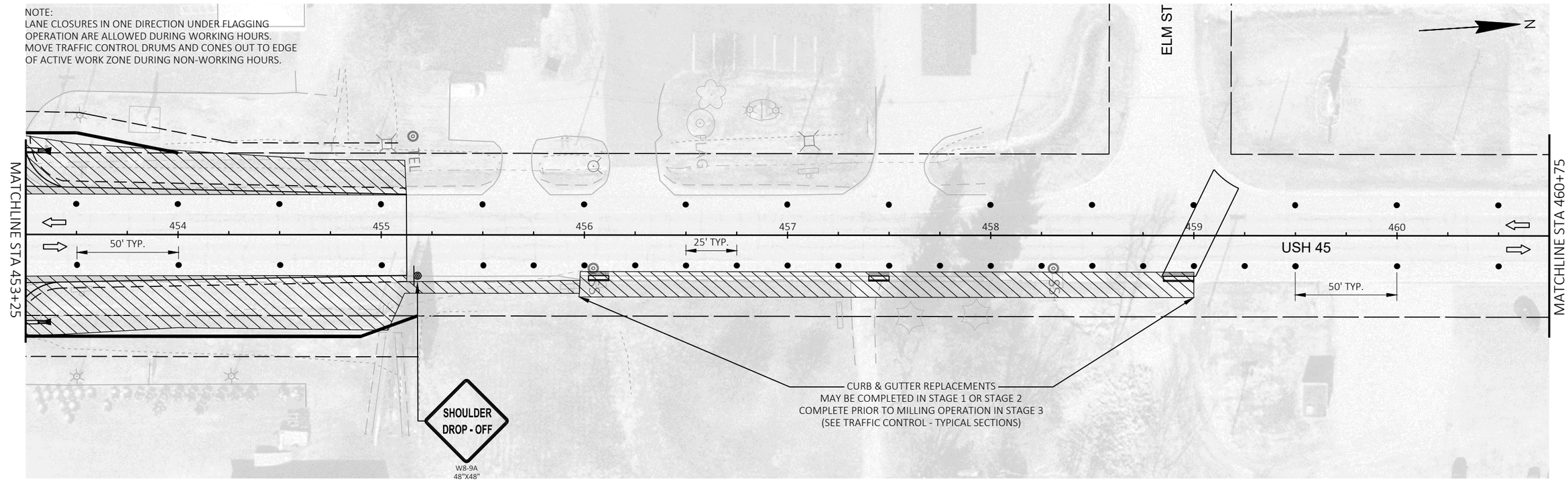


PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	TRAFFIC CONTROL - STAGE 2 - USH 45 & CTH N WIDENING	SHEET 92	E

2



NOTE:
LANE CLOSURES IN ONE DIRECTION UNDER FLAGGING OPERATION ARE ALLOWED DURING WORKING HOURS. MOVE TRAFFIC CONTROL DRUMS AND CONES OUT TO EDGE OF ACTIVE WORK ZONE DURING NON-WORKING HOURS.



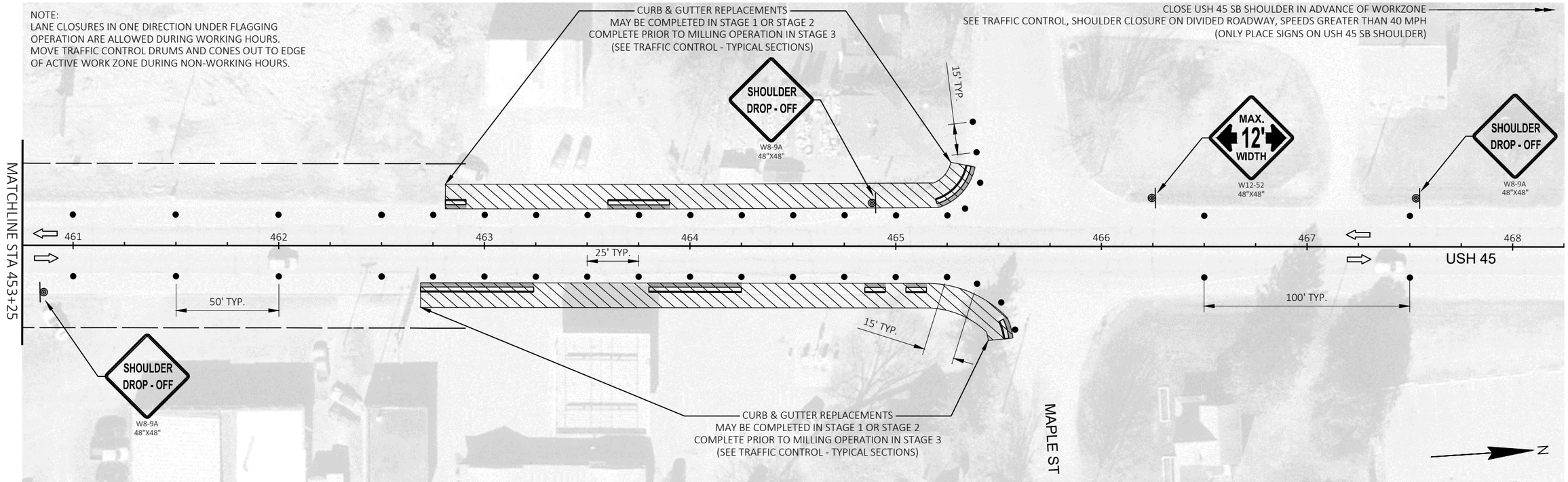
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	TRAFFIC CONTROL - STAGE 2 - USH 45 & CTH N WIDENING	SHEET 93	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\025003-TC_STAGE-2.DWG
LAYOUT NAME - 2
PLOT DATE : 2/20/2024 2:09 PM
PLOT BY : CZECH, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

NOTE:
LANE CLOSURES IN ONE DIRECTION UNDER FLAGGING OPERATION ARE ALLOWED DURING WORKING HOURS. MOVE TRAFFIC CONTROL DRUMS AND CONES OUT TO EDGE OF ACTIVE WORK ZONE DURING NON-WORKING HOURS.

CURB & GUTTER REPLACEMENTS
MAY BE COMPLETED IN STAGE 1 OR STAGE 2
COMPLETE PRIOR TO MILLING OPERATION IN STAGE 3
(SEE TRAFFIC CONTROL - TYPICAL SECTIONS)

CLOSE USH 45 SB SHOULDER IN ADVANCE OF WORKZONE
SEE TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
(ONLY PLACE SIGNS ON USH 45 SB SHOULDER)



CONSTRUCT CTH N WIDENING AND CURB & GUTTER IN TWO PHASES SUCH THAT ONLY ONE WORK ZONE, EASTBOUND OR WESTBOUND, IS ACTIVE ALONG CTH N. CONSTRUCT CTH N CONCURRENTLY WITH USH 45 CONSTRUCTION OPERATIONS.

MAINTAIN A MINIMUM 10' LANE WIDTH FOR CTH N TRAFFIC. CONTRACTOR MAY SHIFT LANES 1', 'RT' OR 'LT', OF THE CTH N CENTERLINE TO CONSTRUCT THE CTH N WIDENING AND CURB & GUTTER. LANE SHIFTS ARE TO BE IN PLACE NO MORE THAN FOUR CONTINUOUS DAYS AND NIGHTS.

LANE CLOSURES IN ONE DIRECTION UNDER FLAGGING OPERATION ARE ALLOWED DURING WORKING HOURS. MOVE TRAFFIC CONTROL DRUMS AND CONES OUT TO EDGE OF ACTIVE WORK ZONE DURING NON-WORKING HOURS.

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	TRAFFIC CONTROL - STAGE 2 - USH 45 & CTH N WIDENING	SHEET 94	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\025003-TC_STAGE-2.DWG
LAYOUT NAME - 3
PLOT DATE : 2/20/2024 2:09 PM
PLOT BY : CZECH, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2

N

BP: 42+00.00

N0°40'00"E

50

PC: 52+05.67

HEMLOCK RD

PT: 56+00.69

60

N0°05'35"W

70

R/L USH 45

80

90

100

110

MOUNTAIN-BAY STATE TRAIL

MATCH LINE STA 117+50

Y = 292959.634
X = 714940.481

HEMLOCK RD

PI STA = 54+03.18
Y = 294162.530
X = 714954.475
DELTA = 0°45'34" LT
D = 0°11'32"
T = 197.51'
L = 395.02'
R = 29800.00'
PC STA = 52+05.67
PT STA = 56+00.69
SE = NC

2

MATCH LINE STA 117+50

120

N0°05'35"W

130

R/L USH 45

140

PC: 141+25.49

150

PT: 154+63.87

160

N66°59'24"W

170

PC: 171+06.53

SHORT LN

180

PT: 178+61.59

N89°38'30"W

190

HUMMINGBIRD RD

MATCH LINE STA 193+00

N

PI STA = 148+82.72
Y = 303642.067
X = 714939.100
DELTA = 66°53'50" LT
D = 4°59'54"
T = 757.23'
L = 1338.38'
R = 1146.29'
PC STA = 141+25.49
PT STA = 154+63.87
SE = 6%

PI STA = 174+89.06
Y = 304729.690
X = 712378.060
DELTA = 22°39'06" LT
D = 3°00'00"
T = 382.52'
L = 755.05'
R = 1909.86'
PC STA = 171+06.53
PT STA = 178+61.59
SE = 5.1%

BLUEBIRD RD

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	ALIGNMENT DETAILS	SHEET 95	E

2

2

CEDAR ST

230

240

PI STA = 240+62.80
Y = 304770.870
X = 705794.450
DELTA = 89°49'37" RT
D = 3°29'58"
T = 1632.38'
L = 2566.95'
R = 1637.32'
PC STA = 224+30.42
PT STA = 252+06.86
SE = 5.4%

PT: 252+06.86

N

STA BACK = 249+97.37
STA AHEAD = 252+06.86

220

PC: 224+30.42

R/L USH 45

210

N89°38'30"W

N01°11'07"E

260

200

MATCH LINE STA 193+00

270

MATCH LINE STA 270+50

N

MATCH LINE STA 270+50

PC: 285+17.25

NORRIE RD

PT: 292+33.72

R/L USH 45

POPPLE LN

PC: 340+00.60

PT: 343+58.38

MATCH LINE STA 346+00

N0°11'07"E

280

290

300

N1°35'48"W

310

320

330

340

PI STA = 288+75.51
Y = 310071.880
X = 705811.600
DELTA = 1°46'56" LT
D = 0°14'55"
T = 358.26'
L = 716.47'
R = 23034.45'
PC STA = 285+17.25
PT STA = 292+33.72
SE = NC

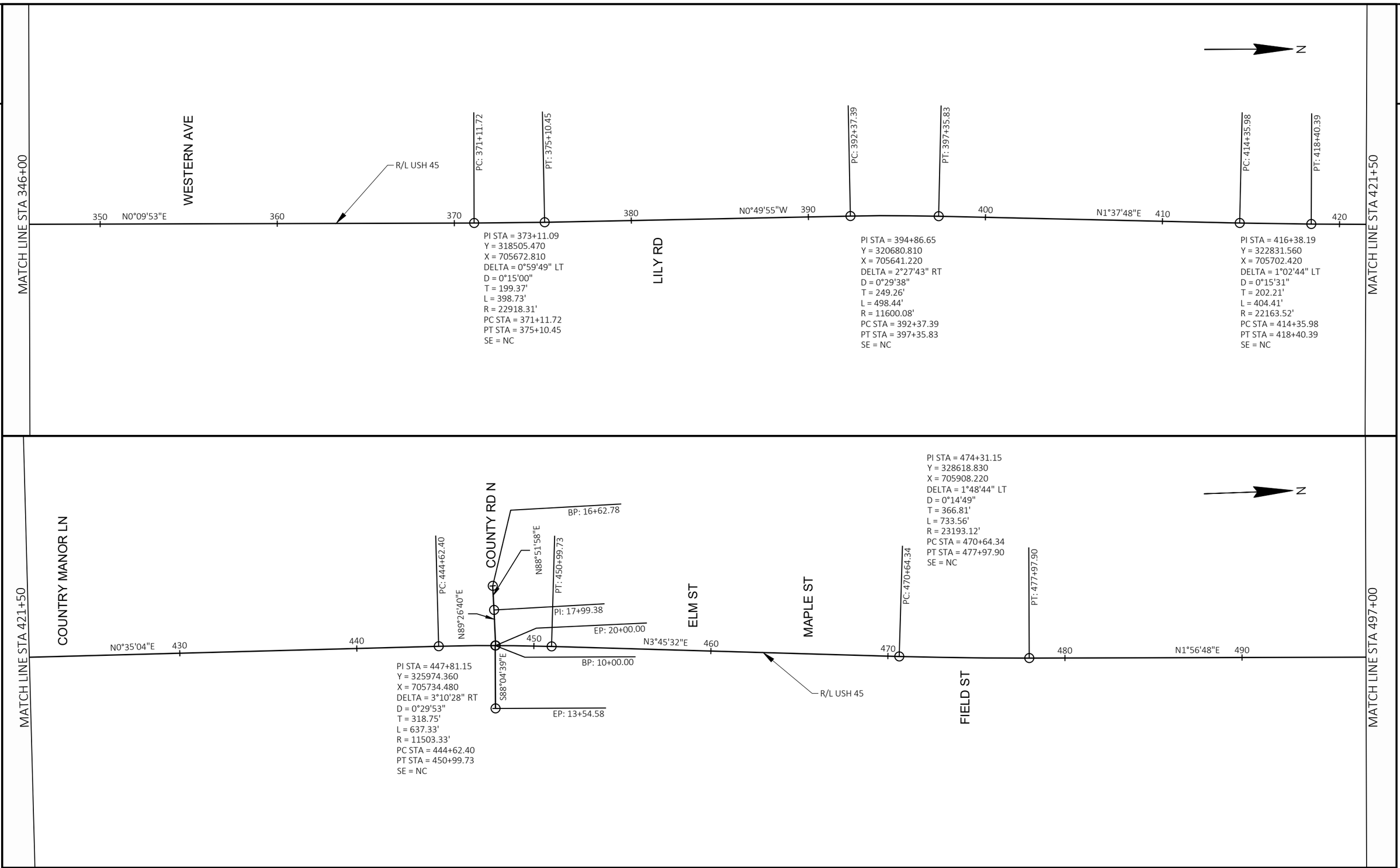
PI STA = 341+79.51
Y = 315373.870
X = 705663.800
DELTA = 1°45'42" RT
D = 0°29'33"
T = 178.90'
L = 357.78'
R = 11636.51'
PC STA = 340+00.60
PT STA = 343+58.38
SE = NC

CEDAR RD

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	ALIGNMENT DETAILS	SHEET 96	E

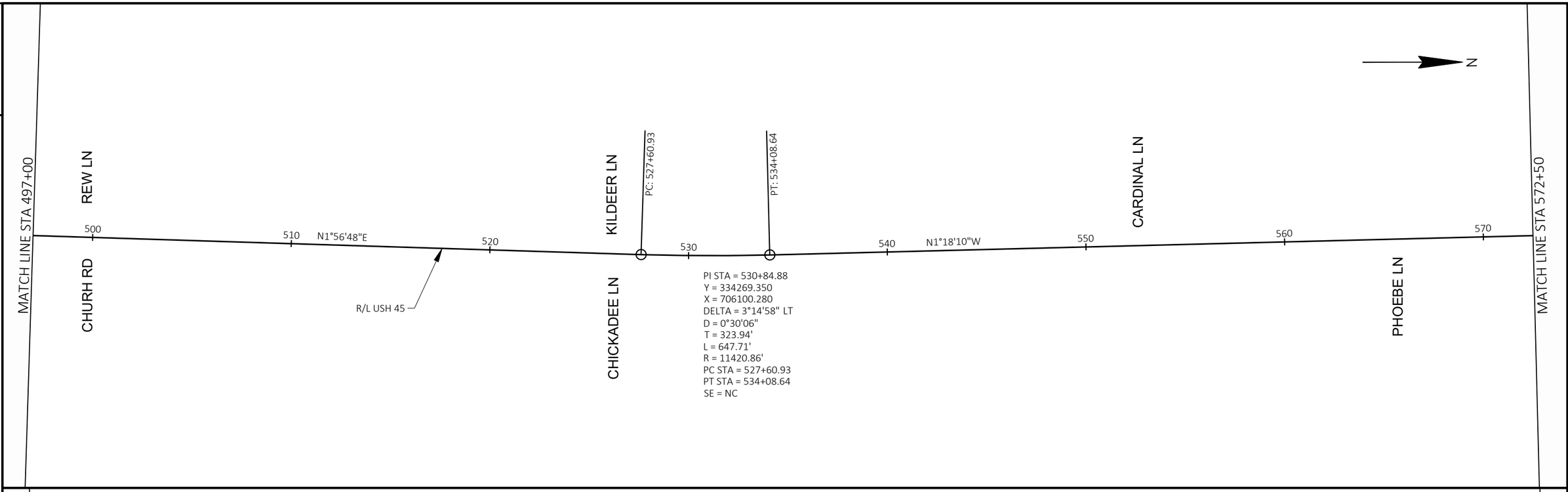
FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 027202- ad
PLOT DATE : 8/3/2023 3:32 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 44

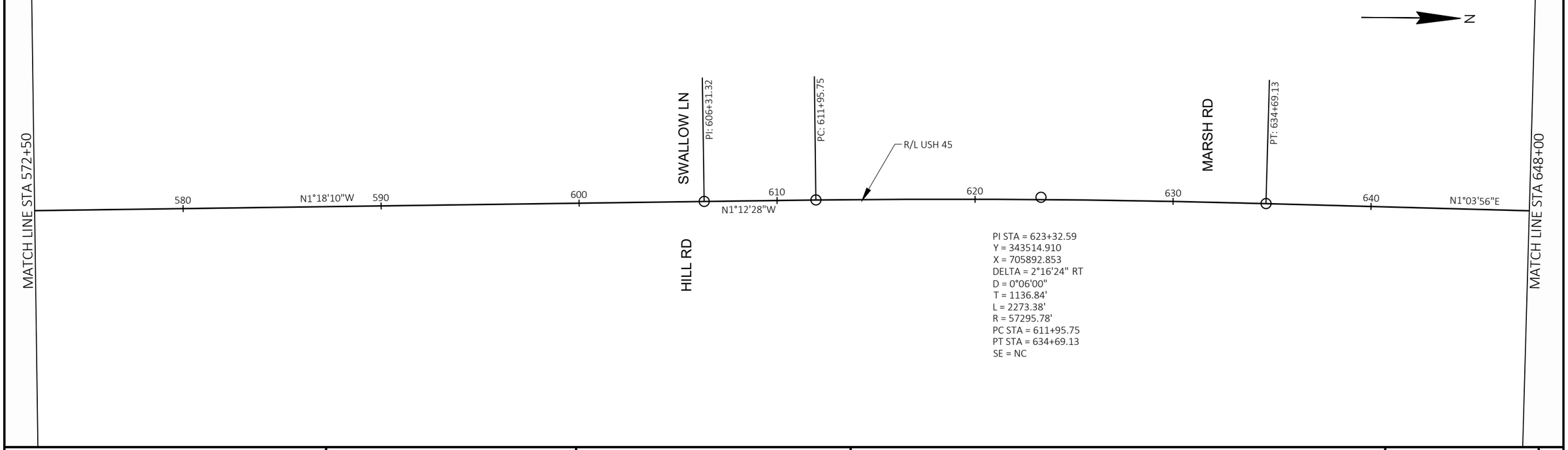
2



PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	ALIGNMENT DETAILS	SHEET 97	E

2





PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	ALIGNMENT DETAILS	SHEET 98	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 027204- ad
PLOT DATE : 8/3/2023 3:32 PM
PLOT BY : DAY, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 44

2

2

N

MATCH LINE STA 648+00

CTH ZZ

650 660 670 680 690 N1°03'56"E 700 710 720

PARTRIDGE LN

R/L USH 45

MATCH LINE STA 723+50

N

PC: 763+71.68

R/L USH 45

770 780 790

PI STA = 784+80.48
Y = 359660.775
X = 706162.358
DELTA = 60°23'07" RT
D = 1°34'51"
T = 2108.79'
L = 3819.77'
R = 3624.34'
PC STA = 763+71.68
PT STA = 364+39.88

STH 52

MATCH LINE STA 800+00

MATCH LINE STA 723+50

730 N1°03'56"E 740

1ST ST

PI: 737+17.78

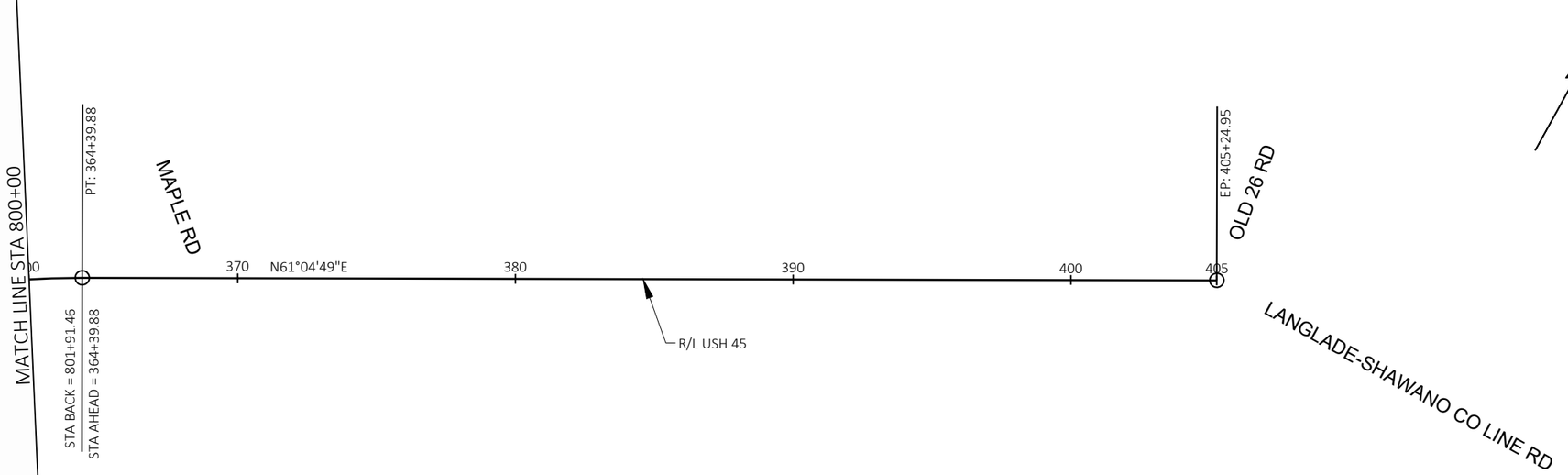
750 N0°41'42"E 760

EMMA ST

CTH Z

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	ALIGNMENT DETAILS	SHEET 99	E

2



PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	ALIGNMENT DETAILS	SHEET 100	E

Estimate Of Quantities

1600-02-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0210	Grubbing	SY	20.000	20.000
0004	203.0100	Removing Small Pipe Culverts	EACH	9.000	9.000
0006	204.0110	Removing Asphaltic Surface	SY	46.000	46.000
0008	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,216.000	1,216.000
0010	204.0120	Removing Asphaltic Surface Milling	SY	324,410.000	324,410.000
0012	204.0150	Removing Curb & Gutter	LF	657.000	657.000
0014	204.0165	Removing Guardrail	LF	510.000	510.000
0016	204.9060.S	Removing (item description) 01. Sign STA 449+50 LT	EACH	1.000	1.000
0018	204.9060.S	Removing (item description) 02. Sign STA 449+50 RT	EACH	1.000	1.000
0020	204.9060.S	Removing (item description) 03. Wood Posts	EACH	4.000	4.000
0022	204.9090.S	Removing (item description) 01. Silt Fence	LF	6,555.000	6,555.000
0024	205.0100	Excavation Common	CY	4,350.000	4,350.000
0026	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	90.000	90.000
0028	208.0100	Borrow	CY	217.000	217.000
0030	208.1100	Select Borrow	CY	350.000	350.000
0032	208.1500.S	Temporary Lane Shift During Culvert Work	EACH	7.000	7.000
0034	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 1600-02-70	EACH	1.000	1.000
0036	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	1.000	1.000
0038	211.0500	Prepare Foundation for Base Aggregate	STA	34.000	34.000
0040	213.0100	Finishing Roadway (project) 01. 1600-02-70	EACH	1.000	1.000
0042	305.0110	Base Aggregate Dense 3/4-Inch	TON	7,696.000	7,696.000
0044	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	7,697.000	7,697.000
0046	450.4000	HMA Cold Weather Paving	TON	3,691.000	3,691.000
0048	455.0605	Tack Coat	GAL	24,283.000	24,283.000
0050	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0052	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0054	460.2005	Incentive Density PWL HMA Pavement	DOL	27,750.000	27,750.000
0056	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	19,280.000	19,280.000
0058	460.2010	Incentive Air Voids HMA Pavement	DOL	36,490.000	36,490.000
0060	460.6224	HMA Pavement 4 MT 58-28 S	TON	36,677.000	36,677.000
0062	465.0105	Asphaltic Surface	TON	1,147.000	1,147.000
0064	465.0110	Asphaltic Surface Patching	TON	1,024.000	1,024.000
0066	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	101.000	101.000
0068	465.0125	Asphaltic Surface Temporary	TON	40.000	40.000
0070	465.0310	Asphaltic Curb	LF	118.000	118.000
0072	465.0315	Asphaltic Flumes	SY	39.000	39.000
0074	465.0560	Asphaltic Rumble Strips, Centerline	LF	63,575.000	63,575.000
0076	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	2.000	2.000
0078	520.1015	Apron Endwalls for Culvert Pipe 15-Inch	EACH	2.000	2.000
0080	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	6.000	6.000
0082	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	6.000	6.000
0084	520.8000	Concrete Collars for Pipe	EACH	2.000	2.000
0086	520.8700	Cleaning Culvert Pipes	EACH	3.000	3.000
0088	520.9700.S	Culvert Pipe Liners (size) 01. 24-Inch	LF	146.000	146.000
0090	520.9700.S	Culvert Pipe Liners (size) 02. 36-Inch	LF	108.000	108.000
0092	520.9750.S	Cleaning Culvert Pipes for Liner Verification	EACH	3.000	3.000
0094	522.0415	Culvert Pipe Reinforced Concrete Class IV 15-Inch	LF	62.000	62.000
0096	522.0418	Culvert Pipe Reinforced Concrete Class IV 18-Inch	LF	158.000	158.000
0098	522.0424	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	222.000	222.000
0100	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	1.000	1.000

1600-02-70

Line	Item	Item Description	Unit	Total	Qty
0102	522.2419	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	78.000	78.000
0104	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	2.000	2.000
0106	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	231.000	231.000
0108	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	921.000	921.000
0110	602.0415	Concrete Sidewalk 6-Inch	SF	150.000	150.000
0112	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	40.000	40.000
0114	606.0100	Riprap Light	CY	3.000	3.000
0116	611.8115	Adjusting Inlet Covers	EACH	3.000	3.000
0118	614.0010	Barrier System Grading Shaping Finishing	EACH	4.000	4.000
0120	614.0396	Guardrail Mow Strip Asphalt	SY	194.000	194.000
0122	614.0397	Guardrail Mow Strip Emulsified Asphalt	SY	109.000	109.000
0124	614.2300	MGS Guardrail 3	LF	300.000	300.000
0126	614.2330	MGS Guardrail 3 K	LF	225.000	225.000
0128	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0130	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1600-02-70	EACH	1.000	1.000
0132	619.1000	Mobilization	EACH	1.000	1.000
0134	621.0100	Landmark Reference Monuments	EACH	88.000	88.000
0136	624.0100	Water	MGAL	237.000	237.000
0138	625.0100	Topsoil	SY	12,283.000	12,283.000
0140	628.1504	Silt Fence	LF	695.000	695.000
0142	628.1520	Silt Fence Maintenance	LF	7,250.000	7,250.000
0144	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0146	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	6.000
0148	628.2006	Erosion Mat Urban Class I Type A	SY	23.000	23.000
0150	628.2008	Erosion Mat Urban Class I Type B	SY	11,288.000	11,288.000
0152	628.2027	Erosion Mat Class II Type C	SY	973.000	973.000
0154	628.7015	Inlet Protection Type C	EACH	2.000	2.000
0156	628.7555	Culvert Pipe Checks	EACH	67.000	67.000
0158	628.7570	Rock Bags	EACH	1,030.000	1,030.000
0160	629.0210	Fertilizer Type B	CWT	8.300	8.300
0162	630.0130	Seeding Mixture No. 30	LB	105.000	105.000
0164	630.0140	Seeding Mixture No. 40	LB	124.000	124.000
0166	630.0500	Seed Water	MGAL	278.000	278.000
0168	638.2102	Moving Signs Type II	EACH	13.000	13.000
0170	642.5001	Field Office Type B	EACH	1.000	1.000
0172	643.0300	Traffic Control Drums	DAY	5,970.000	5,970.000
0174	643.0900	Traffic Control Signs	DAY	3,720.000	3,720.000
0176	643.1000	Traffic Control Signs Fixed Message	SF	36.000	36.000
0178	643.1070	Traffic Control Cones 42-Inch	DAY	650.000	650.000
0180	643.3165	Temporary Marking Line Paint 6-Inch	LF	215,278.000	215,278.000
0182	643.5000	Traffic Control	EACH	1.000	1.000
0184	644.1440	Temporary Pedestrian Surface Matting	SF	355.000	355.000
0186	644.1810	Temporary Pedestrian Barricade	LF	80.000	80.000
0188	645.0130	Geotextile Type R	SY	4.000	4.000
0190	646.2020	Marking Line Epoxy 6-Inch	LF	6,381.000	6,381.000
0192	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	263,150.000	263,150.000
0194	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	2,765.000	2,765.000
0196	646.5020	Marking Arrow Epoxy	EACH	10.000	10.000
0198	646.5120	Marking Word Epoxy	EACH	7.000	7.000
0200	646.6120	Marking Stop Line Epoxy 18-Inch	LF	97.000	97.000

Estimate Of Quantities

1600-02-70

Line	Item	Item Description	Unit	Total	Qty
0202	646.6466	Cold Weather Marking Epoxy 6-Inch	LF	26,945.000	26,945.000
0204	646.6470	Cold Weather Marking Epoxy 10-Inch	LF	290.000	290.000
0206	646.7120	Marking Diagonal Epoxy 12-Inch	LF	416.000	416.000
0208	646.7220	Marking Chevron Epoxy 24-Inch	LF	188.000	188.000
0210	648.0100	Locating No-Passing Zones	MI	15.100	15.100
0212	650.4500	Construction Staking Subgrade	LF	2,176.000	2,176.000
0214	650.5000	Construction Staking Base	LF	2,176.000	2,176.000
0216	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	1,152.000	1,152.000
0218	650.6000	Construction Staking Pipe Culverts	EACH	7.000	7.000
0220	650.8000	Construction Staking Resurfacing Reference	LF	79,742.000	79,742.000
0222	650.9911	Construction Staking Supplemental Control (project) 01. 1600-02-70	EACH	1.000	1.000
0224	650.9920	Construction Staking Slope Stakes	LF	2,176.000	2,176.000
0226	690.0150	Sawing Asphalt	LF	2,455.000	2,455.000
0228	690.0250	Sawing Concrete	LF	58.000	58.000
0230	740.0440	Incentive IRI Ride	DOL	66,720.000	66,720.000
0232	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	200.000	200.000
0234	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	200.000	200.000
0236	SPV.0060	Special 01. Reestablish Section Corner Monument	EACH	22.000	22.000
0238	SPV.0060	Special 02. Televise Culvert Pipes	EACH	1.000	1.000
0240	SPV.0060	Special 03. Galvanized Steel Trash Guard 12-Inch	EACH	2.000	2.000
0242	SPV.0060	Special 04. Grading Shaping and Finishing Culvert	EACH	5.000	5.000
0244	SPV.0060	Special 05. Grading Shaping Finishing Trail Crossing	EACH	2.000	2.000
0246	SPV.0180	Special 01. Removing Distressed Asphaltic Surface Milling	SY	5,260.000	5,260.000
0248	SPV.0180	Special 02. Protective Thermoplastic Coating at Snowmobile Crossings	SY	220.000	220.000

REMOVING PIPE

STATION - STATION	OFFSET	SIZE (IN)	APPROX. LENGTH (FT)	TYPE	203.0100 REMOVING SMALL PIPE CULVERTS EACH	REMARKS
CATEGORY 0010						
111+51	LT/RT	24	60	CMP	1	CULVERT #58045007425
395+00	LT/RT	24	62	RCP	1	CULVERT #58045005904
449+44	LT/RT	19X30	66	CMP	1	CULVERT #58045005909
632+07	LT/RT	24	100	RCP	1	CULVERT #58045005921
CATEGORY 0010 TOTAL					**4**	
CATEGORY 0020						
442+61	LT	18	47	CMP	1	DRIVEWAY CULVERT
443+53	RT	12	24	CMP	1	DRIVEWAY CULVERT
449+50	LT	18	15	CMP	1	FIELD ENTRANCE CULVERT
453+00	LT	18	60	CMP	1	DRIVEWAY CULVERT
453+00	RT	15	60	CMP	1	DRIVEWAY CULVERT
CATEGORY 0020 TOTAL					**5**	
PROJECT 1600-02-70 TOTAL					**9**	

REMOVING PAVEMENT

STATION	-	STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY
CATEGORY 0010				
458+85	-	459+00	USH 45 RT	4
462+69	-	463+24	USH 45 RT	13
462+81	-	462+91	USH 45 LT	3
463+60	-	463+90	USH 45 LT	7
464+09	-	464+54	USH 45 RT	10
465+19	-	465+35	USH 45 LT	6
465+51	-	465+53	USH 45 RT	3
CATEGORY 0010 TOTAL				46
PROJECT 1600-02-70 TOTAL				**46**

REMOVING ASPHALTIC SURFACE MILLING

STATION	-	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	SPV.0180.01 REMOVING DISTRESSED ASPHALTIC SURFACE MILLING SY	REMARKS
42+50	-	404+65	USH 45 MAINLINE	72	309,100	---	
252+50	-	306+00	USH 45 LONGITUDINAL JOINT	---	--	1,190	DRIVING / PASSING LANE JOINT
304+00	-	373+50	USH 45 LONGITUDINAL JOINT	---	--	1,550	DRIVING / PASSING LANE JOINT
590+00	-	655+00	USH 45 LONGITUDINAL JOINT	---	--	1,450	DRIVING / PASSING LANE JOINT
662+00	-	710+00	USH 45 LONGITUDINAL JOINT	---	--	1,070	DRIVING / PASSING LANE JOINT
51+50	-	54+00	HEMLOCK RD	32	480	---	
52+25	-	53+75	HEMLOCK RD	31	300	---	
68+00	-	69+75	WAYSIDE PARK ENTRANCE	27	580	---	
105+25	-	107+35	WITT-BIRN TOWNLINE RD	32	440	---	
160+00	-	162+75	BLUEBIRD RD	32	470	---	
172+40	-	173+90	SHORT LN	24	180	---	
187+00	-	189+25	HUMMINGBIRD RD	32	400	---	
234+40	-	236+25	CEDAR ST	37	480	---	
286+00	-	289+25	ORIOLE RD	28	310	---	
287+75	-	290+10	NORRIE RD	30	420	---	
327+10	-	329+30	POPPLE LN	---	440	---	
340+50	-	342+75	CEDAR RD	32	490	---	
354+15	-	356+45	WESTERN AVE	31	420	---	
380+25	-	382+70	LILY RD	29	460	---	
422+25	-	424+50	COUNTRY MANOR LN	68	410	---	
458+25	-	459+50	ELM ST	35	210	---	
465+00	-	466+25	MAPLE ST	48	250	---	
465+25	-	466+25	MAPLE ST	35	200	---	
473+90	-	474+80	FIELD ST	26	210	---	
498+75	-	501+20	REW LN	32	410	---	
498+75	-	500+90	CHURCH RD	33	450	---	
524+75	-	527+35	CHICKADEE LN	28	420	---	
525+10	-	527+60	KILDEER LN	28	410	---	
551+50	-	554+00	CARDINAL LN	25	410	---	
564+50	-	566+75	PHOEBE LN	26	450	---	
604+10	-	606+45	HILL RD	31	470	---	
604+50	-	606+50	SWALLOW LN	---	440	---	
630+45	-	633+25	MARSH RD	33	480	---	
657+00	-	659+35	CTH ZZ	34	450	---	
657+00	-	659+25	PARTRIDGE LN	---	490	---	
735+50	-	737+75	1ST ST	45	390	---	
748+75	-	752+25	EMMA ST	32	540	---	
749+85	-	751+75	CTH Z	49	260	---	
796+75	-	798+15	STH 52	42	370	---	
367+25	-	371+00	MAPLE RD	36	500	---	
CATEGORY 0010 TOTAL				**1,155**	**323,190**	**5,260**	

REMOVING ASPHALTIC SURFACE MILLING (CONTINUED)

STATION	-	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	SPV.0180.01 REMOVING DISTRESSED ASPHALTIC SURFACE MILLING SY	REMARKS
CATEGORY 0020							
18+47	-	19+80	STATE RD	27	460	---	
10+19	-	12+17	CTH N	34	760	---	
CATEGORY 0020 TOTAL				**61**	**1,220**	**0**	
PROJECT 1600-02-70 TOTAL				**1,216**	**324,410**	**5,260**	

REMOVING GUARDRAIL

STATION	-	STATION	OFFSET	204.0165 REMOVING GUARDRAIL LF
555+29	-	557+84	RT	255
555+98	-	558+53	LT	255
PROJECT 1600-02-70 TOTAL				**510**

REMOVING CURB & GUTTER

STATION	-	STATION	OFFSET	204.0150 REMOVING CURB & GUTTER LF
CATEGORY 0010				
456+02	-	456+12	RT	10
457+40	-	457+50	RT	10
458+85	-	459+00	RT	15
462+69	-	463+24	RT	55
462+81	-	462+91	LT	10
463+60	-	463+90	LT	30
463+80	-	464+25	RT	45
464+85	-	464+95	RT	10
465+05	-	465+15	RT	10
465+20	-	465+37	LT	26
465+52	-	465+55	RT	10
631+88	-	632+41	LT	61
CATEGORY 0010 TOTAL				**292**
CATEGORY 0020				
447+08	-	447+64	RT, SE QUADRANT	86
447+27	-	447+65	LT, SW QUADRANT	62
447+99	-	448+33	LT, NW QUADRANT	53
448+01	-	449+32	RT, NE QUADRANT	164
CATEGORY 0020 TOTAL				365
PROJECT 1600-02-70 TOTAL				**657**

REMOVING SIGNS AND POSTS

STATION	-	STATION	OFFSET	204.9060.S.01 REMOVING SIGN STA 449+50 LT EACH	204.9060.S.02 REMOVING SIGN STA 449+50 RT EACH	204.9060.S.03 REMOVING WOOD POSTS EACH
449+50			53' LT	1	---	---
449+50			42' RT	---	1	---
444+70	-	444+88	34' RT	---	---	4
PROJECT 1600-02-70 TOTAL				**1**	**1**	**4**

EXCAVATION, HAULING, AND DISPOSAL (CATEGORY 0020)

STATION	-	STATION	LOCATION	OFFSET	205.0501.S EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL TON
11+00	-	12+00	CTH N	RT	90
PROJECT 1600-02-70 TOTAL					**90**

LANE SHIFT

STATION	CULVERT NUMBER	OFFSET	TEMPORARY LANE SHIFT DURING CULVERT WORK 208.1500.S EACH	FOR INFORMATION ONLY WIDTH (FT)	BASE AGGREGATE (TON)	BORROW (CY)	NOTES
111+51	58045007425	LT	1	17	170	224	
111+51	58045007425	RT	1	14	130	104	
395+00	58045005904	LT	1	19	210	423	
395+00	58045005904	RT	1	17	160	208	
449+44	58045005909	LT	1	10	77	34	
449+44	58045005909	RT	1	10	83	--	*
632+07	58045005921	RT	1	18	170	136	
PROJECT 1600-02-70 TOTAL			**7**				

*STA 449+44 RT INCLUDES ASPHALTIC SURFACE TEMPORARY, ASPHALTIC CURB, AND EXCAVATION COMMON; LISTED ELSEWHERE IN MISCELLANEOUS QUANTITIES

PREPARE FOUNDATION (CATEGORY 0020)

STATION	-	STATION	OFFSET	211.0500 PREPARE FOUNDATION FOR BASE AGGREGATE STA
440+75	-	447+50	LT	7
440+75	-	447+50	RT	7
448+15	-	455+13	RT	7
448+15	-	455+13	LT	7
18+47	-	19+50	LT	2
18+47	-	19+50	RT	2
10+50	-	12+10	RT	2
PROJECT 1600-02-70 TOTAL				**34**

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	208.1100 SELECT BORROW (EXPANDED EBS BACKFILL) (11) FACTOR 1.30	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE (15)	208.0100 BORROW	COMMENT
DIVISION 1 - CULVERT 58045007425 - CATEGORY 0010													
	110+99 to 112+03	Culvert 7425 Transition Cut	257	--	61	--	--	--	--	--	--	--	Transition Cut not included in Mass Ordinate
	109+68 to 113+39	Culvert 7425 Perm Grading LT	65	--	0	65	--	72	90	-25	--	--	
	109+87 to 113+20	Culvert 7425 Perm Grading RT	86	--	0	86	--	60	75	11	--	--	
DIVISION 1 SUBTOTAL			408	0	61	151	0	132	165	-14	0	14	
DIVISION 2 - CULVERT 58045005904 - CATEGORY 0010													
	394+48 to 395+53	Culvert 5904 Transition Cut	365	--	61	--	--	--	--	--	--	--	Transition Cut not included in Mass Ordinate
	392+82 to 397+18	Culvert 5904 Perm Grading LT	95	--	0	95	--	228	285	-190	--	--	
	393+21 to 395+96	Culvert 5904 Perm Grading RT	52	--	0	52	--	53	66	-14	--	--	
DIVISION 2 SUBTOTAL			512	0	61	147	0	280	350	-203	0	203	
DIVISION 3 - CULVERT 58045005909 - CATEGORY 0010													
	448+14 to 450+75	Culvert 5909 Temp Widening RT	68	--	0	68	--	12	15	52	--	--	
	448+76 to 449+97	Culvert 5909 Transition Cut	248	--	164	--	--	--	--	--	--	--	Transition Cut not included in Mass Ordinate
DIVISION 3 SUBTOTAL			316	0	164	68	0	12	15	52	52	0	
DIVISION 4 - CULVERT 58045005921 - CATEGORY 0010													
	631+55 to 632+60	Culvert 5921 Transition Cut	575	--	115	--	--	--	--	--	--	--	Transition Cut not included in Mass Ordinate
	630+07 to 633+85	Culvert 5921 Perm Grading RT	128	--	0	128	--	23	29	100	--	--	
DIVISION 4 SUBTOTAL			703	0	115	128	0	23	29	100	100	0	
CATEGORY 0010 TOTAL			1,938	0	401	493	0	447	559	-66	152	217	
CATEGORY 0010 TOTAL COMMON EXCAVATION			1,938										
DIVISION 5 - CTH N INTERSECTION - CATEGORY 0020													
	440+75 to 447+00	USH 45 at CTH N - South	830	--	21	809	--	120	149	659	--	--	
	448+54 to 455+98	USH 45 at CTH N - North	934	--	22	913	--	221	276	637	--	--	
	18+47 to 19+17	CTH N - West	53	--	2	50	--	4	5	45	--	--	
	10+86 to 12+10	CTH N - East	56	--	4	52	65	10	13	40	--	--	Select Borrow for petroleum-contaminated soil backfill
	447+00 to 448+54	USH 45/CTH N Intersection	292	--	34	258	--	30	38	221	--	--	
	445+87 to 447+58	USH 45/CTH N Int. SW Grading	17	--	0	17	--	3	4	13	--	--	
	448+19 to 449+21	USH 45/CTH N Int. NW Grading	11	--	0	11	--	0	0	11	--	--	
DIVISION 5 SUBTOTAL			2,193	0	82	2,111	65	388	485	1,626	1,626	0	
UNDISTRIBUTED EBS EXCAVATION		10% Undistributed	--	219	--	--	285	--	--	--	--	--	Select Borrow for EBS backfill at USH 45 / CTH N widenings
CATEGORY 0020 TOTAL			2,193	219	82	2,111	350	388	485	1,626	1,626	0	
CATEGORY 0020 TOTAL COMMON EXCAVATION			2,412										
GRAND TOTAL			4,131	219	483	2,604	350	835	1,044	1,560	1,777	217	
TOTAL COMMON EXCAVATION			4,350										

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(3) EBS EXCAVATION TO BE BACKFILLED WITH SELECT BORROW MATERIAL. NOTE: THIS IS DESIGNERS CHOICE, CAN BE BACKFILLED WITH BORROW, OR CUT AS WELL.

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(11) EXPANDED EBS BACKFILL - THIS IS TO BE FILLED WITH SELECT BORROW MATERIAL. EBS BACKFILL FACTOR = 1.30. ITEM NUMBER 208.1100

(13) EXPANDED FILL FACTOR = 1.25

(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

BASE AGGREGATE

STATION	-	STATION	LOCATION	305.0110 DENSE 3/4-INCH TON	305.0120 DENSE 1 1/4-INCH TON	624.0100 WATER MGAL
CATEGORY 0010						
42+50	-	249+97	USH 45 SHOULDERS	1,620	---	25
252+07	-	440+75	USH 45 SHOULDERS	1,470	---	23
455+12	-	801+77	USH 45 SHOULDERS	2,700	---	41
364+40	-	404+65	USH 45 SHOULDERS	320	---	4.8
110+98	-	112+04	USH 45 CULVERT REPLACEMENT	---	280	4.2
109+68	-	113+39	USH 45 FINISHING FORESLOPES	200	250	6.8
394+47	-	395+53	USH 45 CULVERT REPLACEMENT	---	280	4.2
392+82	-	397+18	USH 45 FINISHING FORESLOPES	210	260	7.1
448+87	-	450+00	USH 45 CULVERT REPLACEMENT	---	430	6.5
631+54	-	632+60	USH 45 CULVERT REPLACEMENT	---	530	8.0
630+07	-	633+85	USH 45 FINISHING FORESLOPES	110	190	4.5
456+02	-	456+12	USH 45 CURB & GUTTER, RT	---	6	0.1
457+40	-	457+50	USH 45 CURB & GUTTER, RT	---	6	0.1
458+85	-	459+00	USH 45 CURB & GUTTER, RT	---	9	0.2
462+69	-	463+24	USH 45 CURB & GUTTER, RT	---	31	0.5
462+81	-	462+91	USH 45 CURB & GUTTER, LT	---	6	0.1
463+60	-	463+90	USH 45 CURB & GUTTER, LT	---	17	0.3
463+80	-	464+25	USH 45 CURB & GUTTER, RT	---	38	0.6
464+85	-	464+95	USH 45 CURB & GUTTER, RT	---	12	0.2
465+05	-	465+15	USH 45 CURB & GUTTER, RT	---	6	0.1
465+20	-	465+37	USH 45 CURB & GUTTER, LT	---	15	0.3
465+52	-	465+55	USH 45 CURB & GUTTER, RT	---	6	0.1
631+88	-	632+41	USH 45 CURB & GUTTER, LT	---	37	0.6
554+18	-	558+49	USH 45 GUARDRAIL RT	50	500	8.3
554+51	-	558+95	USH 45 GUARDRAIL LT	28	510	8.1
109+15	-	109+33	USH 45 TRAIL CROSSING LT	---	13	0.2
109+18	-	109+40	USH 45 TRAIL CROSSING RT	---	15	0.3
UNDISTRIBUTED				680	350	16
CATEGORY 0010 TOTAL				**7,388**	**3,797**	**171**

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BASE AGGREGATE

STATION	-	STATION	LOCATION	305.0110 DENSE 3/4-INCH TON	305.0120 DENSE 1 1/4-INCH TON	624.0100 WATER MGAL
CATEGORY 0020						
440+75	-	447+68	USH 45/STATE RD WIDENING LT	---	790	12
440+75	-	447+67	USH 45/CTH N WIDENING RT	---	760	12
447+93	-	455+12	USH 45/STATE RD WIDENING LT	---	900	14
447+98	-	455+12	USH 45/CTH N WIDENING RT	---	830	13
440+75	-	447+68	USH 45/STATE RD SHOULDERS LT	78	---	1.2
440+75	-	447+67	USH 45/CTH N SHOULDERS RT	42	---	0.7
447+93	-	455+12	USH 45/STATE RD SHOULDERS LT	89	---	1.4
447+98	-	455+12	USH 45/CTH N SHOULDERS RT	71	---	1.1
442+21	-	443+03	USH 45 LT DRIVEWAY	---	46	0.7
443+42	-	443+63	USH 45 RT DRIVEWAY	---	7	0.2
445+01	-	445+55	USH 45 RT DRIVEWAY	---	15	0.3
445+62	-	446+03	USH 45 LT DRIVEWAY	---	10	0.2
19+04	-	19+24	CTH N (WEST) RT DRIVEWAY	---	57	0.9
11+06	-	11+50	CTH N (EAST) RT DRIVEWAY	---	15	0.3
449+25	-	449+78	USH 45 LT FIELD ENTRANCE	---	17	0.3
452+55	-	453+43	USH 45 LT DRIVEWAY	---	53	0.8
452+64	-	453+41	USH 45 RT DRIVEWAY	---	40	0.6
UNDISTRIBUTED				28	360	5.9
CATEGORY 0020 TOTAL				**308**	**3,900**	**66**
PROJECT 1600-02-70 TOTAL				**7,696**	**7,697**	**237**

ASPHALTIC ITEMS

STATION	-	STATION	LOCATION	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0105 ASPHALTIC SURFACE TON	465.0110 ASPHALTIC SURFACE PATCHING TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	465.0310 ASPHALTIC CURB LF	REMARKS
CATEGORY 0010												
42+50	-	404+65	USH 45 MAINLINE	2,840	17,714	28,350	---	---	---	---	---	
42+50	-	404+65	USH 45 SHOULDERS	630	3,924	6,280	---	---	---	---	---	
252+50	-	306+00	USH 45 LONGITUDINAL JOINT	---	167	---	---	140	---	---	---	DRIVING / PASSING LANE JOINT
304+00	-	373+50	USH 45 LONGITUDINAL JOINT	---	217	---	---	181	---	---	---	DRIVING / PASSING LANE JOINT
590+00	-	655+00	USH 45 LONGITUDINAL JOINT	---	203	---	---	169	---	---	---	DRIVING / PASSING LANE JOINT
662+00	-	710+00	USH 45 LONGITUDINAL JOINT	---	150	---	---	125	---	---	---	DRIVING / PASSING LANE JOINT
51+50	-	54+00	HEMLOCK RD	6	33	53	---	---	---	---	---	
52+25	-	53+75	HEMLOCK RD	4	21	33	---	---	---	---	---	
68+00	-	69+75	WAYSIDE PARK ENTRANCE	7	41	65	---	---	---	---	---	
105+25	-	107+35	WITT-BIRN TOWNLINE RD	5	31	49	---	---	---	---	---	
160+00	-	162+75	BLUEBIRD RD	6	33	53	---	---	---	---	---	
172+40	-	173+90	SHORT LN	2	13	20	---	---	---	---	---	
187+00	-	189+25	HUMMINGBIRD RD	5	28	45	---	---	---	---	---	
234+40	-	236+25	CEDAR ST	6	34	53	---	---	---	---	---	
286+00	-	289+25	ORIOLE RD	4	22	34	---	---	---	---	---	
287+75	-	290+10	NORRIE RD	5	30	48	---	---	---	---	---	
327+10	-	329+30	POPPLE LN	5	31	49	---	---	---	---	---	
340+50	-	342+75	CEDAR RD	6	34	54	---	---	---	---	---	
354+15	-	356+45	WESTERN AVE	5	29	47	---	---	---	---	---	
380+25	-	382+70	LILY RD	6	33	52	---	---	---	---	---	
422+25	-	424+50	COUNTRY MANOR LN	5	29	46	---	---	---	---	---	
458+25	-	459+50	ELM ST	3	15	24	---	---	---	---	---	
465+00	-	466+25	MAPLE ST	3	18	28	---	---	---	---	---	
465+25	-	466+25	MAPLE ST	3	14	22	---	---	---	---	---	
473+90	-	474+80	FIELD ST	3	15	24	---	---	---	---	---	
498+75	-	501+20	REW LN	5	29	46	---	---	---	---	---	
498+75	-	500+90	CHURCH RD	5	31	50	---	---	---	---	---	
524+75	-	527+35	CHICKADEE LN	5	29	47	---	---	---	---	---	
525+10	-	527+60	KILDEER LN	5	29	46	---	---	---	---	---	
551+50	-	554+00	CARDINAL LN	5	29	46	---	---	---	---	---	
564+50	-	566+75	PHOEBE LN	6	32	51	---	---	---	---	---	
604+10	-	606+45	HILL RD	6	33	52	---	---	---	---	---	
604+50	-	606+50	SWALLOW LN	5	31	49	---	---	---	---	---	
630+45	-	633+25	MARSH RD	6	33	53	---	---	---	---	---	
657+00	-	659+35	CTH ZZ	5	31	50	---	---	---	---	---	
657+00	-	659+25	PARTRIDGE LN	6	35	55	---	---	---	---	---	
735+50	-	737+75	1ST ST	5	28	44	---	---	---	---	---	
748+75	-	752+25	EMMA ST	7	38	61	---	---	---	---	---	
749+85	-	751+75	CTH Z	3	19	30	---	---	---	---	---	
796+75	-	798+15	STH 52	5	26	42	---	---	---	---	---	

ASPHALTIC ITEMS (CONTINUED)

STATION	-	STATION	LOCATION	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0105 ASPHALTIC SURFACE TON	465.0110 ASPHALTIC SURFACE PATCHING TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	465.0310 ASPHALTIC CURB LF	REMARKS
367+25	-	371+00	MAPLE RD	6	35	56	---	---	---	---	---	
18+47	-	19+80	STATE RD	6	33	53	---	---	---	---	---	
10+19	-	12+17	CTH N	9	56	89	---	---	---	---	---	
458+85	-	459+00	USH 45 RT	---	1	---	---	2	---	---	---	CURB & GUTTER SPOT REPLACEMENT
462+69	-	463+24	USH 45 RT	---	2	---	---	5	---	---	---	CURB & GUTTER SPOT REPLACEMENT
462+81	-	462+91	USH 45 LT	---	1	---	---	1	---	---	---	CURB & GUTTER SPOT REPLACEMENT
463+60	-	463+90	USH 45 LT	---	1	---	---	3	---	---	---	CURB & GUTTER SPOT REPLACEMENT
464+09	-	464+54	USH 45 RT	---	2	---	---	4	---	---	---	CURB & GUTTER SPOT REPLACEMENT
465+19	-	465+35	USH 45 LT	---	1	---	---	3	---	---	---	CURB & GUTTER SPOT REPLACEMENT
465+51	-	465+53	USH 45 RT	---	1	---	---	1	---	---	---	CURB & GUTTER SPOT REPLACEMENT
110+98	-	112+04	USH 45	---	49	---	122	---	---	---	---	CULVERT REPLACEMENT
394+47	-	395+53	USH 45	---	49	---	123	---	---	---	---	CULVERT REPLACEMENT
448+87	-	450+00	USH 45	---	77	---	191	---	---	---	---	CULVERT REPLACEMENT
631+54	-	632+60	USH 45	---	96	---	238	---	---	---	---	CULVERT REPLACEMENT
554+18	-	558+49	USH 45 RT	---	26	15	31	---	---	---	---	GUARDRAIL
554+51	-	558+95	USH 45 LT	---	24	13	28	---	---	---	---	GUARDRAIL
109+15	-	109+33	USH 45, LT	---	---	---	3	---	---	---	---	TRAIL & SNOWMOBILE CROSSING
109+18	-	109+40	USH 45, RT	---	---	---	4	---	---	---	---	TRAIL & SNOWMOBILE CROSSING
			UNDISTRIBUTED	---	---	---	---	370	---	---	---	MINOR REPAIRS AND RAMPS
CATEGORY 0010 TOTAL				**3,659**	**23,786**	**36,377**	**740**	**1,004**	**0**	**0**	**0**	
CATEGORY 0020												
440+75	-	447+68	USH 45/CTH N WIDENING LT	5	85	48	101	---	---	---	---	
440+75	-	447+67	USH 45/CTH N WIDENING RT	5	72	41	86	---	---	---	---	
447+93	-	455+12	USH 45/CTH N WIDENING LT	6	97	54	115	---	---	---	---	
447+98	-	455+12	USH 45/CTH N WIDENING RT	5	88	50	105	---	---	---	---	
443+00	-	445+50	USH 45	11	155	107	---	---	---	---	---	CENTERLINE PROFILE ADJUSTMENT
442+21	-	443+03	USH 45 LT	---	---	---	---	---	23	---	---	DRIVEWAY
443+42	-	443+63	USH 45 RT	---	---	---	---	---	3	---	---	DRIVEWAY
445+01	-	445+55	USH 45 RT	---	---	---	---	---	10	---	---	DRIVEWAY
445+62	-	446+03	USH 45 LT	---	---	---	---	---	2	---	---	DRIVEWAY
19+00	-	19+28	CTH N (WEST) RT	---	---	---	---	---	3	---	---	DRIVEWAY
11+06	-	11+50	CTH N (EAST) RT	---	---	---	---	---	8	---	---	DRIVEWAY
449+25	-	449+78	USH 45 LT	---	---	---	---	---	3	---	---	FIELD ENTRANCE
452+55	-	453+43	USH 45 LT	---	---	---	---	---	28	---	---	DRIVEWAY
452+64	-	453+41	USH 45 RT	---	---	---	---	---	21	---	---	DRIVEWAY
448+13	-	450+75	USH 45 RT	---	---	---	---	---	---	40	118	TEMPORARY WIDENING AT CULVERT
			UNDISTRIBUTED	---	---	---	---	20	---	----	---	MINOR REPAIRS AND RAMPS
CATEGORY 0020 TOTAL				**32**	**497**	**300**	**407**	**20**	**101**	**40**	**118**	
PROJECT 1600-02-70 TOTAL				**3,691**	**24,283**	**36,677**	**1,147**	**1,024**	**101**	**40**	**118**	

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PWL MIXTURE USE TABLE

THE FOLLOWING ACCEPTANCE CRITERIA ARE APPLICABLE FOR THIS PROJECT:

								QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
STATION	- STATION	LOCATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
42+50	- 404+65	USH 45 DRIVING LANES & PASSING LANES	UPPER LAYER	MILLED EXISTING HMA	4 MT 58-28 S	27,750	2.0"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
42+50	- 404+65	USH 45 SHOULDERS	UPPER LAYER	MILLED EXISTING HMA	4 MT 58-28 S	6,308	2.0"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
42+50	- 404+65	SIDE ROADS	UPPER LAYER	MILLED EXISTING HMA	4 MT 58-28 S	1,719	2.0"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
440+75	- 455+12	USH 45 & CTH N INTERSECTION	UPPER LAYER	MILLED EXISTING HMA	4 MT 58-28 S	601	2.0"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
440+75	- 455+12	USH 45 & CTH N WIDENING	UPPER LAYER	ASPHALTIC SURFACE	4 MT 58-28 S	96	2.0"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
440+75	- 455+12	USH 45 & CTH N WIDENING	ASPHALTIC SURFACE	BAD 1.25"	ASPHALTIC SURFACE	204	4.25	QMP AS PER SS 460	ACCEPTANCE TESTING BY ORDINARY COMPACTION
554+18	- 558+95	MGS REPLACEMENT	UPPER LAYER	ASPHALTIC SURFACE	4 MT 58-28 S	9	2.0"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
554+18	- 558+95	MGS REPLACEMENT	ASPHALTIC SURFACE	BAD 1.25"	ASPHALTIC SURFACE	19	4.25	QMP AS PER SS 460	ACCEPTANCE TESTING BY ORDINARY COMPACTION
		VARIOUS CULVERT REPLACEMENTS	ASPHALTIC SURFACE	BASE AGGREGATE	ASPHALTIC SURFACE	740	6.25" TOTAL	QMP AS PER SS 465	ACCEPTANCE TESTING BY ORDINARY COMPACTION
		LONGITUDINAL JOINT REPLACEMENTS	ASPHALTIC SURFACE PATCHING	MILLED EXISTING HMA	ASPHALTIC SURFACE	615	2.0"	QMP AS PER SS 465	ACCEPTANCE TESTING BY ORDINARY COMPACTION
		CURB AND GUTTER REPLACEMENTS	ASPHALTIC SURFACE PATCHING	BASE AGGREGATE	ASPHALTIC SURFACE	19	6.25" TOTAL	QMP AS PER SS 465	ACCEPTANCE TESTING BY ORDINARY COMPACTION

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ASPHALTIC RUMBLE STRIPS

STATION	-	STATION	LOCATION	465.0560 ASPHALTIC RUMBLE STRIPS, CENTERLINE LF	REMARKS
42+50	-	50+75	USH 45 CENTERLINE	825	
54+80	-	67+76	USH 45 CENTERLINE	1,296	
69+76	-	86+25	USH 45 CENTERLINE	1,649	
110+37	-	159+50	USH 45 CENTERLINE	4,913	
163+50	-	171+29	USH 45 CENTERLINE	779	
175+29	-	186+00	USH 45 CENTERLINE	1,071	
190+00	-	233+50	USH 45 CENTERLINE	4,350	
237+50	-	249+97	USH 45 CENTERLINE	1,247	
252+07	-	286+70	USH 45 CENTERLINE	3,463	
290+77	-	326+32	USH 45 CENTERLINE	3,555	
330+32	-	339+77	USH 45 CENTERLINE	945	
343+77	-	353+12	USH 45 CENTERLINE	935	
357+12	-	379+62	USH 45 CENTERLINE	2,250	
383+62	-	411+87	USH 45 CENTERLINE	2,825	
413+87	-	421+11	USH 45 CENTERLINE	724	
425+11	-	440+50	USH 45 CENTERLINE	1,539	
476+33	-	497+79	USH 45 CENTERLINE	2,146	
506+11	-	524+15	USH 45 CENTERLINE	1,804	
528+21	-	550+57	USH 45 CENTERLINE	2,236	
554+57	-	563+70	USH 45 CENTERLINE	913	
567+70	-	603+40	USH 45 CENTERLINE	3,570	
607+43	-	629+63	USH 45 CENTERLINE	2,220	
633+63	-	656+08	USH 45 CENTERLINE	2,245	
660+08	-	735+21	USH 45 CENTERLINE	7,513	
739+21		748+44	USH 45 CENTERLINE	923	
752+59	-	795+36	USH 45 CENTERLINE	4,277	
371+03	-	404+65	USH 45 CENTERLINE	3,362	
PROJECT 1600-02-70 TOTAL				**63,575**	

CULVERTS

STATION	CULVERT NUMBER	APRON ENDWALLS FOR CULVERT PIPE 520.1012 12-INCH EACH	520.1015 15-INCH EACH	520.1018 18-INCH EACH	520.1024 24-INCH EACH	CULVERT PIPE REINFORCED CONCRETE CLASS IV 522.0415 15-INCH LF	522.0418 18-INCH LF	522.0424 24-INCH LF	CULVERT PIPE REINF CONC HORIZ ELL HE-IV 522.2419 19X30-INCH LF	APRON ENDWALLS FOR CULVERT PIPE REINF CONC HORIZ ELL 522.2619 19X30-INCH EACH	CONCRETE COLLARS FOR PIPE 520.8000 EACH	CLEANING CULVERT PIPES 520.8700 EACH	TELEVISE CULVERT PIPES SPV.0060.02 EACH	GALVANIZED STEEL TRASH GUARD 12-INCH SPV.0060.03 EACH
CATEGORY 0010														
111+51	58045007425	---	---	---	2	---	---	58	---	---	---	---	---	---
395+00	58045005904	---	---	---	2	---	---	68	---	---	---	---	---	---
418+00	58045089284	2	---	---	---	---	---	---	---	---	2	1	1	2
449+44	58045005909	---	---	---	---	---	---	---	78	2	---	---	---	---
526+15	KILDEER LN	---	---	---	---	---	---	---	---	---	---	1	---	---
526+51	58045005914	---	---	---	---	---	---	---	---	---	---	1	---	---
632+08	58045005921	---	---	---	2	---	---	96	---	---	---	---	---	---
CATEGORY 0010 TOTAL		**2**	**0**	**0**	**6**	**0**	**0**	**222**	**78**	**2**	**2**	**3**	**1**	**2**
CATEGORY 0020														
442+61	DRIVEWAY LT	---	---	2	---	---	68	---	---	---	---	---	---	---
449+50	FIELD ENTRANCE LT	---	---	2	---	---	28	---	---	---	---	---	---	---
453+00	DRIVEWAY LT	---	---	2	---	---	62	---	---	---	---	---	---	---
453+00	DRIVEWAY RT	---	2	---	---	62	---	---	---	---	---	---	---	---
CATEGORY 0020 TOTAL		**0**	**2**	**6**	**0**	**62**	**158**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PROJECT 1600-02-70 TOTAL		**2**	**2**	**6**	**6**	**62**	**158**	**222**	**78**	**2**	**2**	**3**	**1**	**2**

CULVERT LINING

STATION	CULVERT NUMBER	CULVERT PIPE LINERS 520.9700.S.01 24-INCH LF	520.9700.S.02 36-INCH LF	CLEANING CULVERT PIPES FOR LINER VERIFICATION 520.9750.S EACH	APRON ENDWALLS FOR CULVERT PIPE REINF CONC 522.1036 36-INCH EACH	EXISTING PIPE INFORMATION MATERIAL	DIAMETER (IN)	SLOPE %	PROPOSED LINER INFORMATION MIN. DIA. (IN)	NOTES
46+30	58045005885	90	---	1	---	RCP	24	1.7	15	
503+47	58045005913	---	108	1	1	RCP	36	0.9	27	REPLACE RT ENDWALL
718+33	58045005929	56	---	1	---	RCP	24	2.3	15	
PROJECT 1600-02-70 TOTAL		**146**	**108**	**3**	**1**					

CONCRETE CURB & GUTTER

STATION	-	STATION	LOCATION	465.0315 ASPHALTIC FLUMES SY	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	611.8115 ADJUSTING INLET COVERS EACH
CATEGORY 0010							
456+02	-	456+12	USH 45 RT	---	10	---	1
457+40	-	457+50	USH 45 RT	---	10	---	---
458+85	-	459+00	USH 45 RT	---	15	---	---
462+69	-	463+24	USH 45 RT	---	55	---	1
462+81	-	462+91	USH 45 LT	---	10	---	1
463+60	-	463+90	USH 45 LT	---	30	---	---
463+80	-	464+25	USH 45 RT	---	45	---	---
464+85	-	464+95	USH 45 RT	---	10	---	---
465+05	-	465+15	USH 45 RT	---	10	---	---
465+20	-	465+37	USH 45 LT	---	26	---	---
465+52	-	465+55	USH 45 RT	---	10	---	---
631+88	-	632+41	USH 45 LT	---	---	61	---
CATEGORY 0010 TOTAL				**0**	**231**	**61**	**3**
CATEGORY 0020							
443+36	-	447+75	RT	26	---	533	---
447+26	-	447+75	LT	13	---	88	---
447+95	-	448+54	LT	---	---	86	---
448+00	-	449+34	RT	---	---	153	---
CATEGORY 0020 TOTAL				**39**	**0**	**860**	**0**
PROJECT 1600-02-70 TOTAL				**39**	**231**	**921**	**3**

GUARDRAIL

STATION	-	STATION	OFFSET	201.0210 GRUBBING SY	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING EACH	614.0396 GUARDRAIL MOW STRIP ASPHALT SY	614.0397 GUARDRAIL MOW STRIP EMULSIFIED ASPHALT SY	614.2300 MGS GUARDRAIL 3 LF	614.2330 MGS GUARDRAIL 3 K LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
554+15	-	555+33	RT	---	1	---	27	---	---	1
555+33	-	556+46	RT	---	---	42	---	112.5	---	---
556+46	-	557+58	RT	---	---	42	---	---	112.5	---
557+58	-	557+96	RT	---	---	14	---	37.5	---	---
557+96	-	559+31	RT	---	1	---	27	---	---	1
554+51	-	555+79	LT	---	1	---	27	---	---	1
555+79	-	556+42	LT	---	---	23	---	62.5	---	---
556+42	-	557+54	LT	---	---	42	---	---	112.5	---
557+54	-	558+42	LT	---	---	32	---	87.5	---	---
558+42	-	559+68	LT	---	1	---	27	---	---	1
557+25	-	557+75	LT	20	---	---	---	---	---	---
PROJECT 1600-02-70 SUBTOTAL				**20**	**4**	**194**	**109**	**300.0**	**225.0**	**4**

BARRIER SYSTEM GRADING SHAPING FINISHING, ITEM 614.0010 *

STATION	-	STATION	OFFSET	EXCAVATION COMMON CY	WASTE CY	BORROW CY	TOPSOIL SY	FERTILIZER TYPE B CWT	SEEDING MIXTURE NO. 30 LB	SEED WATER MGAL	EROSION MAT URBAN CLASS I TYPE B SY	CONSTRUCTION STAKING SLOPE STAKES LF
554+50	-	559+68	LT	315	107	---	1300	0.9	24	29	1300	518
554+15	-	559+31	RT	284	---	24	1480	1.0	27	33	1480	516
PROJECT 1600-02-70 SUBTOTAL				**599**	**107**	**24**	**2780**	**1.9**	**51**	**62**	**2780**	**1034**

* ITEMS AND QUANTITIES IN THIS TABLE LISTED FOR BID INFORMATION ONLY

RIPRAP & GEOTEXTILE

STATION	-	STATION	LOCATION	606.0100 RIPRAP LIGHT CY	645.0130 GEOTEXTILE TYPE R SY
503+32	-		RT	3	4
PROJECT 1600-02-70 TOTAL				**3**	**4**

MAINTENANCE AND REPAIR OF HAUL ROADS

PROJECT	618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS EACH
1600-02-70	1
PROJECT 1600-02-70 SUBTOTAL	1

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EROSION CONTROL MOBILIZATION

	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH
CATEGORY 0010		
	4	4
CATEGORY 0010 TOTAL	**4**	**4**
CATEGORY 0020		
	2	2
CATEGORY 0020 TOTAL	**2**	**2**
PROJECT 1600-02-70 TOTAL	**6**	**6**

LANDSCAPING

STATION - STATION	LOCATION	625.0100 TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2027 EROSION MAT CLASS II TYPE C SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0500 SEED WATER MGAL
CATEGORY 0010									
46+14 - 46+44	RT	140	---	---	140	0.1	3	--	3.1
46+17 - 46+47	LT	140	---	---	140	0.1	3	--	3.1
109+68 - 113+39	LT	598	---	590	8	0.4	11	--	14
109+86 - 113+21	RT	768	---	760	8	0.5	14	--	18
392+81 - 397+18	LT	1,038	---	1,030	8	0.7	19	--	24
393+21 - 396+04	RT	468	---	460	8	0.3	9	--	11
462+80 - 465+53	LT/RT	18	18	---	---	0.1	1	--	0.4
503+08 - 503+47	RT	140	---	---	140	0.1	3	--	3.1
503+47 - 503+85	LT	80	---	---	80	0.1	2	--	1.8
630+06 - 633+84	RT	568	---	560	8	0.4	11	--	13
631+85 - 632+54	LT	138	---	130	8	0.1	3	--	3.1
718+18 - 718+48	LT	140	---	---	140	0.1	3	--	3.1
718+18 - 718+48	RT	90	---	---	90	0.1	2	--	2.0
UNDISTRIBUTED		1082	5	883	195	0.8	21	0	25
CATEGORY 0010 TOTAL		**5,408**	**23**	**4,413**	**973**	**3.9**	**105**	**0**	**124**
CATEGORY 0020									
440+74 - 455+98		5,500	---	5,500	---	3.5	--	99	124
UNDISTRIBUTED		1,375	0	1,375	0	0.9	0	25	31
CATEGORY 0020 TOTAL		**6,875**	**0**	**6,875**	**0**	**4.4**	**0**	**124**	**154**
PROJECT 1600-02-70 TOTAL		**12,283**	**23**	**11,288**	**973**	**8.3**	**105**	**124**	**279**

EROSION CONTROL

STATION	-	STATION	LOCATION	CULVERT NUMBER	* 204.9090.S.01 REMOVING SILT FENCE LF	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.7015 INLET PROTECTION TYPE C EACH	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH	NOTES
CATEGORY 0010											
46+10	-	46+50	LT & RT	---	370	---	370	---	---	---	SILT FENCE INSTALLED BY OTHERS
46+10	-	46+50	LT & RT	58045005885	---	---	---	---	3	---	
108+70	-		LT & RT	---	---	---	---	---	---	40	2 DITCH CHECKS, 20 BAGS PER DITCH CHECK
109+30	-	113+40	LT & RT	---	885	---	885	---	---	---	SILT FENCE INSTALLED BY OTHERS
111+51	-		LT & RT	58045007425	---	---	---	---	3	60	3 DITCH CHECKS, 20 BAGS PER DITCH CHECK
392+59	-	397+61	LT & RT	---	865	---	865	---	---	---	SILT FENCE INSTALLED BY OTHERS
395+00	-		LT & RT	58045005904	---	---	---	---	3	60	3 DITCH CHECKS, 20 BAGS PER DITCH CHECK
414+14	-	420+51	LT	58045089284	---	---	---	---	1	20	1 DITCH CHECK, 20 BAGS PER DITCH CHECK
462+75	-		RT	---	---	---	---	1	---	---	
462+87	-		LT	---	---	---	---	1	---	---	
502+72	-	504+20	LT & RT	---	505	---	505	---	---	---	SILT FENCE INSTALLED BY OTHERS
502+72	-	504+20	LT & RT	58045005913	---	---	---	---	7	20	1 DITCH CHECK, 20 BAGS PER DITCH CHECK
525+20	-	527+20	LT & RT	---	490	---	490	---	---	---	SILT FENCE INSTALLED BY OTHERS
525+20	-	527+20	LT & RT	58045005914	---	---	---	---	10	100	5 DITCH CHECKS, 20 BAGS PER DITCH CHECK
554+00	-	559+47	MGS, RT	---	620	---	620	---	---	---	SILT FENCE INSTALLED BY OTHERS
554+37	-	559+82	MGS, LT	---	615	---	615	---	---	---	SILT FENCE INSTALLED BY OTHERS
630+50	-	632+58	LT & RT	---	575	---	575	---	---	---	SILT FENCE INSTALLED BY OTHERS
631+85	-	632+58	LT & RT	58045005921	---	---	---	---	3	60	3 DITCH CHECKS, 20 BAGS PER DITCH CHECK
718+15	-	718+55	LT & RT	58045005929	---	---	---	---	3	20	1 DITCH CHECK, 20 BAGS PER DITCH CHECK
UNDISTRIBUTED					1230	0	1230	0	15	150	
CATEGORY 0010 TOTAL					**6,155**	**0**	**6,155**	**2**	**48**	**530**	
CATEGORY 0020											
440+60	-	442+45	LT & RT	N/A	400	---	400	---	---	---	SILT FENCE INSTALLED BY OTHERS
442+61	-		DRIVEWAY, LT	N/A	---	---	---	---	2	40	2 DITCH CHECKS, 20 BAGS PER DITCH CHECK
447+54	-		DRIVEWAY, RT	N/A	---	---	---	---	2	---	
449+44	-		LT & RT	58045005909	---	---	---	---	5	40	2 DITCH CHECKS, 20 BAGS PER DITCH CHECK
449+50	-		FIELD ENTRANCE, LT	N/A	---	---	---	---	2	---	
453+00	-		DRIVEWAY, LT	N/A	---	---	---	---	2	40	2 DITCH CHECKS, 20 BAGS PER DITCH CHECK
453+00	-		DRIVEWAY, RT	N/A	---	---	---	---	2	40	2 DITCH CHECKS, 20 BAGS PER DITCH CHECK
446+75	-	447+50	SE QUADRANT	N/A	---	85	85	---	---	---	
446+45	-	447+50	SW QUADRANT	N/A	---	155	155	---	---	---	
448+25	-	449+25	NW QUADRANT	N/A	---	155	155	---	---	---	
448+00	-	449+40	NE QUADRANT	N/A	---	160	160	---	---	---	
440+74	-	455+98	LT & RT, INTERSECTION	N/A	---	---	---	---	---	240	3 DITCH CHECKS PER QUADRANT, 20 BAGS PER DITCH CHECK
UNDISTRIBUTED					0	140	140	0	4	100	
CATEGORY 0020 TOTAL					**400**	**695**	**1,095**	**0**	**19**	**500**	
PROJECT 1600-02-70 TOTAL					**6,555**	**695**	**7,250**	**2**	**67**	**1,030**	

* ALL SILT FENCE QUANTITIES LISTED UNDER 204.9090.S.01 REMOVING SILT FENCE IS INSTALLED BY OTHERS. PAYMENT FOR 204.9090.S.01 REMOVING SILT FENCE IS FOR REMOVAL OF FENCE ONLY. SEE NOTES AND EROSION CONTROL PLAN SHEETS.

PERMANENT SIGNING

SIGN NO.	STATION	OFFSET	SIGN CODE	SIZE IN	X	IN	638.2102 MOVING SIGNS TYPE II EACH	DESCRIPTION
CATEGORY 0010								
	109+25	LT	---	---	X	---	1	PERMIT REQUIRED, NO ATV SYMBOL
CATEGORY 0010 TOTAL							**1**	
CATEGORY 0020								
	NB USH 45	SOUTH LEG	---	---	X	---	1	← Business Dist, Bowler →
	NB USH 45	SOUTH LEG	---	---	X	---	1	COUNTY N ↔
	EB CTH N	WEST LEG	---	---	X	---	1	STOP
	EB CTH N	WEST LEG	---	---	X	---	1	USH 45 ↔
	EB CTH N	EAST LEG	---	---	X	---	1	COUNTY N ↑
	EB CTH N	EAST LEG	---	---	X	---	1	SPEED LIMIT 35
	WB CTH N	EAST LEG	---	---	X	---	1	STOP
	WB CTH N	EAST LEG	---	---	X	---	1	USH 45 ↔
	WB CTH N	WEST LEG	---	---	X	---	1	COUNTY N ↑
	NB USH 45	NORTH LEG	---	---	X	---	1	NORTH USH 45
	SB USH 45	NORTH LEG	---	---	X	---	1	COUNTY N ↔
	SB USH 45	NORTH LEG	---	---	X	---	1	SPEED LIMIT 45
CATEGORY 0020 TOTAL							**12**	
PROJECT 1600-02-70 TOTAL							**13**	

TRAFFIC CONTROL SIGNS FIXED MESSAGE

SIGN CODE	IN	X	IN	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	DESCRIPTION
G20-57C	72	X	36	18	HWY 45 ROAD WORK BEGINS XXX-XX
G20-57C	72	X	36	18	HWY 45 ROAD WORK BEGINS XXX-XX
PROJECT 1600-02-70 TOTAL				**36**	

TRAFFIC CONTROL

ROADWAY	LOCATION	TRAFFIC CONTROL	DAYS IN SERVICE	643.0300 TRAFFIC CONTROL DRUMS NO.	DAY	643.1070 TRAFFIC CONTROL CONES 42-INCH NO.	DAY	643.0900 TRAFFIC CONTROL SIGNS NO.	DAY
USH 45 STAGE 1	CULVERT REPLACEMENTS	ADVANCE WARNING SIGNS	20	---	---	---	---	10	200
	CULVERT REPLACEMENTS	TEMPORARY LANE SHIFT	20	30	600	---	---	---	---
	CULVERT REPLACEMENTS	LOOSE GRAVEL SIGNING	20	---	---	---	---	6	120
	CULVERT CLEANING AND LININGS	ADVANCE WARNING SIGNS	9	---	---	---	---	10	90
	CULVERT CLEANING AND LININGS	SHOULDER CLOSURES	9	15	135	---	---	1	9
USH 45 STAGE 2	CTH N INTERSECTION; CURB & GUTTER	ADVANCE WARNING SIGNS	25	---	---	---	---	10	250
	CTH N INTERSECTION; CURB & GUTTER	SHOULDER CLOSURES	25	30	750	---	---	1	25
	USH 45 & CTH N WIDENING	SEE PLAN SHEETS	25	177	4425	26	650	24	600
USH 45 STAGE 3	MILLING AND PAVING; TEMP. MARKING	ADVANCE WARNING SIGNS	31	---	---	---	---	47	1457
	LONGITUDINAL JOINT REPAIRS	ADVANCE WARNING SIGNS	20	---	---	---	---	10	200
	MILLING AND PAVING; TEMP. MARKING	MILLED SURFACES	31	---	---	---	---	8	248
USH 45 STAGE 4	GUARDRAIL, RUMBLE STRIPS, PERM. MARKING	ADVANCE WARNING SIGNS	11	---	---	---	---	47	517
	GUARDRAIL, RUMBLE STRIPS, PERM. MARKING	SHOULDER CLOSURES	4	15	60	---	---	1	4
PROJECT 1600-02-70 TOTAL					**5,970**		**650**		**3,720**

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PAVEMENT MARKING ITEMS

STATION	-	STATION	LOCATION	646.2020 MARKING LINE EPOXY 6-INCH YELLOW SOLID LF	646.2020 MARKING LINE EPOXY 6-INCH YELLOW 12.5' LINE - 37.5' GAP LF	646.2020 MARKING LINE EPOXY 6-INCH WHITE SOLID LF	646.2020 MARKING LINE EPOXY 6-INCH WHITE 3' LINE - 9' GAP LF	646.2020 MARKING LINE EPOXY 6-INCH WHITE 12.5' LINE - 37.5' GAP LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH YELLOW SOLID LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH YELLOW 12.5' LINE - 37.5' GAP LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH WHITE SOLID LF	646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH WHITE SOLID LF	646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH WHITE 3' LINE - 9' GAP LF	646.5020 MARKING ARROW EPOXY TYPE 2 WHITE EACH	646.5120 MARKING WORD EPOXY ONLY WHITE EACH
CATEGORY 0010															
42+50	-	440+75	USH 45	---	---	---	387	2,340	51,300	5,450	77,200	1,700	---	6	5
			WITT-BIRN TOWNLINE RD	67	17	---	---	---	---	---	---	---	---	---	---
			CEDAR ST	63	---	20	---	---	---	---	---	---	---	---	---
455+13	-	404+65		---	---	---	475	2,120	39,100	7,690	75,500	565	---	---	---
CATEGORY 0010 TOTAL						**5,489**				**256,240**			**2,265**	**6**	**5**
CATEGORY 0020															
440+75	-	455+13	USH 45	---	---	---	13	---	4,310	---	2,600	425	75	4	2
18+64	-	19+70	CTH N WEST OF USH 45	213	---	116	---	---	---	---	---	---	---	---	---
10+30	-	12+10	CTH N EAST OF USH 45	359	---	191	---	---	---	---	---	---	---	---	---
CATEGORY 0020 TOTAL						**892**				**6,910**			**500**	**4**	**2**
PROJECT 1600-02-70 TOTAL						**6,381**				**263,150**			**2,765**	**10**	**7**

PAVEMENT MARKING ITEMS CONTINUED

STATION	-	STATION	LOCATION	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH YELLOW LF	646.7220 MARKING CHEVRON EPOXY 24-INCH WHITE LF	646.6466 COLD WEATHER MARKING EPOXY 6-INCH YELLOW SOLID LF	646.6466 COLD WEATHER MARKING EPOXY 6-INCH YELLOW 12.5' LINE - 37.5' GAP LF	646.6466 COLD WEATHER MARKING EPOXY 6-INCH WHITE SOLID LF	646.6466 COLD WEATHER MARKING EPOXY 6-INCH WHITE 3' LINE - 9' GAP LF	646.6466 COLD WEATHER MARKING EPOXY 6-INCH WHITE 12.5' LINE - 37.5' GAP LF	646.6470 COLD WEATHER MARKING EPOXY 10-INCH WHITE SOLID LF	646.6470 COLD WEATHER MARKING EPOXY 10-INCH WHITE 3' LINE - 9' GAP LF	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH YELLOW SOLID LF	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH YELLOW 4' LINE - 46' GAP LF	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH WHITE SOLID LF	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH WHITE 3' LINE - 9' GAP LF	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH WHITE 4' LINE - 46' GAP LF
CATEGORY 0010																			
42+50	-	440+75	USH 45	---	191	188	5,130	545	7,720	40	235	170	---	102,600	3,500	3,400	774	1,500
			WITT-BIRN TOWNLINE RD	31	---	---	5	---	---	---	---	---	---	134	20	---	---	---
			CEDAR ST	---	---	---	5	---	---	---	---	---	---	126	---	40	---	---
455+13	-	404+65		---	---	---	3,910	770	7,550	50	210	60	---	78,200	4,940	1,130	950	1,360
CATEGORY 0010 TOTAL				**31**	**191**	**188**			**26,170**			**230**		**189,520**		**9,154**		
CATEGORY 0020																			
440+75	-	455+13	USH 45	---	225	---	430	---	260	---	---	50	10	8,620	---	6,050	176	---
18+64	-	19+70	CTH N WEST OF USH 45	33	---	---	20	---	10	---	---	---	---	426	---	232	---	---
10+30	-	12+10	CTH N EAST OF USH 45	33	---	---	35	---	20	---	---	---	---	718	---	382	---	---
CATEGORY 0020 TOTAL				**66**	**225**	**0**			**775**			**60**		**9,764**		**6,840**		
PROJECT 1600-02-70 TOTAL				**97**	**416**	**188**			**26,945**			**290**		**199,284**		**15,994**		

CONSTRUCTION STAKING

STATION	-	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER CURB & GUTTER LF	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9910.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL 1600-02-70 LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
CATEGORY 0010										
42+50	-	249+97	USH 45	---	---	---	---	20,747	---	---
252+07	-	801+77	USH 45	---	---	---	---	54,970	---	---
364+40	-	404+65	USH 45	---	---	---	---	4,025	---	---
110+98	-	112+04	USH 45	106	106	---	1	---	---	106
394+47	-	395+53	USH 45	106	106	---	1	---	---	106
448+87	-	450+00	USH 45	113	113	---	1	---	---	113
631+54	-	632+60	USH 45	106	106	---	1	---	---	106
456+02	-	456+12	USH 45 RT	---	---	10	---	---	---	---
457+40	-	457+50	USH 45 RT	---	---	10	---	---	---	---
458+85	-	459+00	USH 45 RT	---	---	15	---	---	---	---
462+69	-	463+24	USH 45 RT	---	---	55	---	---	---	---
462+81	-	462+91	USH 45 LT	---	---	10	---	---	---	---
463+60	-	463+90	USH 45 LT	---	---	30	---	---	---	---
463+80	-	464+25	USH 45 RT	---	---	45	---	---	---	---
464+85	-	464+95	USH 45 RT	---	---	10	---	---	---	---
465+05	-	465+15	USH 45 RT	---	---	10	---	---	---	---
465+20	-	465+37	USH 45 LT	---	---	26	---	---	---	---
465+52	-	465+55	USH 45 RT	---	---	10	---	---	---	---
631+77	-	632+41	MARSH RD	---	---	61	---	---	---	---
PROJECT				---	---	---	---	---	1	---
CATEGORY 0010 TOTAL				**431**	**431**	**292**	**4**	**79,742**	**1**	**431**
CATEGORY 0020										
440+75	-	447+70	USH 45	695	695	---	---	---	---	695
443+36	-	447+75	USH 45 RT	---	---	533	---	---	---	---
447+26	-	447+75	USH 45 LT	---	---	88	---	---	---	---
447+93	-	455+12	USH 45	719	719	---	---	---	---	719
447+95	-	448+54	USH 45 LT	---	---	86	---	---	---	---
448+00	-	449+34	USH 45 RT	---	---	153	---	---	---	---
18+47	-	19+80	CTH N	133	133	---	---	---	---	133
10+19	-	12+17	CTH N	198	198	---	---	---	---	198
442+63			DRIVEWAY LT	---	---	---	1	---	---	---
453+00			DRIVEWAY LT	---	---	---	1	---	---	---
453+00			DRIVEWAY RT	---	---	---	1	---	---	---
CATEGORY 0020 TOTAL				**1,745**	**1,745**	**860**	**3**	**0**	**0**	**1,745**
PROJECT 1600-02-70 TOTAL				**2,176**	**2,176**	**1,152**	**7**	**79,742**	**1**	**2,176**

SAWING

STATION	-	STATION	OFFSET	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
CATEGORY 0010							
89+75	-	91+50	RT	USH 45	150	---	WHITETAIL CROSSING ENTRANCE CE (SOUTH)
95+75	-	97+25	RT	USH 45	140	---	WHITETAIL CROSSING ENTRANCE CE (NORTH)
456+02	-	456+12	RT	USH 45	14	5	CURB & GUTTER REPLACEMENT
457+40	-	457+50	RT	USH 45	14	5	CURB & GUTTER REPLACEMENT
458+85	-	459+00	RT	USH 45	19	5	CURB & GUTTER REPLACEMENT
462+69	-	463+24	RT	USH 45	59	5	CURB & GUTTER REPLACEMENT
462+81	-	462+91	LT	USH 45	14	5	CURB & GUTTER REPLACEMENT
463+60	-	463+90	LT	USH 45	34	5	CURB & GUTTER REPLACEMENT
463+80	-	464+25	RT	USH 45	49	5	CURB & GUTTER REPLACEMENT
464+85	-	464+95	RT	USH 45	14	5	CURB & GUTTER REPLACEMENT
465+05	-	465+15	RT	USH 45	14	5	CURB & GUTTER REPLACEMENT
465+20	-	465+37	LT	USH 45	30	5	CURB & GUTTER REPLACEMENT
465+52	-	465+55	RT	USH 45	14	5	CURB & GUTTER REPLACEMENT
110+98	-		LT/RT	USH 45	30	---	CULVERT REPLACEMENT
112+03	-		LT/RT	USH 45	30	---	CULVERT REPLACEMENT
394+48	-		LT/RT	USH 45	30	---	CULVERT REPLACEMENT
395+53	-		LT/RT	USH 45	30	---	CULVERT REPLACEMENT
448+76	-		LT/RT	USH 45	39	---	CULVERT REPLACEMENT
449+97	-		LT/RT	USH 45	40	---	CULVERT REPLACEMENT
554+67	-	558+40	RT	USH 45	380	---	GUARDRAIL
555+52	-	558+99	LT	USH 45	350	---	GUARDRAIL
631+55	-		LT/RT	USH 45/MARSH RD	110	3	CULVERT REPLACEMENT
632+60	-		LT/RT	USH 45	46	---	CULVERT REPLACEMENT
CATEGORY 0010 TOTAL					**1,650**	**58**	
CATEGORY 0020							
446+96	-	447+75	RT	USH 45/CTH N	110	---	EDGE OF PAVEMENT WIDENING
447+14	-	447+75	LT	USH 45/STATE RD	120	---	EDGE OF PAVEMENT WIDENING
447+90	-	448+39	LT	USH 45/STATE RD	140	---	EDGE OF PAVEMENT WIDENING
447+90	-	449+44	RT	USH 45/CTH N	190	---	EDGE OF PAVEMENT WIDENING
11+59		12+10	RT	CTH N	52	---	EDGE OF PAVEMENT WIDENING
18+60		18+89	RT	STATE RD	31	---	EDGE OF PAVEMENT WIDENING
445+05	-	445+51	RT	DRIVEWAY	46	---	DRIVEWAY
452+75	-	453+24	LT	DRIVEWAY	49	---	DRIVEWAY
452+85	-	453+18	RT	DRIVEWAY	33	---	DRIVEWAY
11+11	-	11+46	RT	DRIVEWAY	34	---	DRIVEWAY
CATEGORY 0020 TOTAL					**805**	**0**	
CONTRACT TOTAL					**2,455**	**58**	

3

MONUMENTS

CORNER NUMBER	SECTION	TOWNSHIP	RANGE	SPV.0060.01 REESTABLISH SECTION CORNER MONUMENT	621.0100 LANDMARK REFERENCE MONUMENTS
E5	5	29N	11E	1	4
G5	8	29N	11E	1	4
J5	8	29N	11E	1	4
L5	17	29N	11E	1	4
N5	17	29N	11E	1	4
Q5	20	29N	11E	1	4
S5	29	29N	11E	1	4
U5	29	29N	11E	1	4
W5	29	29N	11E	1	4
Y5	32	29N	11E	1	4
1A5	6	28N	11E	1	4
1C5	6	28N	11E	1	4
1E5	7	28N	11E	1	4
1G5	7	28N	11E	1	4
1J5	17	28N	11E	1	4
1L5	17	28N	11E	1	4
1N5	20	28N	11E	1	4
1Q5	19	28N	11E	1	4
1S5	30	28N	11E	1	4
1U5	30	28N	11E	1	4
1W7	32	28N	11E	1	4
1W9	32	28N	11E	1	4
PROJECT 1600-02-70 TOTAL				**22**	**88**

NOTE: ALL MONUMENTS ARE BERNTSEN STEEL NAIL MARKERS

3

GRADING SHAPING AND FINISHING

SPV.0060.04
CULVERT

STATION	-	STATION	LOCATION	EACH	REMARKS
418+00	-		USH 45, LT	1	CLEANING, TELEVISING, ENDWALLS, AND TRASH GUARD
503+50	-		USH 45, LT/RT	1	CLEANING, LINING, AND RT ENDWALL
526+00	-		USH 45, LT/RT	1	CLEANING
526+51	-		USH 45, LT/RT	1	CLEANING
718+00	-		USH 45, LT/RT	1	CLEANING AND LINING
PROJECT 1600-02-70 SUBTOTAL				**5**	

GRADING SHAPING FINISHING CULVERT, ITEM SPV.0060.04 *

STATION	-	STATION	OFFSET	EXCAVATION COMMON CY	WASTE CY	BORROW CY	TOPSOIL SY	FERTILIZER TYPE B CWT	SEEDING MIXTURE NO. 30 LB	SEED WATER MGAL	EROSION MAT URBAN CLASS I TYPE B SY
418+00	-		LT	30	5	25	90	0.1	2	2	90
503+50	-		LT/RT	60	10	50	180	0.1	4	4	180
526+00	-		LT/RT	50	10	40	150	0.1	3	3	150
526+51	-		LT/RT	35	5	30	100	0.1	2	2	100
718+00	-		LT/RT	45	10	35	140	0.1	3	3	140
PROJECT 1600-02-70 SUBTOTAL				**220**	**40**	**180**	**660**	**0.5**	**14**	**15**	**660**

* ITEMS AND QUANTITIES IN THIS TABLE LISTED FOR BID INFORMATION ONLY.
ASSUMES A MAXIMUM WIDTH OF 8' (4' LT AND 4' RT OF DITCH CL), A MAXIMUM EXCAVATION DEPTH OF 1', AND A MAXIMUM LENGTH OF 100' AT EACH CULVERT END (50' IN EACH DIRECTION ALONG THE DITCH, WHERE APPLICABLE) FOR DITCH GRADING AND SHAPING.

TRAIL CROSSINGS

STATION	-	STATION	LOCATION	OFFSET	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	602.0415 CONCRETE SIDEWALK 6-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	644.1440 TEMPORARY PEDESTRIAN SURFACE MATTING SF	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF	SPV.0060.05 GRADING SHAPING FINISHING TRAIL CROSSING EACH	SPV.0180.02 PROTECTIVE THERMOPLASTIC COATING AT SNOWMOBILE CROSSINGS SY
	109+28		USH 45, MOUNTAIN BAY STATE TRAIL	LT & RT	1	---	---	---	---	---	55
109+15	-	109+33	USH 45, MOUNTAIN BAY STATE TRAIL	LT	---	75	20	175	40	1	---
109+18	-	109+40	USH 45, MOUNTAIN BAY STATE TRAIL	RT	---	75	20	180	40	1	---
	459+00		USH 45, ELM ST	LT & RT	---	---	---	---	---	---	90
	405+15		USH 45, OLD 26 RD	LT & RT	---	---	---	---	---	---	75
PROJECT 1600-02-70 SUBTOTAL					**1**	**150**	**40**	**355**	**80**	**2**	**220**

GRADING SHAPING FINISHING TRAIL CROSSING, ITEM SPV.0060.05 *

STATION	-	STATION	OFFSET	EXCAVATION COMMON CY	WASTE CY	BORROW CY	TOPSOIL SY	FERTILIZER TYPE B CWT	SEEDING MIXTURE NO. 30 LB	SEED WATER MGAL	EROSION MAT URBAN CLASS I TYPE B SY
109+15	-	109+33	LT	5	1	4	40	0.1	1	1	40
109+18	-	109+40	RT	6	1	5	40	0.1	1	1	40
PROJECT 1600-02-70 SUBTOTAL				**11**	**2**	**9**	**80**	**0.2**	**2**	**2**	**80**

* ITEMS AND QUANTITIES IN THIS TABLE LISTED FOR BID INFORMATION ONLY.

TRANSPORTATION PROJECT PLAT NO: 1600-02-20 - 4.01

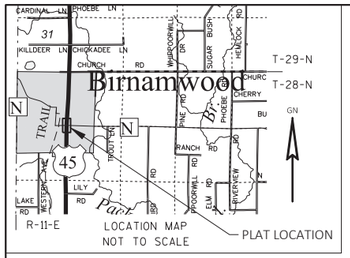
THAT PART OF LOTS 1 AND 2, CSM 1590 BEING IN AND INCLUDING PART OF THE SW1/4 OF THE SW1/4 OF SECTION 5, PART OF LOTS 1 AND 2, CSM 921 LOCATED IN THE SE1/4 OF THE SE1/4 OF SECTION 6, PART OF THE NE1/4 OF THE NE1/4 OF SECTION 7 AND PART OF CSM 256 BEING IN AND INCLUDING PART OF THE NW1/4 OF THE NW1/4 OF SECTION 8; ALL IN T 28 N, R 11 E, VILLAGE OF BIRNAMWOOD, SHAWANO COUNTY, WISCONSIN.

RELOCATION ORDER USH 45 WITTENBERG - ANTIGO STH 29 TO LANGLADE COUNTY LINE SHAWANO COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1600-02-20-4.01
SHEET 1 OF 2
AMENDMENT NO:___



RW COORDINATE TABLE		
POINT	Y	X
400	325558.033	705730.359
401	325558.035	705730.233
402	325558.634	705670.285
403	325659.710	705671.296
404	326114.138	705684.978
405	326545.430	705721.891
406	326594.678	705734.991
407	326702.684	705742.113
408	326708.180	705782.562
409	326708.176	705782.691
410	326706.944	705822.568
411	326678.573	705830.854
412	326394.187	705812.170
413	326258.974	705813.347
414	326060.109	705802.534
415	326004.179	705853.301
418	325971.295	705849.016
419	325931.437	705843.822
420	325865.709	705775.307
421	325752.472	705772.631
422	325557.434	705790.279
424	325969.726	705571.008
431	325673.197	705731.421
432	325974.696	705738.911
433	326384.470	705807.523
434	326357.528	705805.753
435	326349.283	705809.220
436	326375.796	705710.746
437	325577.826	705770.437
1159	325833.463	705674.343
1160	325936.754	705572.392
1170	326002.699	705569.624

RW COURSE TABLE		
COURSE	BEARING	DISTANCE
1175-400	S00°31'43"W	416.82'
400-401	N89°25'39"W	0.13'
401-402	N89°25'39"W	59.95'
402-403	N00°34'21"E	101.08'
403-1159	SEE CURVE DATA	
1159-1160	N44°37'34"W	145.13'
1160-424	N02°24'11"W	33.00'
424-1170	N02°24'11"W	33.00'
1170-404	N45°59'20"E	160.39'
404-436	N05°37'28"E	262.92'
436-405	N03°45'32"E	170.00'
405-406	N14°53'45"E	50.96'
406-407	N03°46'22"E	108.24'
407-408	N82°15'48"E	40.82'
408-409	S88°13'52"E	0.13'
409-410	S88°13'52"E	39.90'
410-411	S16°16'54"E	29.56'
411-412	S03°45'32"W	285.00'
412-433	S25°33'37"W	10.77'
433-434	S03°45'32"W	27.00'
434-435	S22°48'22"E	8.94'
435-413	S02°36'58"E	90.40'
413-414	S03°06'44"W	199.16'
414-415	S42°13'45"E	75.53'
415-418	S07°25'26"W	33.16'
418-419	S07°25'26"W	40.20'
419-420	S46°11'23"W	94.94'
420-421	S01°21'13"W	113.27'
421-437	S00°43'11"W	174.66'
437-422	S44°13'05"E	28.45'
422-400	N89°25'39"W	59.92'
1175-432	S88°13'52"E	4.71'

BASIS OF EXISTING RIGHT OF WAY				
ROAD NAME	PROJECT/SURVEY	VOL.	PAGE	DOC.
USH 45	SAP 3555			
USH 45	1600-1-21			
USH 45	1600-1-29			
USH 45	CSM 256	1	273	342115
USH 45	CSM 921	3	279	431612
USH 45	CSM 1246	4	318	475716
USH 45	CSM 1495	5	343	495092
USH 45	CSM 1590	5	515	500366
USH 45	CSM 3668	16	20	650646
STATE ROAD	CSM 921	3	279	431612
STATE ROAD	CSM 1246	4	318	475716
STATE ROAD	CSM 1495	5	343	495092
CTH N	S 1211(2)			
CTH N	CSM 256	1	273	342115
CTH N	CSM 939	3	304	434119

SCALE, FEET
0 50 100
GN

PI STA = 447+81.15
Y = 325974.360
X = 705734.480
DELTA = 3°10'28" RT
D = 0°29'53"
T = 318.75'
L = 637.33'
R = 11503.33'
PC STA = 444+62.40
PT STA = 450+99.73

CURVE DATA	CURVE DATA	CURVE DATA
RL PC-431	431-432	432-RL PT
L=17.57'	L=301.60'	L=318.16'
LCH=17.57'	LCH=301.59'	LCH=318.15'
LCB= N00°37'42"E	LCB= N01°25'23"E	LCB= N02°58'00"E
R=11503.33'	R=11503.33'	R=11503.33'

SCHEDULE OF SIGNS

SIGN NUMBER	SIGN OWNER	PROPERTY OWNER	PERMIT NO.
8-1	BETTY HAIBESLEBEN	DAVID R. RESCH & PRISCILLA L. RESCH RENTALS, LLC	003655
7-1	JPM AMERICAS/ BILLBOARDS INC.	JESSE R. RICHARDSON AND ANN R. RICHARDSON, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROP.	019177

DETAIL (NTS)
443+64.80 (401) 0.00' R/L = N00°35'04"E
S/L = N00°31'43"E
443+64.80 (400) 0.13'

1172 FOUND MAG NAIL Y = 325891.805 X = 703084.671

1177 FOUND BERNTSEN SURVEY NAIL Y = 323328.440 X = 705709.790

1195 SET BERNTSEN SURVEY NAIL FROM TIES Y = 325892.792 X = 708390.978

1176 FOUND BERNTSEN SURVEY NAIL Y = 328619.374 X = 705908.592

1175 FOUND BERNTSEN SURVEY NAIL Y = 325974.841 X = 705734.204 STA 447+81.53, 4.71' LT

DETAIL (NTS)
455+16.38 (408) -0.13' S/L = N03°46'22"E
R/L = N03°45'32"E
455+16.38 (409) 0.00'

NOTES:

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), SHAWANO COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING ACCESS CONTROL ALONG USH 45 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT NO. 1600-01-29.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN RHINELANDER, WISCONSIN.

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED	EASEMENT VOL. PG. DOC
51	AMERICAN TRANSMISSION COMPANY (ELECTRIC)	RELEASE OF RIGHTS	VOL 364, PG 212, DOC 277265, PARCEL 3 (1) NO EASEMENT OF RECORD, PARCEL 3 (2) VOL 959, PG 129, DOC 539408, PARCEL 4 VOL 959, PG 144, DOC 539410, PARCEL 4
52	ALLIANT ENERGY (ELECTRIC)	RELEASE OF RIGHTS	NO EASEMENT OF RECORD, PARCELS 2,3,7,8,9
53	ASTREA COMMUNICATIONS (FIBER OPTIC)	RELEASE OF RIGHTS	NO EASEMENT OF RECORD, PARCELS 8,9
54	FRONTIER COMMUNICATIONS (TELEPHONE)	RELEASE OF RIGHTS RELEASE OF RIGHTS	VOL 224, PG 556, DOC 174185, PARCEL 1 NO EASEMENT OF RECORD, PARCELS 8,9

EXISTING MONUMENTS			
POINT	Y	X	DESC.
1157	325785.842	705673.231	1" PIPE
1158	325675.865	705671.457	1" PIPE
1159	SEE RW COORDINATE TABLE		1" PIPE
1160	SEE RW COORDINATE TABLE		1" PIPE
1161	325935.057	705520.986	1" PIPE
1162	325934.357	705498.962	1" PIPE
1164	325999.667	705475.496	1" PIPE
1166	326706.935	705822.864	1" PIPE
1170	SEE RW COORDINATE TABLE		1" PIPE

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
1	KERSTEN LUMBER COMPANY, INC. A WISCONSIN CORPORATION	TLE	-----	-----	-----	.042
2	RICHARD J. LEIH AND GINA L. LEIH, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROPERTY	FEE, TLE	0.024	0.060	0.084	0.044
3	JEROME E. REMINGTON	FEE, TLE	0.053	0.376	0.429	0.083
4	WISCONSIN POWER AND LIGHT COMPANY	TLE	-----	-----	-----	0.007
5	ROBERT R. SPIERINGS	FEE, TLE	0.187	0.223	0.410	0.034
6	KERSTEN SCHMIDT PROPERTIES, LLC, A WISCONSIN LIMITED LIABILITY COMPANY	FEE, TLE	0.056	0.201	0.257	0.058
7	JESSE R. RICHARDSON AND ANN R. RICHARDSON, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROPERTY JPM AMERICAS/BILLBOARDS INC. (SIGN OWNER)	FEE, TLE	0.048	0.201	0.249	0.053
8	DAVID R. RESCH & PRISCILLA L. RESCH RENTALS, LLC BETTY HAIBESLEBEN (SIGN OWNER)	FEE, TLE	0.107	0.754	0.861	0.114
9	RAMON AGUILAR	FEE, TLE	0.017	0.193	0.210	0.038

ORIGINAL PLAT PREPARED BY: AECOM

I, DONALD J. BUZA, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT, AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN DONALD J. BUZA S-2338 CUSTER, WI LAND SURVEYOR

SIGNATURE: Donald J Buza DATE: 4/27/2023
PRINT NAME: DONALD J. BUZA
REGISTRATION NUMBER: S-2338

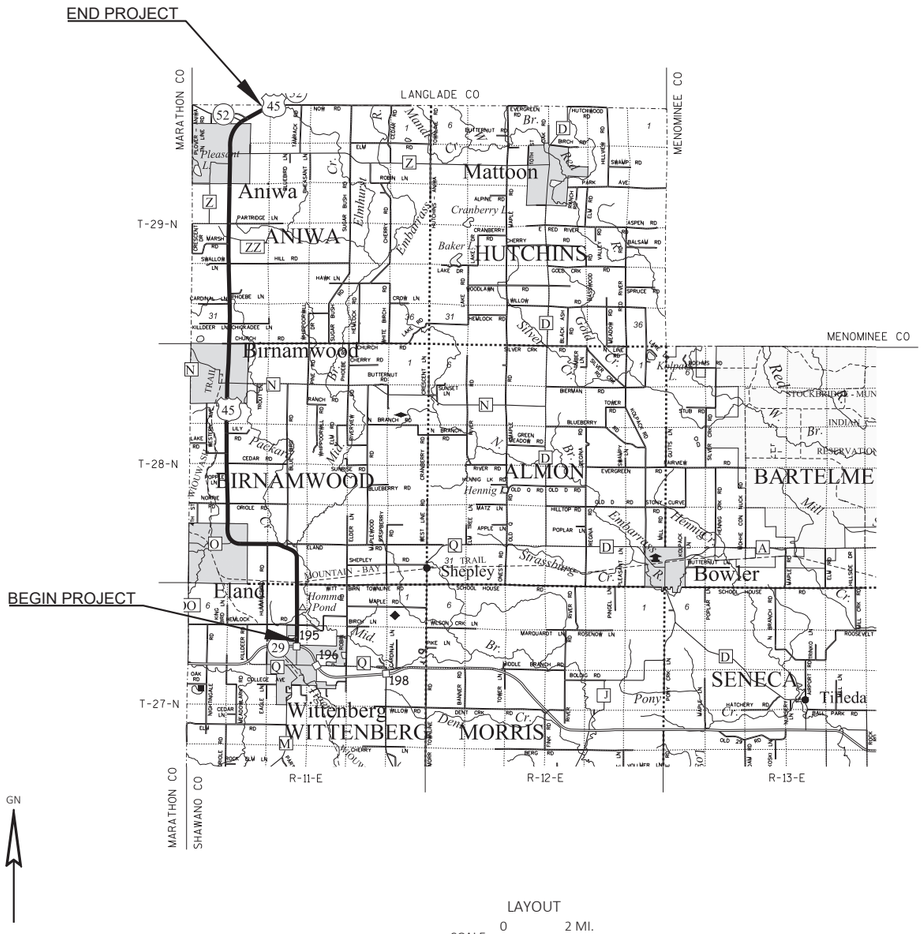
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHCENTRAL REGION OFFICE.

SIGNATURE: _____ DATE: _____
PRINT NAME: BRENT L. STELLA

FILE NAME : C:\USERS\DONALD.BUZA\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\040101-RP.DWG
APPRAISAL PLAT DATE : 4/27/23
PLOT DATE : 6/12/2023 12:35 PM PLOT BY : BUZA, DONALD PLOT NAME : PLOT SCALE :

1600-02-20-4.01

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
PROJECT NO. 1600-02-20
WITTENBERG - ANTIGO
STH 29 TO LANGLADE COUNTY LINE
USH 45
SHAWANO COUNTY



LAYOUT
SCALE 0 2 MI.

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
TO BE REMOVED
BRIDGE
CULVERT
PARALLEL OFFSETS

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED)
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)

PARCEL NUMBER 25
UTILITY NUMBER 40
R/W BOUNDARY POINT 200
TLE BOUNDARY POINT 300

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	RIGHT OF WAY	R/W
COUNTY	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SECTION LINE	S/L
DISTANCE	DIST	SEPTIC VENT	SEPV
CORNER	COR	SQUARE FEET	SF
DOCUMENT NUMBER	DOC	STATE TRUNK HIGHWAY	STH
EASEMENT	EASE	STATION	STA
EXISTING	EX	TELEPHONE PEDESTAL	TP
GAS VALVE	GV	TEMPORARY LIMITED EASEMENT	TLE
GRID NORTH	GN	TRANSPORTATION PROJECT PLAT	TPP
HIGHWAY EASEMENT	HE	UNITED STATES HIGHWAY	USH
IDENTIFICATION	ID	VOLUME	V
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ /DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
ELECTRIC TOWER	☒

THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1600-02-20.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), SHAWANO COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, CENTERLINE OF EXISTING PAVEMENTS AND/OR EXISTING OCCUPATIONAL LINES.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

PROPERTY LINES SHOWN ON THIS PLAT FOR PROPERTIES BEING IMPACTED ARE DRAWN FROM DATA DERIVED FROM FILED/RECORDED MAPS AND DOCUMENTS OF PUBLIC RECORD. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN RHINELANDER, WISCONSIN.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

PROJECT NUMBER	1600-02-20 - 4.01
SHEET	2 OF 2
AMENDMENT NO:	

BEGIN PROJECT
STA 42+50
MATCH EXISTING
BUTT JOINT REQ'D
Y = 293009.427
X = 714941.060

BP: 42+00.00

WISCONSIN PUBLIC SERVICE (GAS)

ALLIANT ENERGY (ELECTRIC)

BM 2A

PROPOSED TLE

WETLAND BOUNDARY

BM 1A

ASTREA (COMMUNICATIONS)

EXISTING R/W

PC: 52+05.67

HEMLOCK RD

PT: 56+00.69

N

MATCH LINE STA 57+00

44 46 48 50 52 54 56

USH 45

CONTROL POINT 924
Y= 293088.541
X= 714989.092

ALLIANT ENERGY (ELECTRIC)

WITTENBERG TELEPHONE CO. (COMMUNICATIONS)

PROPOSED TLE

WETLAND BOUNDARY

CONTROL POINT 900
Y= 293459.683
X= 714977.821

STA 46+30
CULVERT NO. 58045005885
CULVERT PIPE LINERS 24-INCH REQUIRED
CLEANING CULVERT PIPES FOR LINER VERIFICATION REQUIRED

EXISTING R/W

HEMLOCK RD

CONTROL POINT 901
Y= 294046.614
X= 715013.988

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
1A	47+08.04	SPIKE IN PP 27-11-9 37/47	1175.38
2A	45+20.80	SPIKE IN PP 27-11-9 37/46	1174.99

N

MATCH LINE STA 57+00

58 60 62 64 66 68 70 7

USH 45

WAYSIDE PARK

MATCH LINE STA 72+00

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 125	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050201-pn

PLOT DATE : 1/26/2024 1:45 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

5

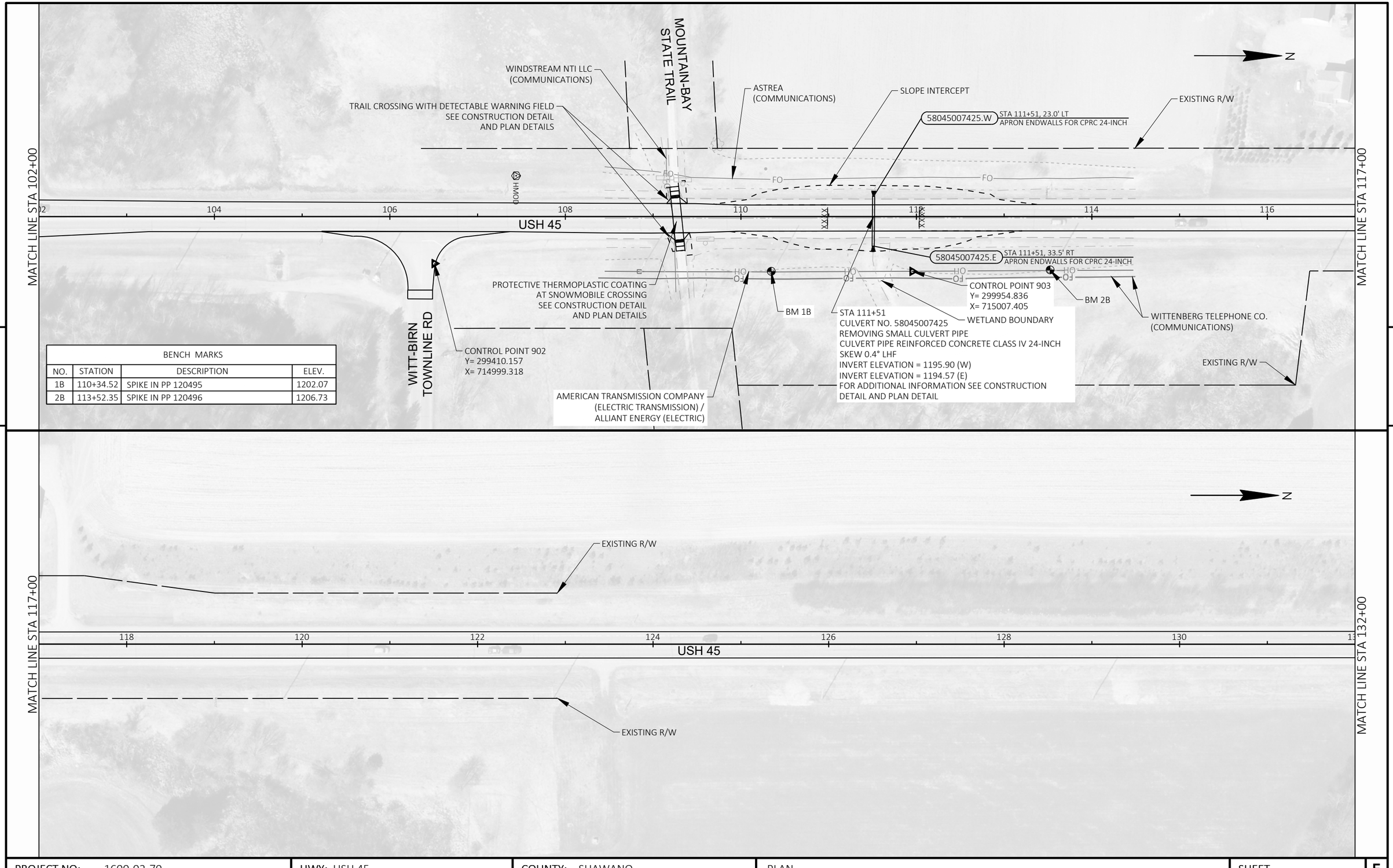
5

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 126	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050202-pn

PLOT DATE : 1/26/2024 1:45 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
1B	110+34.52	SPIKE IN PP 120495	1202.07
2B	113+52.35	SPIKE IN PP 120496	1206.73

5

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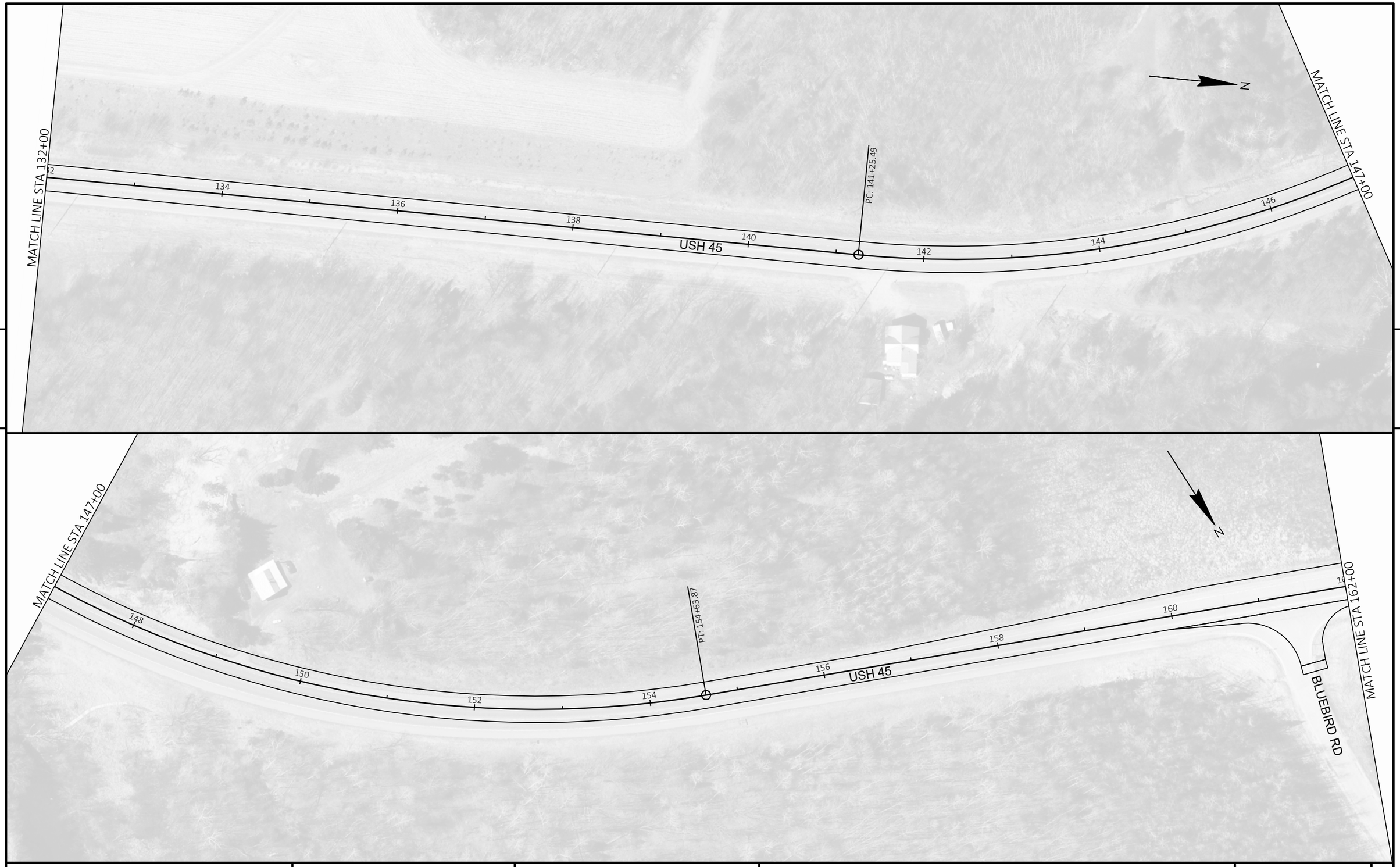
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 127	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050203-pn
PLOT DATE : 1/26/2024 1:45 PM
PLOT BY : CZECH, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



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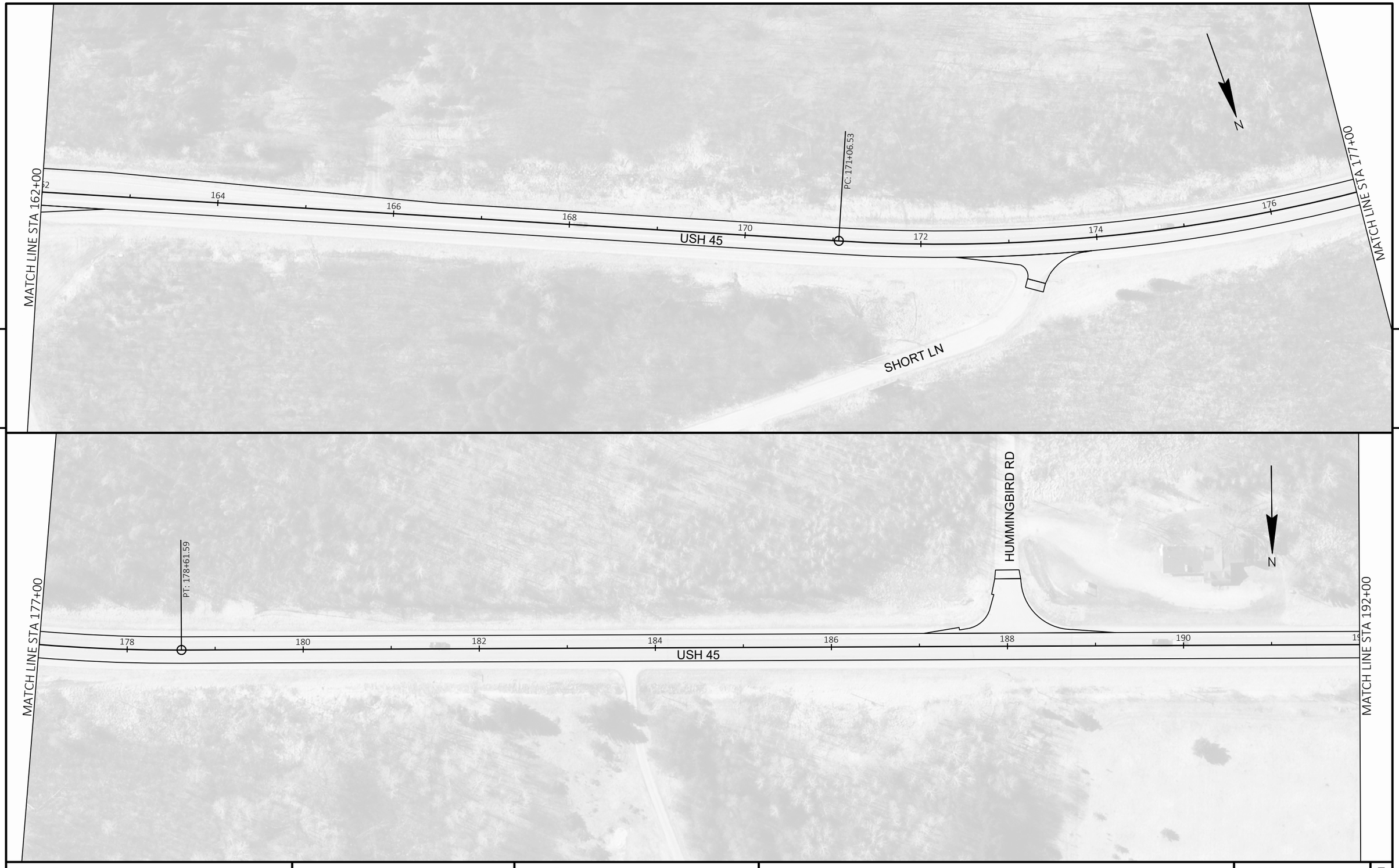
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 128	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050204-pn

PLOT DATE : 1/26/2024 1:45 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

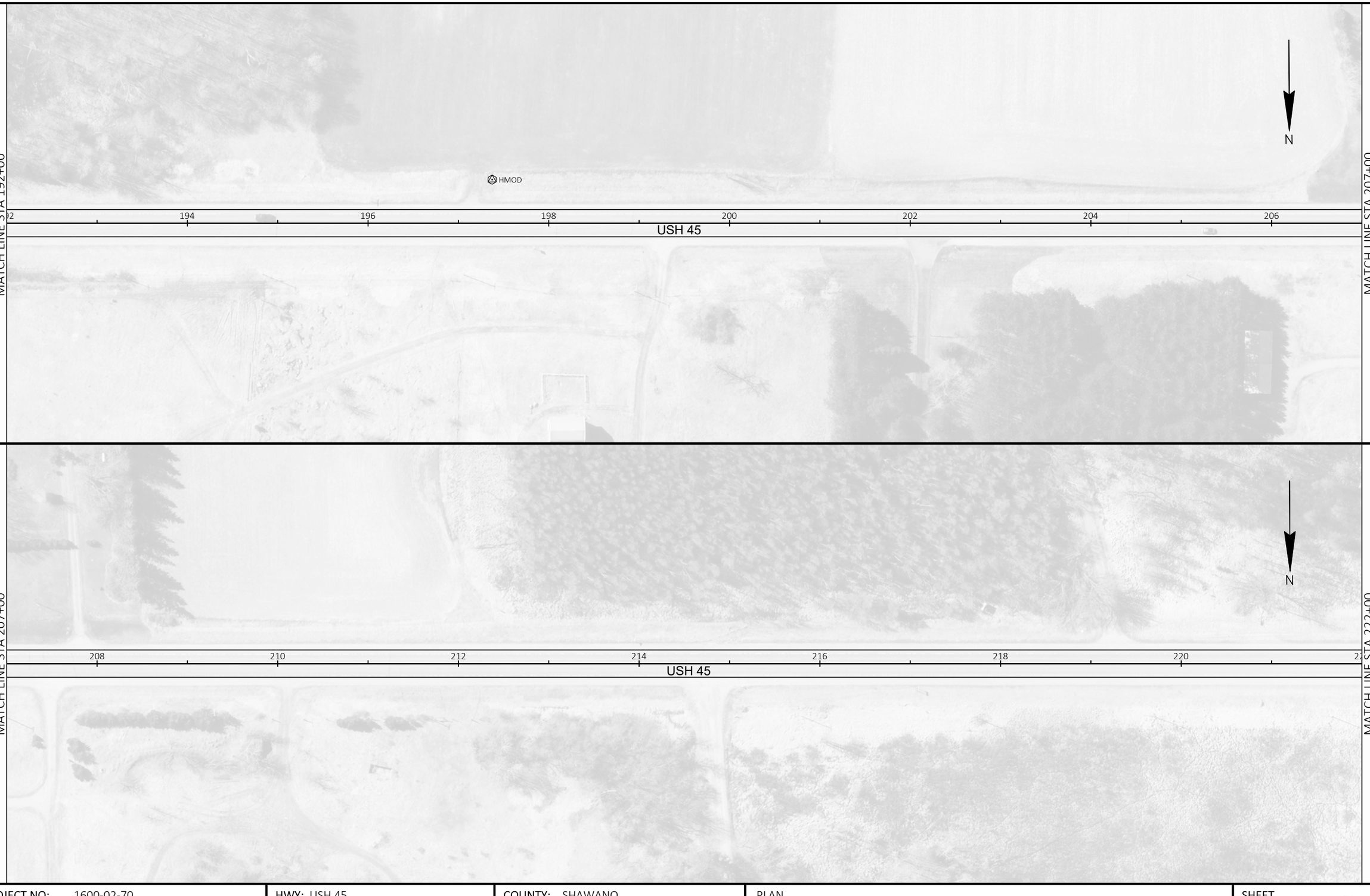


PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 129	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050205-pn

PLOT DATE : 1/26/2024 1:46 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 130	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050206-pn
PLOT DATE : 1/26/2024 1:46 PM
PLOT BY : CZECH, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 131	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050207-pn
PLOT DATE : 1/26/2024 1:46 PM
PLOT BY : CZECH, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

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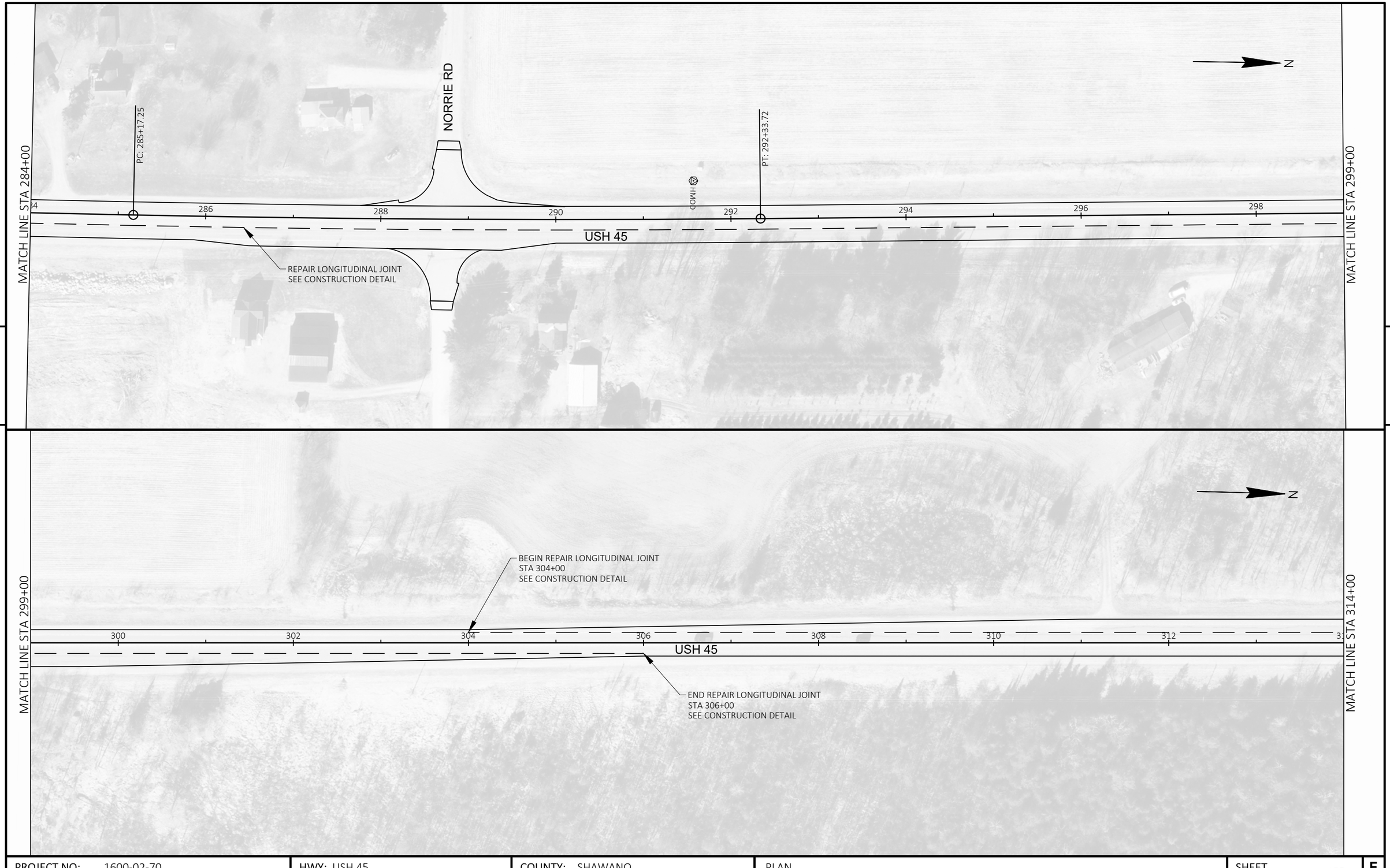
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 132	E



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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 133	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050209-pn

PLOT DATE : 1/26/2024 1:47 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 134	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050210-pn
PLOT DATE : 1/26/2024 1:48 PM
PLOT BY : CZECH, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

MATCH LINE STA 344+00

REPAIR LONGITUDINAL JOINT
SEE CONSTRUCTION DETAIL

WESTERN AVE

N

344 346 348 350 352 354 356 358

USH 45

MATCH LINE STA 359+00

5

5

MATCH LINE STA 359+00

N

PC: 371+11.72

END REPAIR LONGITUDINAL JOINT
STA 373+50
SEE CONSTRUCTION DETAIL

DOMHD

360 362 364 366 368 370 372

USH 45

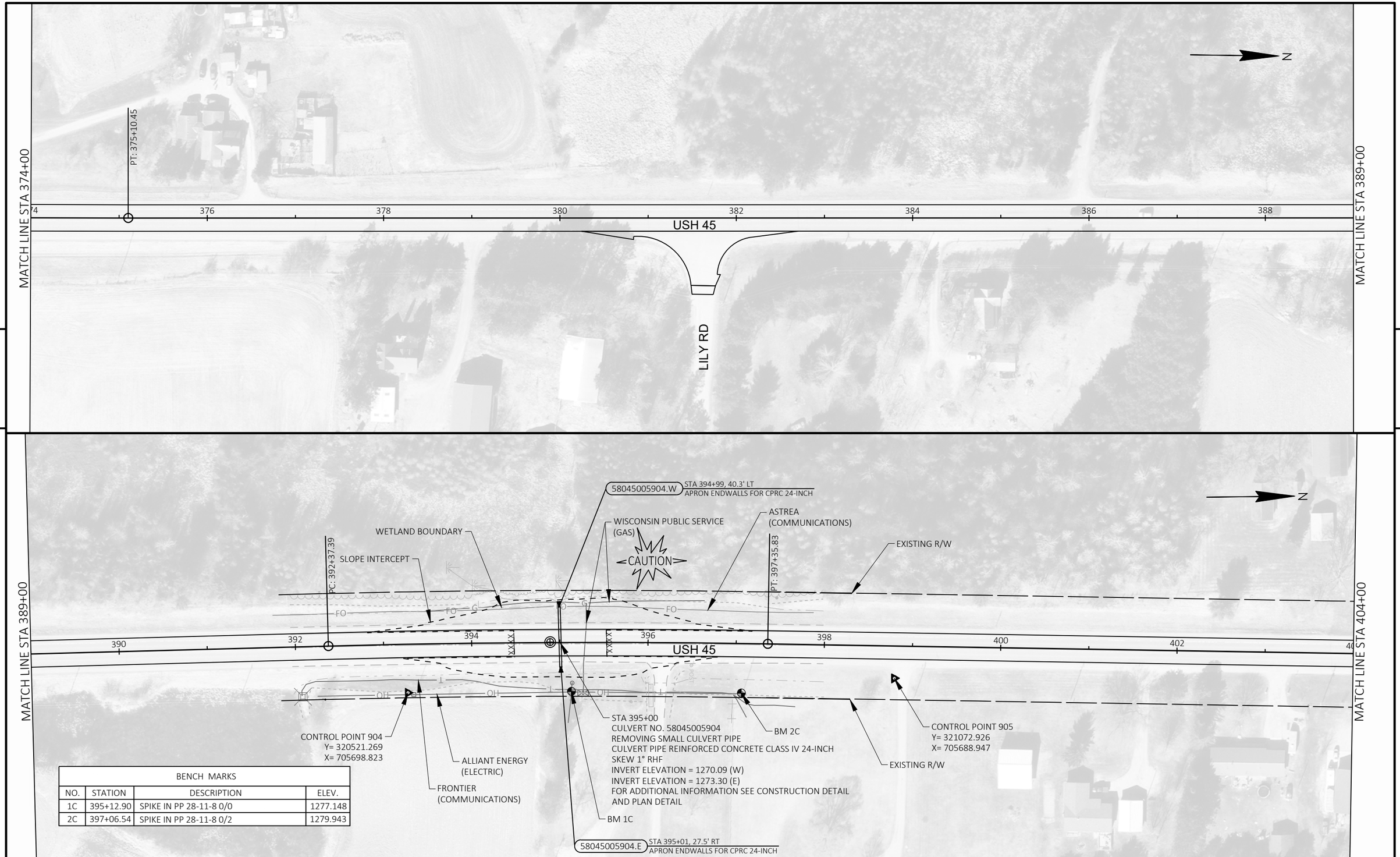
MATCH LINE STA 374+00

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 135	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050211-pn

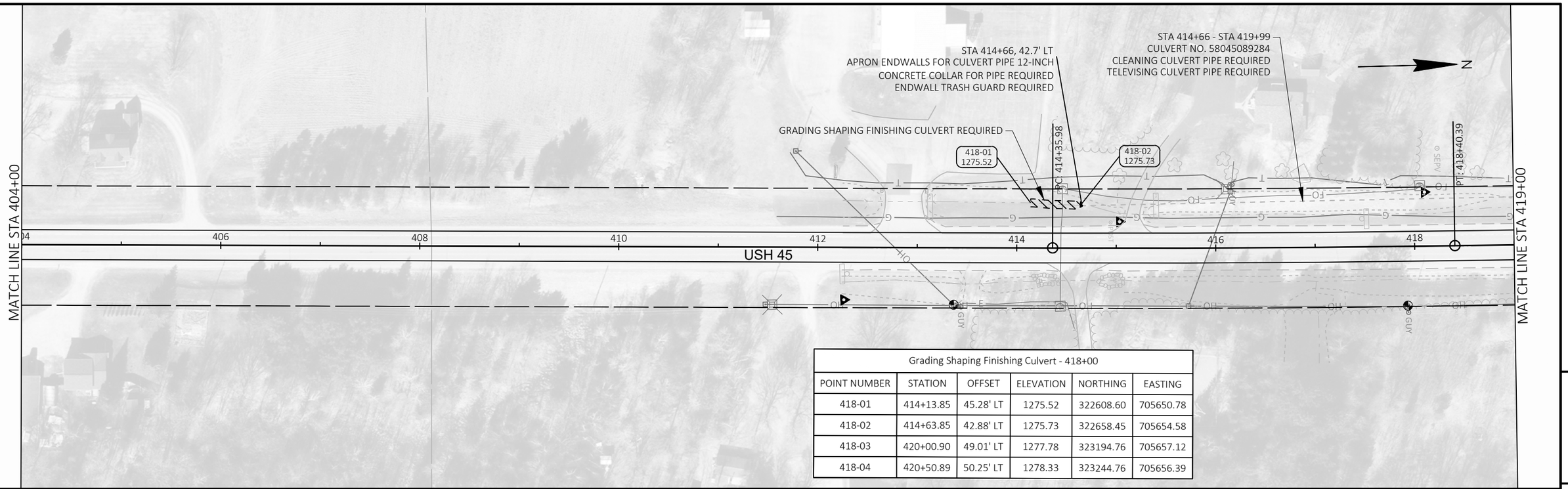
PLOT DATE : 1/26/2024 1:48 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
1C	395+12.90	SPIKE IN PP 28-11-8 0/0	1277.148
2C	397+06.54	SPIKE IN PP 28-11-8 0/2	1279.943

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 136	E



Grading Shaping Finishing Culvert - 418+00					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
418-01	414+13.85	45.28' LT	1275.52	322608.60	705650.78
418-02	414+63.85	42.88' LT	1275.73	322658.45	705654.58
418-03	420+00.90	49.01' LT	1277.78	323194.76	705657.12
418-04	420+50.89	50.25' LT	1278.33	323244.76	705656.39

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 137	E

MATCH LINE STA 434+00

MATCH LINE STA 449+00

MATCH LINE STA 464+00

USH 45

CTH N

ELM ST

ASTREA (COMMUNICATIONS)

WITTENBERG TELEPHONE COMPANY (COMMUNICATIONS)

FRONTIER (COMMUNICATIONS)

CAUTION

WISCONSIN PUBLIC SERVICE (GAS)

CONTROL POINT 931
Y= 325422.362
X= 705696.345

CPRC CLASS IV 18-INCH
STA 442+63
INVERT 1: 1278.01 (S)
INVERT 2: 1278.35 (N)
LENGTH: 68 FT
SLOPE: -0.50%

REMOVING SMALL CULVERT PIPE

STA 442+30, 42.6' LT
APRON ENDWALLS FOR CULVERT PIPE 18-INCH

STA 442+97, 43.0' LT
APRON ENDWALLS FOR CULVERT PIPE 18-INCH

WISCONSIN PUBLIC SERVICE (GAS)

BC: 444+62.40

BM 2D

ALLIANT ENERGY (UNDERGROUND ELECTRIC)

PI: 17+99.38

AMERICAN TRANSMISSION COMPANY (ELECTRIC TRANSMISSION) / ALLIANT ENERGY (ELECTRIC)

BIRNAMWOOD WASTEWATER TREATMENT FACILITY (SEWER)

BM 4D

ALLIANT ENERGY (ELECTRIC)

EXISTING CULVERT TO REMAIN

ALLIANT ENERGY (ELECTRIC)

EXISTING R/W

ALLIANT ENERGY (UNDERGROUND ELECTRIC)

REMOVING SMALL CULVERT PIPE

BIRNAMWOOD MUNICIPAL WATER UTILITY (WATER)

BIRNAMWOOD MUNICIPAL WATER UTILITY (WATER)

REMOVING WOOD POSTS REQ'D

PROPOSED R/W

PROPOSED TLE

SLOPE INTERCEPT

BM 1D

CONTROL POINT 906
Y= 326015.486
X= 705774.397

PROPOSED TLE

PROPOSED R/W

FRONTIER (COMMUNICATIONS)

AMERICAN TRANSMISSION COMPANY (ELECTRIC TRANSMISSION) / ALLIANT ENERGY (ELECTRIC)

EXISTING R/W FOR CTH N INTERSECTION TEMPORARILY BASED ON GIS. THIS EXISTING R/W WILL BE UPDATED BASED ON TITLE SEARCHES ONCE THEY ARE RECEIVED.

FOR ADDITIONAL INFORMATION ON INTERSECTION SEE PLAN DETAILS.

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1D	447+39.09	RR SPIKE IN TRANS POLE 120882	1280.81
2D	447+41.73	RR SPIKE IN TRANS POLE 120881	1280.01
3D	451+91.98	HYD-SW BURY/TAG BOLT	1283.60
4D	445+56.96	HYD-SW BURY/TAG BOLT	1282.27

58045005909.W
STA 449+23, 35.0' LT
APRON ENDWALLS FOR CPRCHE 19x30-INCH

STA 449+37, 47.0' LT
APRON ENDWALLS FOR CULVERT PIPE 18-INCH

WETLAND BOUNDARY

REMOVING SIGN REQ'D

CPRC CLASS IV 18-INCH
STA 449+50
INVERT 1: 1277.85
INVERT 2: 1278.07
LENGTH: 27 FT
SLOPE: -0.80%

REMOVING SMALL CULVERT PIPE
STA 449+64, 46.8' LT
APRON ENDWALLS FOR CULVERT PIPE 18-INCH

CONTROL POINT 933
Y= 326472.100
X= 705712.752

BIRNAMWOOD WASTEWATER TREATEMENT FACILITY (SEWER)

BIRNAMWOOD MUNICIPAL WATER UTILITY (WATER)

ASTREA (COMMUNICATIONS)

BM 3D

SLOPE INTERCEPT

WETLAND BOUNDARY

REMOVING SIGN REQ'D

PT: 450+99.73

58045005909.E
STA 449+47, 37.8' RT
APRON ENDWALLS FOR CPRCHE 19x30-INCH

STA 449+34
CULVERT NO. 58045005909
REMOVING SMALL CULVERT PIPE
CPRC HE CLASS HE-IV 19X30-INCH REQUIRED
SKEW 18° RHF
INVERT ELEVATION = 1278.27 (E)
INVERT ELEVATION = 1277.74 (W)
FOR ADDITIONAL INFORMATION SEE CONSTRUCTION DETAIL AND PLAN DETAIL

WISCONSIN PUBLIC SERVICE (GAS)

CAUTION

STA 452+69, 45.2' LT
APRON ENDWALLS FOR CULVERT PIPE 18-INCH

CPRC CLASS IV 18-INCH
STA 453+00
INVERT 1: 1281.01 (S)
INVERT 2: 1281.67 (N)
LENGTH: 62 FT
SLOPE: -1.06%

REMOVING SMALL CULVERT PIPE

STA 453+31, 41.3' LT
APRON ENDWALLS FOR CULVERT PIPE 18-INCH

PROPOSED TLE

PROPOSED R/W

FRONTIER (COMMUNICATIONS)

ALLIANT ENERGY (ELECTRIC)

FOR CURB & GUTTER REPLACEMENTS, SEE CONSTRUCTION DETAIL AND PLAN DETAIL

EXISTING R/W

PROPOSED TLE

PROPOSED R/W

STA 453+31, 43.1' RT
APRON ENDWALLS FOR CULVERT PIPE 15-INCH

REMOVING SMALL CULVERT PIPE

CPRC CLASS IV 15-INCH
STA 453+00
INVERT 1: 1280.71 (S)
INVERT 2: 1281.19 (N)
LENGTH: 62 FT
SLOPE: -0.77%

STA 452+69, 43.9' RT
APRON ENDWALLS FOR CULVERT PIPE 15-INCH

CONTROL POINT 907
Y= 326786.203
X= 705830.848

RT SWALE GRADING
SEE CROSS SECTIONS

BIRNAMWOOD WASTEWATER TREATMENT FACILITY (SEWER)

EXISTING R/W

PROTECTIVE THERMOPLASTIC COATING AT SNOWMOBILE CROSSING SEE CONSTRUCTION DETAIL AND PLAN DETAILS

FOR CURB & GUTTER REPLACEMENTS, SEE CONSTRUCTION DETAIL AND PLAN DETAIL

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 138 E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050214-pn

PLOT DATE : 1/26/2024 1:49 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 139	E

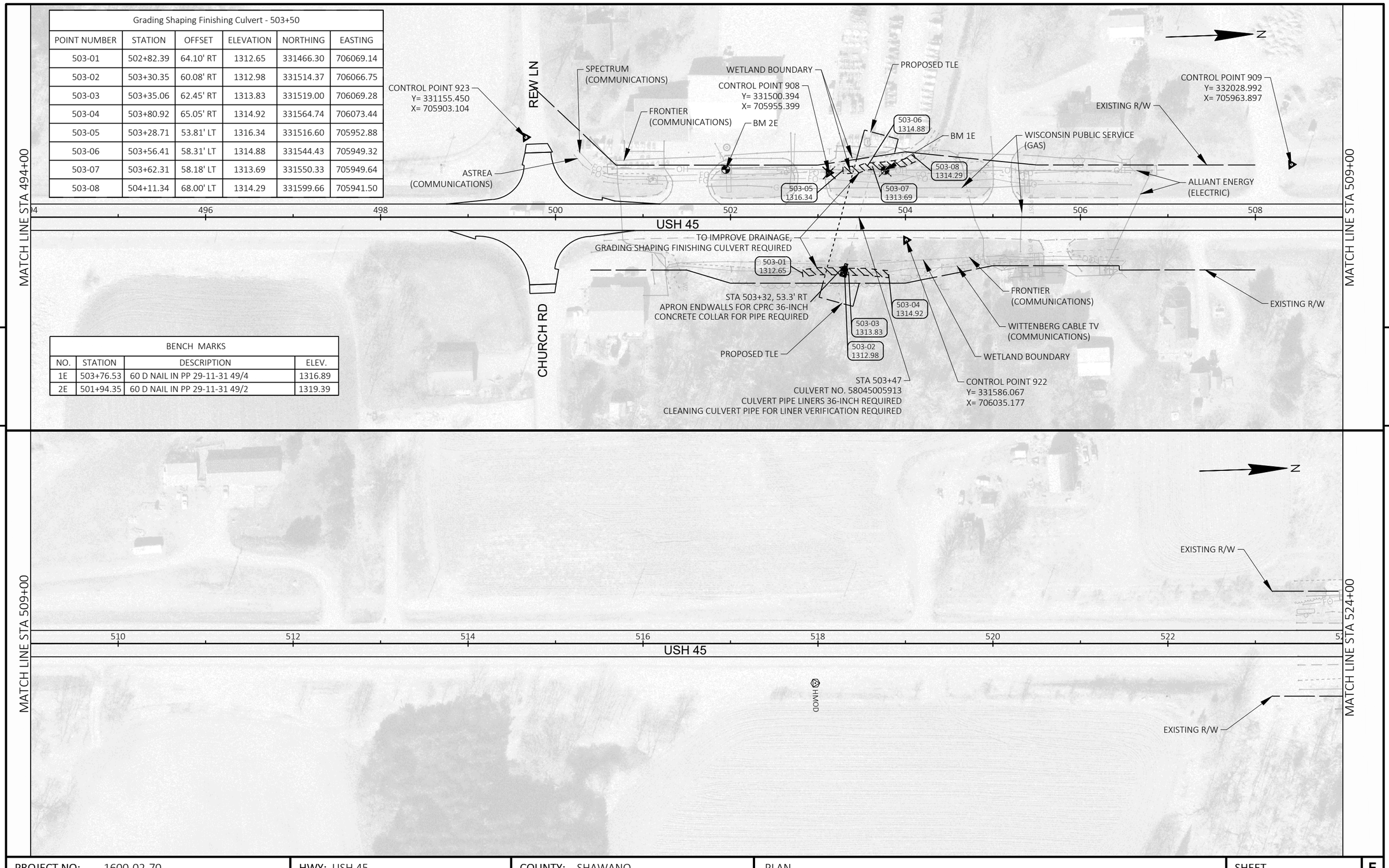
FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050202-PN.DWG
LAYOUT NAME - 050215-pn

PLOT DATE : 10/26/2023 11:51 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

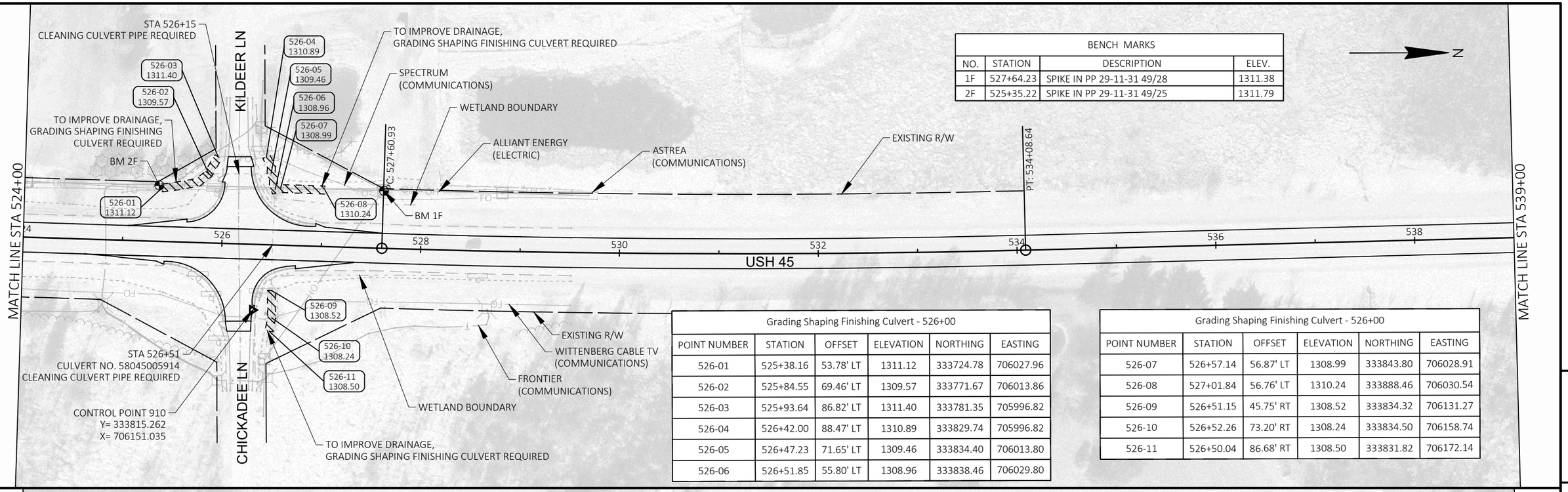
Grading Shaping Finishing Culvert - 503+50					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
503-01	502+82.39	64.10' RT	1312.65	331466.30	706069.14
503-02	503+30.35	60.08' RT	1312.98	331514.37	706066.75
503-03	503+35.06	62.45' RT	1313.83	331519.00	706069.28
503-04	503+80.92	65.05' RT	1314.92	331564.74	706073.44
503-05	503+28.71	53.81' LT	1316.34	331516.60	705952.88
503-06	503+56.41	58.31' LT	1314.88	331544.43	705949.32
503-07	503+62.31	58.18' LT	1313.69	331550.33	705949.64
503-08	504+11.34	68.00' LT	1314.29	331599.66	705941.50

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
1E	503+76.53	60 D NAIL IN PP 29-11-31 49/4	1316.89
2E	501+94.35	60 D NAIL IN PP 29-11-31 49/2	1319.39



PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 140	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050202-PN.DWG
LAYOUT NAME - 050216-pn
PLOT DATE : 10/26/2023 11:52 AM
PLOT BY : CZECH, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
1F	527+64.23	SPIKE IN PP 29-11-31 49/28	1311.38
2F	525+35.22	SPIKE IN PP 29-11-31 49/25	1311.79

Grading Shaping Finishing Culvert - 526+00					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
526-01	525+38.16	53.78' LT	1311.12	333724.78	706027.96
526-02	525+84.55	69.46' LT	1309.57	333771.67	706013.86
526-03	525+93.64	86.82' LT	1311.40	333781.35	705996.82
526-04	526+42.00	88.47' LT	1310.89	333829.74	705996.82
526-05	526+47.23	71.65' LT	1309.46	333834.40	706013.80
526-06	526+51.85	55.80' LT	1308.96	333838.46	706029.80

Grading Shaping Finishing Culvert - 526+00					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
526-07	526+57.14	56.87' LT	1308.99	333843.80	706028.91
526-08	527+01.84	56.76' LT	1310.24	333888.46	706030.54
526-09	526+51.15	45.75' RT	1308.52	333834.32	706131.27
526-10	526+52.26	73.20' RT	1308.24	333834.50	706158.74
526-11	526+50.04	86.68' RT	1308.50	333831.82	706172.14

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 141	E

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
1G	555+57.78	SPIKE IN PP 29-11-30 49/3	1310.94
2G	557+55.01	SPIKE IN PP	1310.44

CONTROL POINTS					
NO.	STATION	DESCRIPTION	NORTHING	EASTING	ELEV.
913	565+84.76	MAG NAIL	337769.689	706072.740	1330.482
918	560+34.89	SPIKE	337218.234	706009.341	1319.863
919	558+59.12	SPIKE	337042.483	706012.283	1318.519
920	555+93.72	SPIKE	336777.170	706019.053	1317.767
921	557+33.85	SPIKE	336918.35	706063.871	1317.920

N

MATCH LINE STA 554+00

WETLAND BOUNDARY
BM 1G
CP 920
REMOVING GUARDRAIL
BM 2G
ALLIANT ENERGY (ELECTRIC)
SLOPE INTERCEPT
ASTREA (COMMUNICATIONS)
EXISTING R/W
SPECTRUM (COMMUNICATIONS)
CP 918
CP 919
554
556
558
560
562
564
566
568
USH 45
CP 921
REMOVING GUARDRAIL
SLOPE INTERCEPT
WETLAND BOUNDARY
MGS GUARDRAIL
SEE SHEET "PLAN DETAILS - MGS REPLACEMENT" FOR DETAILS
FRONTIER (COMMUNICATIONS)
WITTENBERG CABLE TV (COMMUNICATIONS)
EXISTING R/W
CP 913
PHOEBE LN

MATCH LINE STA 569+00

5

5

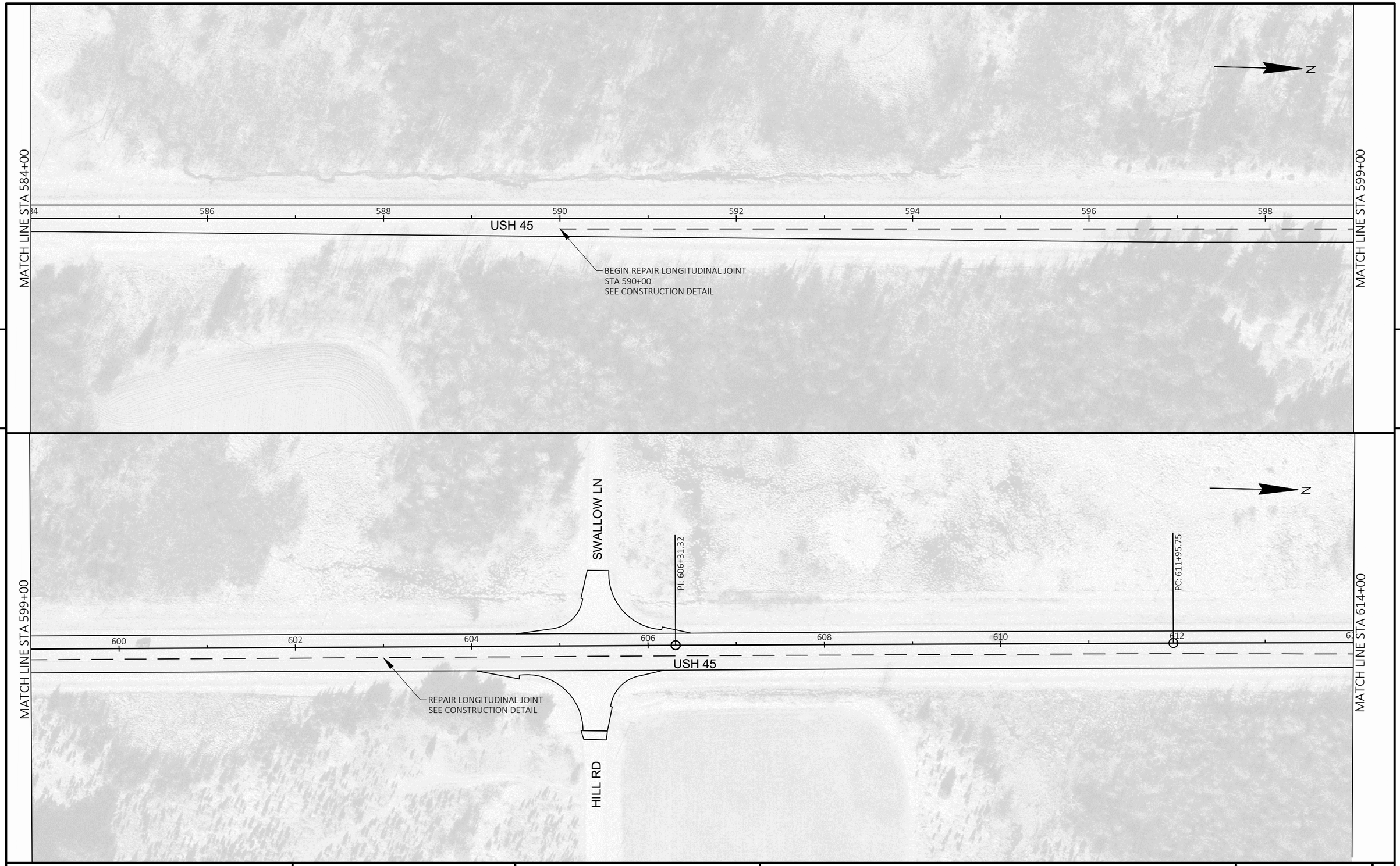
N

MATCH LINE STA 569+00

570
572
574
576
578
580
582
USH 45

MATCH LINE STA 584+00

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 142	E



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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 143	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050202-PN.DWG
LAYOUT NAME - 050219-pn

PLOT DATE : 10/26/2023 11:54 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

MATCH LINE STA 614+00

N

EXISTING R/W

616 618 620 622 624 626 628

USH 45

REPAIR LONGITUDINAL JOINT
SEE CONSTRUCTION DETAIL

HMOD

EXISTING R/W

MATCH LINE STA 629+00

5

5

MATCH LINE STA 629+00

N

BM 2H

MARSH RD

WETLAND BOUNDARY

ALLIANT ENERGY
(ELECTRIC)

EXISTING R/W

58045005921.W STA 632+08, 54.9' LT
APRON ENDWALLS FOR CPRC 24-INCH

ASTREA
(COMMUNICATIONS)

CONCRETE CURB & GUTTER
6" SLOPED 36" TYPE D

+36,67
-81.74' LT

BM 1H

PT: 634+69.13

CONTROL POINT 914
Y= 344384.172
X= 705877.329

R = 60'

630 632 634 636 638 640 642

USH 45

MATCH LINE STA 644+00

STA 632+08
CULVERT NO. 58045005921
REMOVING SMALL CULVERT PIPE
CULVERT PIPE CLASS IV 24-INCH
INVERT ELEVATION = 1364.16 (W)
INVERT ELEVATION = 1366.20 (E)
FOR ADDITIONAL INFORMATION SEE
CONSTRUCTION DETAIL AND PLAN DETAIL

REPAIR LONGITUDINAL JOINT
SEE CONSTRUCTION DETAIL

WITTENBERG CABLE TV
(COMMUNICATIONS)

FRONTIER
(COMMUNICATIONS)

CONTROL POINT 926
Y= 344627.530
X= 705952.455

EXISTING R/W

58045005921.E STA 632+08, 41.2' RT
APRON ENDWALLS FOR CPRC 24-INCH

WETLAND BOUNDARY

SLOPE INTERCEPT

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1H	633+00.59	SPIKE IN PP 29-11-19 47/27	1366.36
2H	631+44.75	SPIKE IN PP 29-11-19 46/26	1363.83

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 144	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050202-PN.DWG
LAYOUT NAME - 050220-pn

PLOT DATE : 10/26/2023 11:54 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

N

CTH ZZ

PARTRIDGE LN

MATCH LINE STA 644+00

MATCH LINE STA 659+00

4 646 648 650 652 654 656 658

USH 45

END REPAIR LONGITUDINAL JOINT
STA 655+00
SEE CONSTRUCTION DETAIL

5

5

N

MATCH LINE STA 659+00

MATCH LINE STA 674+00

BEGIN REPAIR LONGITUDINAL JOINT
STA 662+00
SEE CONSTRUCTION DETAIL

660 662 664 666 668 670 672 6

USH 45

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 145	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050202-PN.DWG
LAYOUT NAME - 050221-pn

PLOT DATE : 10/26/2023 11:54 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
1I	684+26.07	SPIKE IN PP	1385.63
2I	682+14.07	SPIKE IN PP	1387.17

N

CONTROL POINT 915
Y= 348706.275
X= 705940.223

ASTREA
(COMMUNICATIONS)

ALLIANT ENERGY
(ELECTRIC)

EXISTING R/W

CONTROL POINT 916
Y= 349513.777
X= 705961.794

BM 2I

BM 1I

WETLAND BOUNDARY

REPAIR LONGITUDINAL JOINT
SEE CONSTRUCTION DETAIL

MATCH LINE STA 674+00

674 676 678 680 682 684 686 688

USH 45

MATCH LINE STA 689+00

EXISTING R/W

WITTENBERG CABLE TV
(COMMUNICATIONS)

FRONTIER
(COMMUNICATIONS)

WETLAND BOUNDARY

CONTROL POINT 927
Y= 349779.640
X= 706038.363

5

5

N

REPAIR LONGITUDINAL JOINT
SEE CONSTRUCTION DETAIL

MATCH LINE STA 689+00

690 692 694 696 698 700 702

USH 45

MATCH LINE STA 704+00

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 146	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050202-PN.DWG
LAYOUT NAME - 050222-pn

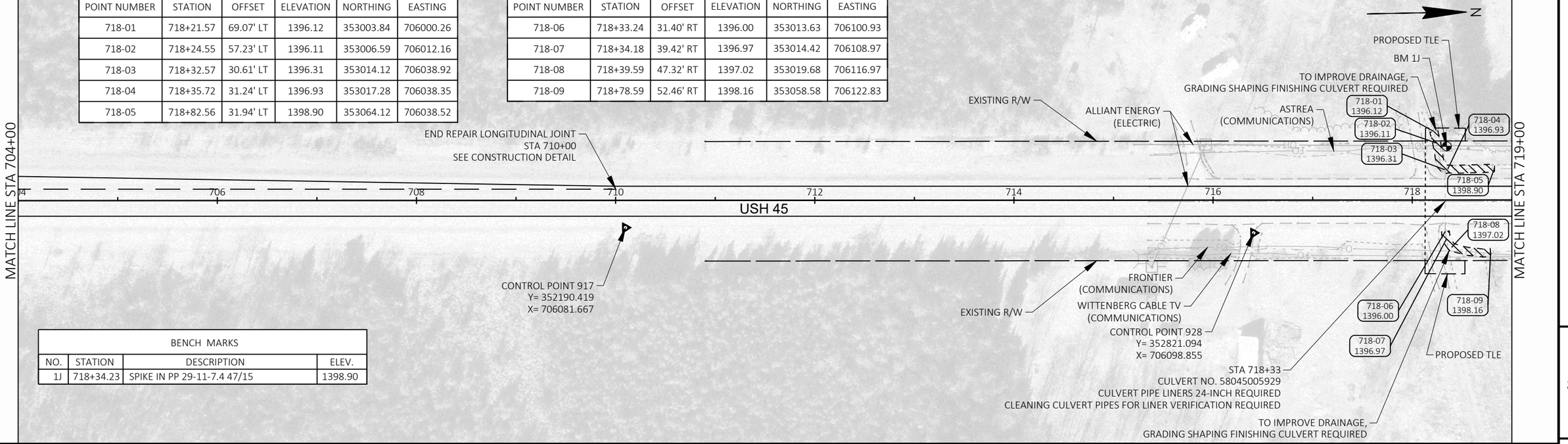
PLOT DATE : 10/26/2023 11:55 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

Grading Shaping Finishing Culvert - 718+00					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
718-01	718+21.57	69.07' LT	1396.12	353003.84	706000.26
718-02	718+24.55	57.23' LT	1396.11	353006.59	706012.16
718-03	718+32.57	30.61' LT	1396.31	353014.12	706038.92
718-04	718+35.72	31.24' LT	1396.93	353017.28	706038.35
718-05	718+82.56	31.94' LT	1398.90	353064.12	706038.52

Grading Shaping Finishing Culvert - 718+00					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
718-06	718+33.24	31.40' RT	1396.00	353013.63	706100.93
718-07	718+34.18	39.42' RT	1396.97	353014.42	706108.97
718-08	718+39.59	47.32' RT	1397.02	353019.68	706116.97
718-09	718+78.59	52.46' RT	1398.16	353058.58	706122.83

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
1J	718+34.23	SPIKE IN PP 29-11-7.4 47/15	1398.90



PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 147 E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050202-PN.DWG
LAYOUT NAME - 050223-pn
PLOT DATE : 10/26/2023 11:55 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

5

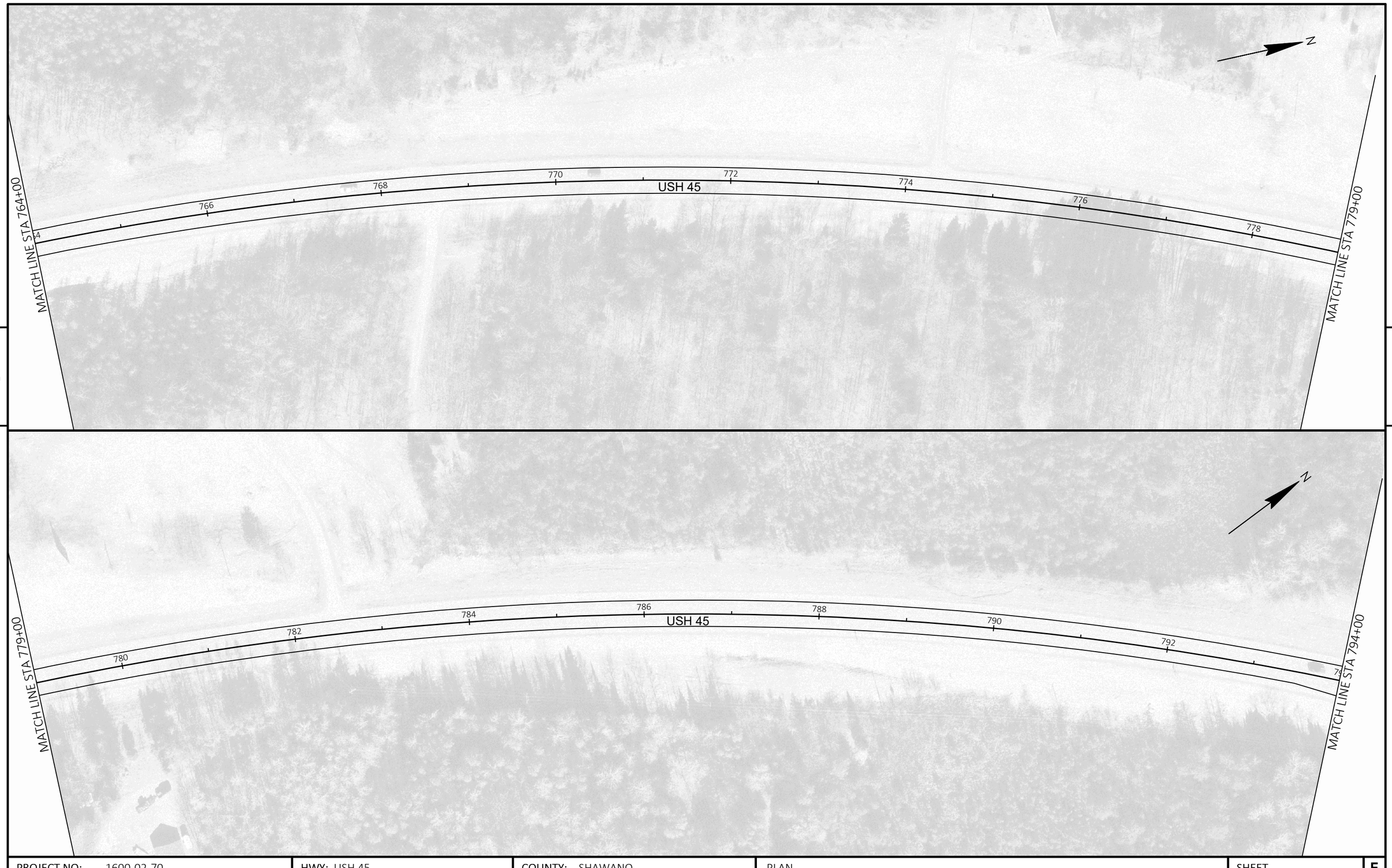
5

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 148	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050202-PN.DWG
LAYOUT NAME - 050224-pn

PLOT DATE : 10/26/2023 11:55 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 149	E

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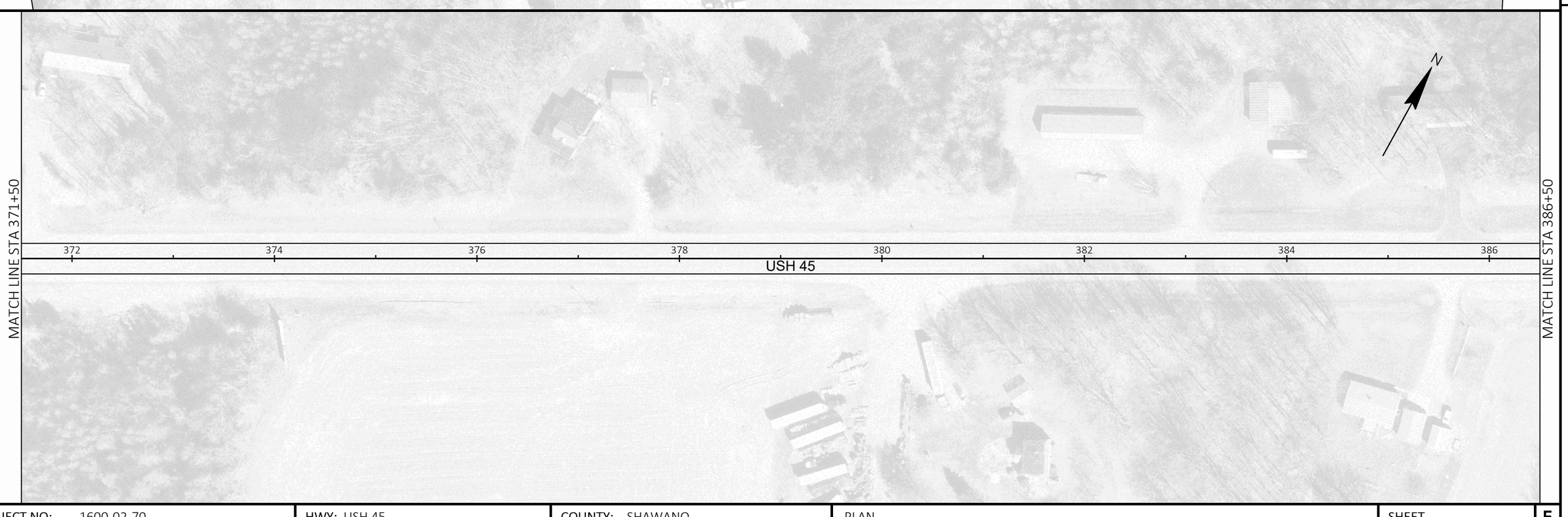
LAYOUT NAME - 050225-pn

PLOT DATE : 10/26/2023 11:56 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



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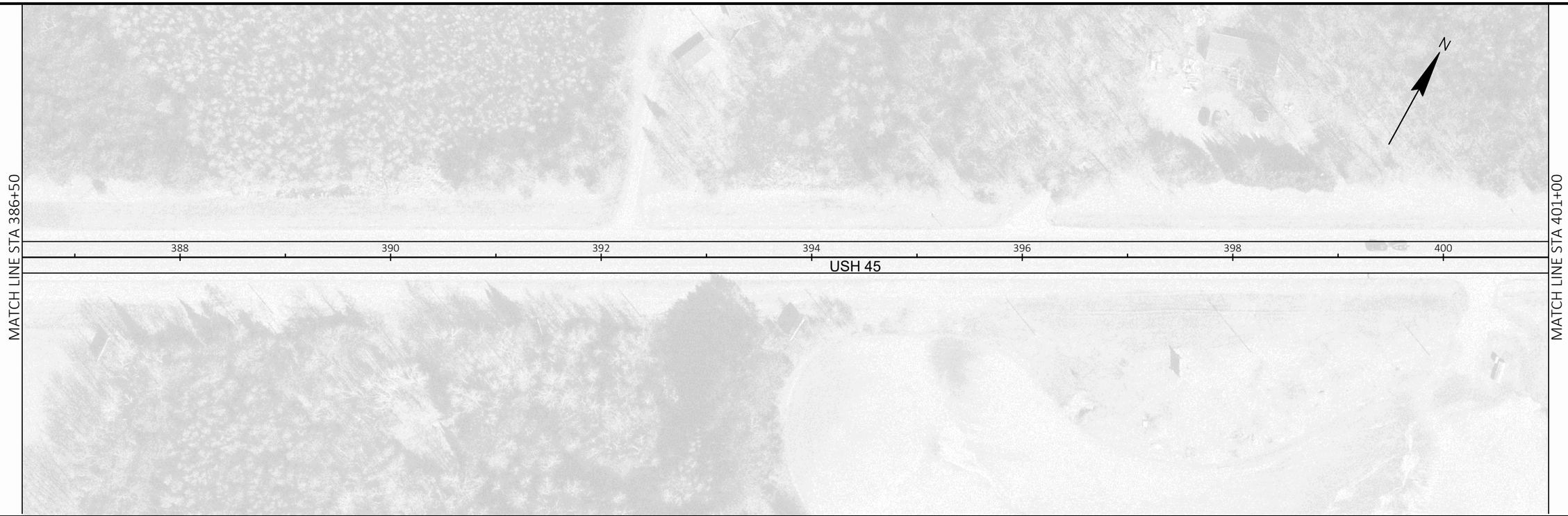
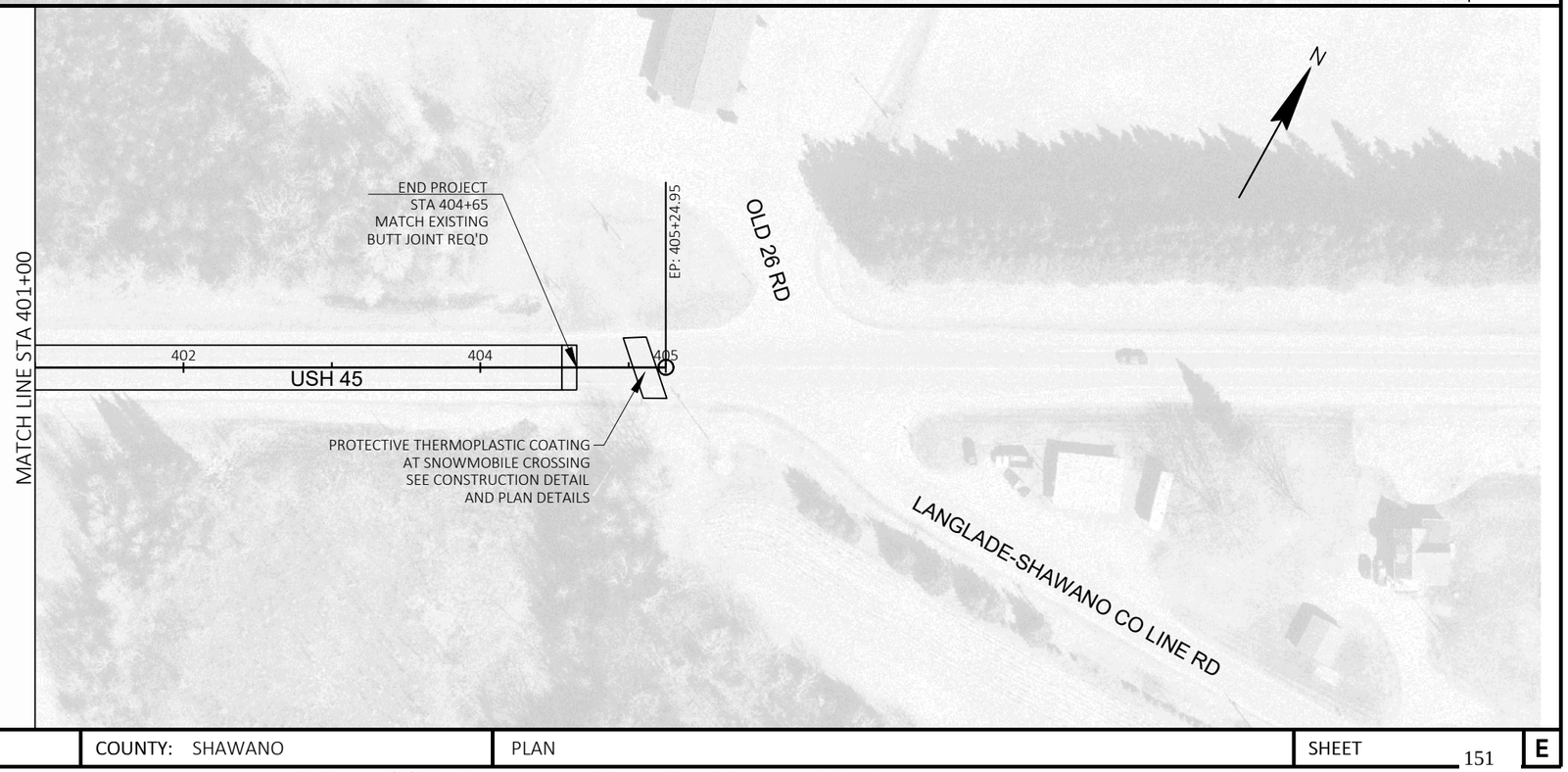


5

5



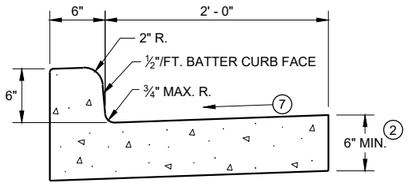
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	PLAN	SHEET 151	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\050202-PN.DWG
LAYOUT NAME - 050227-pn
PLOT DATE : 10/26/2023 11:56 AM
PLOT BY : CZECH, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

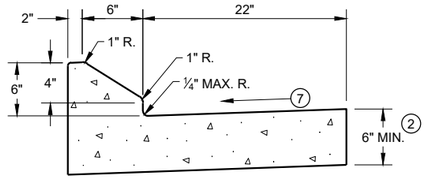
Standard Detail Drawing List

08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D19-04	DRIVEWAY AND SIDEWALK RAMPS TYPE Z
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-14A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13C19-03	HMA LONGITUDINAL JOINTS
14B28-04A	GUARDRAIL MOW STRIP
14B28-04B	GUARDRAIL MOW STRIP
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C12-09B	TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE
15C18-08A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C19-08A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15C35-06B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-06C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D48-01	TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

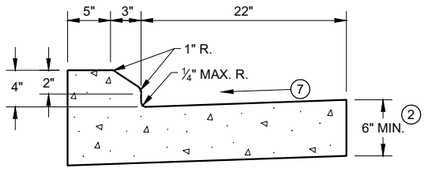
6



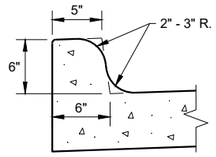
TYPES A (1) & D



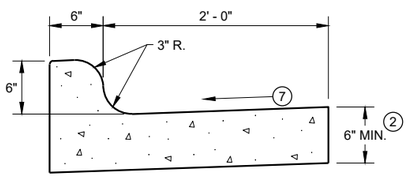
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

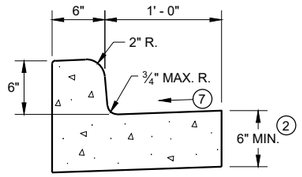


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



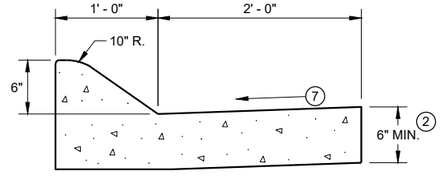
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

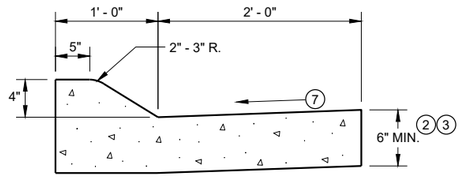


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

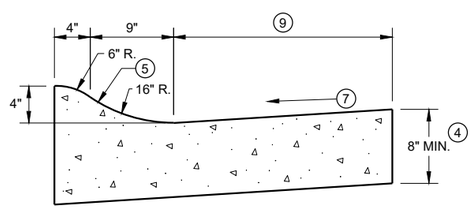


6" SLOPED CURB TYPES A (1) & D



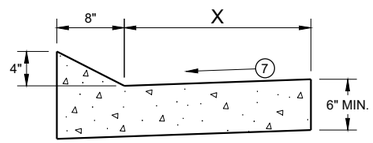
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

TBT & TBTT	X
30"	22"
36"	28"

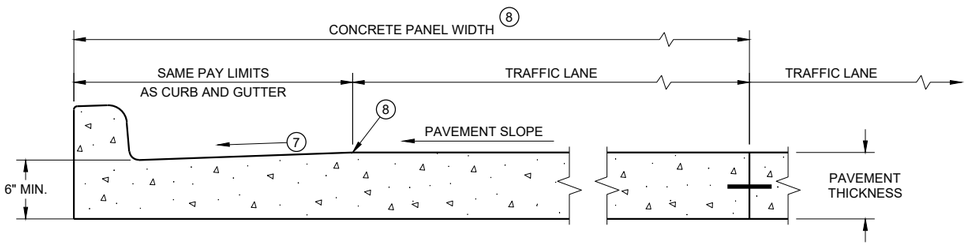


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

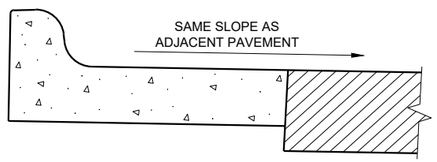
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

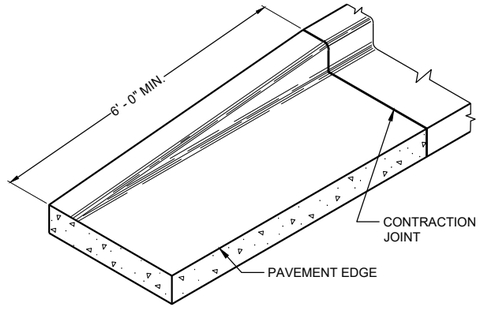
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

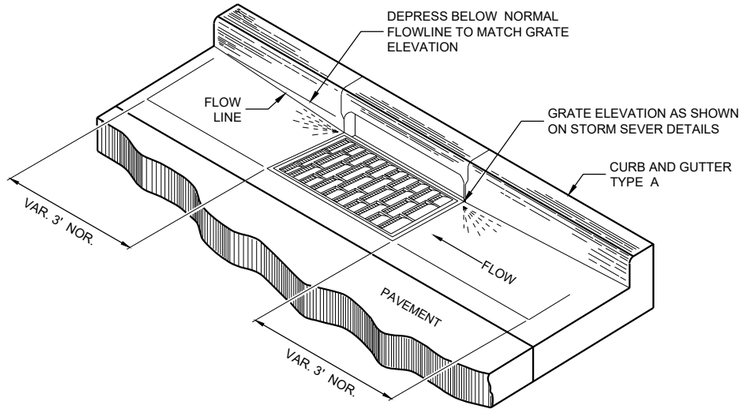
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D01 - 23a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

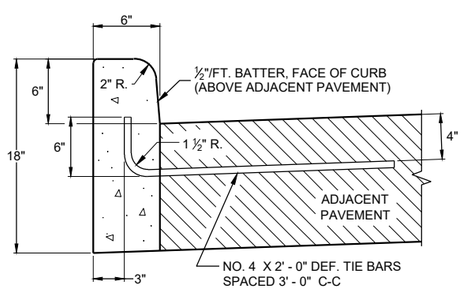
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

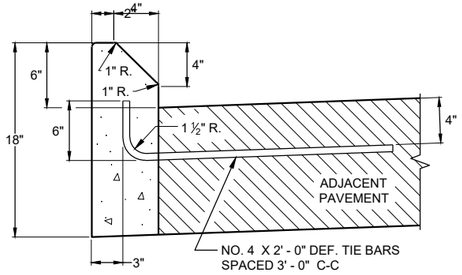
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

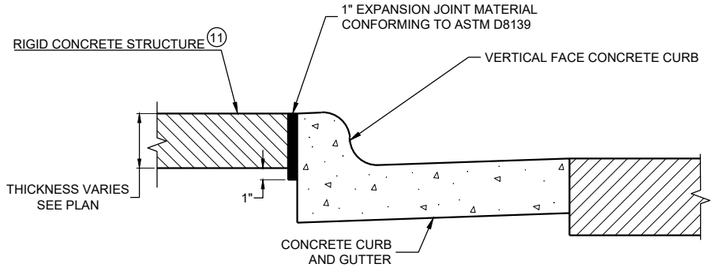


TYPES A (1) & D

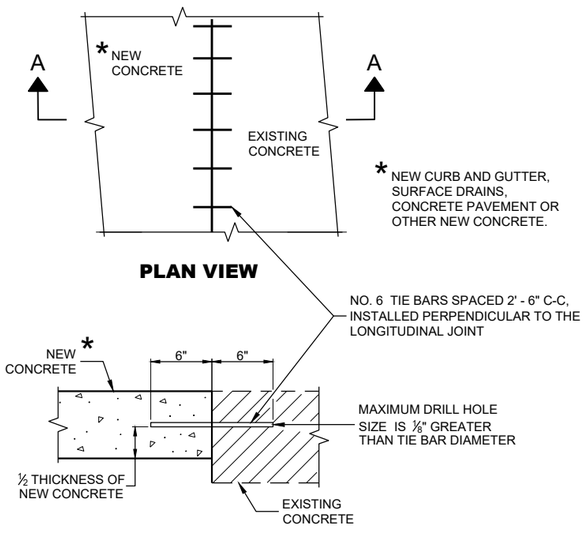


TYPES G (1) & J

CONCRETE CURB



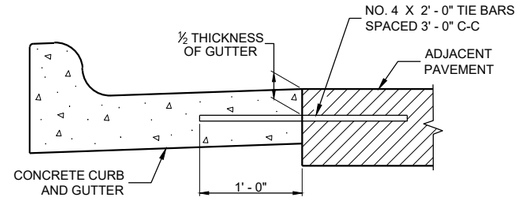
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



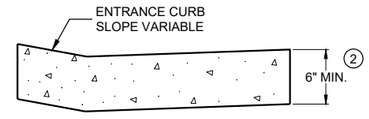
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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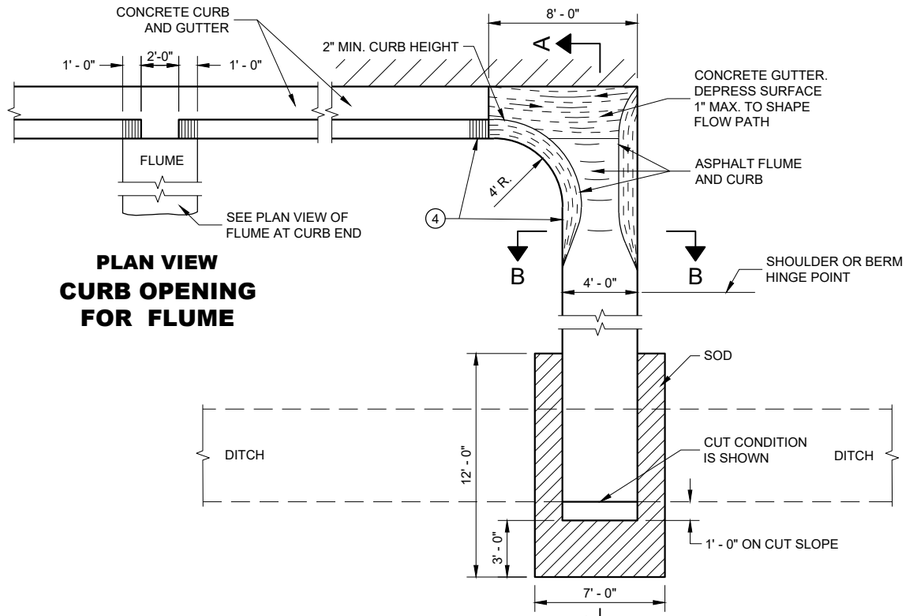
SDD08D01 - 23b

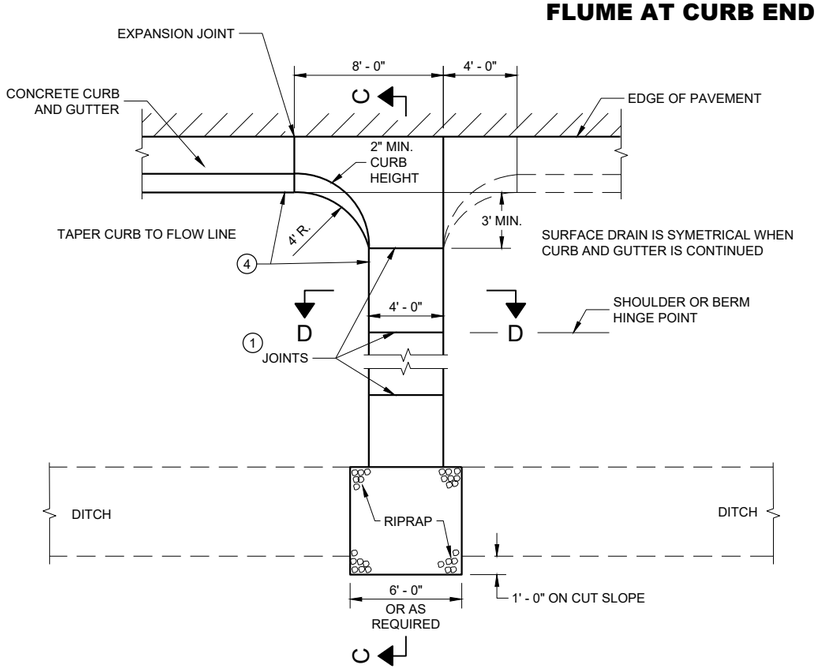
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



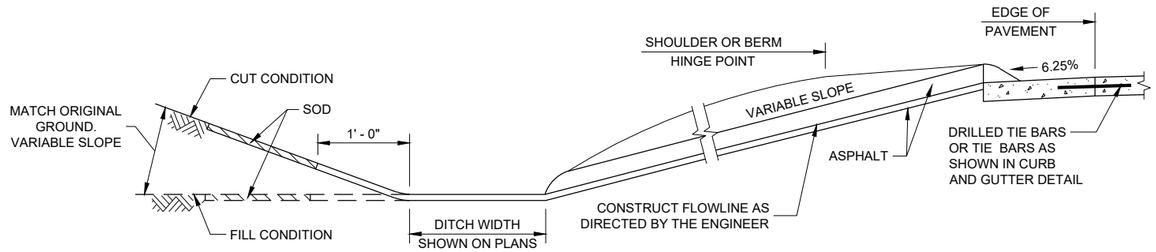
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

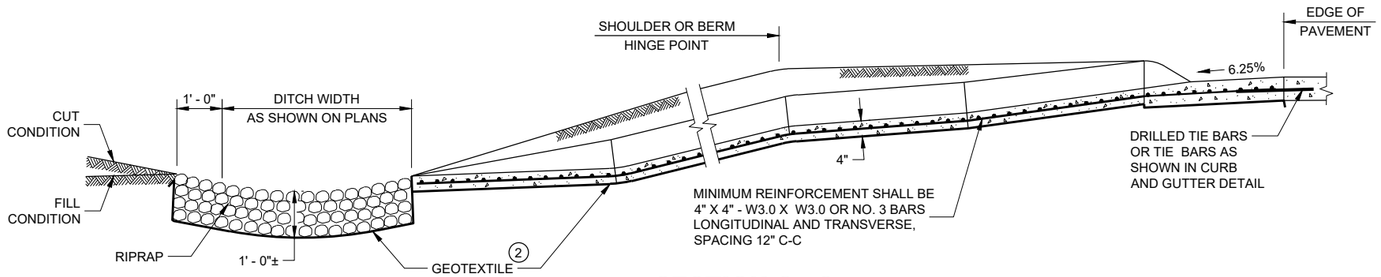
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

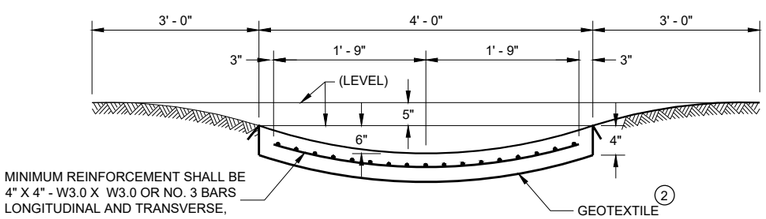


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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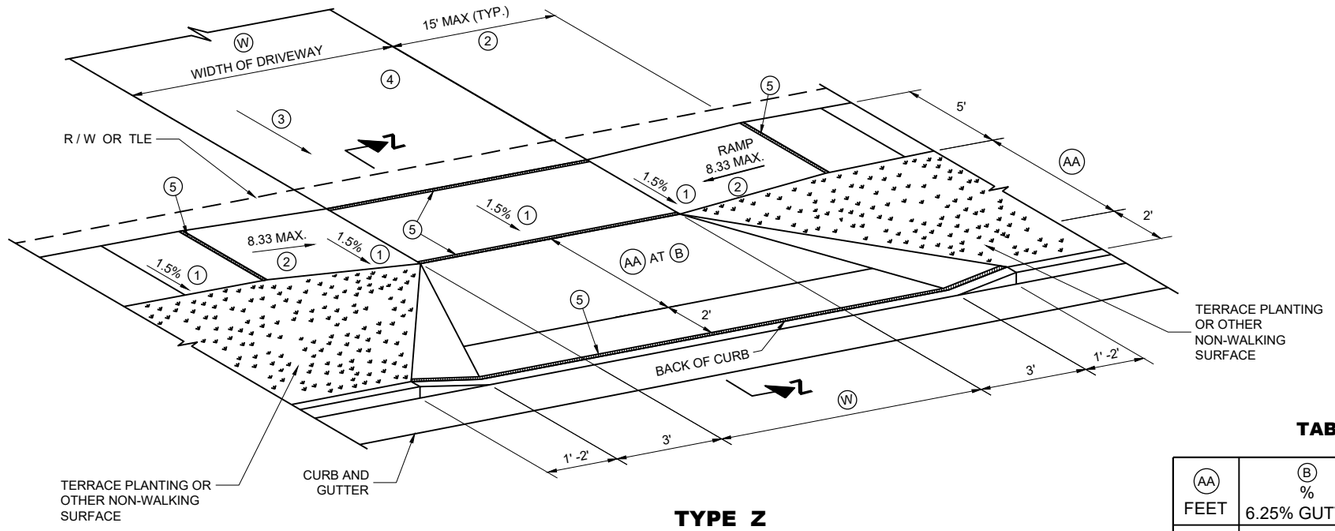
SDD 08D04 - 07



TYPE Z

SIDEWALK WITH WIDER TERRACE

TERRACE VARIES 7 TO 12 FEET

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.

(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

(4) DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

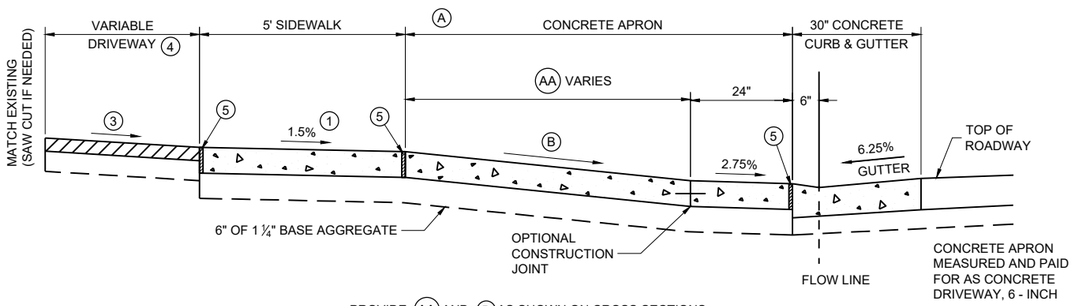
(5) ½" EXPANSION JOINT FILLER.

TABLE Z

(AA) FEET	(B) % 6.25% GUTTER	(B) % 4% GUTTER
4.5'	11.5%	9% TO 11.5%
5.5'	9% TO 11.5%	8% TO 11.5%
6.5'	8% TO 11.5%	6% TO 11.5%
7.5'	7% TO 11.5%	6% TO 11.5%
8.5'	6% TO 11.5%	5% TO 11.5%
9.5'	5% TO 11.5%	4% TO 11.5%

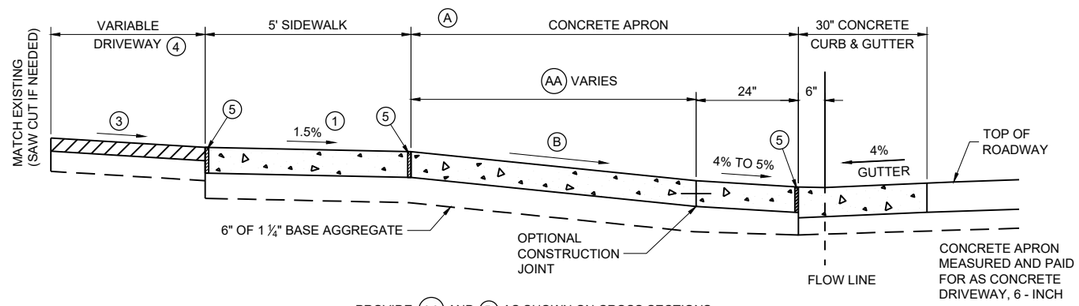
(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)



PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

6.25% GUTTER SLOPE



PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

4% GUTTER SLOPE

NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS FOR (B) VALUES NOT SHOWN IN TABLE Z.

SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY 6-INCH.

SECTION Z - Z

DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER

(URBAN AND SUBURBAN)

DRIVEWAY AND SIDEWALK RAMPS TYPE Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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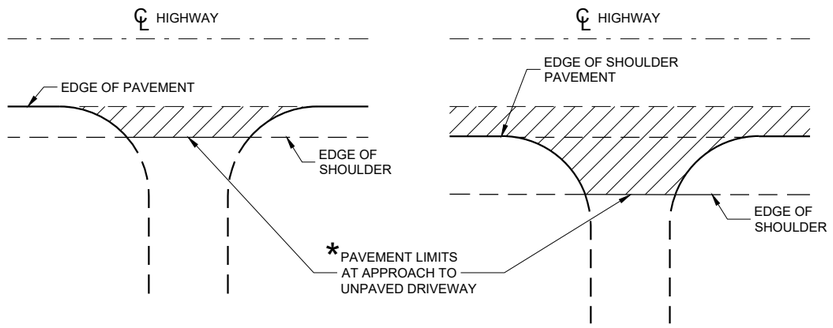
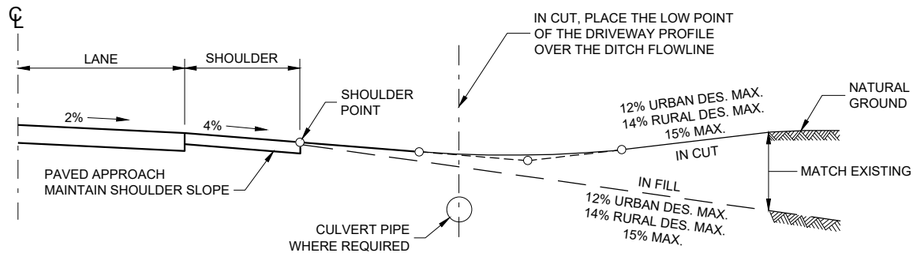
SDD 08D19-04



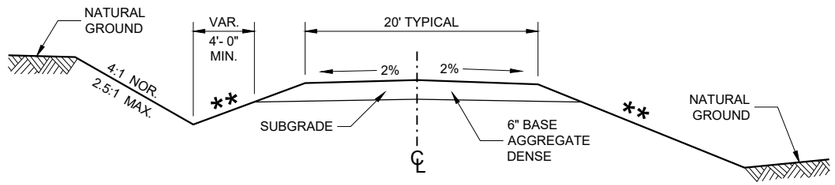
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

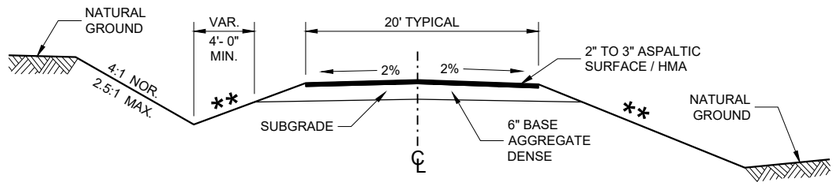


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

6

SDD 08D21 - 01

SDD 08D21 - 01

DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

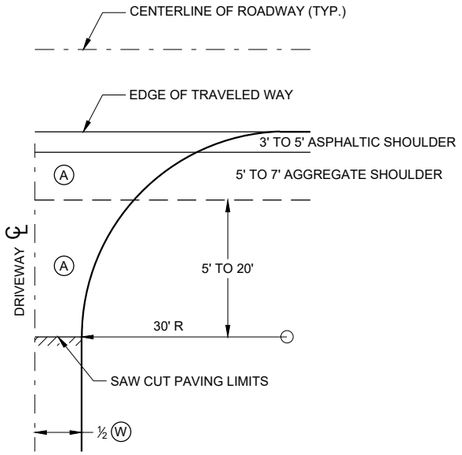
APPROVED
December 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

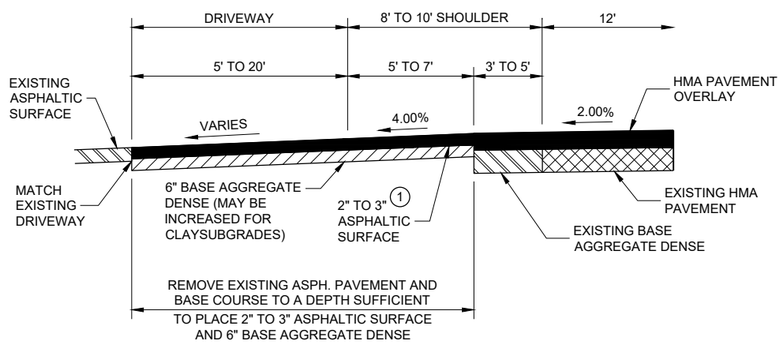
GENERAL NOTES

(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PLAN VIEW

HALF SECTION



PROFILE VIEW

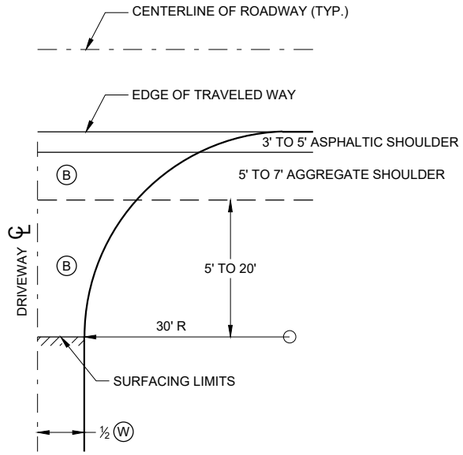
RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS

(A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)

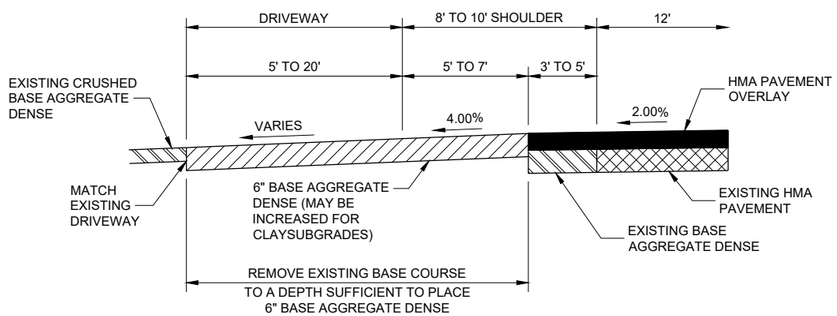
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

(W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.



PLAN VIEW

HALF SECTION



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE

RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER
FHWA

6

SDD 08D22 - 01

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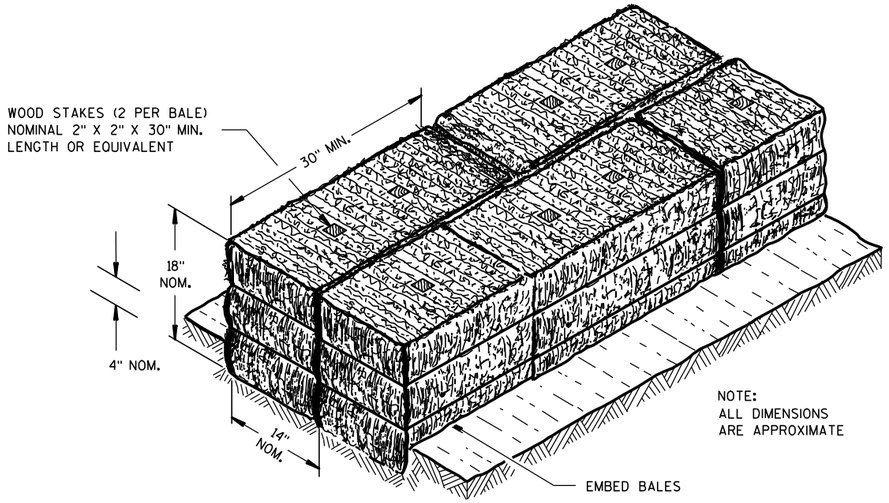
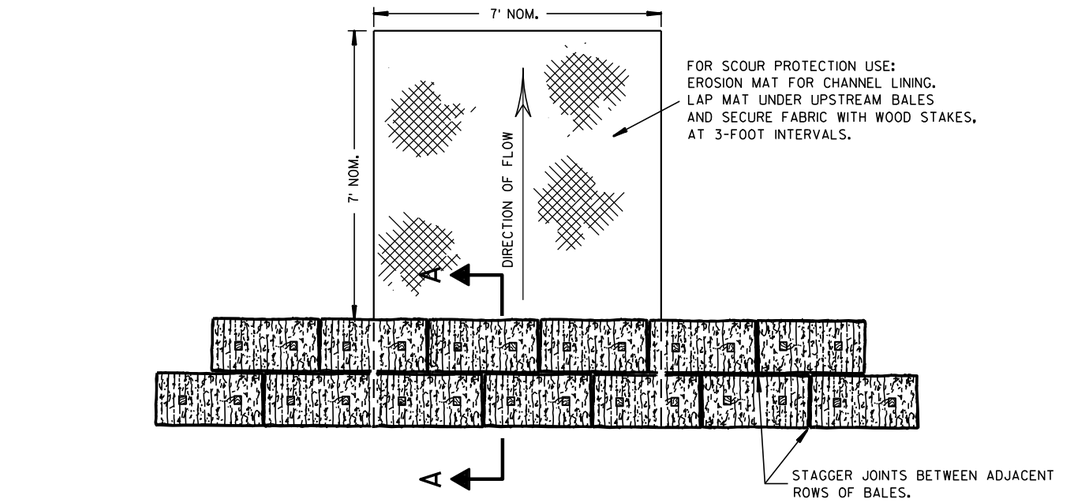
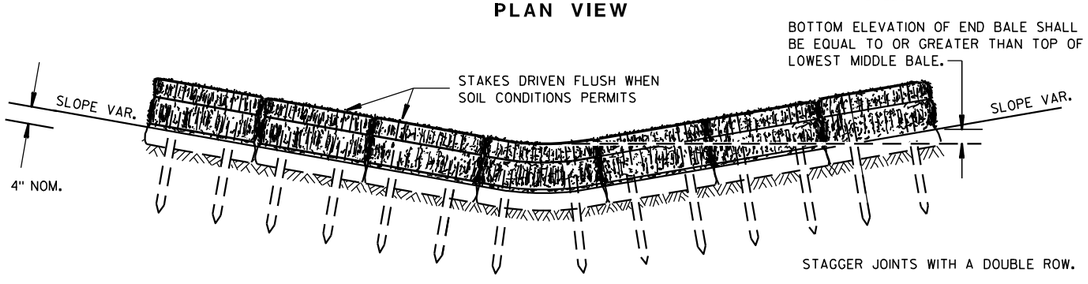
SDD 08D22 - 01



SECTION A-A



PLAN VIEW



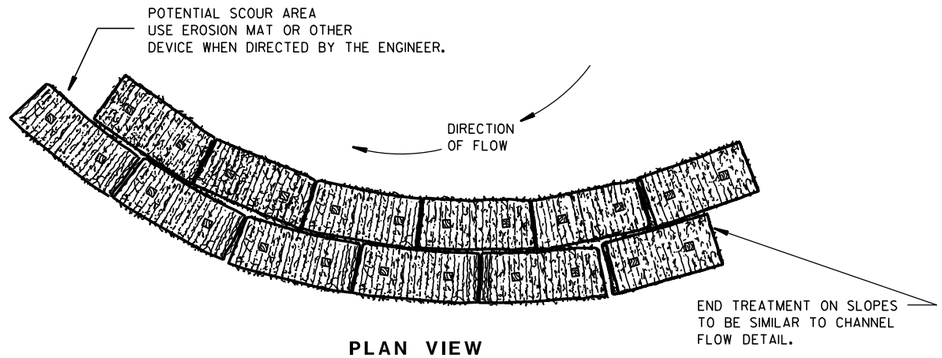
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

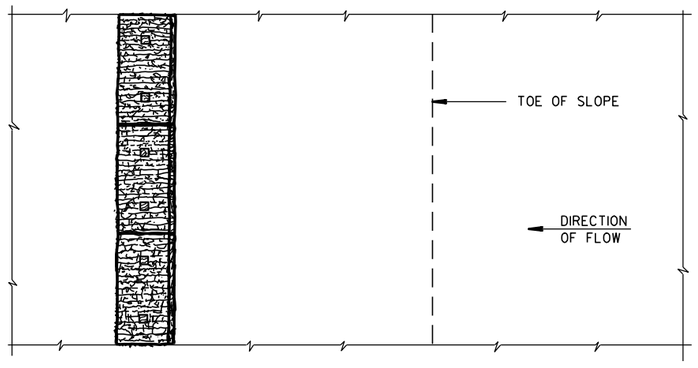
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

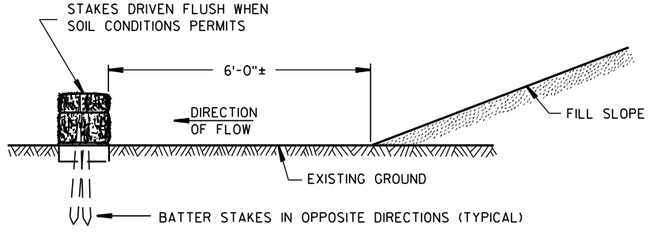


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

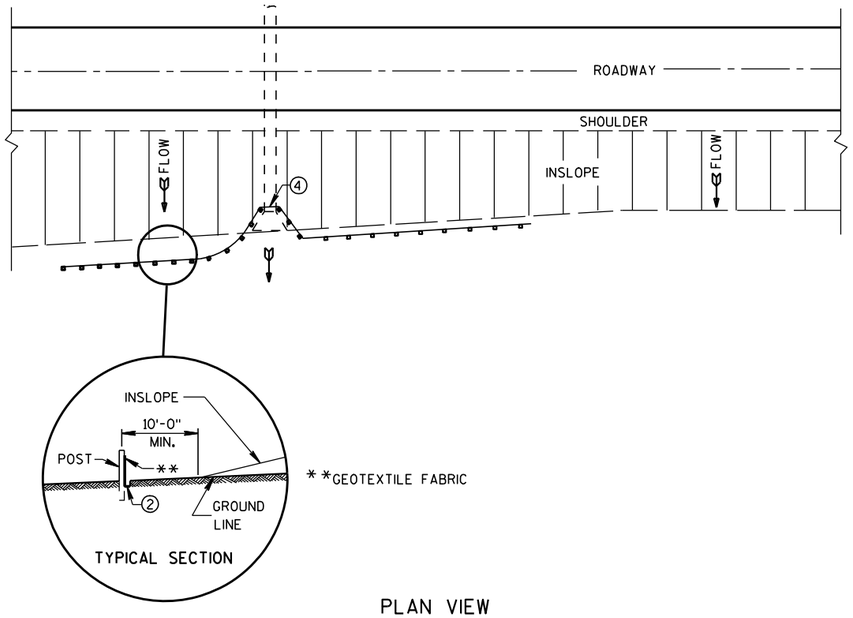
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

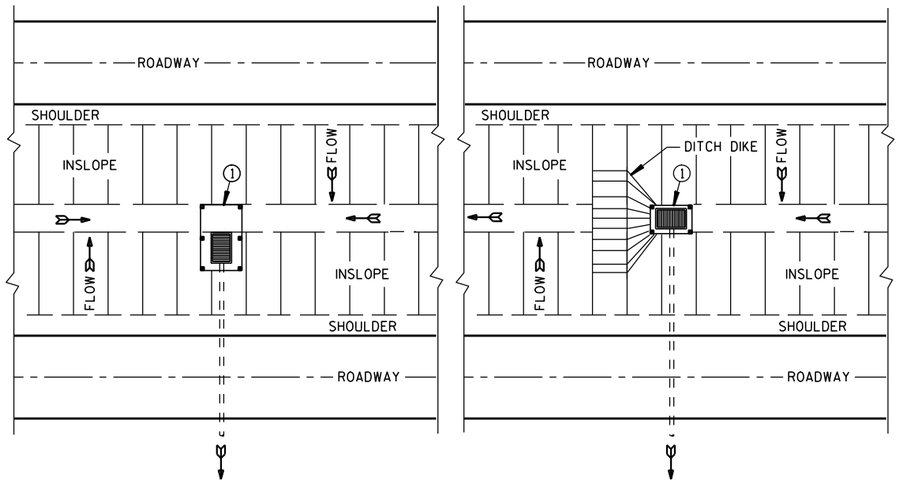
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



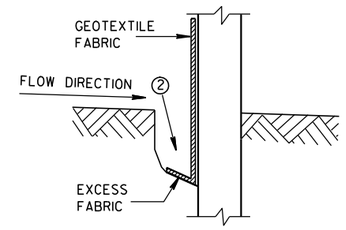
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

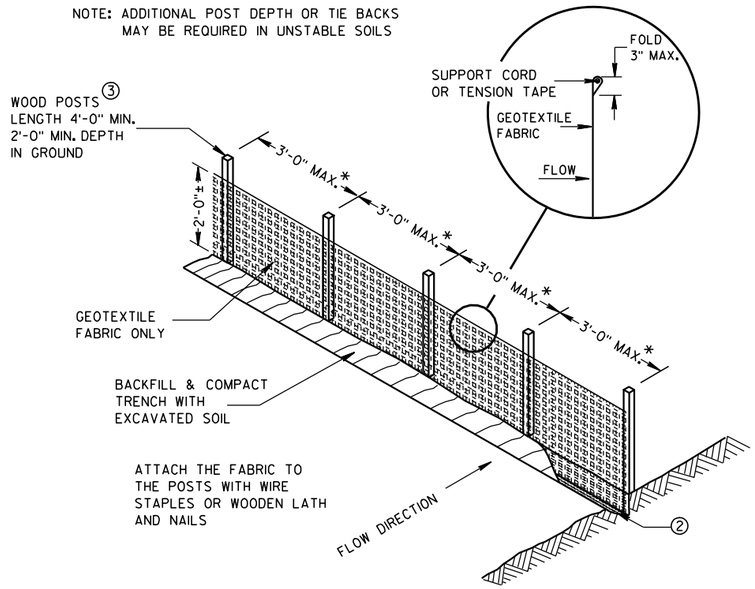
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

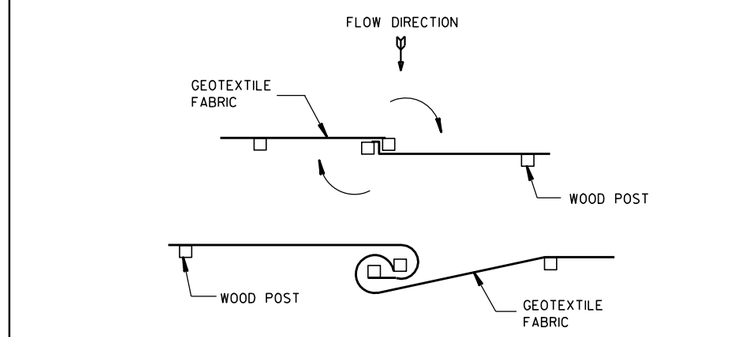


TRENCH DETAIL

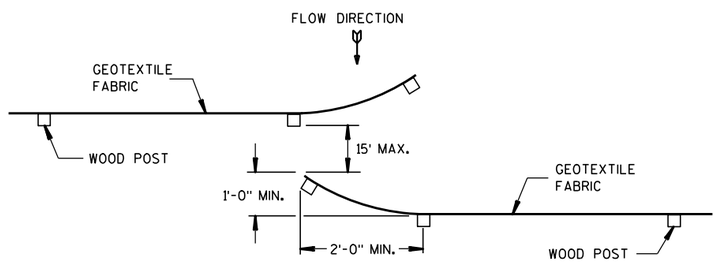


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

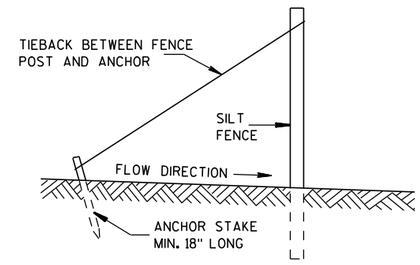


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

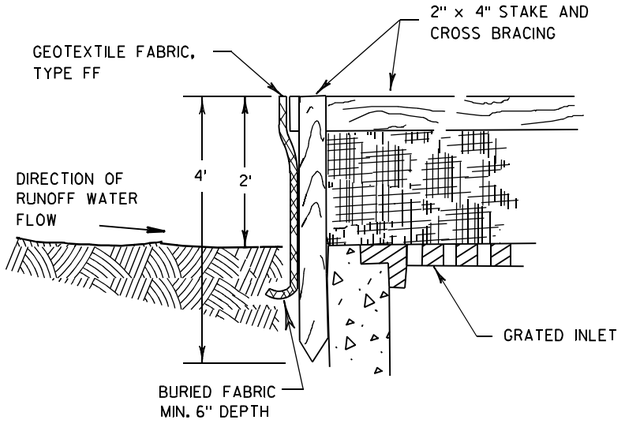
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

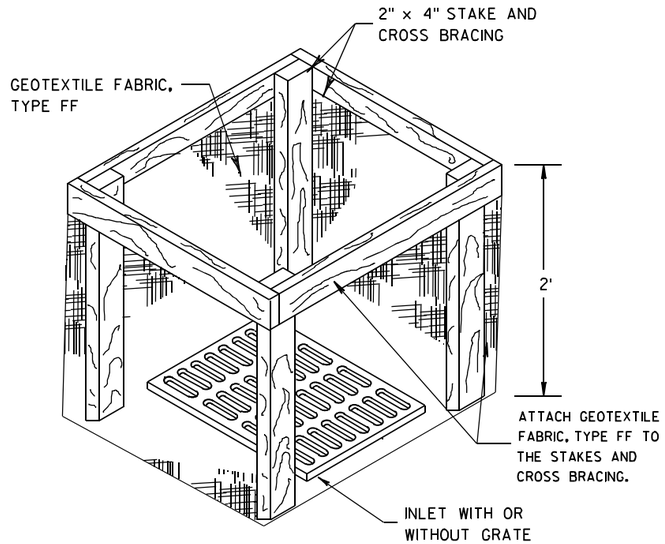
6

S.D.D. 8 E 9-6

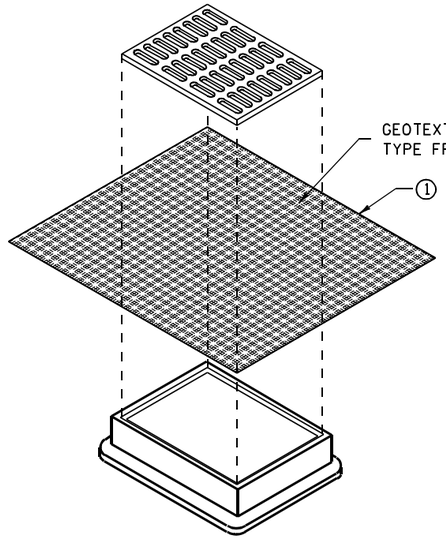
6

S.D.D. 8 E 9-6



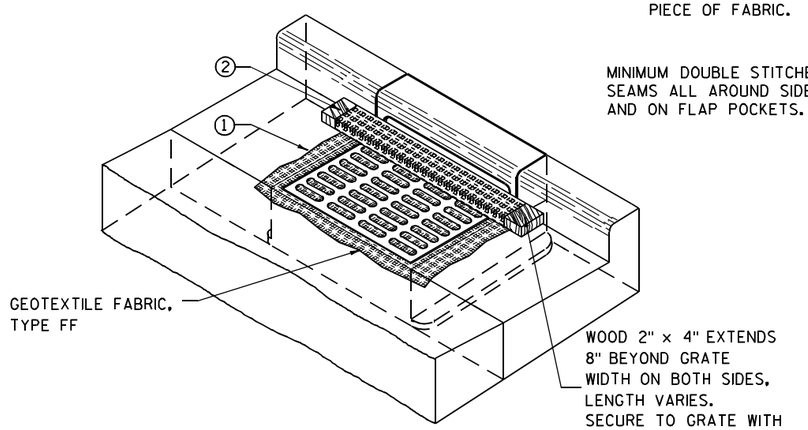


INLET PROTECTION, TYPE A

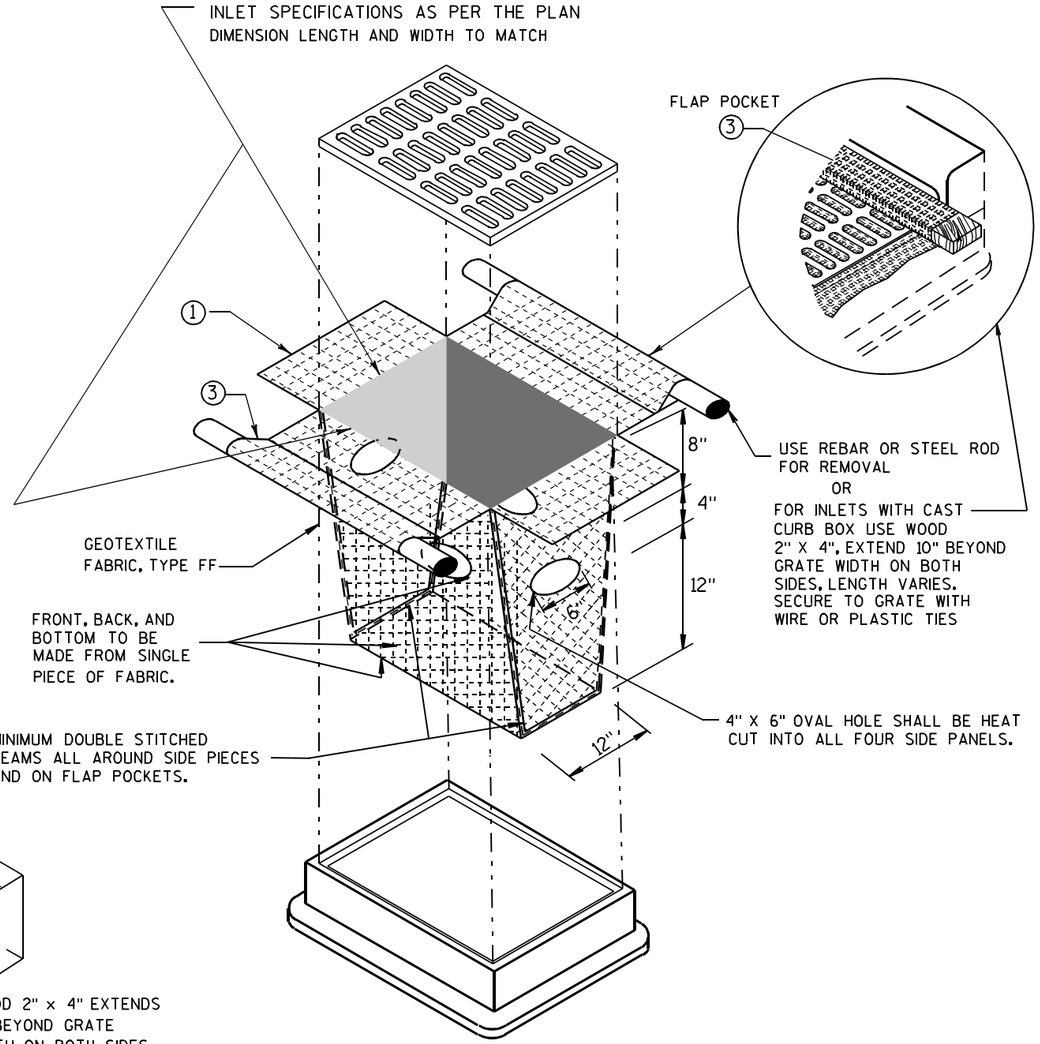


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

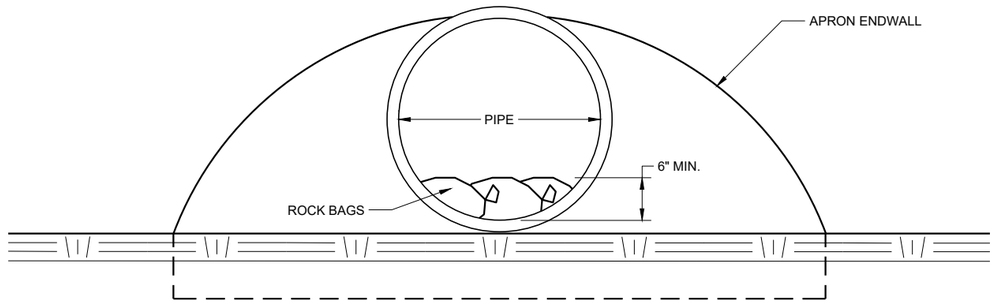
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

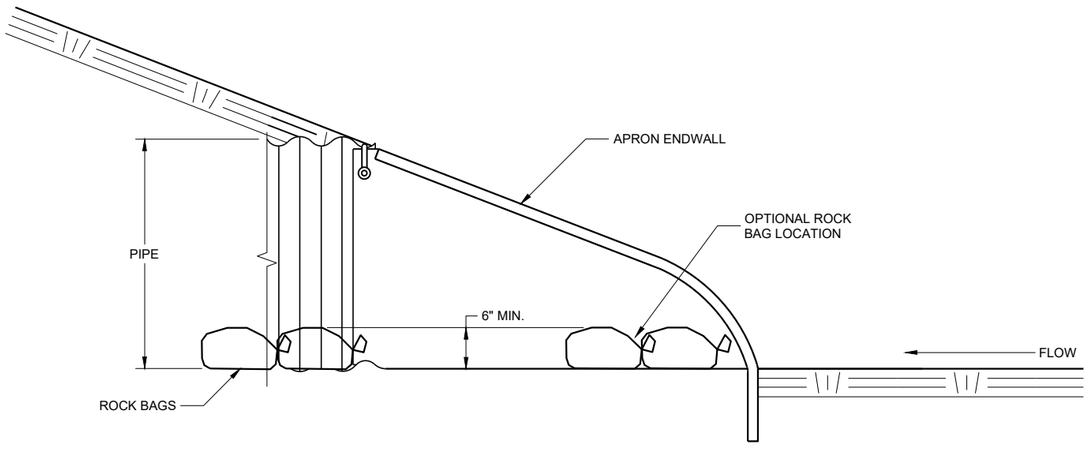
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

6

SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

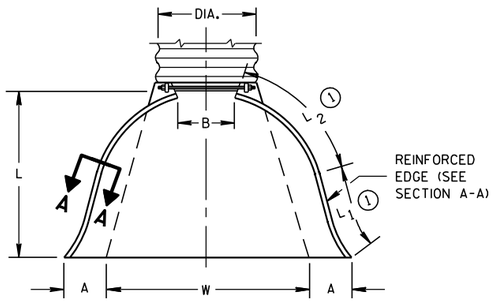
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

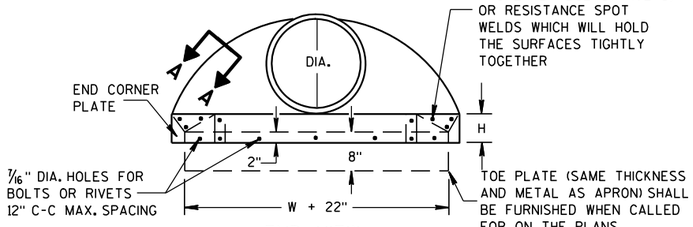
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

*MINIMUM
**MAXIMUM



PLAN VIEW



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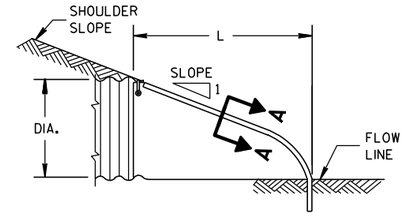
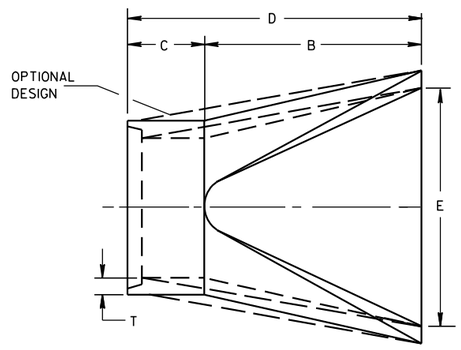
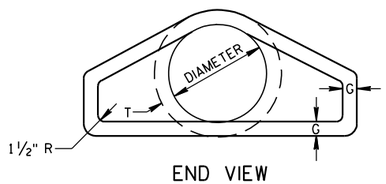


SIDE ELEVATION

METAL ENDWALLS



PLAN



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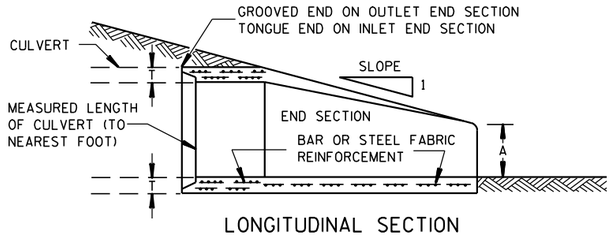
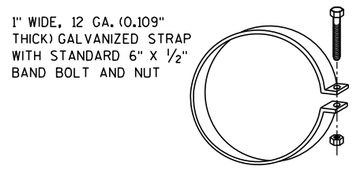


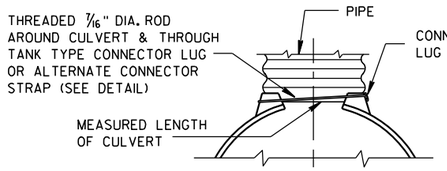
LONGITUDINAL SECTION

CONCRETE ENDWALLS

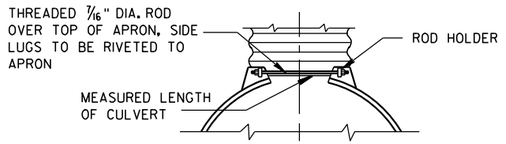


ALTERNATE FOR TYPE 1 CONNECTION

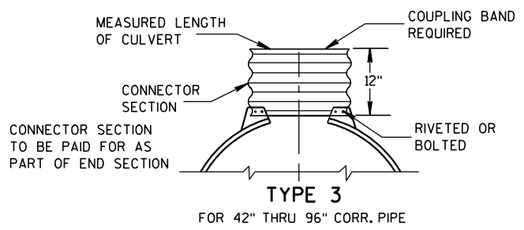
END SECTION CONNECTOR STRAP



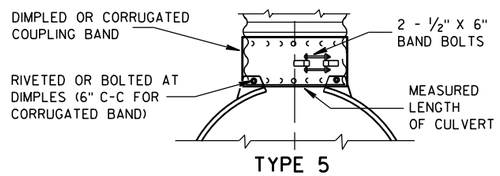
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

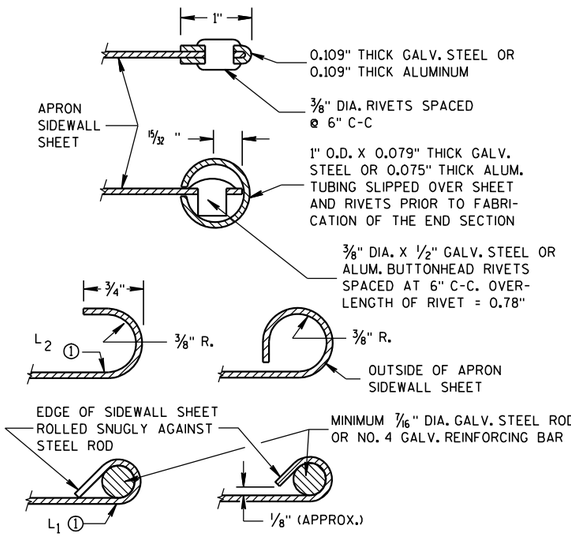
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

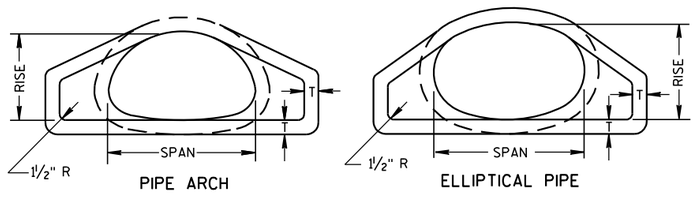
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

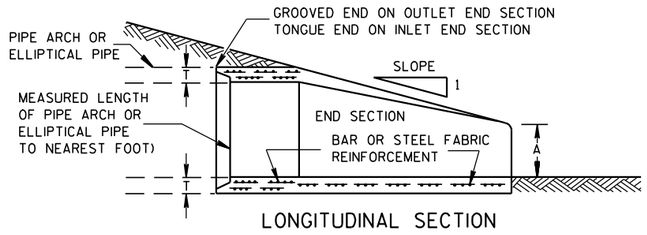
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

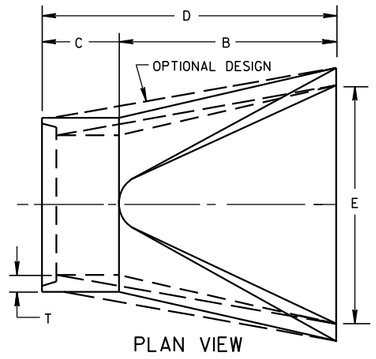
S.D.D. 8 F 1-11



END VIEW

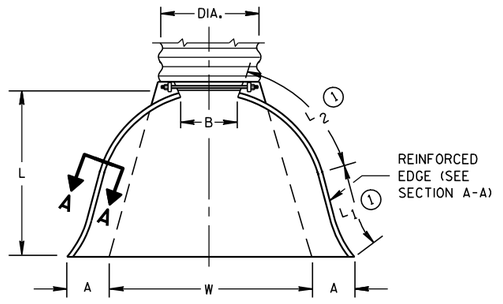


LONGITUDINAL SECTION

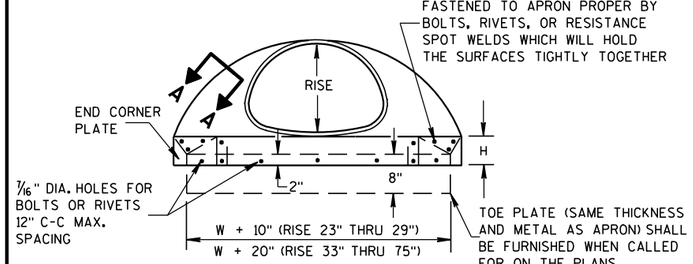


PLAN VIEW

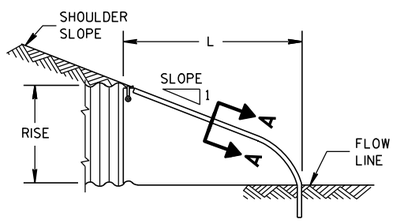
CONCRETE ENDWALLS



PLAN VIEW

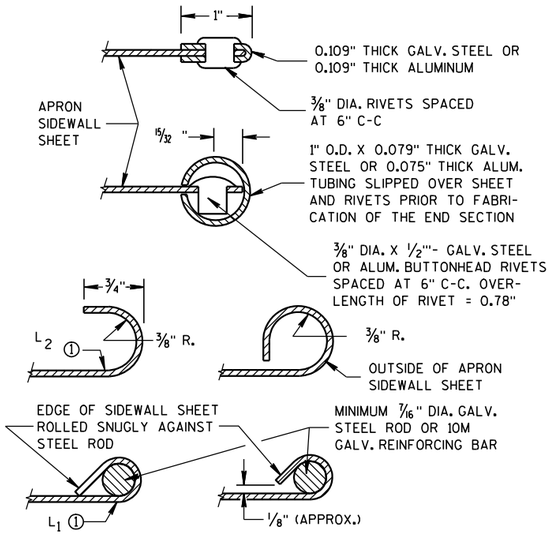


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

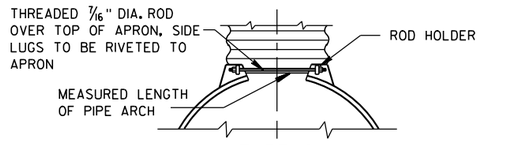
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

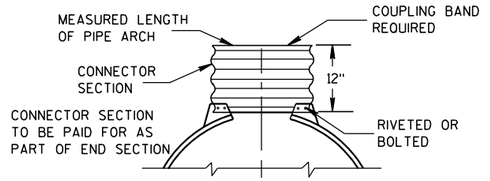
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



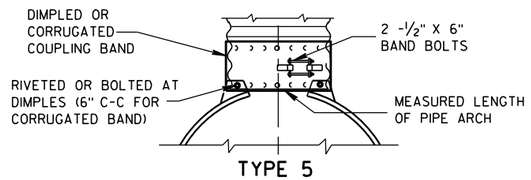
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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S.D.D. 8 F 2-1

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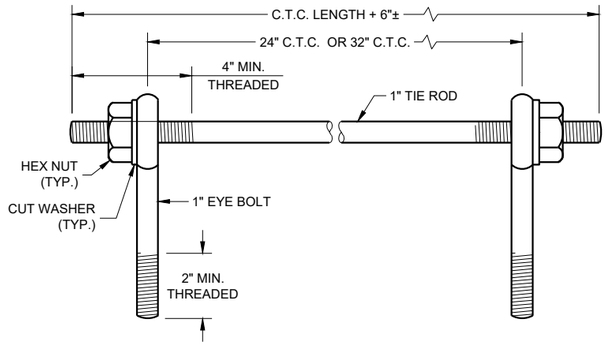
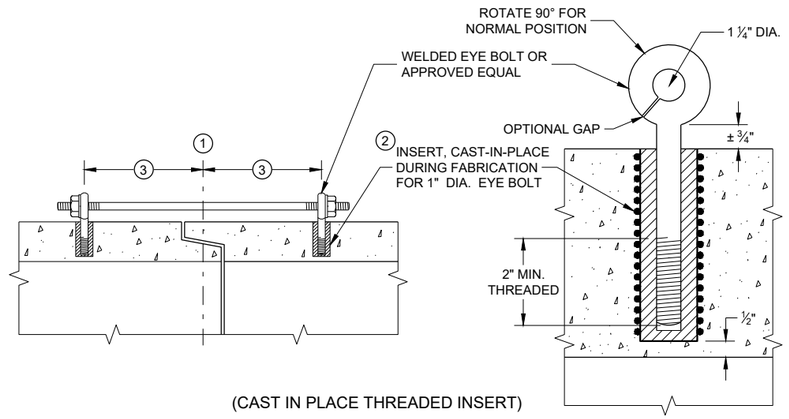
S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

(2) THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

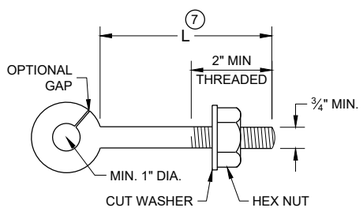
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

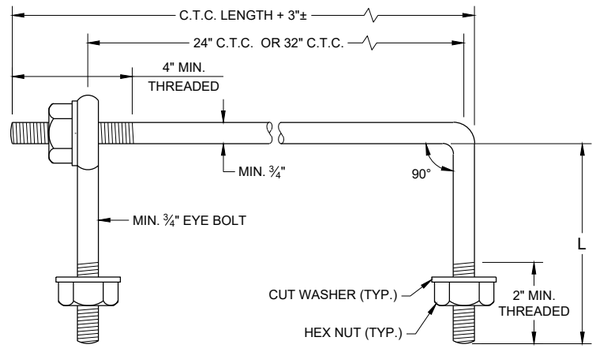
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

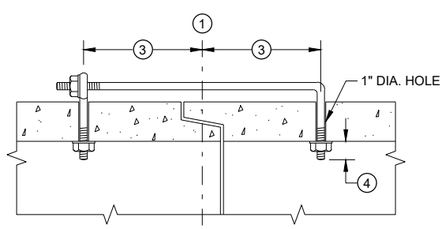


EYE BOLT (7)

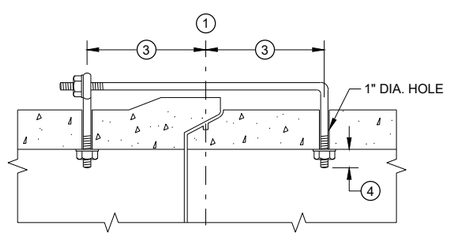
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

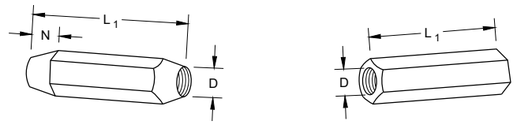
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

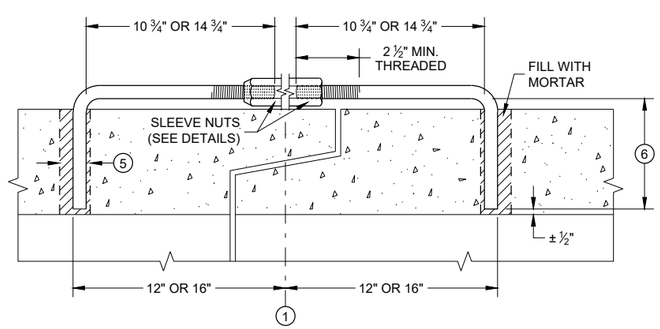
PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



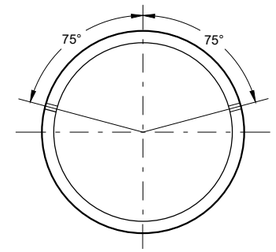
RIGHT AND LEFT THREADS

SLEEVE NUTS



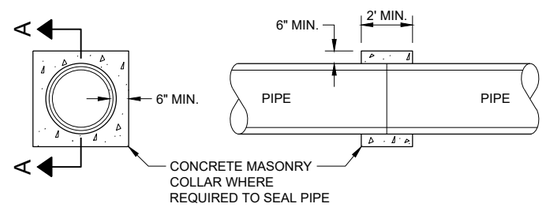
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

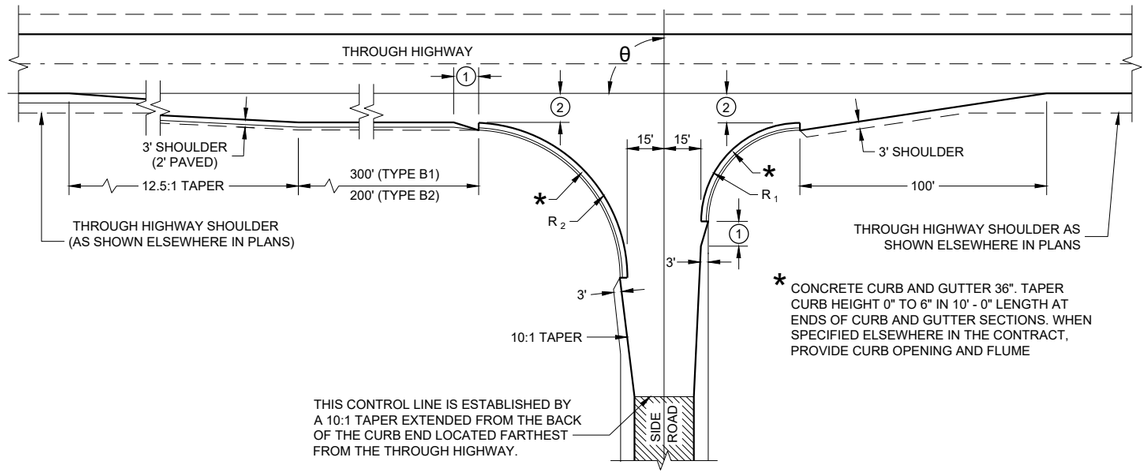
CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA



* CONCRETE CURB AND GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10' - 0" LENGTH AT ENDS OF CURB AND GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME

TYPE "B1" AND "B2"

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65 - 70	35	70
71 - 80	40	70
81 - 90	40	60
91 - 100	50	55
101 - 110	60	45

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

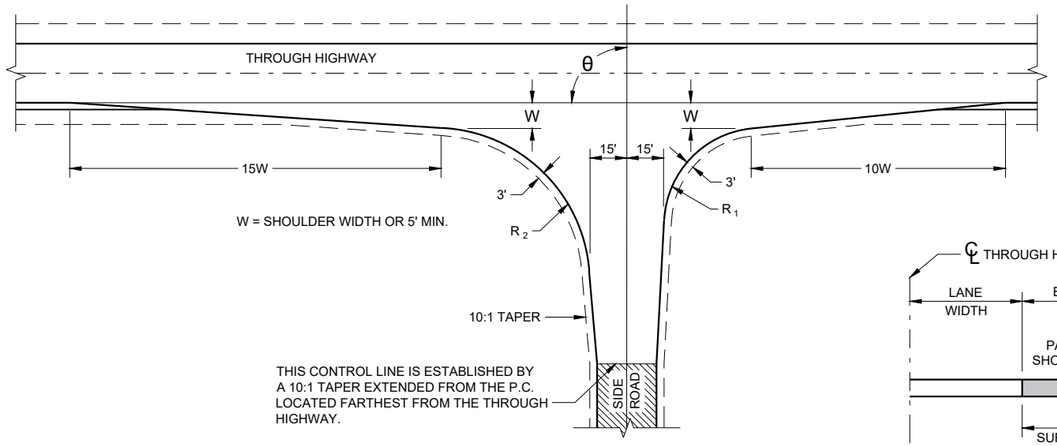
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

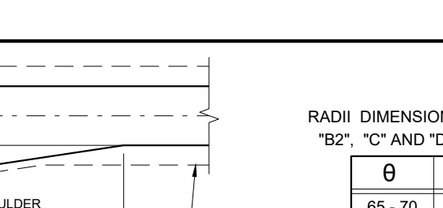
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
- ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH
- PC CONCRETE = 13-FT PLUS PAVED SHOULDER WIDTH

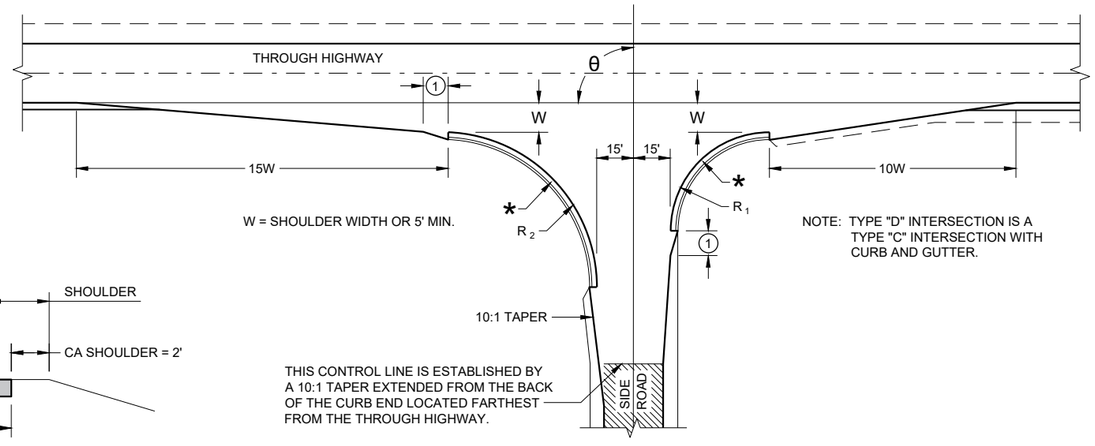
(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



TYPE "C"

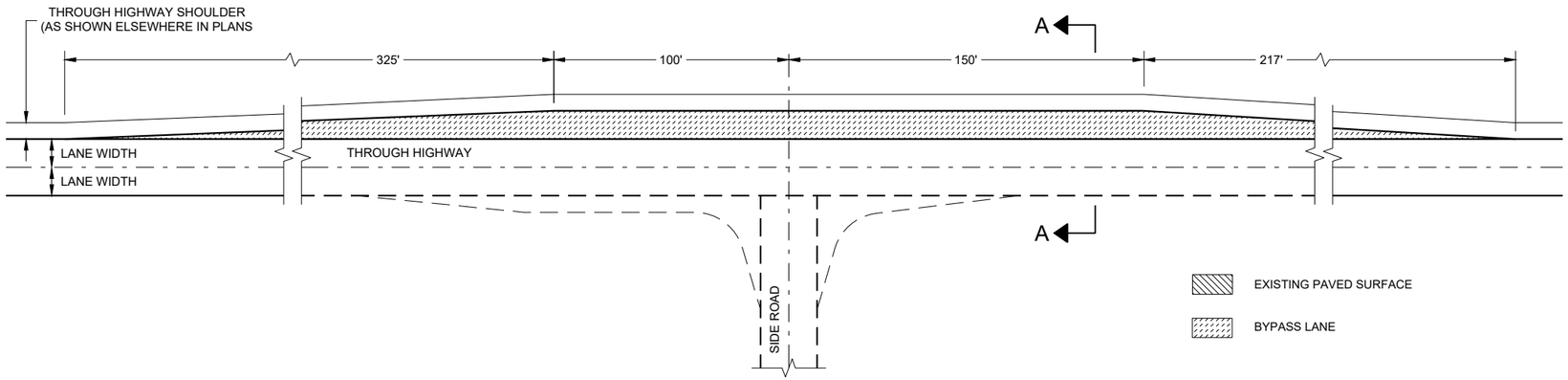


SECTION A - A
(SHOWING BYPASS LANE AND SHOULDER)



NOTE: TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB AND GUTTER.

TYPE "D"



TEE INTERSECTION BYPASS LANE DETAIL

AT GRADE SIDE ROAD INTERSECTION TYPES "B1", "B2", "C", "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 09A01 - 14a

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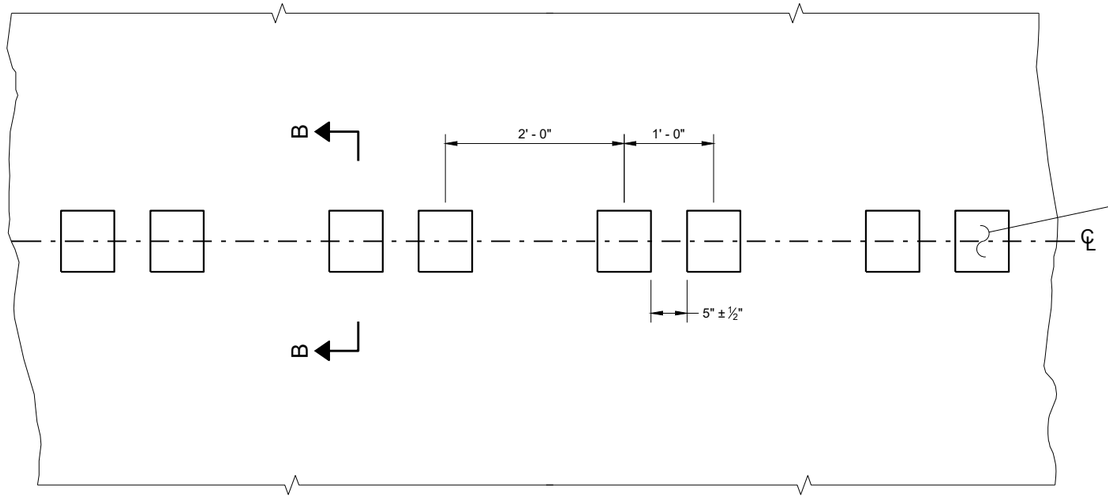
SDD 09A01 - 14a

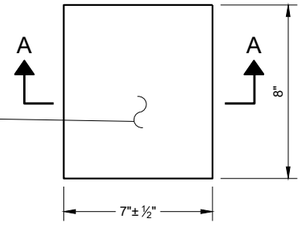
GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A11 SHEETS "d" AND "e".

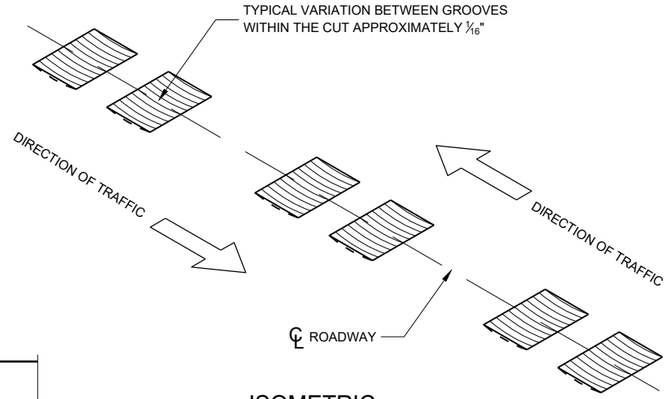
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



PLAN DETAIL VIEW



PLAN VIEW
(SINGLE GROOVE)



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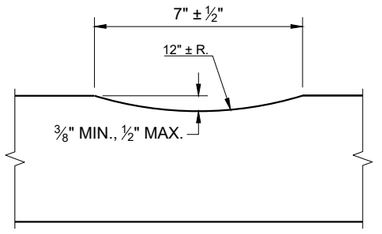
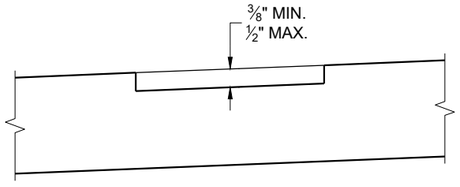
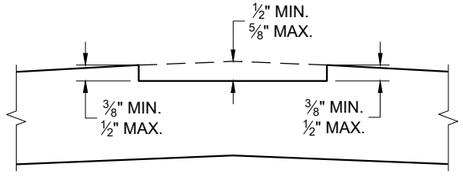


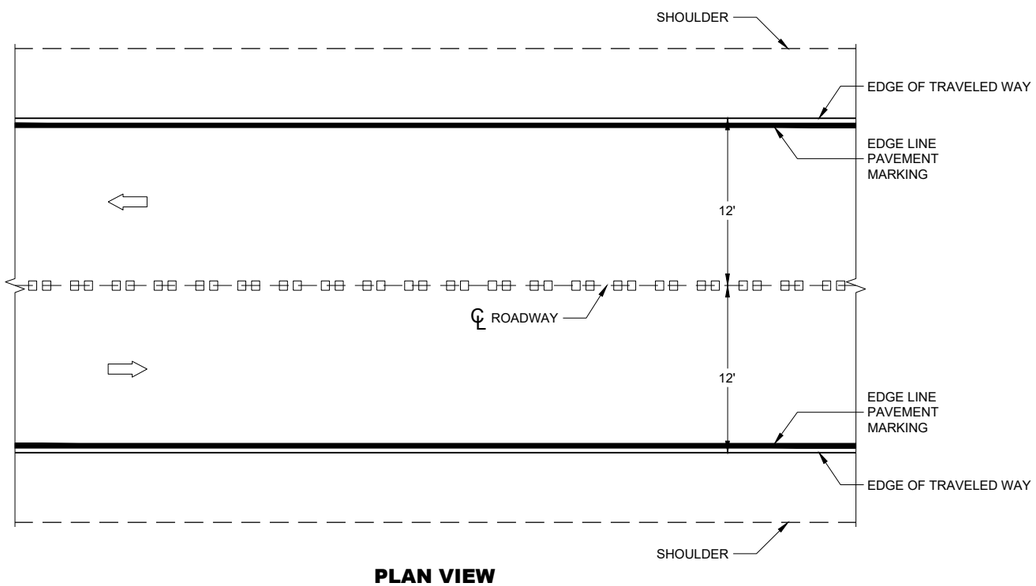
SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



PLAN VIEW

CENTERLINE RUMBLE STRIPS - ASPHALT

6

SDD 13A11 - 04a

CENTERLINE RUMBLE STRIPS - ASPHALT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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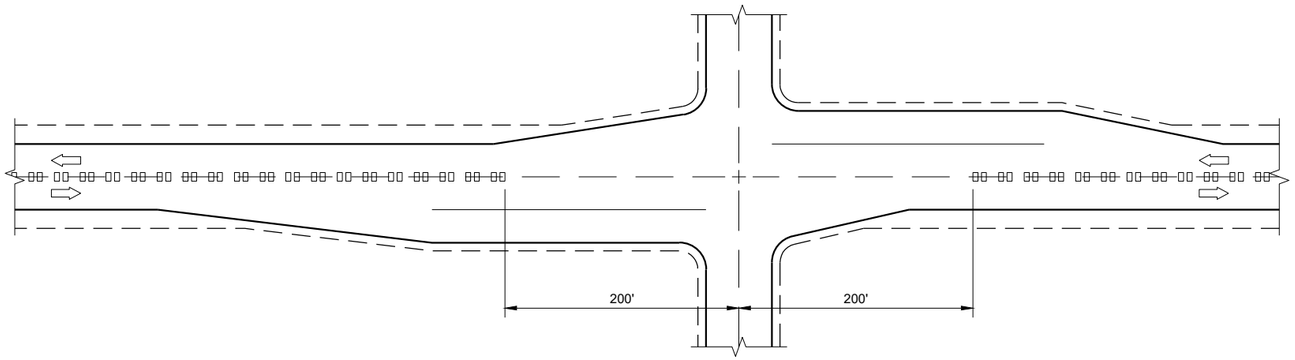
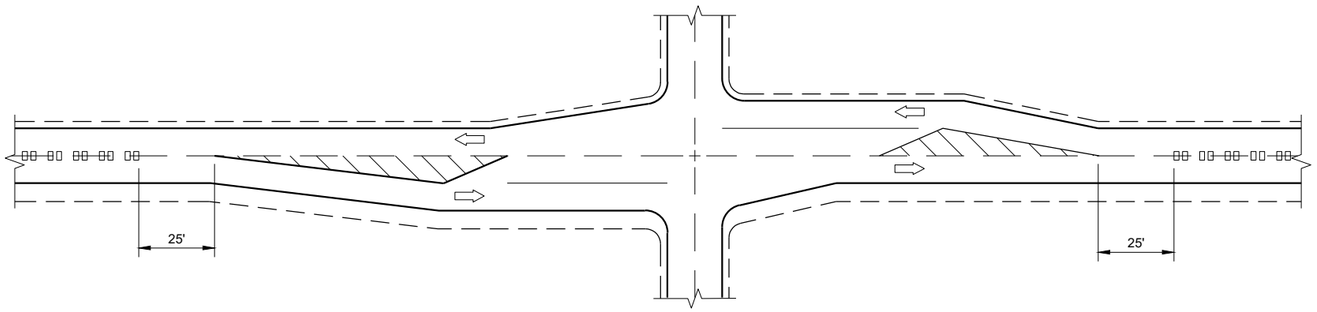
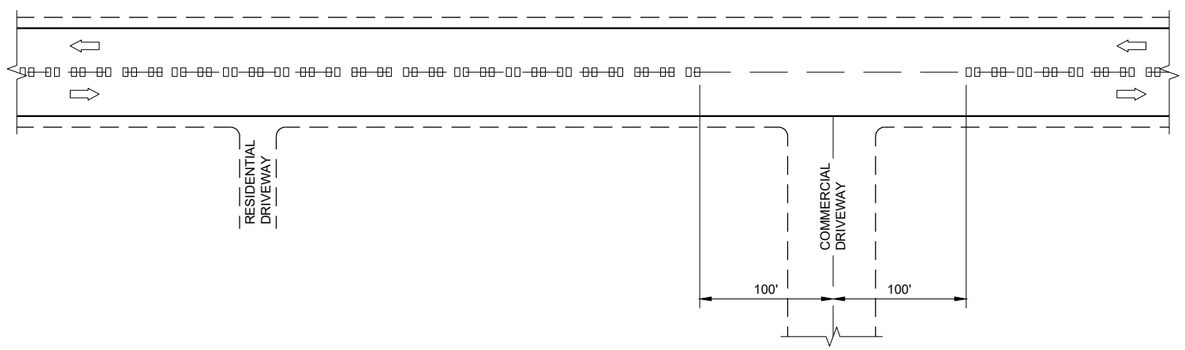
SDD 13A11 - 04a



CENTERLINE GROOVES AT INTERSECTIONS



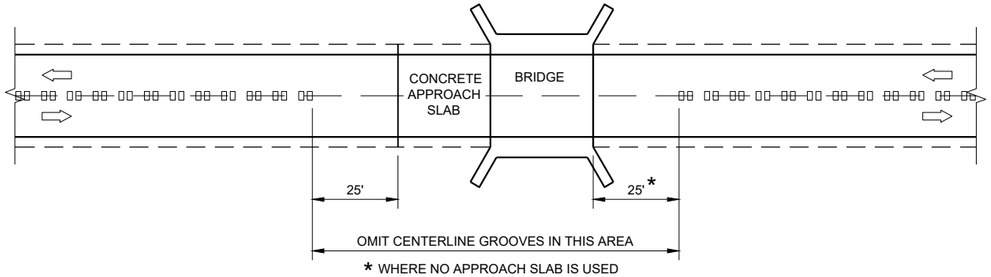
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



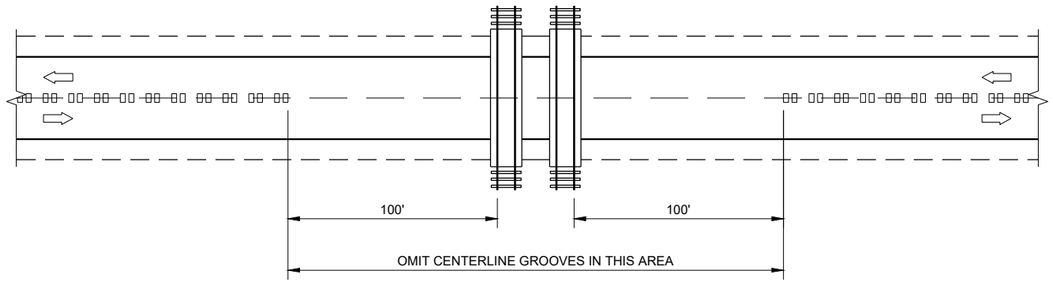
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

CENTER LINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAIL ROADS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ John Jenkins — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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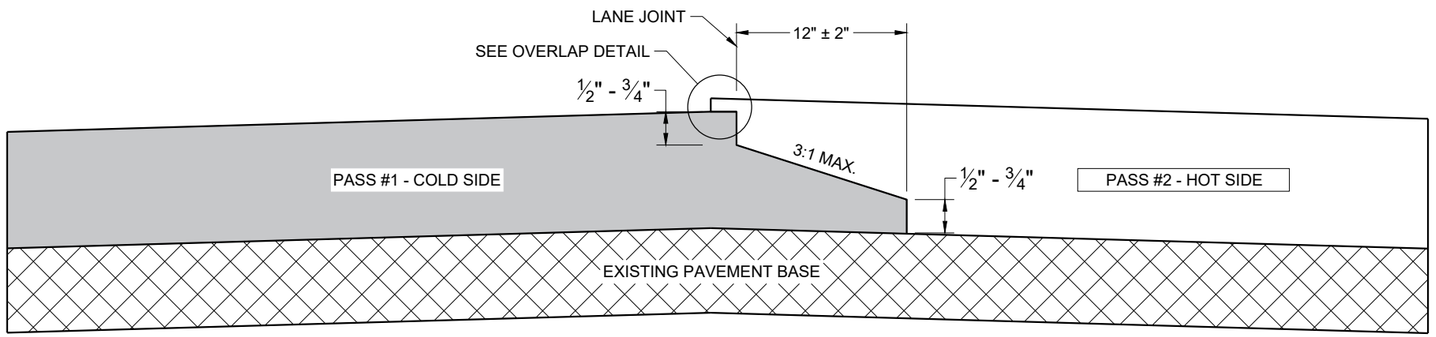
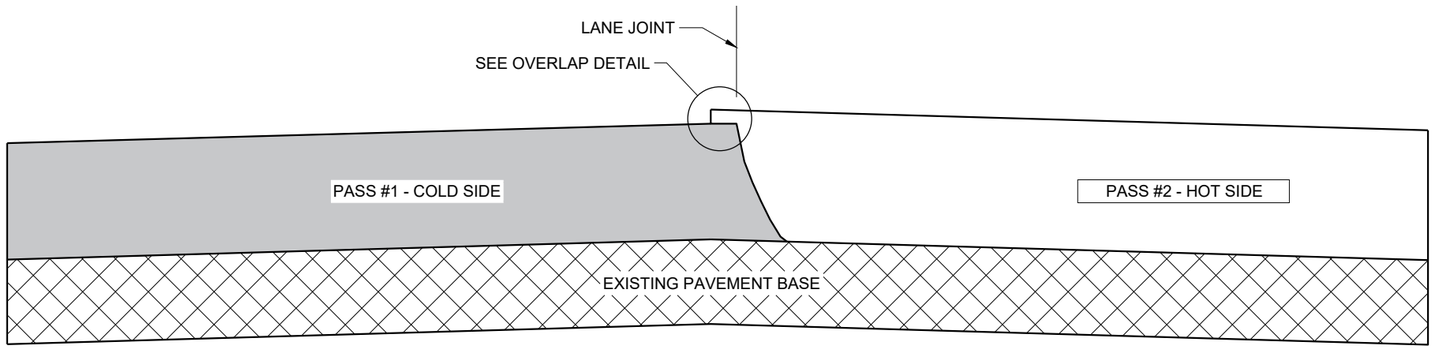
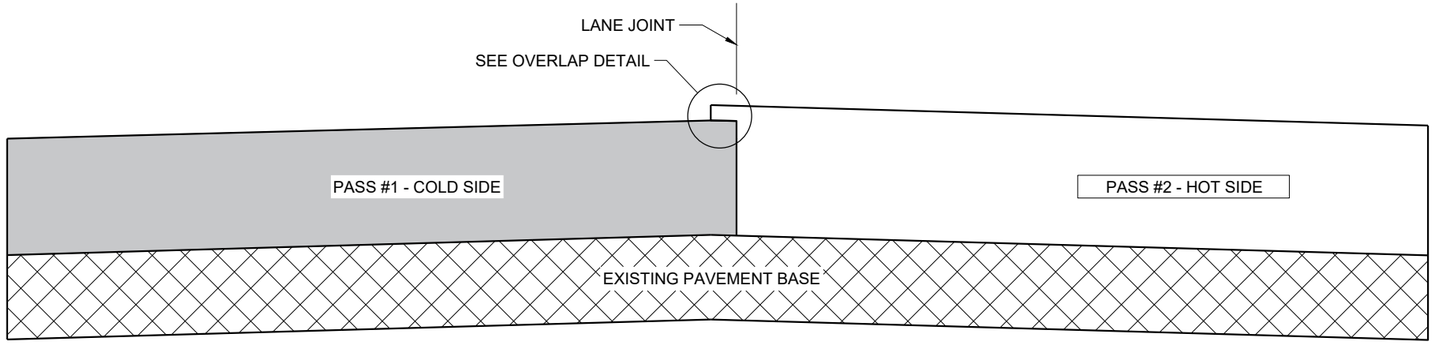
SDD 13A11 - 04d



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

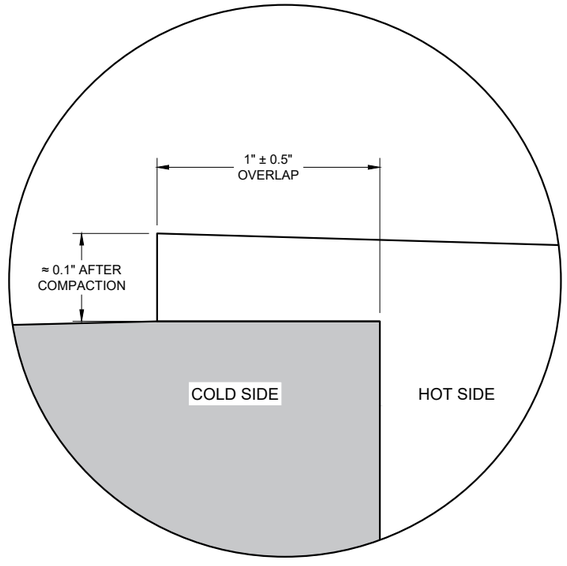
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

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SDD 13C19 - 03

SDD 13C19 - 03

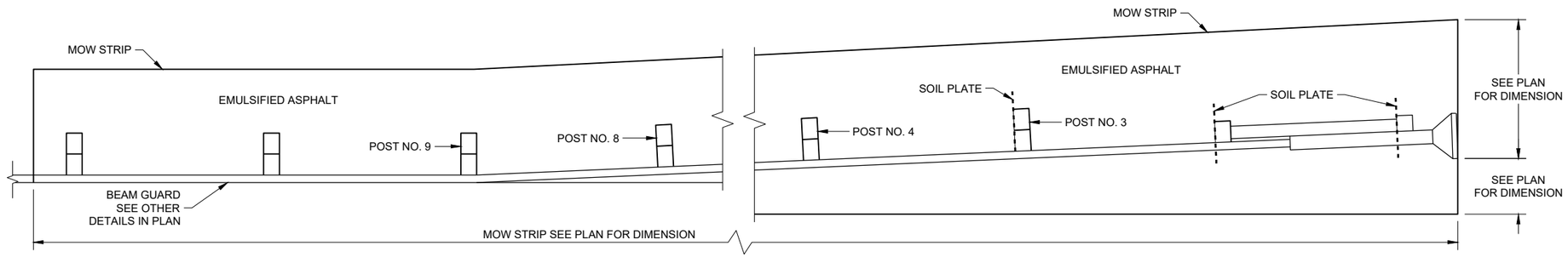
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



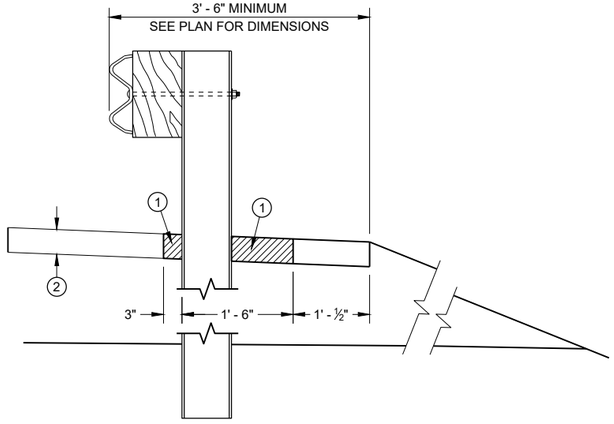
PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABSORBING TERMINAL

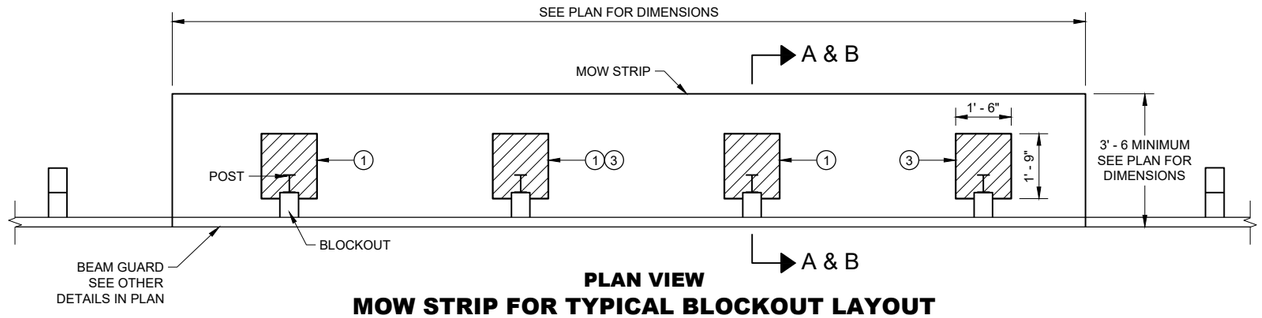
GENERAL NOTES

ONLY USE STEEL POSTS IN CONCRETE AND ASPHALT MOW STRIPS.

1. CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.
2. DEPTH OF MOW STRIP:
   ASPHALT - 4"
   CONCRETE - 4"
   EMULSIFIED ASPHALT - 1" OR LESS
3. FOR EMULSIFIED ASPHALT, MOW STRIP STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS)

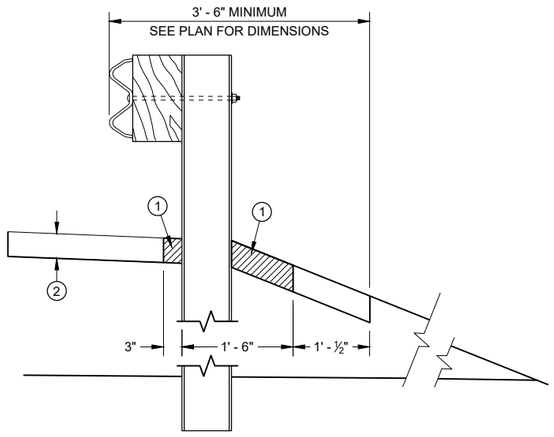


SECTION A - A

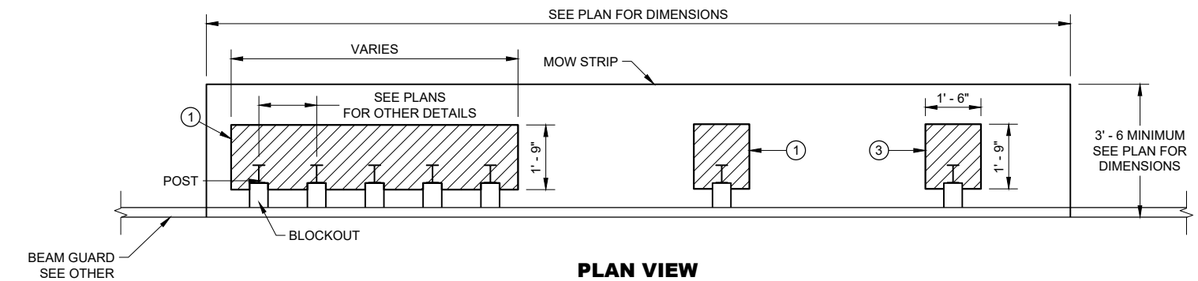


PLAN VIEW

MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT

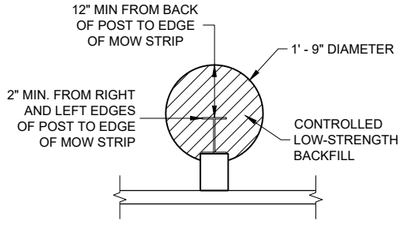


SECTION B - B

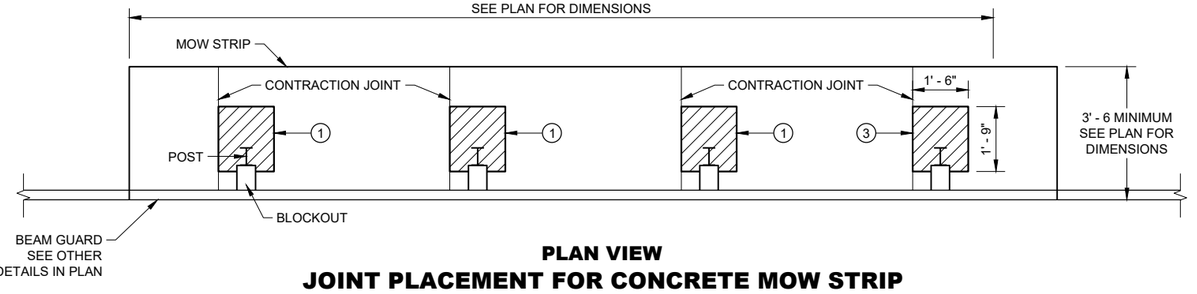


PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



ALTERNATIVE HMA MOW STRIP DESIGN



PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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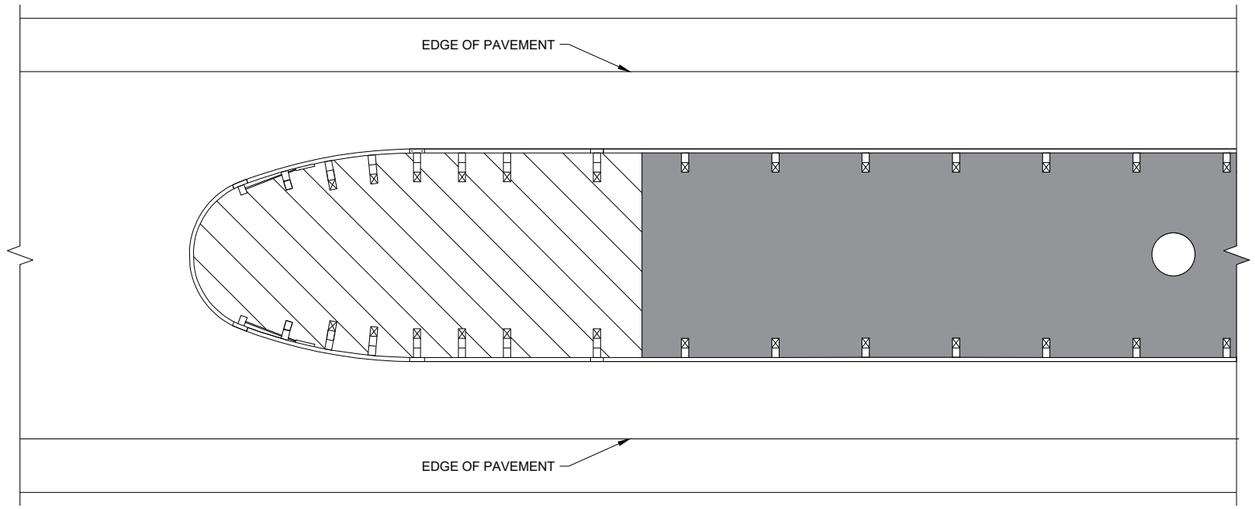
LEGEND

CONCRETE, ASPHALT, OR EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

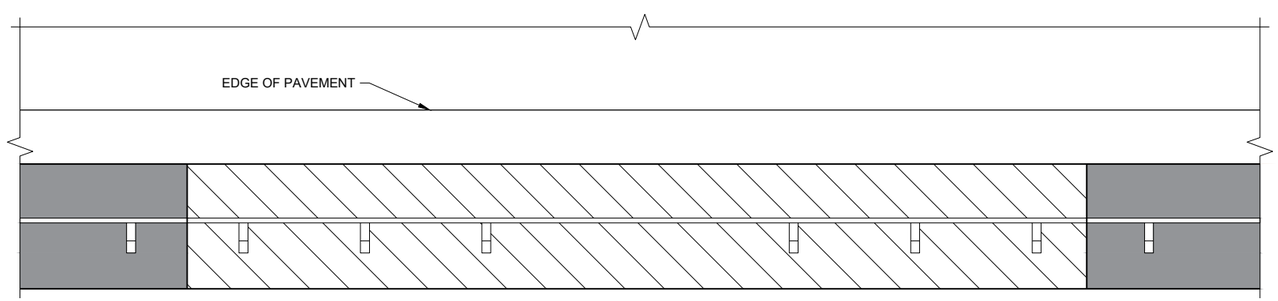
EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

GENERAL NOTES

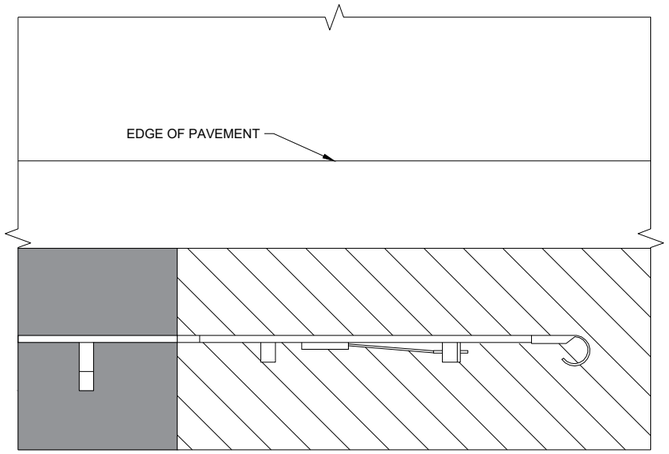
EXISTING THRIE BEAM BULLNOSES MAY HAVE WOOD POSTS. NEW THRIE BEAM BULLNOSE WILL HAVE STEEL POSTS.



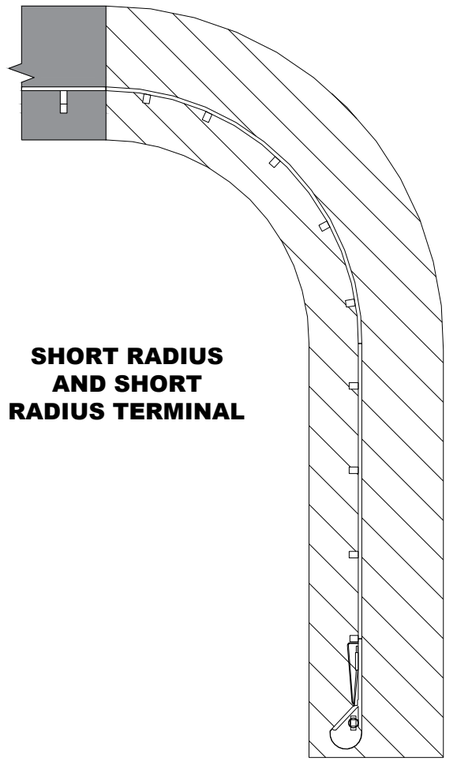
THRIE BEAM BULLNOSE



LONG - SPAN



TYPE 2 TERMINAL



SHORT RADIUS AND SHORT RADIUS TERMINAL

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

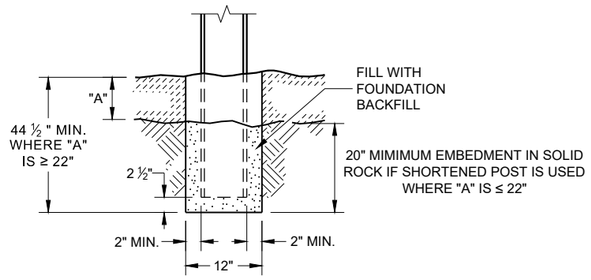
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

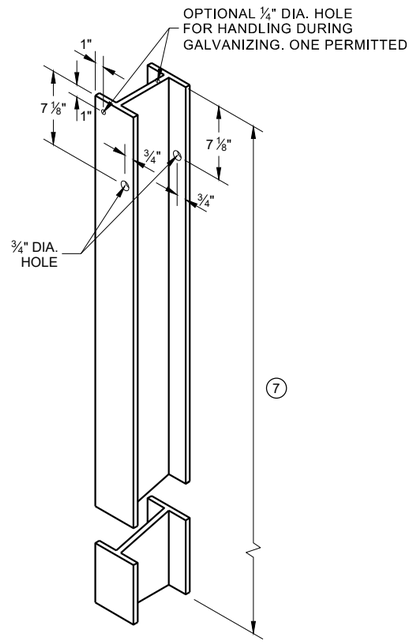
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

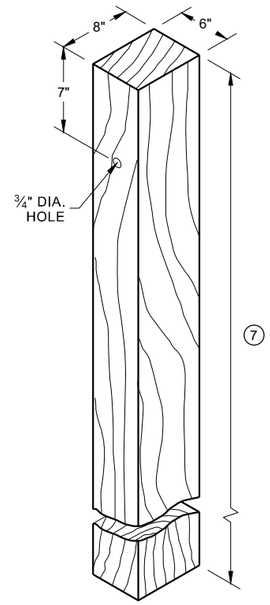
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



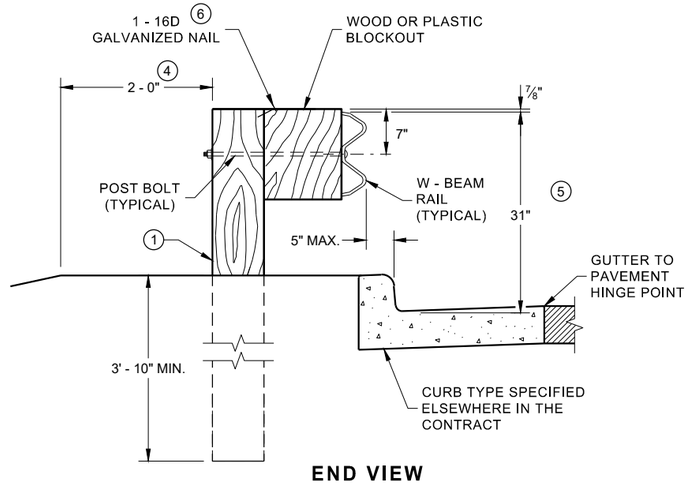
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



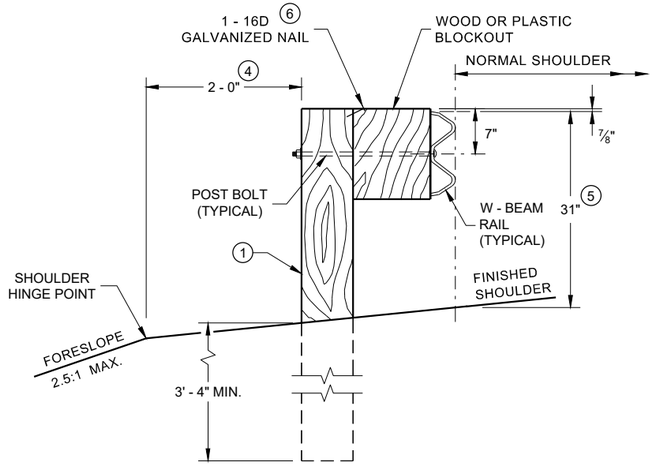
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



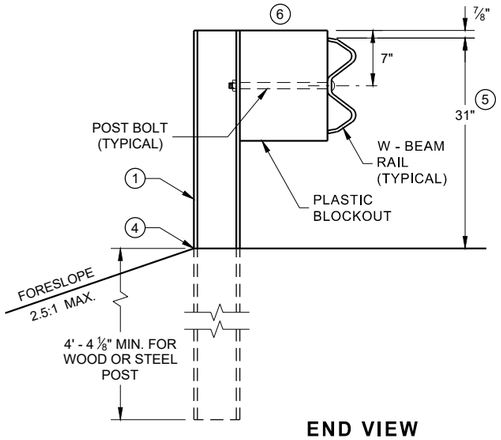
WOOD POST (6" X 8") NOMINAL (1)



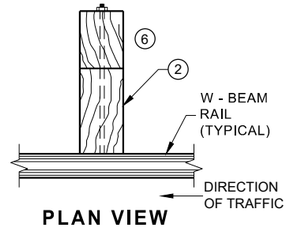
END VIEW
LOCATED ALONG A CURBED ROADWAY



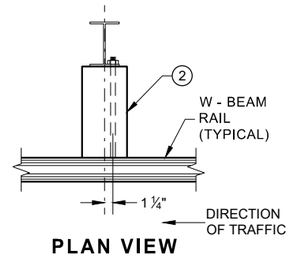
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



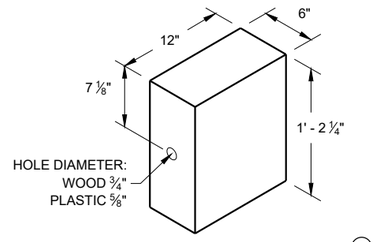
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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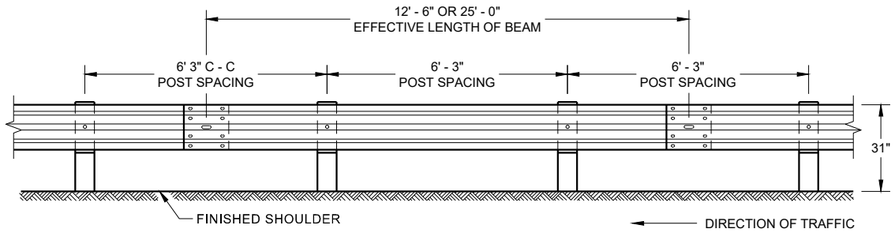
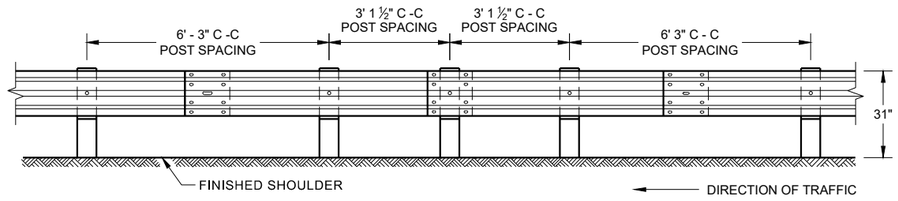
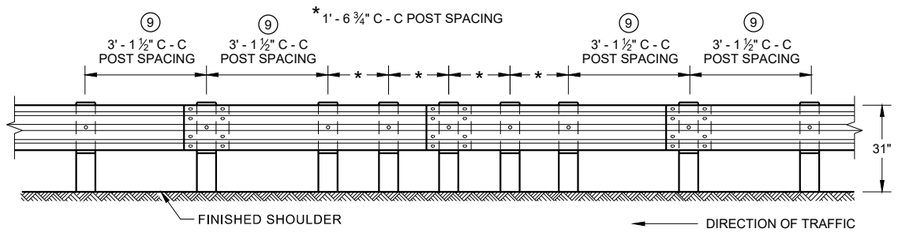


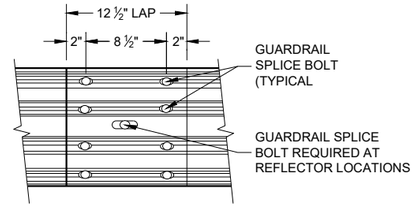
FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

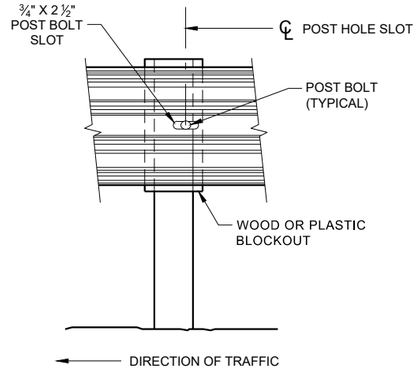
GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

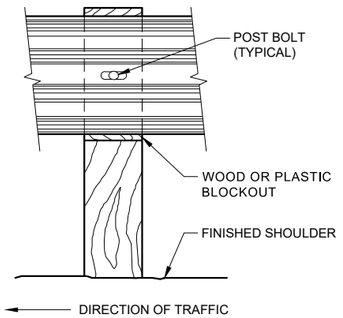
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

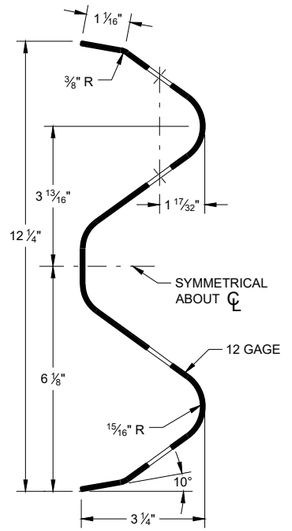
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



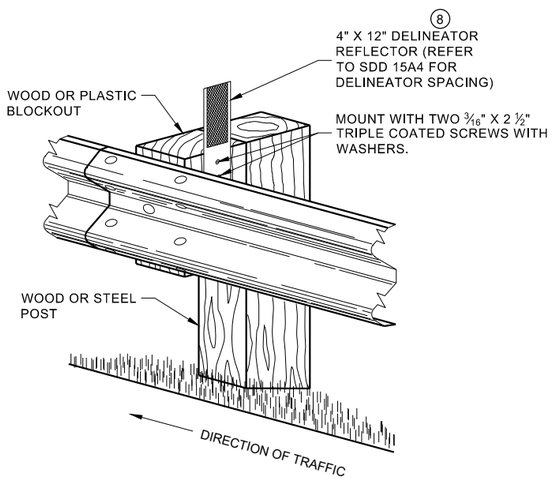
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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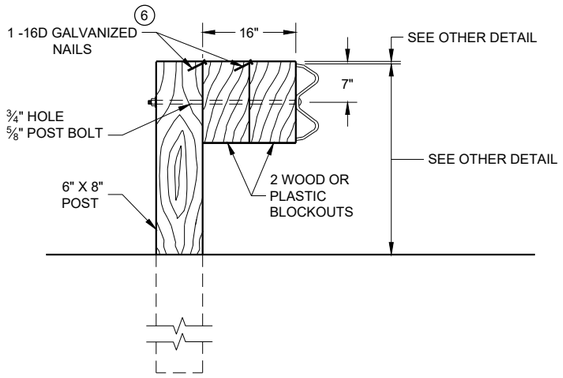
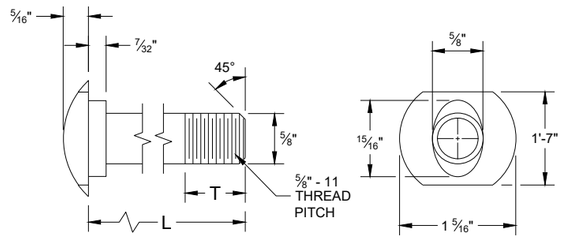


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

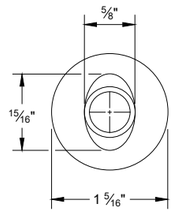
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

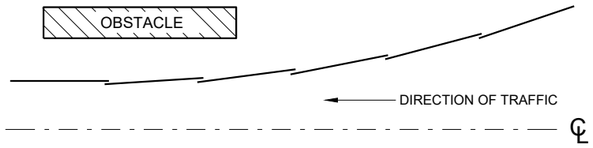


POST BOLT TABLE

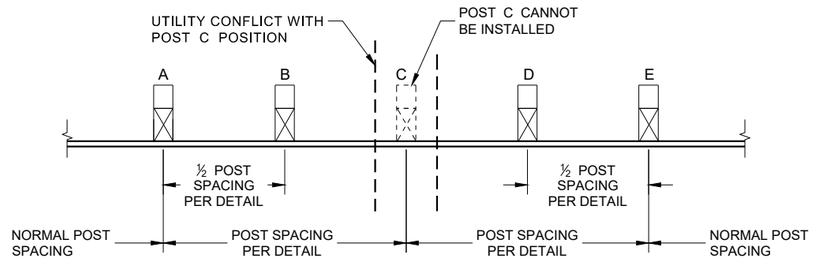
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



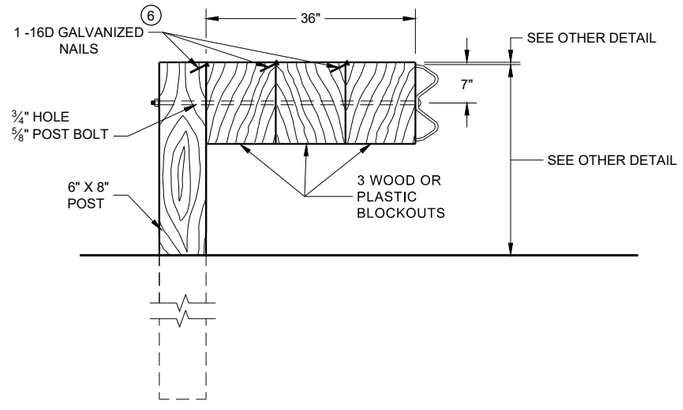
ALTERNATE BOLT HEAD



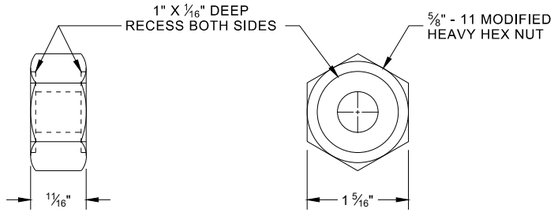
PLAN VIEW
BEAM LAPPING DETAIL



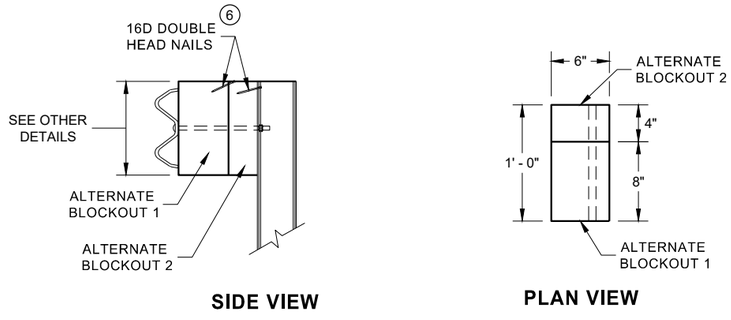
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW

PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

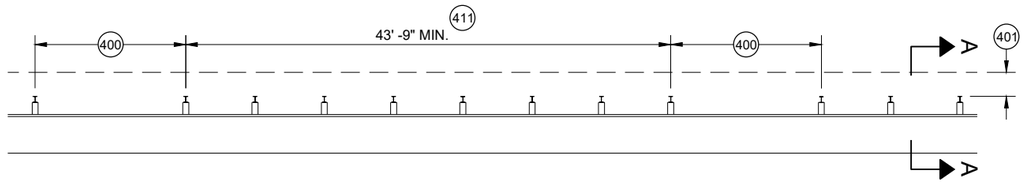
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

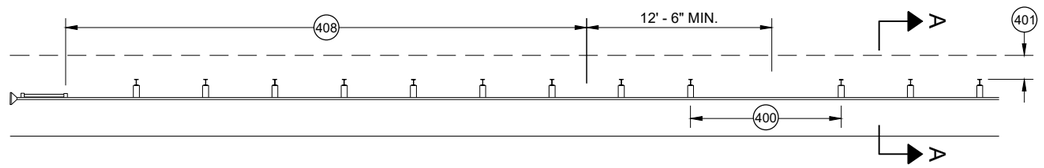
6

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

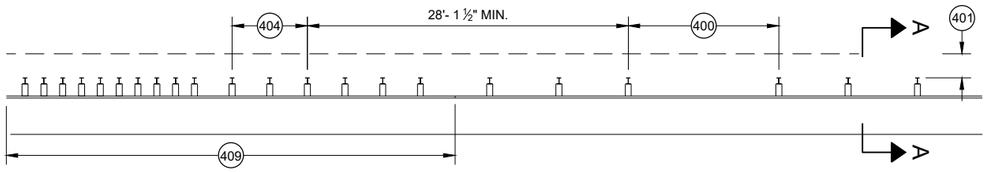
SDD 14B42 - 07c



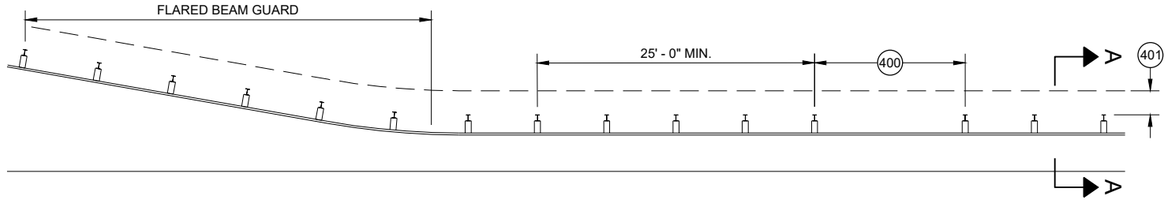
MISSING POST IN MGS GUARDRAIL



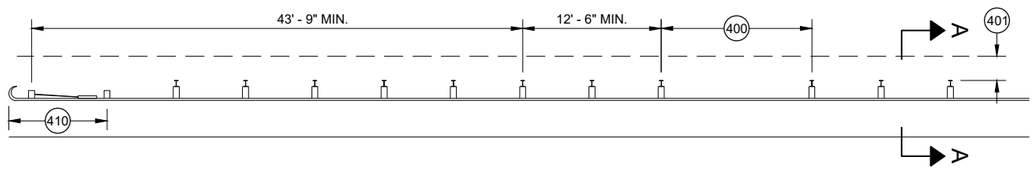
MISSING POST IN MGS GUARDRAIL NEAR EAT



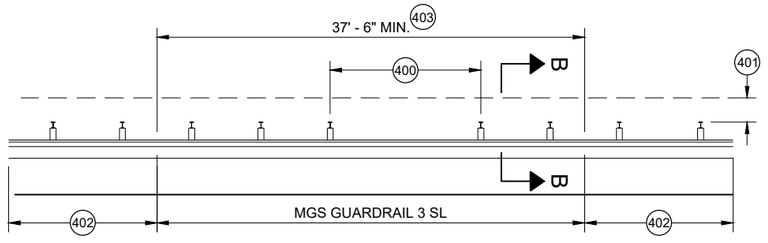
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

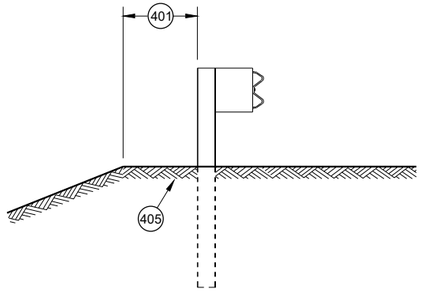


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

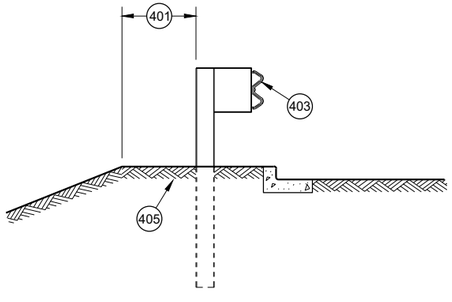


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

6

SDD 14B42 - 07d

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

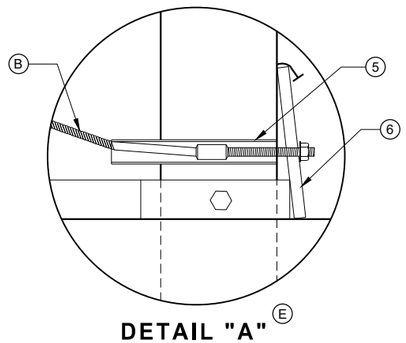
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

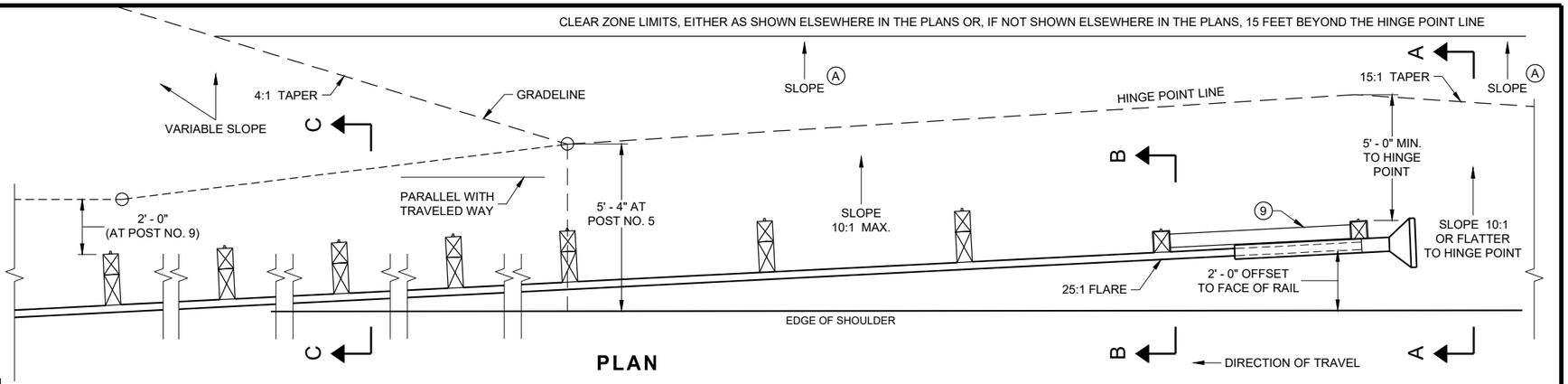
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

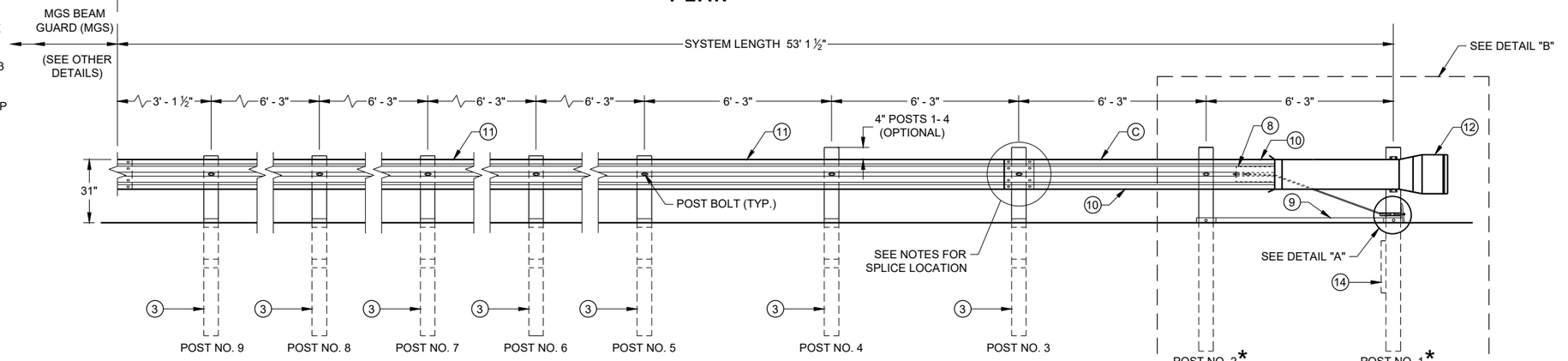
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



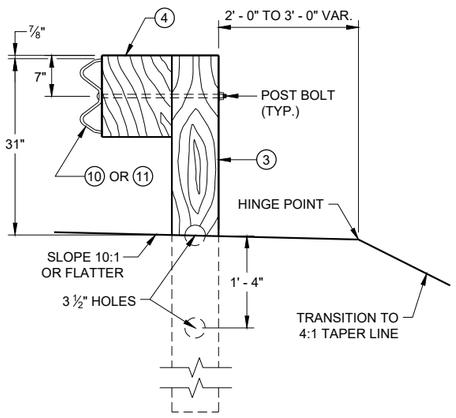
DETAIL "A" (E)



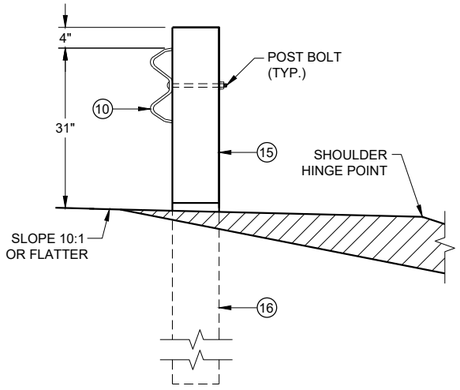
PLAN



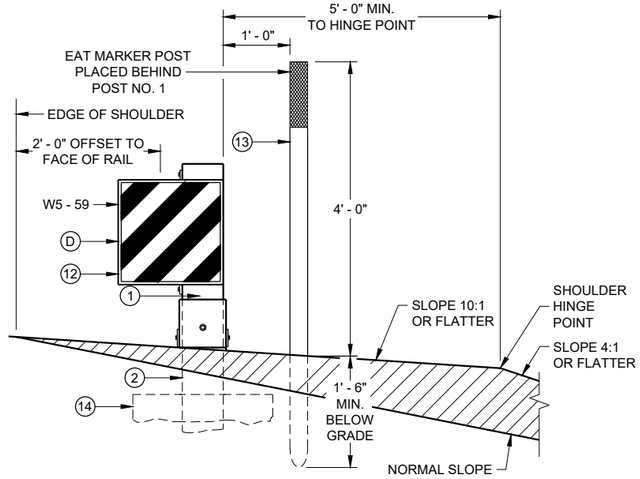
ELEVATION



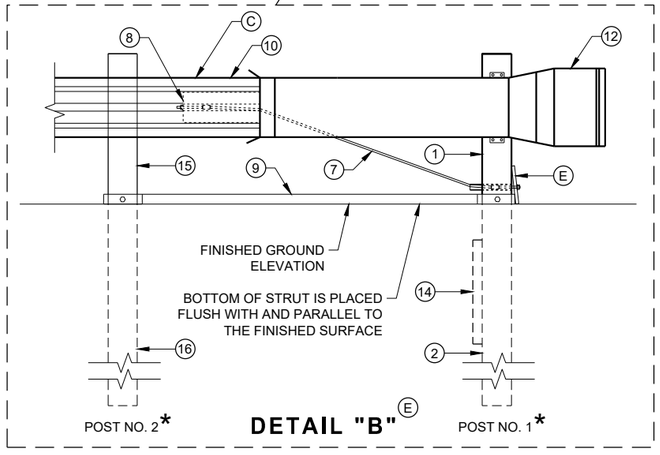
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



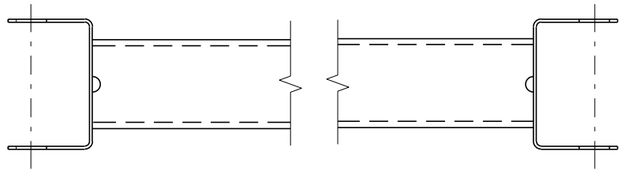
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

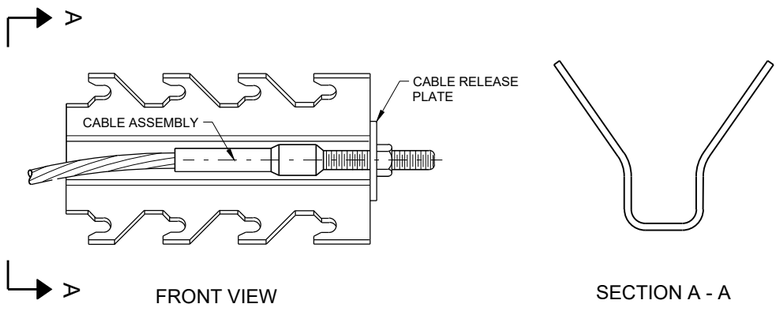
SDD 14B44 - 04a



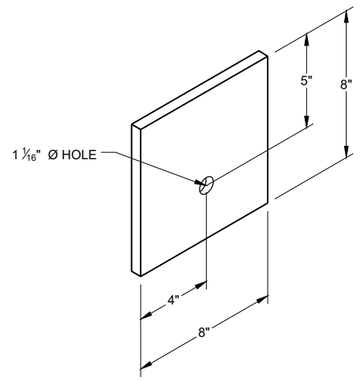
GENERIC GROUND STRUT (9) (E)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
(1)	UPPER POST NO. 1 6" X 6" TUBE
(2)	LOWER POST NO. 1
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	IMPACT HEAD
(13)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
(14)	SOIL PLATE
(15)	UPPER POST NO. 2
(16)	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX (9) (E)



BEARING PLATE (6) (E)

6

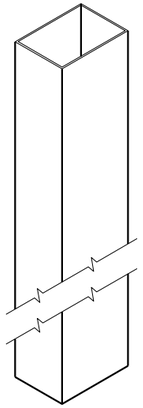
6

SDD 14B44 - 04b

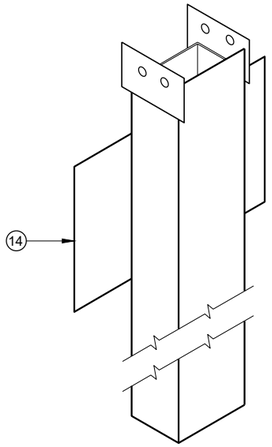
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

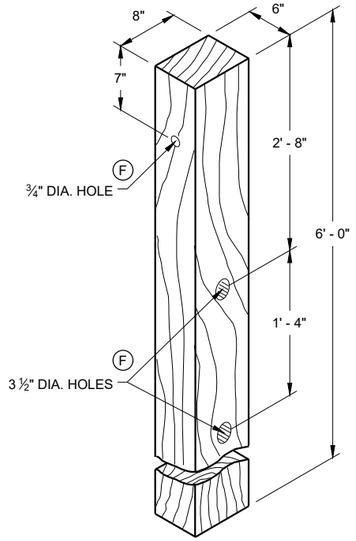
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



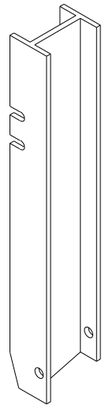
UPPER POST NO. 1 (1) (E)



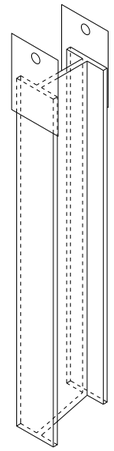
LOWER POST NO. 1 (2) (E)



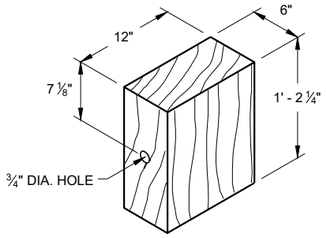
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



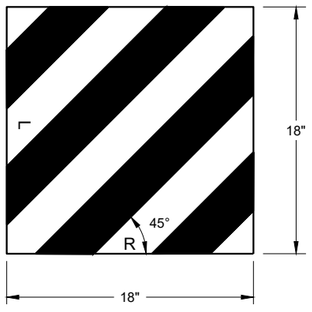
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

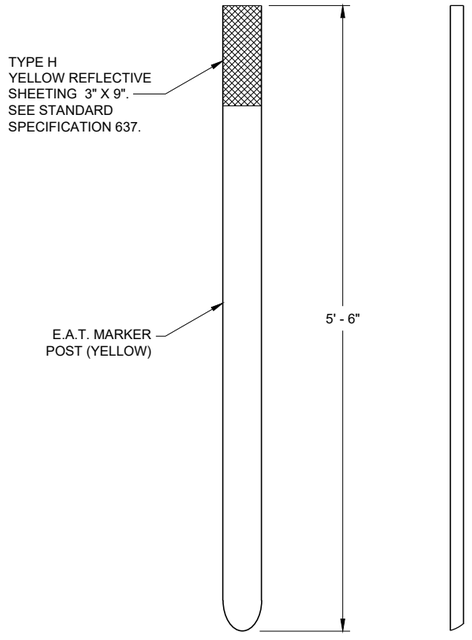


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



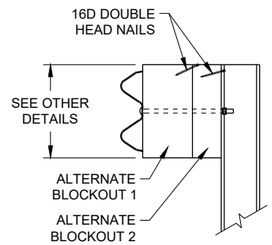
W5 - 59

REFLECTIVE SHEETING DETAIL (E)

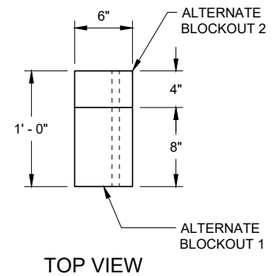


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

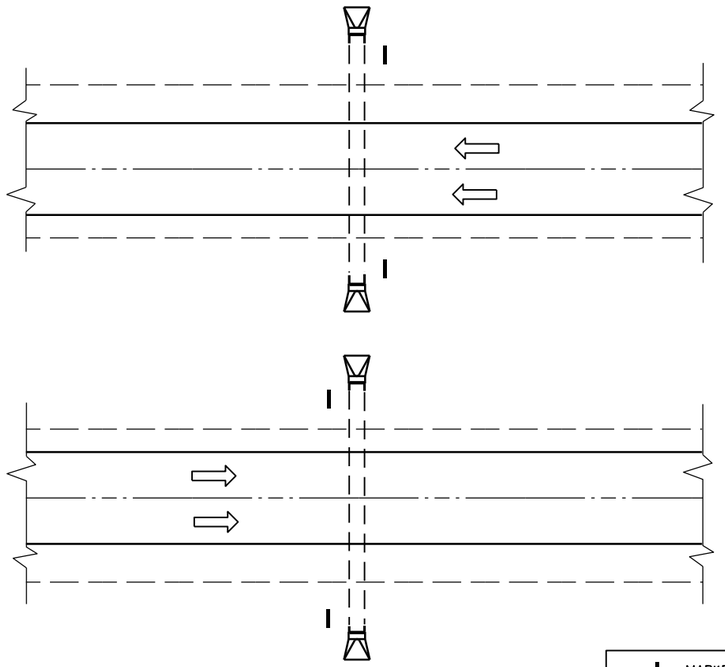
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

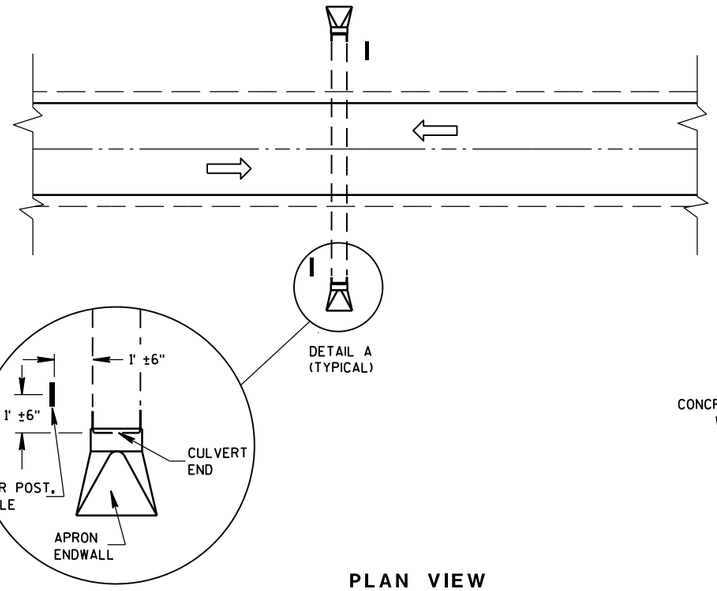
6

SDD 14B44 - 04c



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

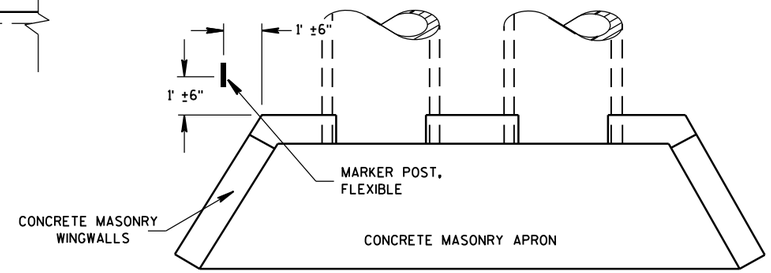
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

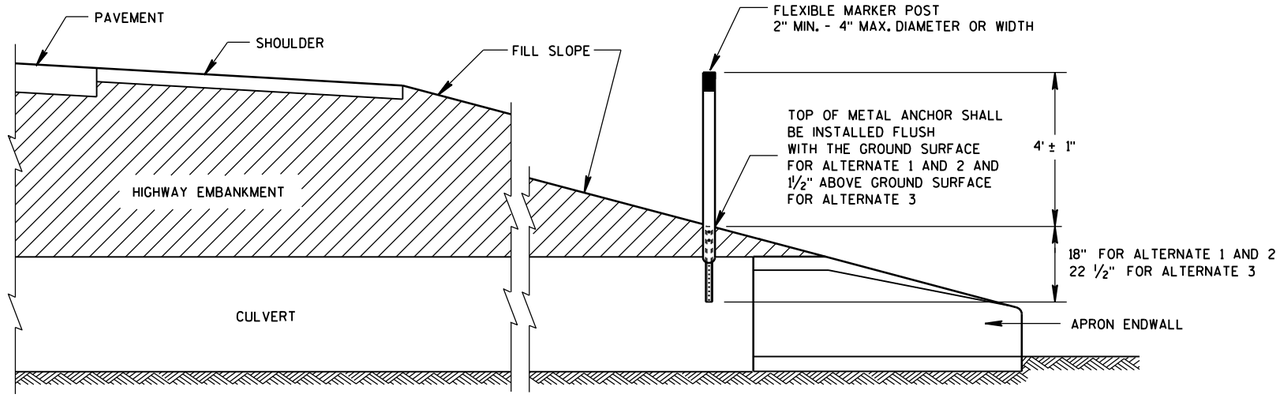
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

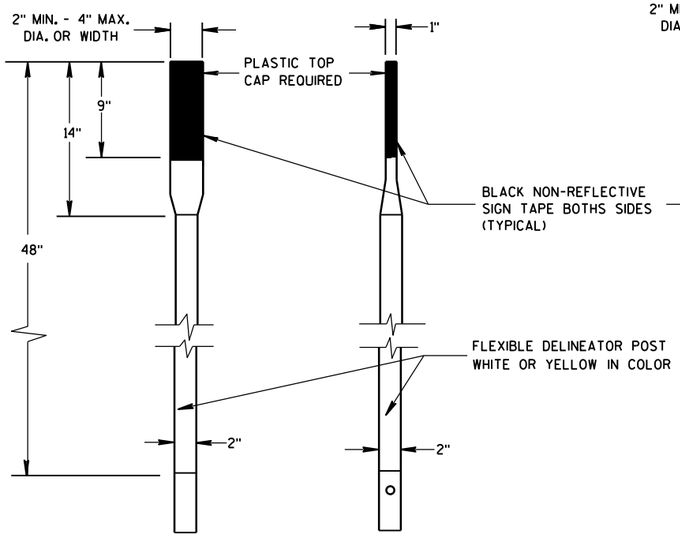
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

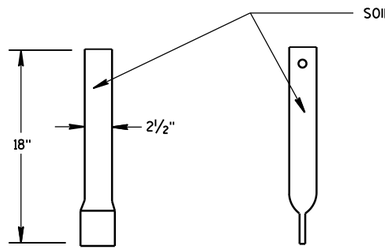
6

S.D.D. 15 A 3-2a

6

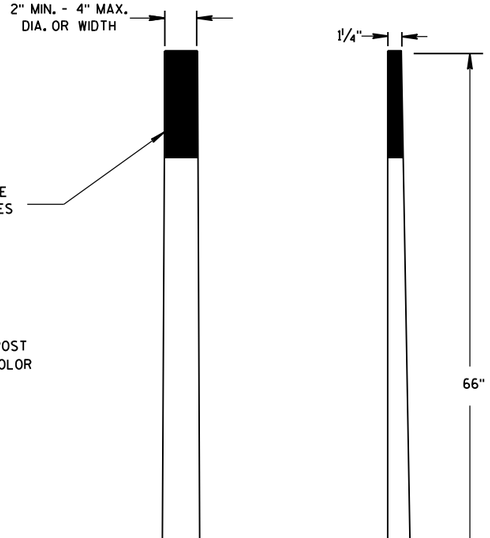
S.D.D. 15 A 3-2a





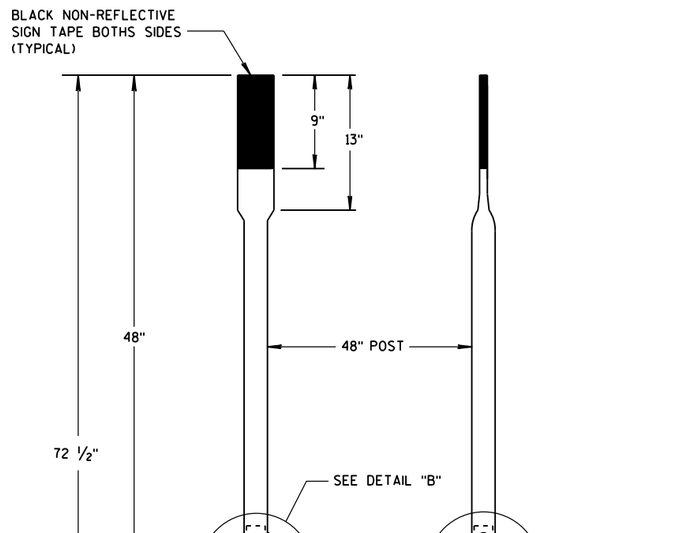
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

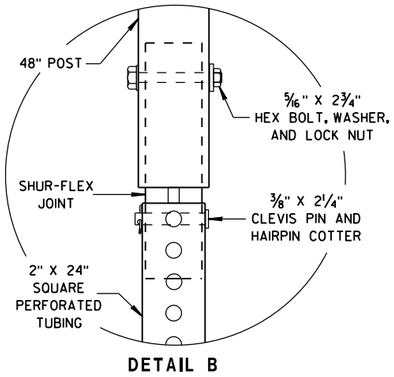
ALTERNATE 2



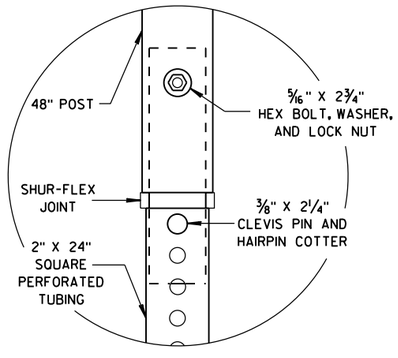
FRONT VIEW SIDE VIEW

ALTERNATE 3

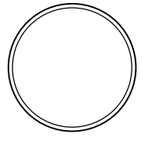
FLEXIBLE MARKER POSTS



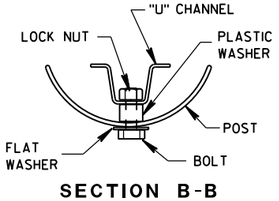
DETAIL B



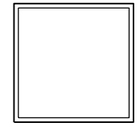
DETAIL C



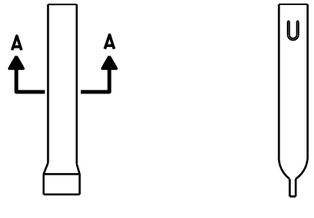
SECTION A-A



SECTION B-B

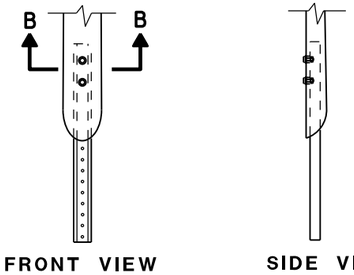


SECTION C-C



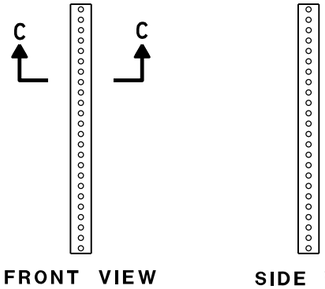
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

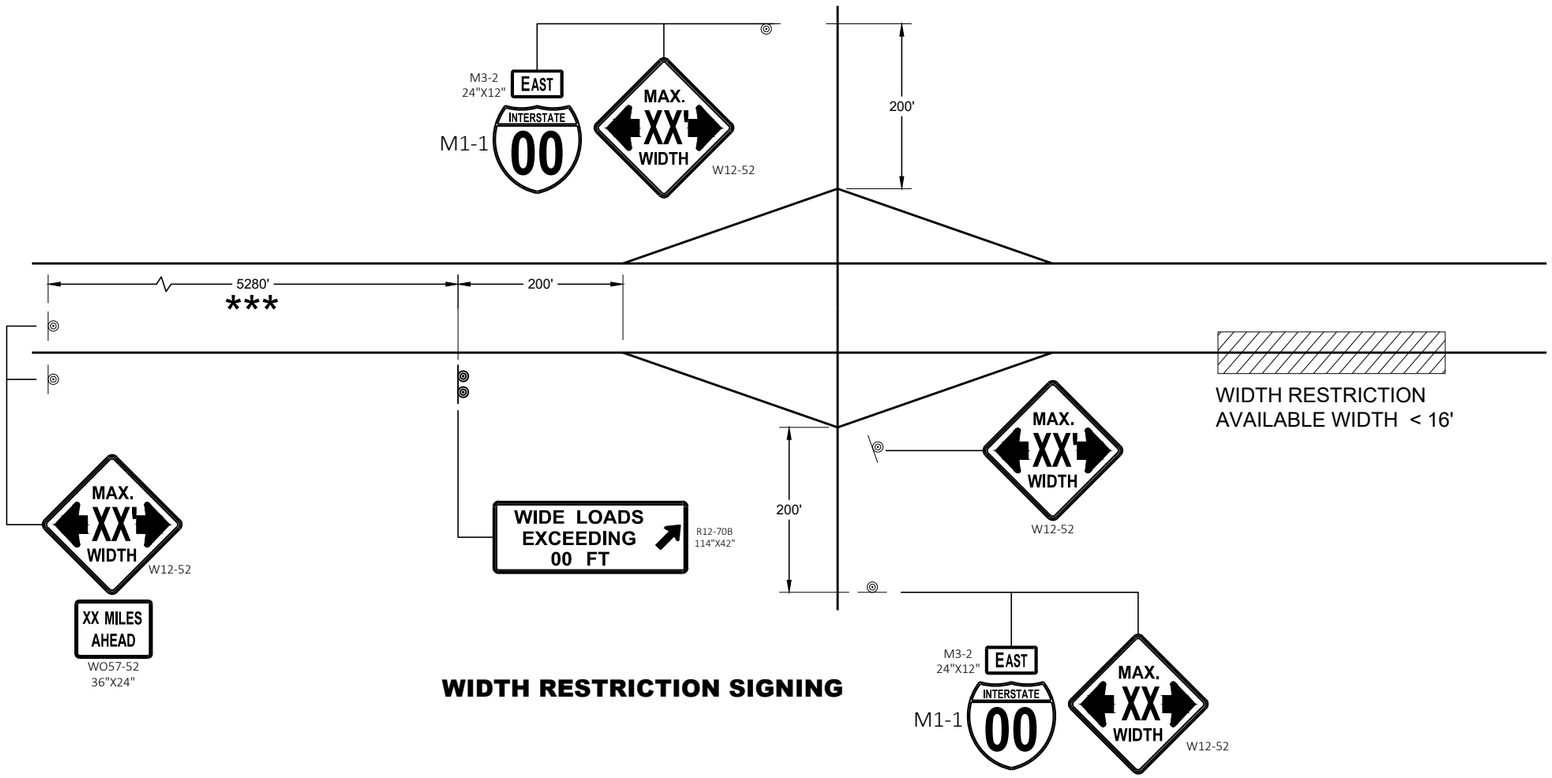
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

6

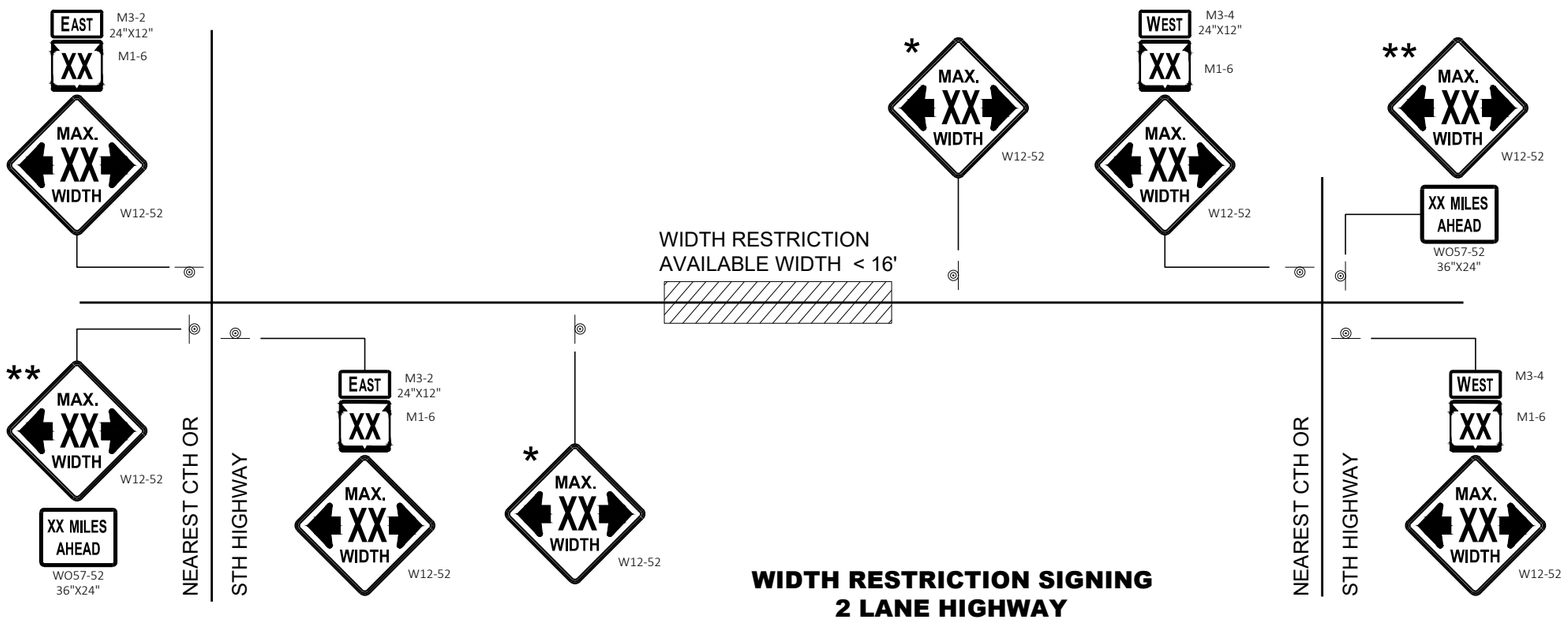
S.D.D. 15 A 3-2b

6

S.D.D. 15 A 3-2b



WIDTH RESTRICTION SIGNING



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

LEGEND

◎ SIGN ON PERMANENT SUPPORT

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL " IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.

WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6

SDD 15C02 - 09f

6

SDD 15C02 - 09f

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

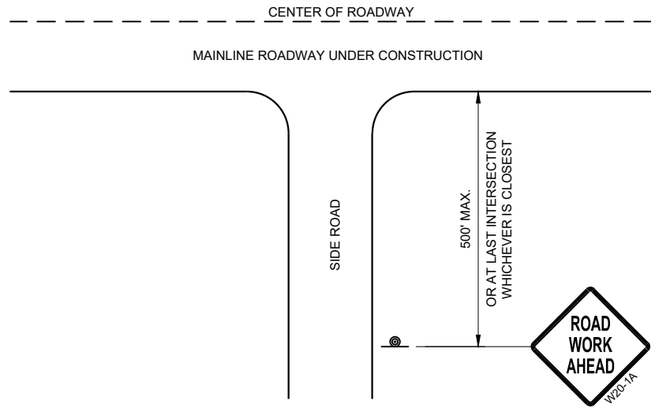
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



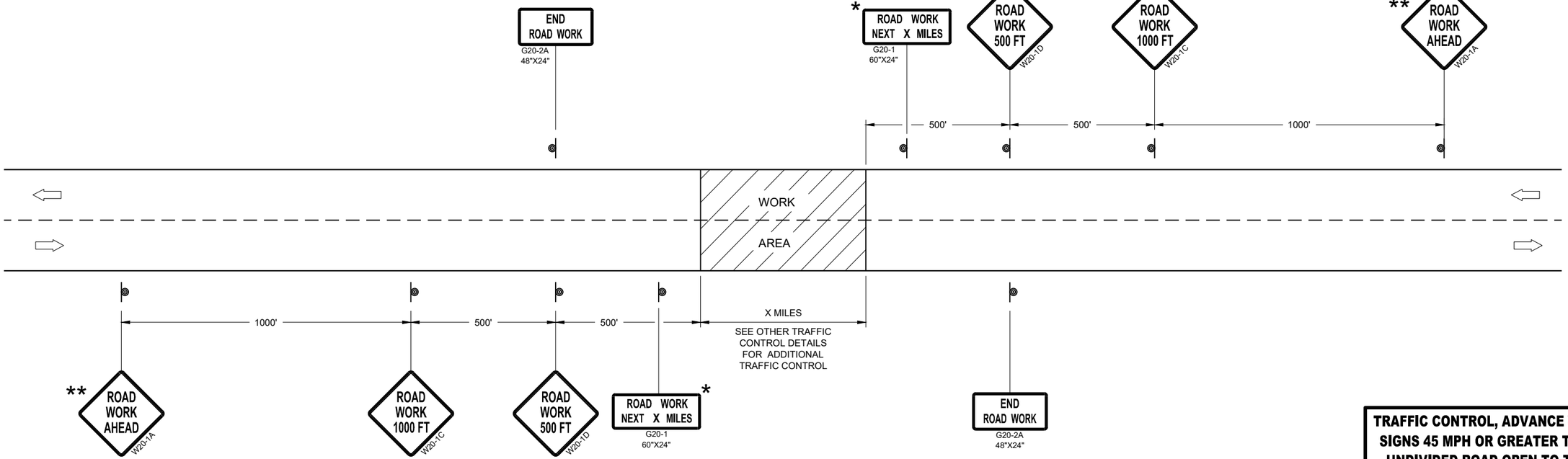
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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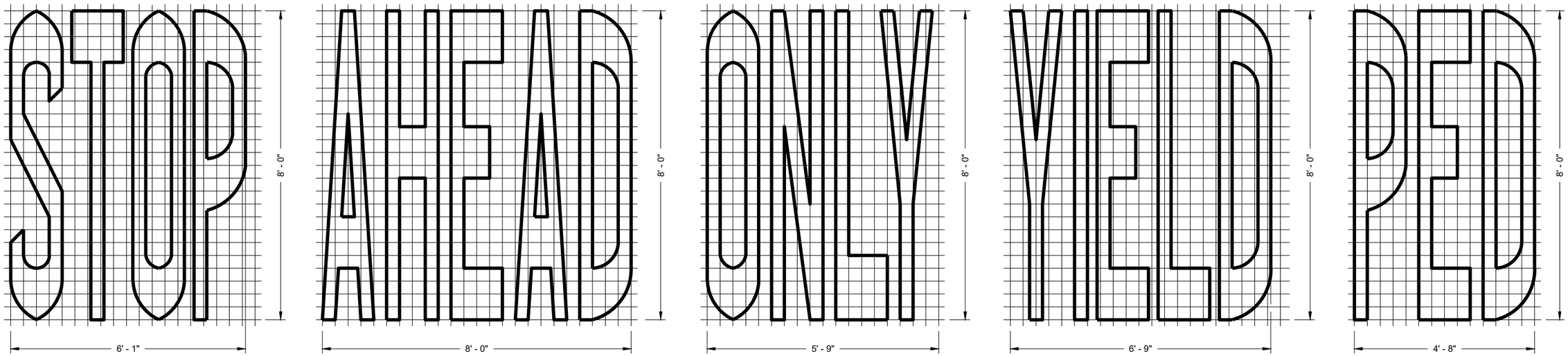
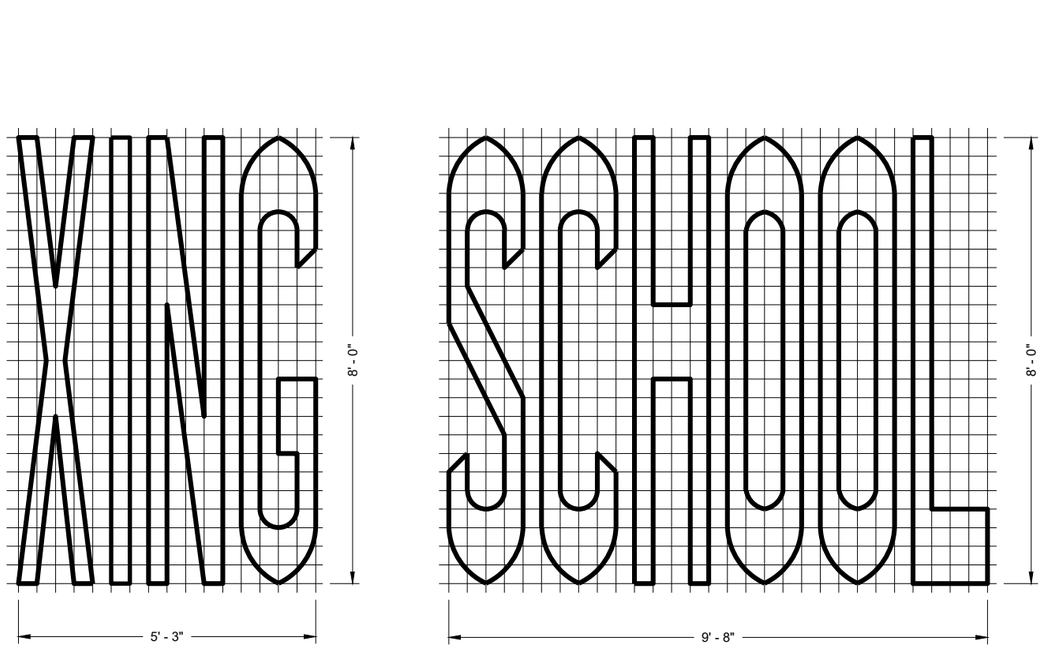
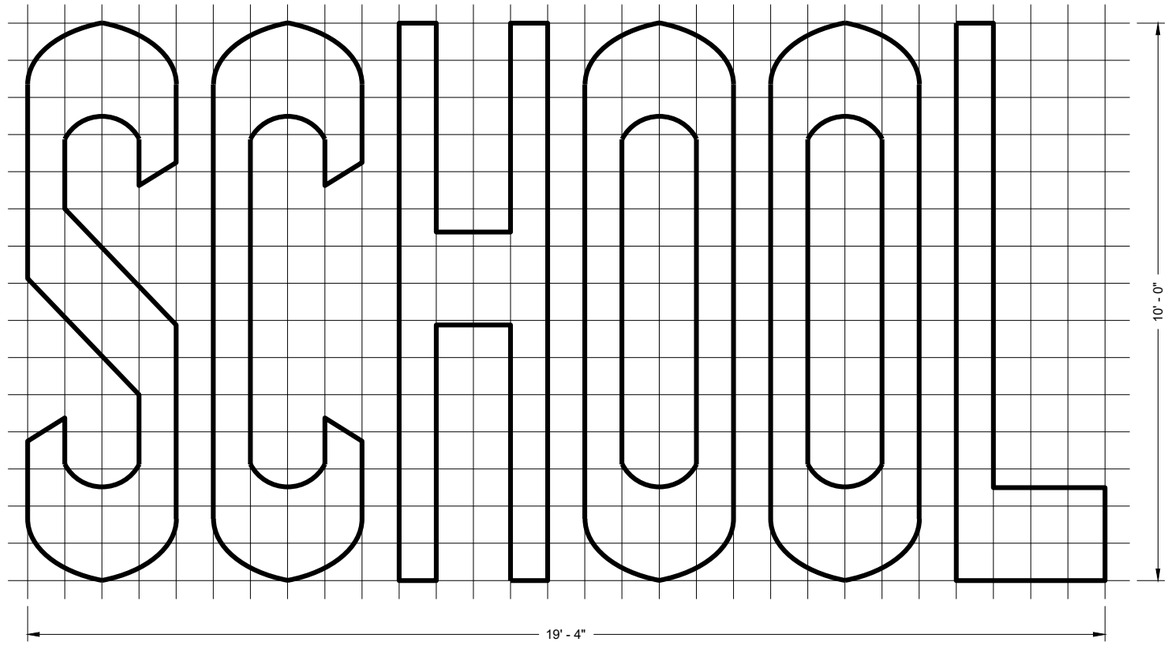
SDD 15C04 - 05





SINGLE LANE



TWO - LANE

GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

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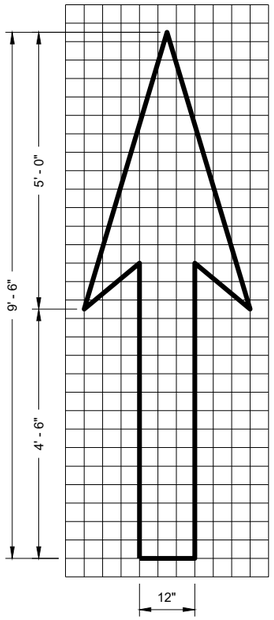
SDD 15C07 - 15b

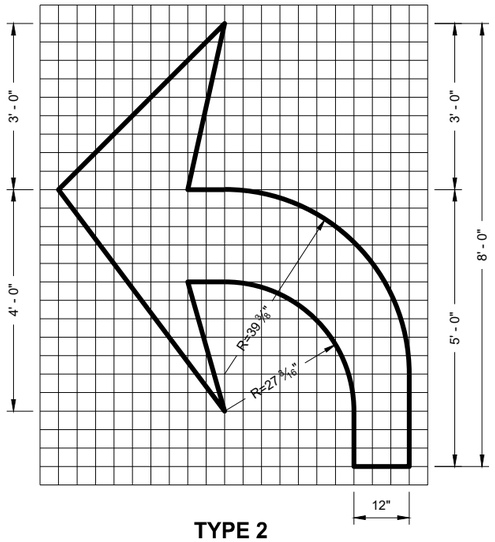
SDD 15C07 - 15b

GENERAL NOTES

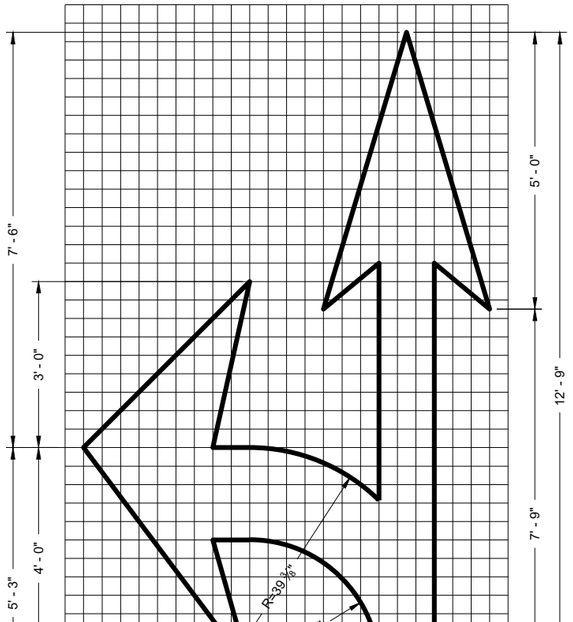
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



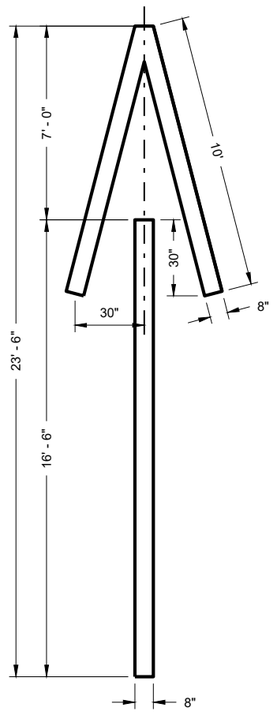
TYPE 1



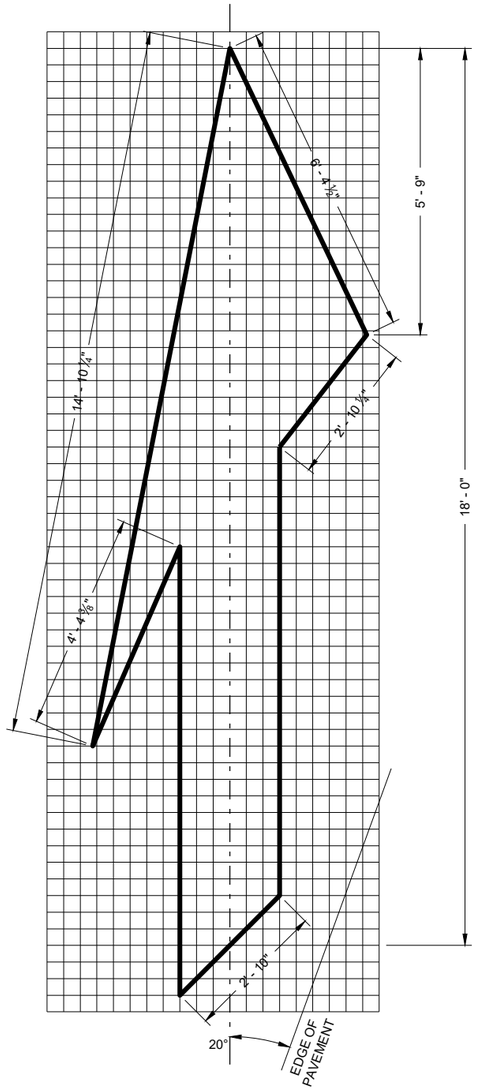
TYPE 2



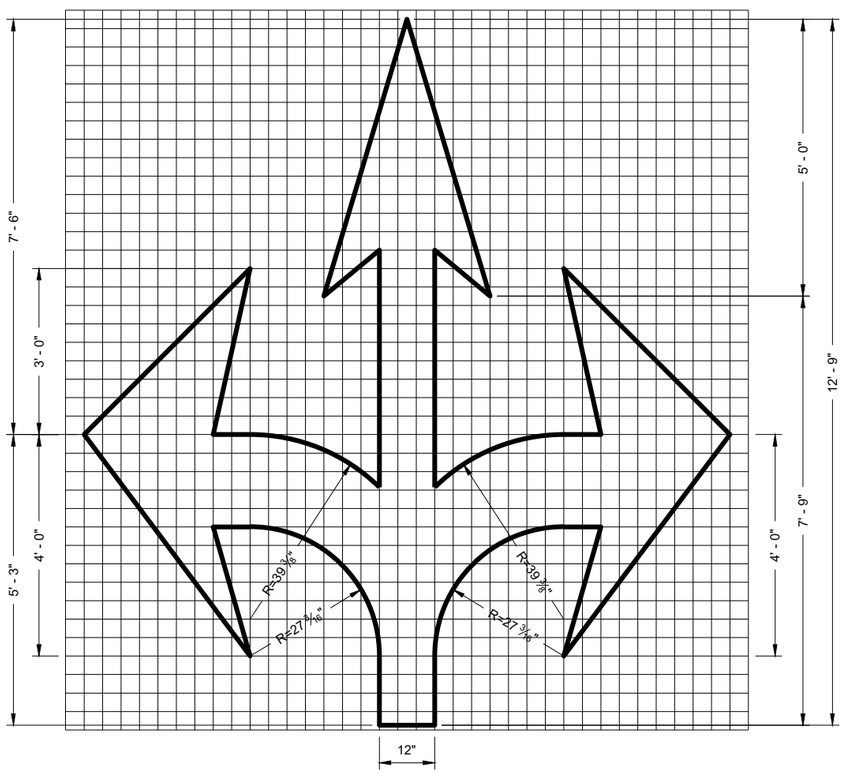
TYPE 3



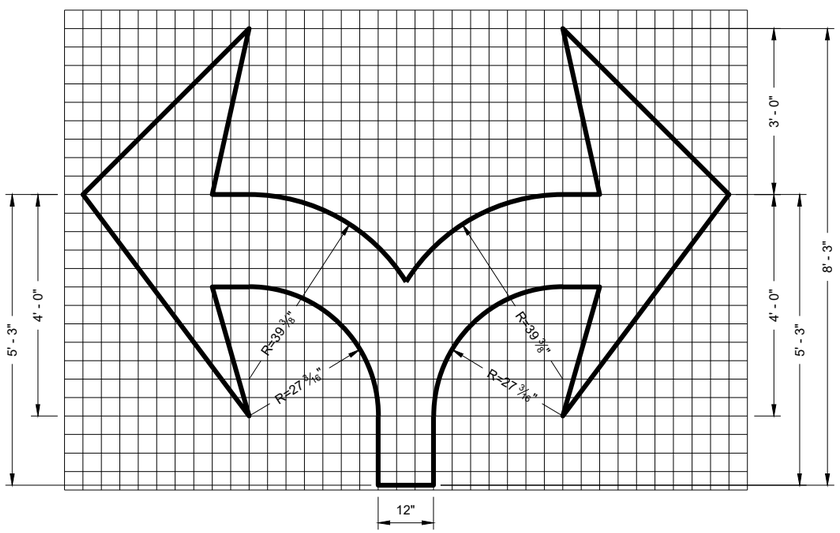
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

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SDD 15C07 - 15c

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

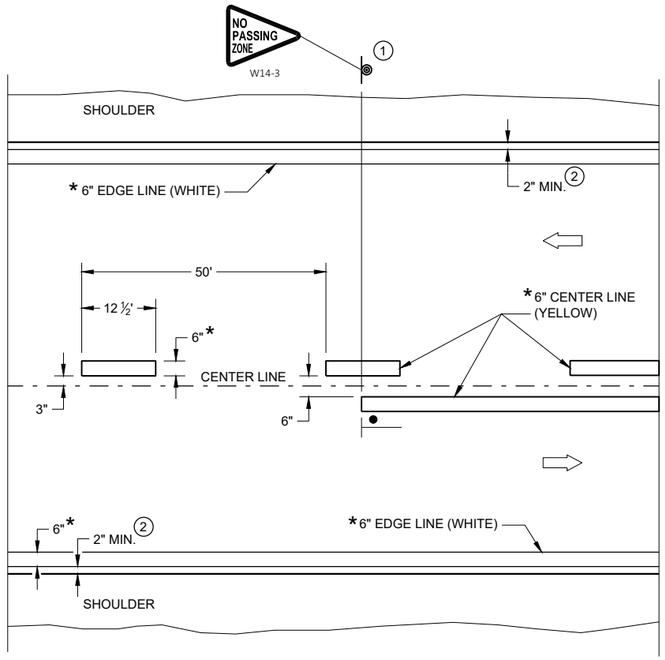
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

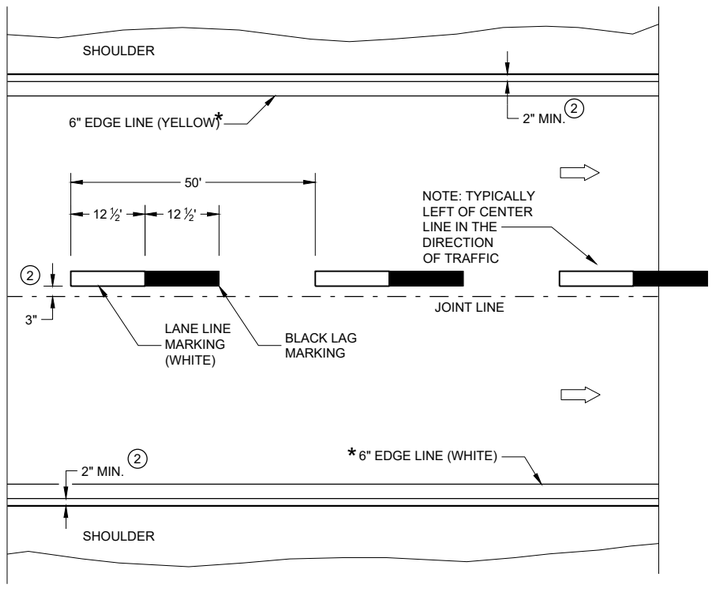
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

FHWA

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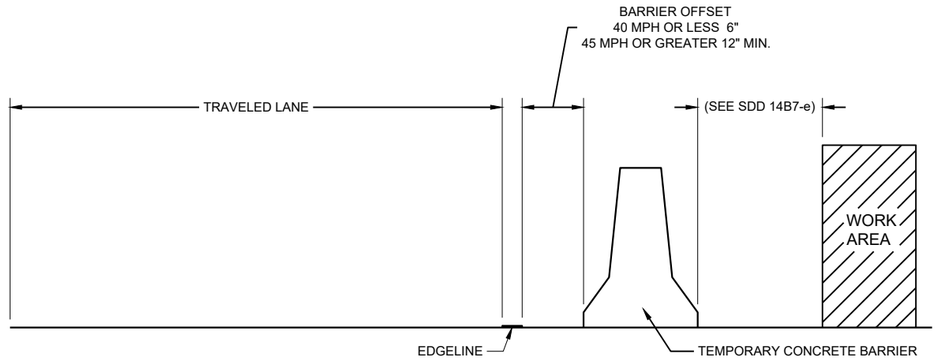
SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

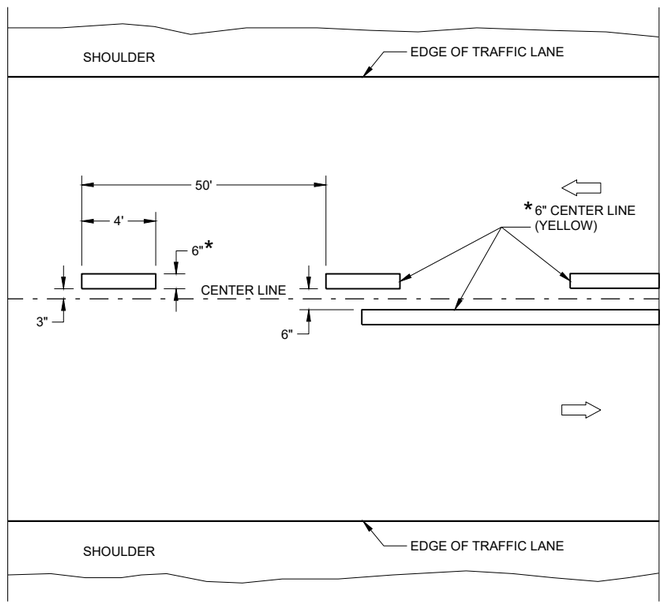
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

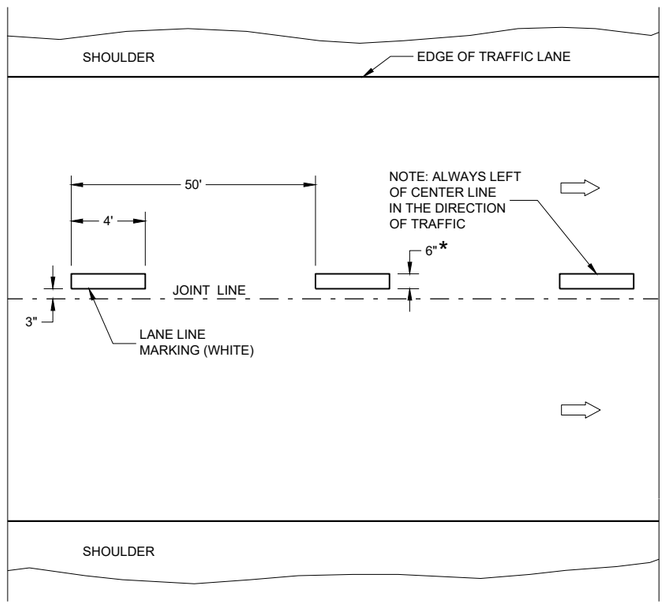
LEGEND

⇨ DIRECTION OF TRAFFIC

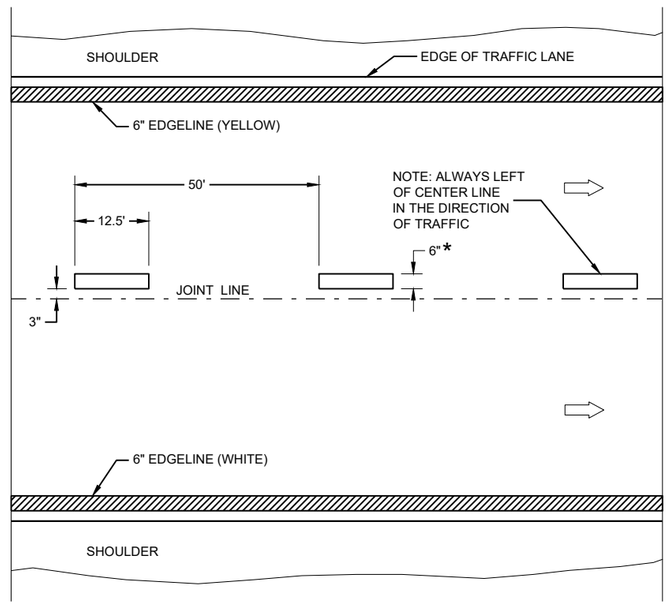
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

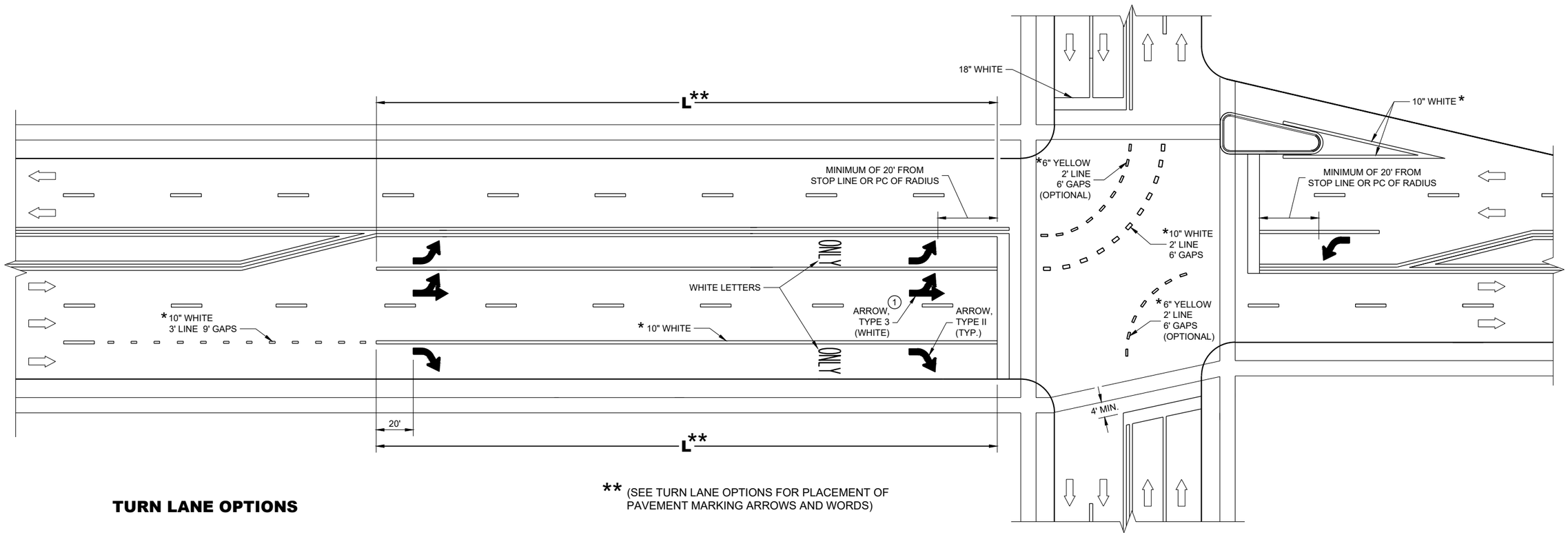
FHWA

6

SDD 15C08-23b

6

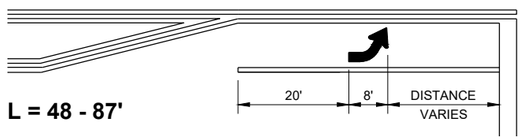
SDD 15C08-23b



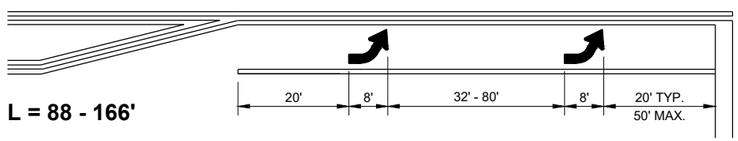
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

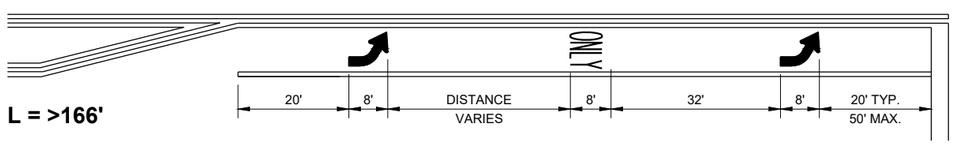
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

(1) QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

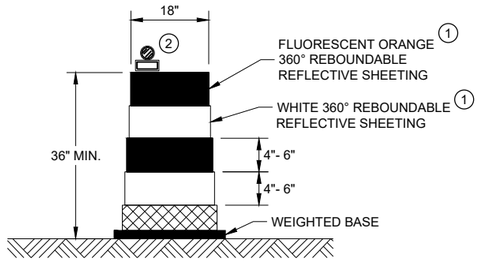
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08-23d

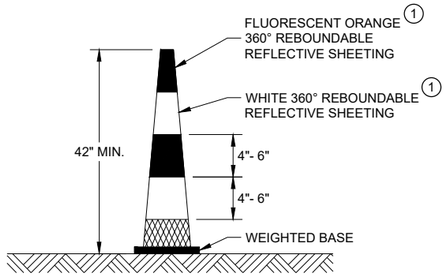
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

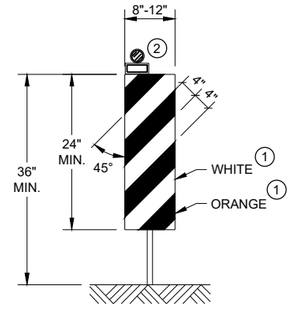
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

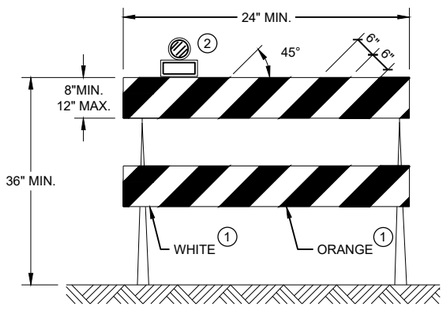
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



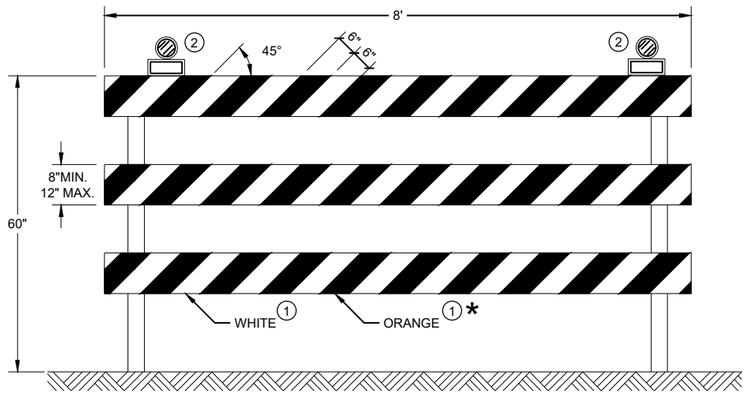
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C11 - 10b

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LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

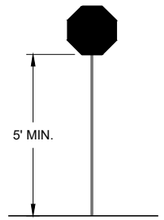
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



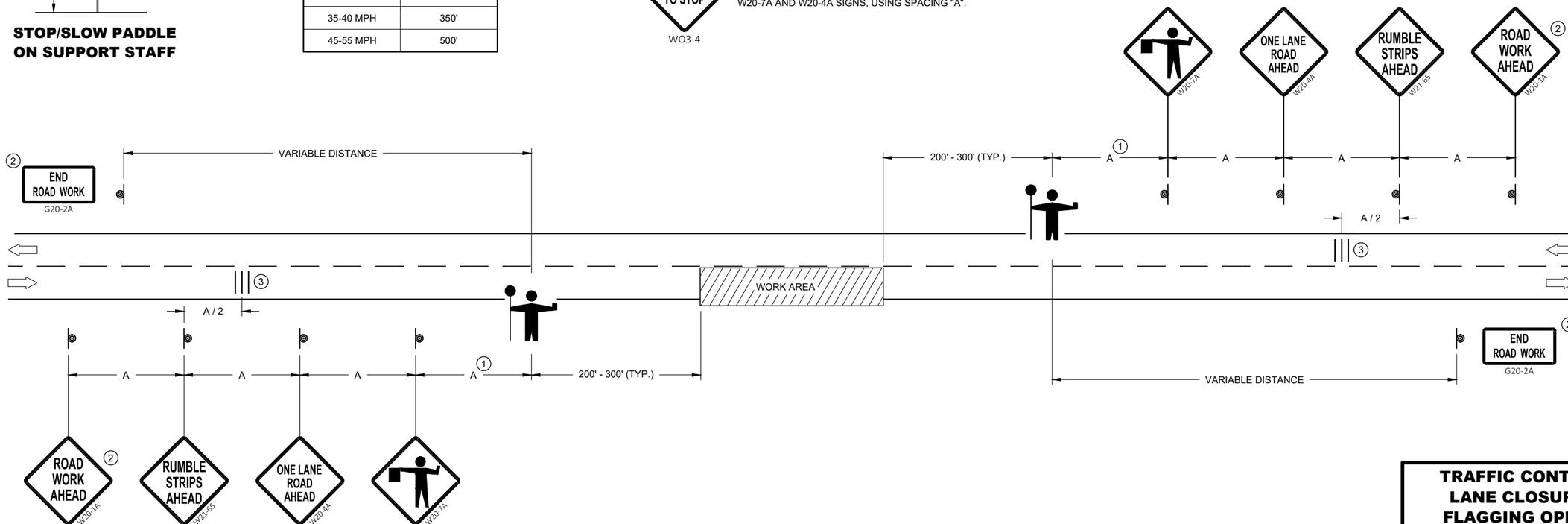
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C12 - 09a

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SDD 15C12 - 09a

GENERAL NOTES

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL CONE 42-INCH

TRAFFIC CONTROL DRUM

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

AFAD — AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

IF THE AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) STOPS WORKING, FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

(1) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

(2) IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE WO3-4 SIGNS WITH W20-7A SIGNS.

TEMPORARY PORTABLE RUMBLE STRIPS

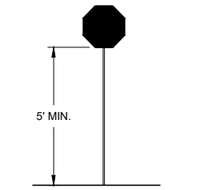
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

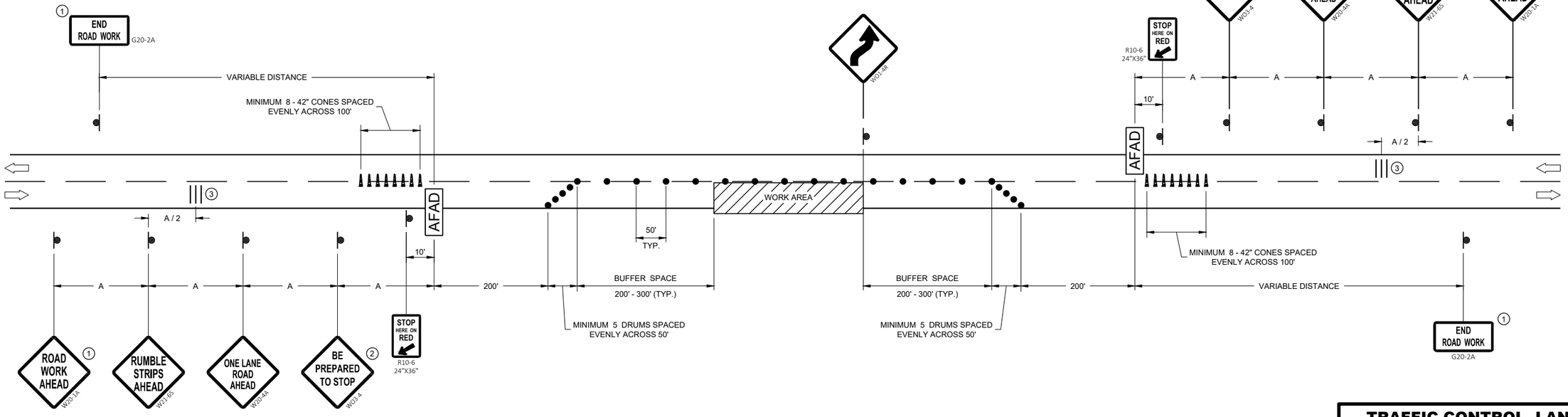
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



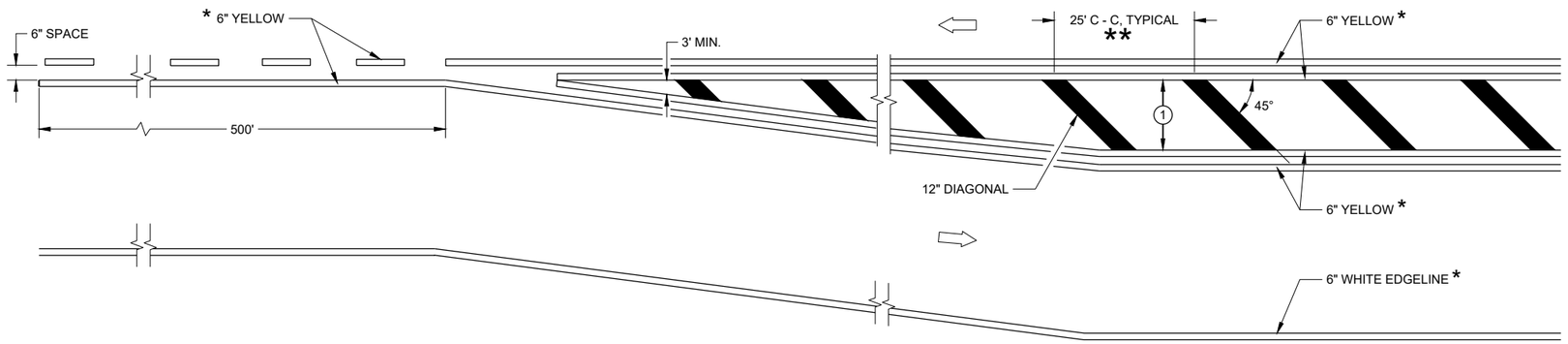
TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

SDD 15C12 - 09b

SDD 15C12 - 09b



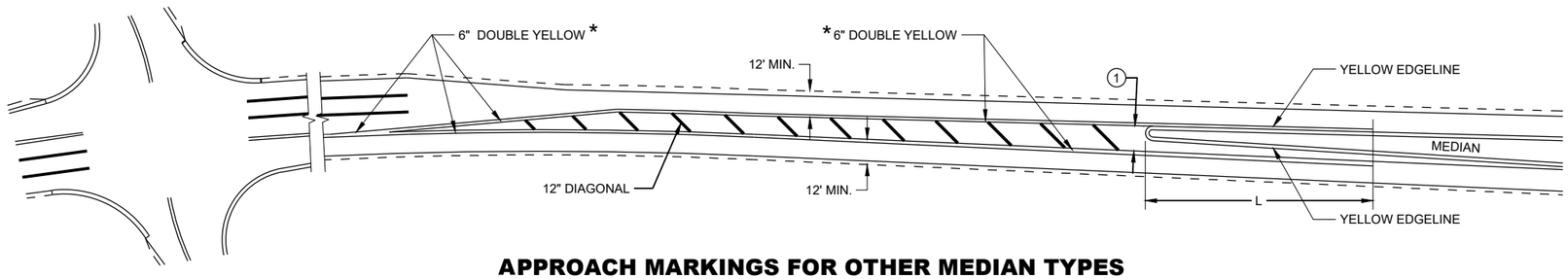
MEDIAN ISLAND DETAIL

GENERAL NOTES

(1) DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

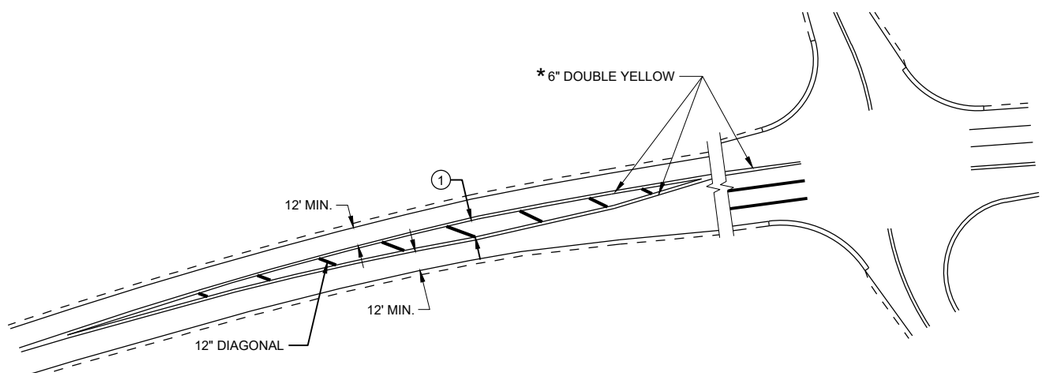
⇨ DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



APPROACH MARKINGS FOR OTHER MEDIAN TYPES

SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER
FHWA

6

SDD 15C18-08a

6

SDD 15C18-08a

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

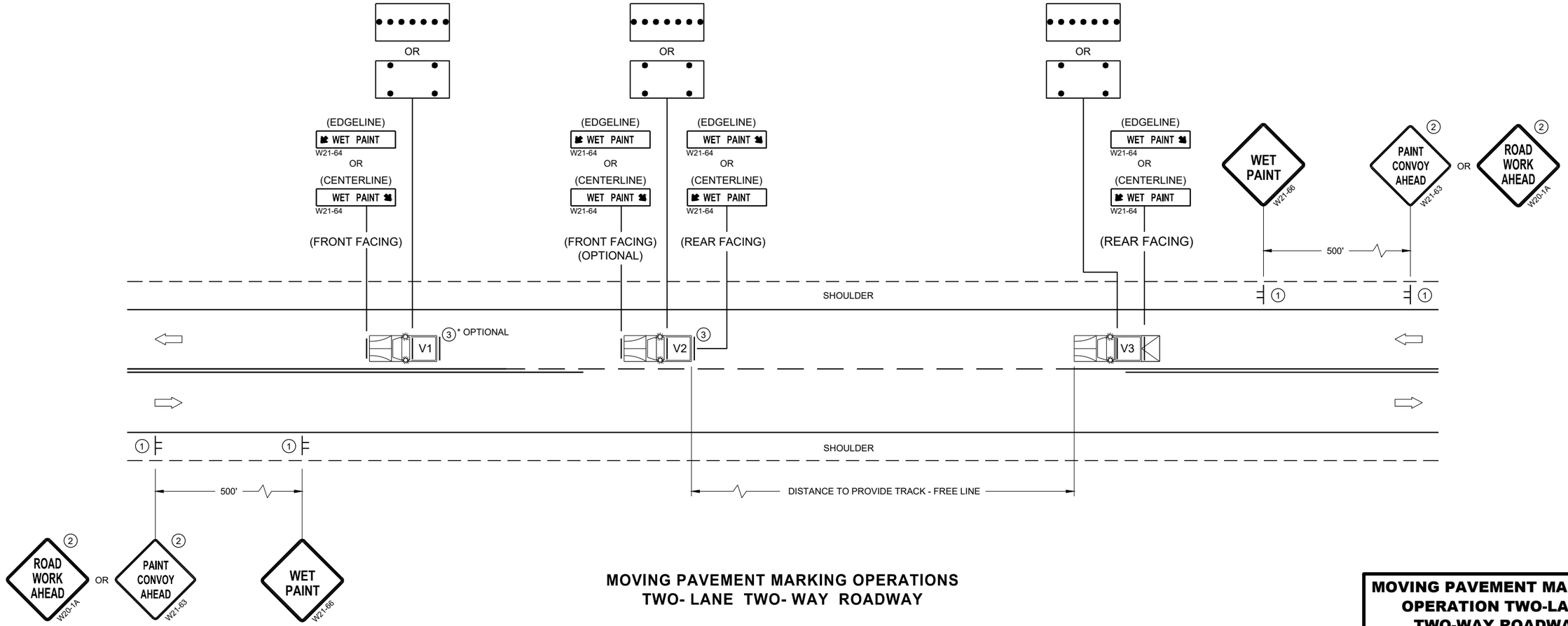
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

(3) V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Andrew I...
WORK ZONE EN

FHWA

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SDD 15C19-08a

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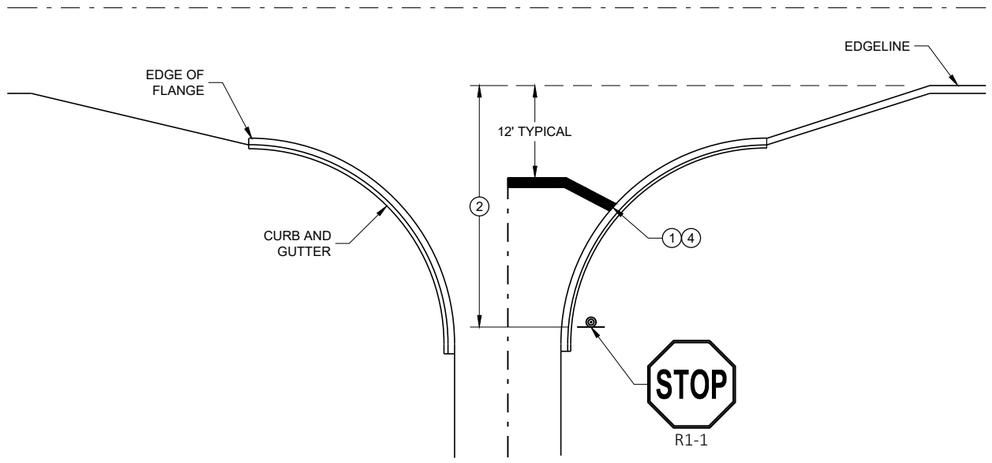
SDD 15C19-08a

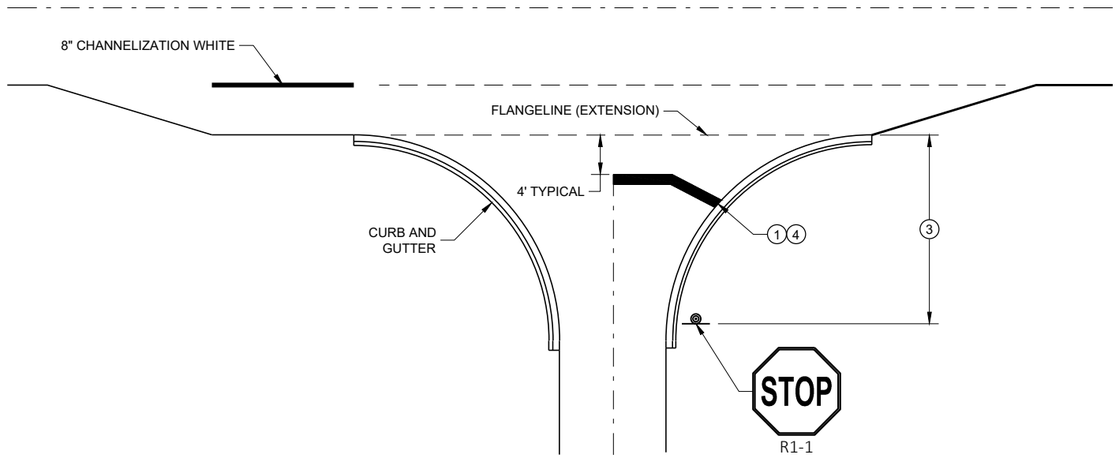
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

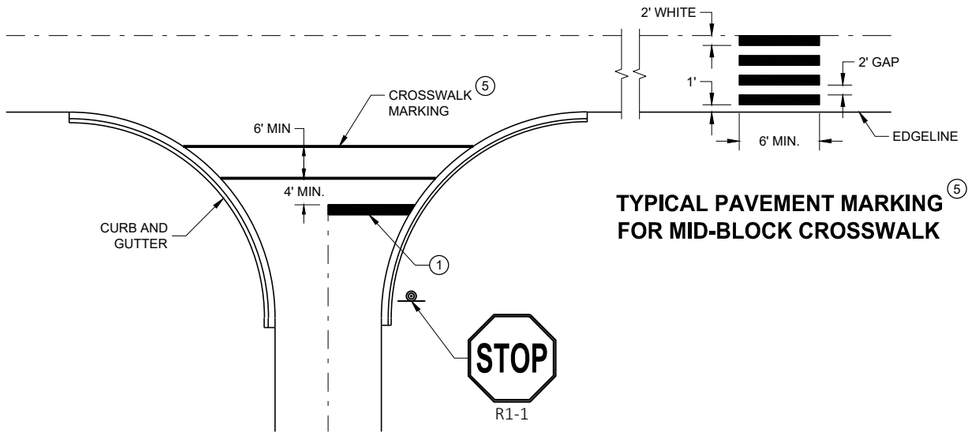
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

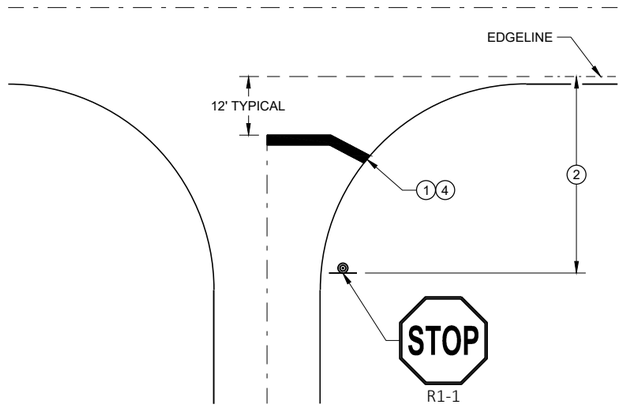


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

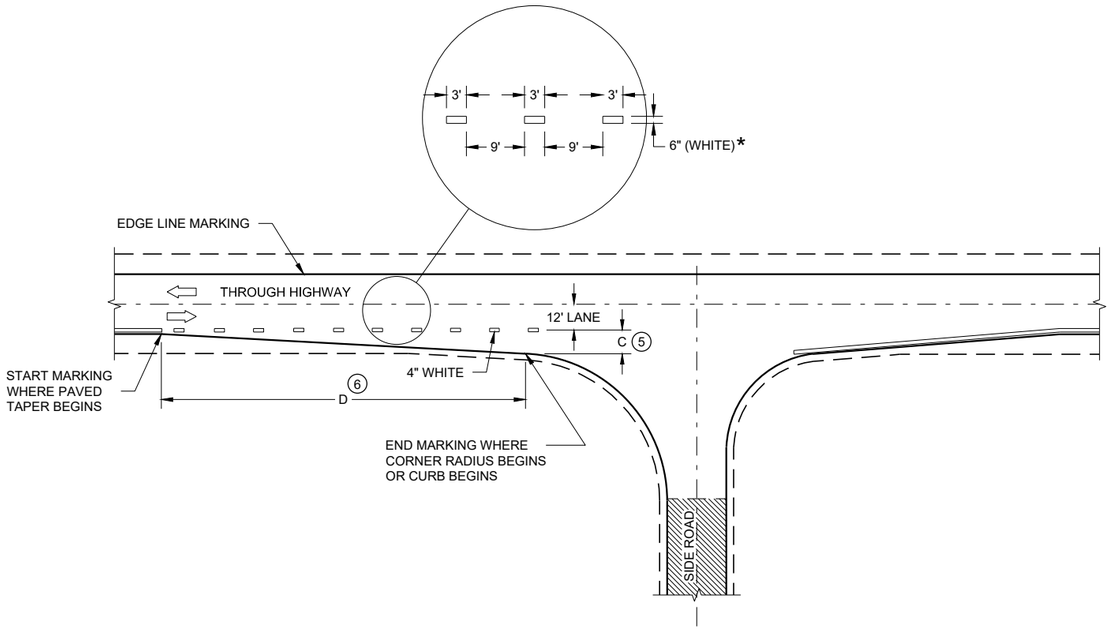
APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

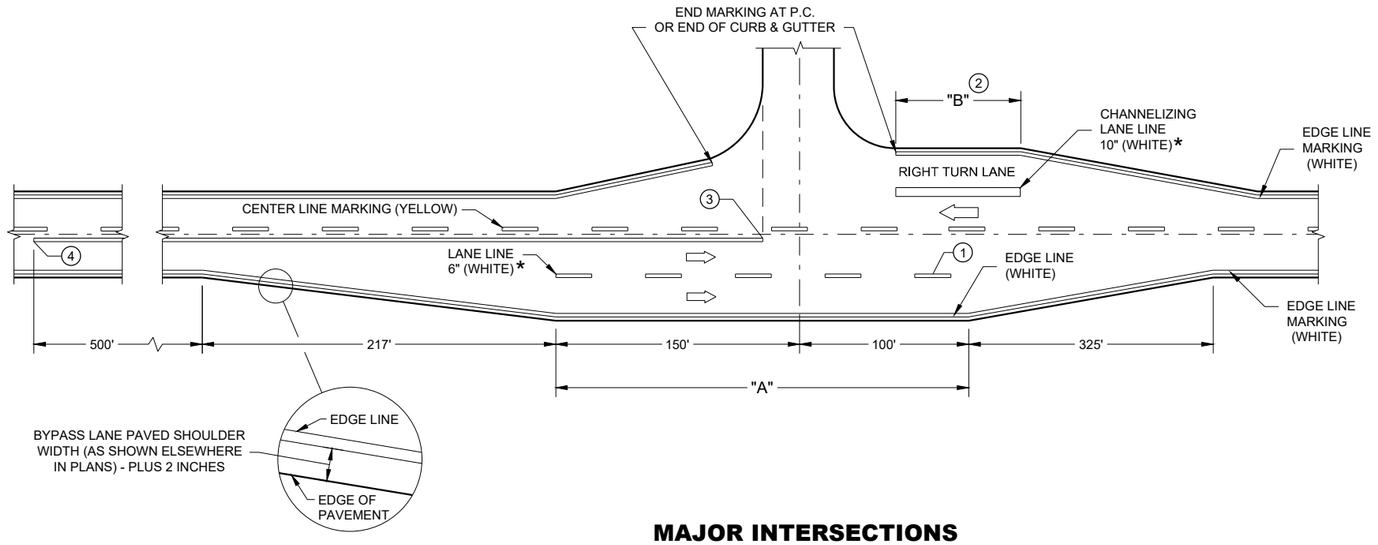
FHWA

6

SDD 15C33 - 04



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

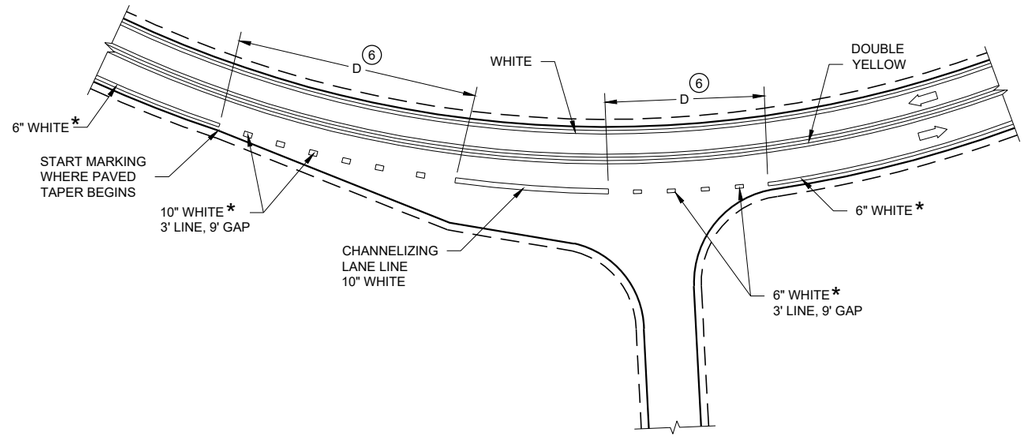
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

DIRECTION OF TRAVEL

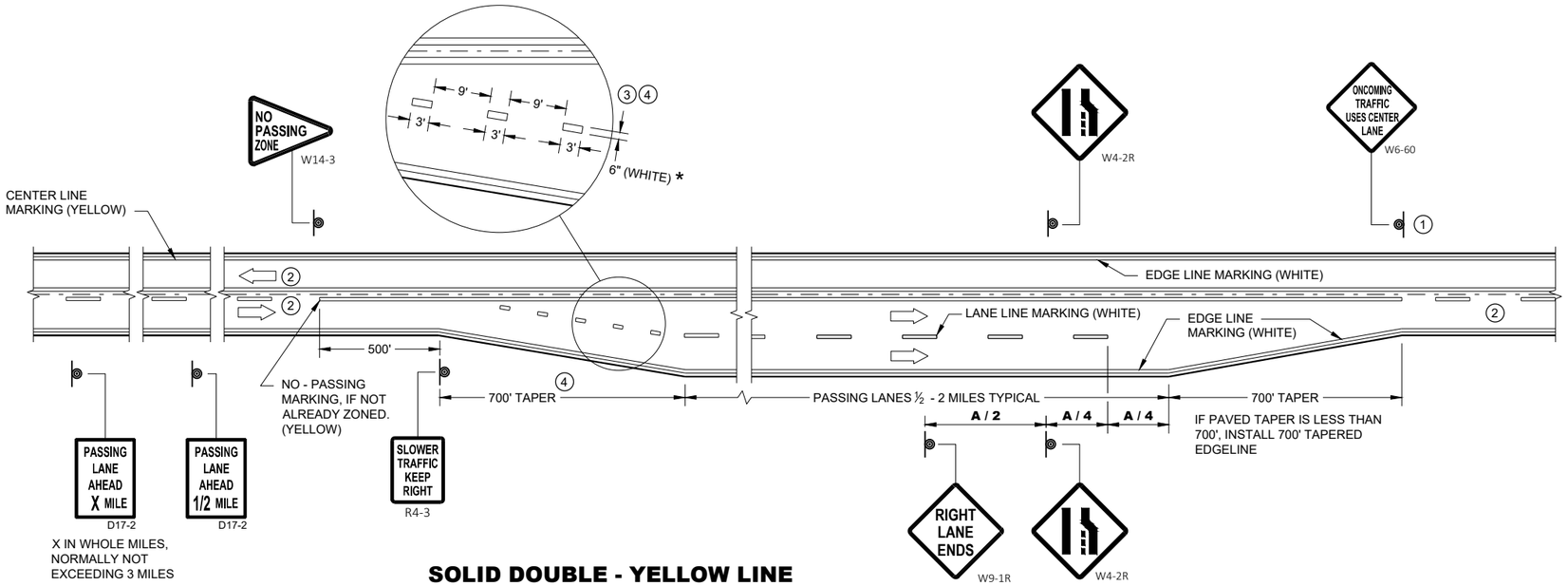


INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

SDD 15C35-06a

6



SOLID DOUBLE - YELLOW LINE
(THROUGHOUT ENTIRE PASSING / CLIMBING LANE)

GENERAL NOTES

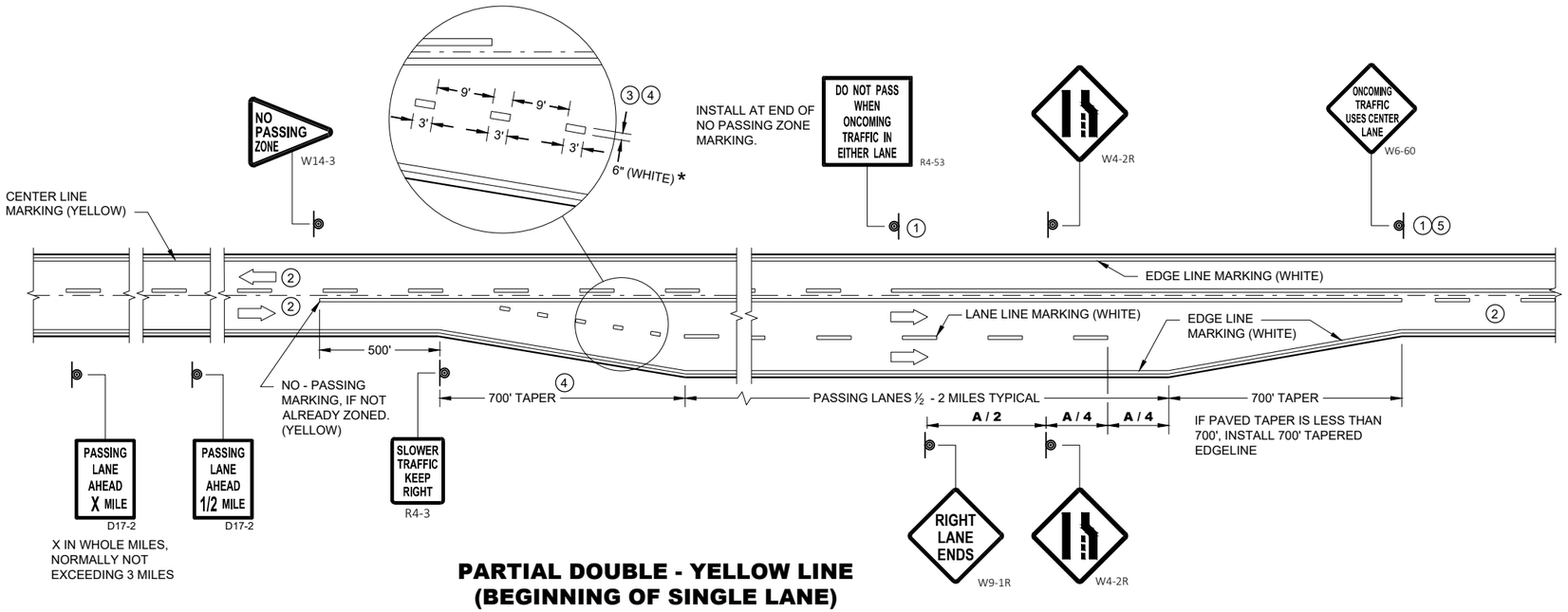
1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY 1 MILE UP UNTIL R4-53.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



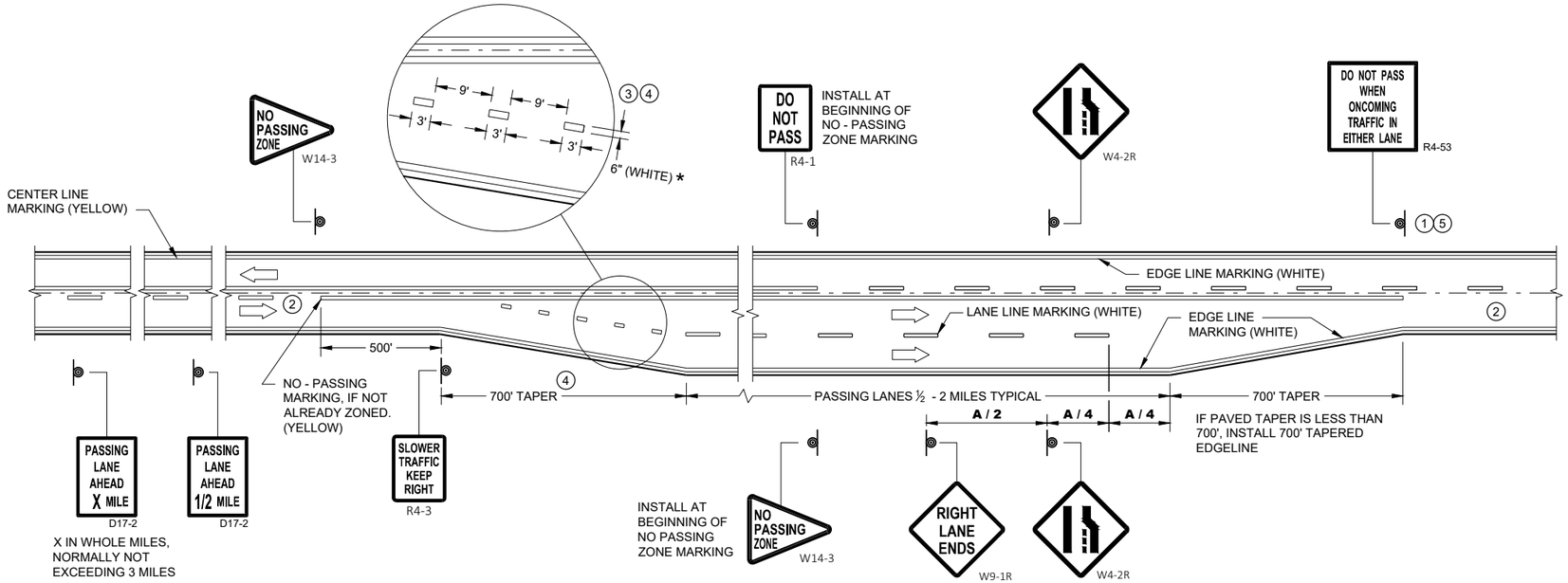
PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35-06b
SDD 15C35-06b



SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)

GENERAL NOTES

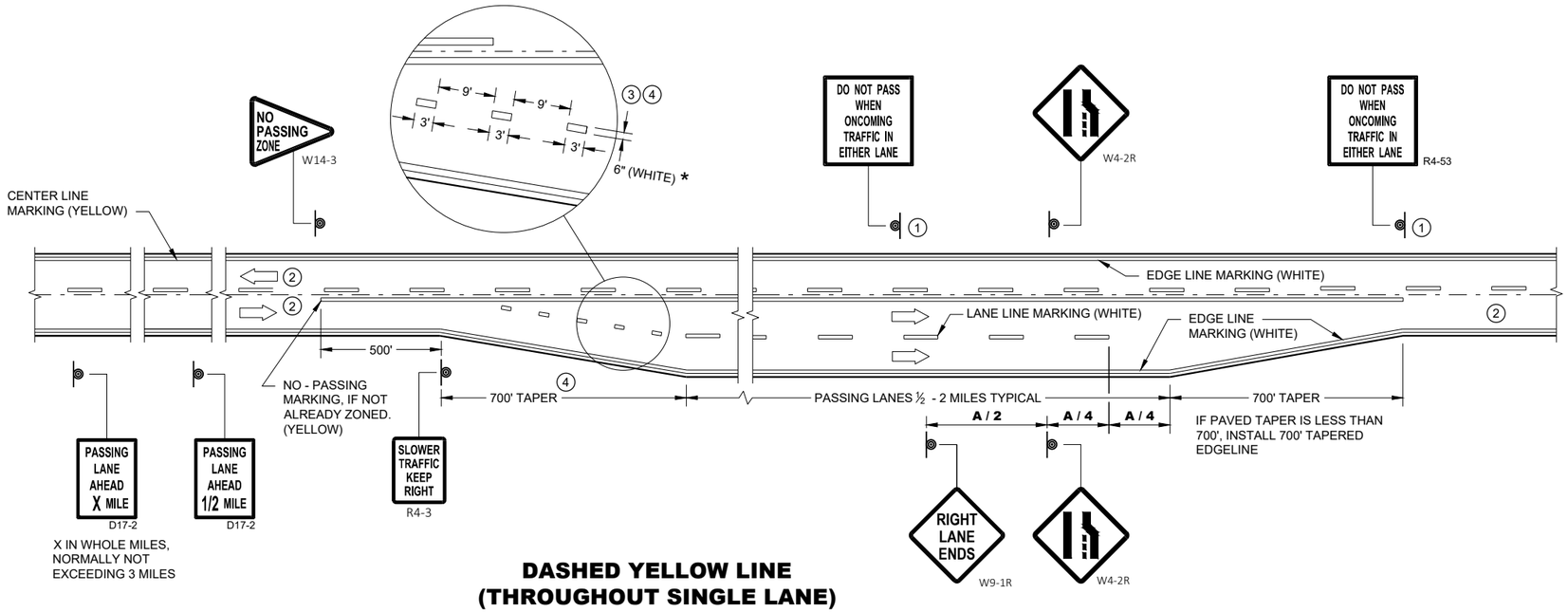
1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY ONE MILE UP UNTIL NO PASSING ZONE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



DASHED YELLOW LINE
(THROUGHOUT SINGLE LANE)

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAI ENGINEER
FHWA

6

SDD 15C35-06c

6

SDD 15C35-06c

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

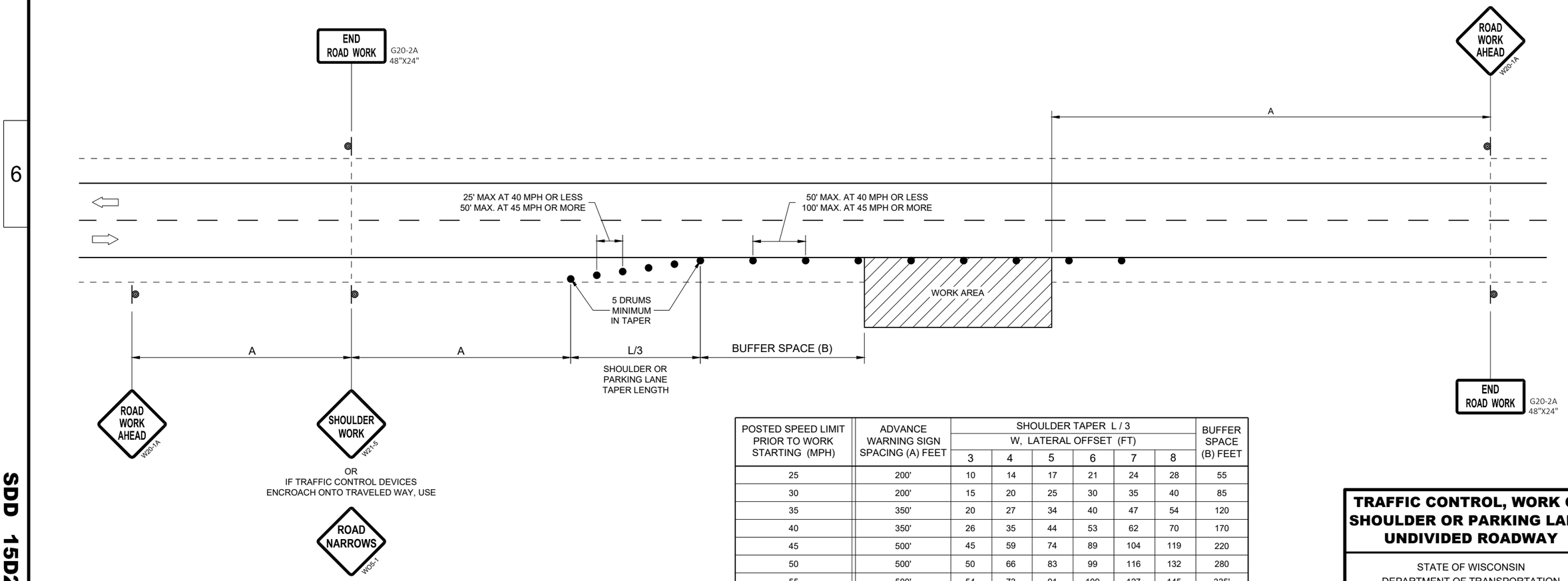
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

SDD 15D28 - 04

SDD 15D28 - 04

GENERAL NOTES

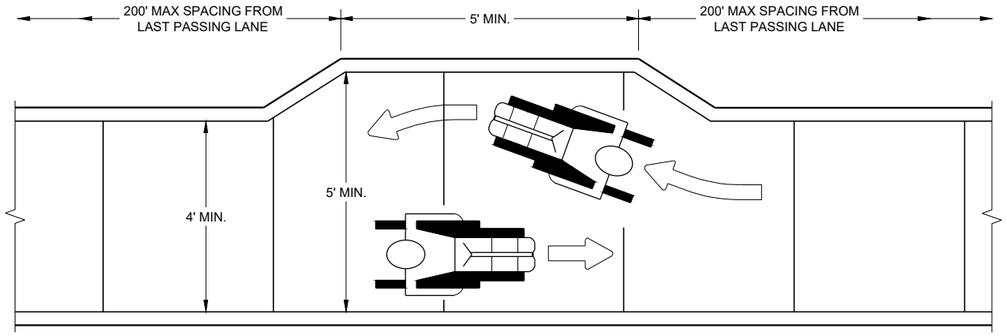
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

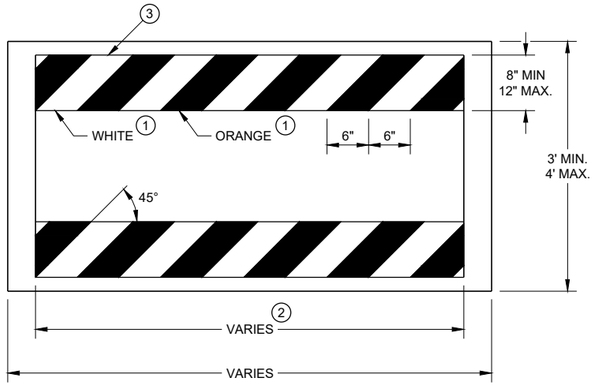
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

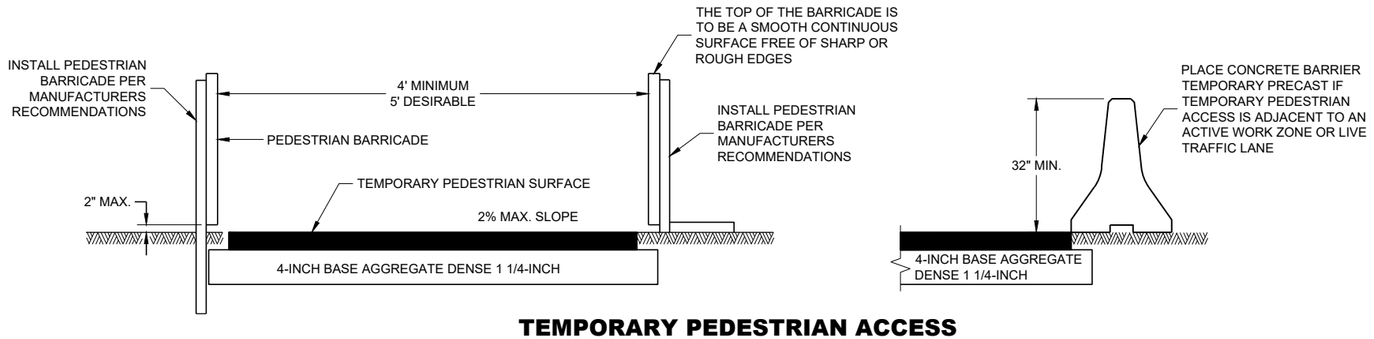
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*



TEMPORARY PEDESTRIAN ACCESS

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

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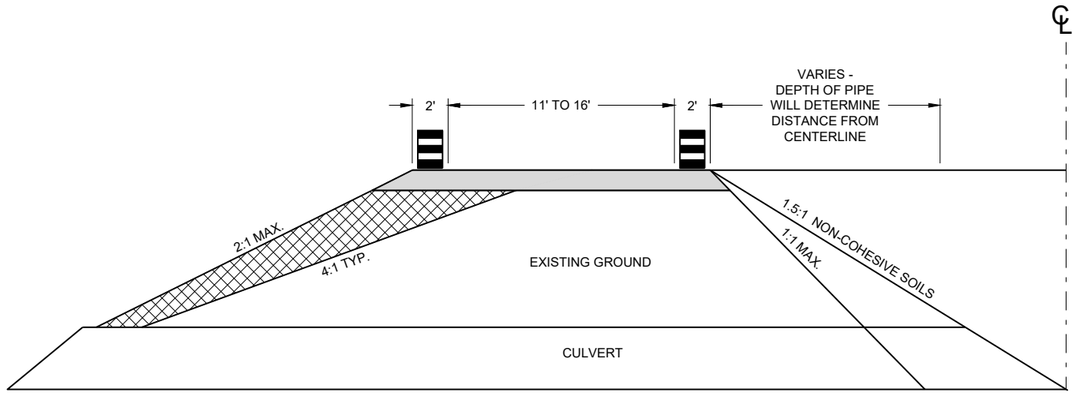
SDD 15D30 - 09a



CROSS SECTION

GENERAL NOTES

USE 1:1 FOR COHESIVE CLAYS AND SILTS, LOAMS, SANDY CLAYS AND ANGULAR GRAVEL SOILS.
USE 1.5:1 FOR NON-COHESIVE SOILS.

THE TAPER SHOULD EXTEND ACROSS THE SHOULDER UNLESS DOING SO WOULD GREATLY CONFLICT WITH THE WORK OPERATION.

ALL LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL DEVICES REMOVED BEYOND THE SHOULDER WHEN WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

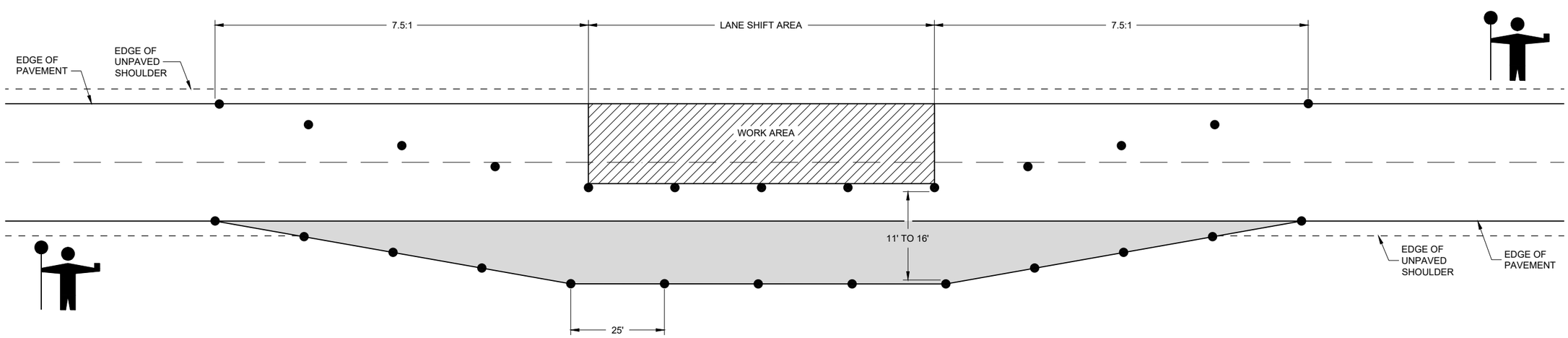
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

USE WITH SDD 15C12 "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATIONS"

USE WITH SDD 15D45 "SIGNING ON ROADWAYS WITH LOOSE GRAVEL"

LEGEND

- DRUM WITHOUT WARNING LIGHT
- 6" BASE AGGREGATE DENSE 1 ¼" -INCIDENTAL TO LANE SHIFT ITEM
- FILL - INCIDENTAL TO LANE SHIFT ITEM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



LANE SHIFT IN FLAGGING OPERATION

TRAFFIC CONTROL, TEMPORARY LANE SHIFT DURING CULVERT WORK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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SDD 15D48 - 01

6

SDD 15D48 - 01

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

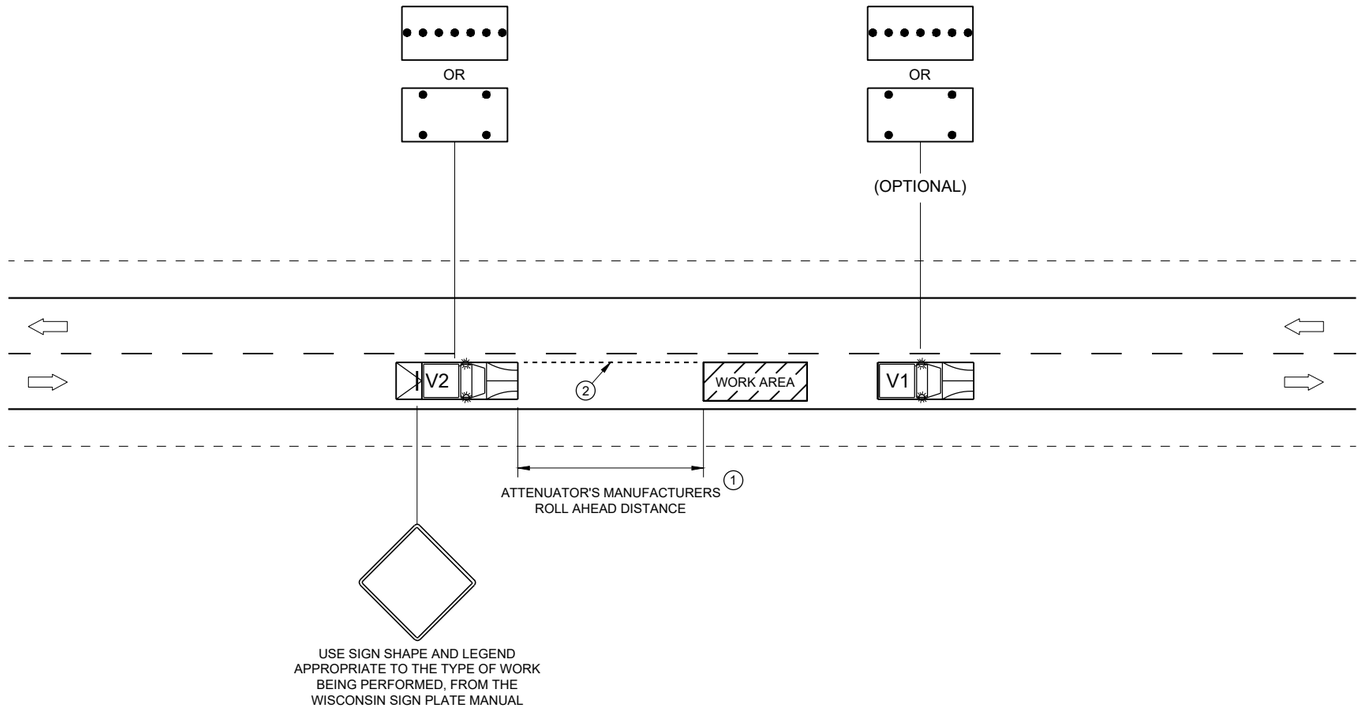
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

(1) DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

6

SDD 15D51 - 01

CULVERT 58045007425 - PERMANENT GRADING LT

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
109+68.260		5.29	0.00	1.67	0	0	0	0	0	0
109+87.333	19	5.20	0.00	4.12	4	0	2	4	3	1
110+00.000	13	5.05	0.00	6.19	2	0	2	6	6	1
110+50.000	50	4.65	0.00	7.59	9	0	13	15	22	-6
111+00.000	50	4.42	0.00	5.96	8	0	13	23	37	-14
111+50.000	50	4.83	0.00	6.44	9	0	11	32	52	-20
112+00.000	50	4.57	0.00	5.30	9	0	11	41	65	-24
112+50.000	50	4.73	0.00	4.05	9	0	9	49	76	-27
113+00.000	50	4.84	0.00	2.88	9	0	6	58	84	-26
113+20.461	20	4.70	0.00	3.22	4	0	2	62	87	-25
113+38.702	18	4.59	0.00	3.35	3	0	2	65	90	-25
					65	0	72			

CULVERT 58045007425 - PERMANENT GRADING RT

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
109+87.333		5.07	0.00	2.64	0	0	0	0	0	0
110+00.000	13	5.07	0.00	3.18	2	0	1	2	2	1
110+50.000	50	5.75	0.00	2.34	10	0	5	12	8	4
111+00.000	50	11.55	0.00	3.18	16	0	5	28	14	14
111+50.000	50	7.35	0.00	14.15	18	0	16	46	35	11
112+00.000	50	8.50	0.00	3.63	15	0	16	61	55	5
112+50.000	50	4.73	0.00	3.98	12	0	7	73	64	9
113+00.000	50	4.97	0.00	3.15	9	0	7	82	72	10
113+20.461	20	5.51	0.00	3.05	4	0	2	86	75	11
					86	0	60			

NOTES:

1 - CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL DOES NOT SHOW UP IN CROSS SECTIONS

3 - UNEXPANDED FILL DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

8 - MASS ORDINATE = (CUT - SALVAGED PAVT) - (FILL * FILL FACTOR)

CULVERT 58045005904 - PERMANENT GRADING LT

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
392+82.095		6.87	0.00	1.00	0	0	0	0	0	0
393+00.000	18	6.69	0.00	0.26	4	0	0	4	1	4
393+21.197	21	7.34	0.00	0.02	6	0	0	10	1	9
393+50.000	29	7.57	0.00	0.00	8	0	0	18	1	17
394+00.000	50	6.66	0.00	0.21	13	0	0	31	1	30
394+50.000	50	5.49	0.00	13.25	11	0	12	42	16	26
394+75.000	25	4.70	0.00	19.84	5	0	15	47	36	11
394+86.612	12	4.68	0.00	19.25	2	0	8	49	46	3
394+93.000	6	4.67	0.00	31.54	1	0	6	50	54	-3
395+00.000	7	4.32	0.00	51.20	1	0	11	51	67	-16
395+50.000	50	4.83	0.00	39.03	8	0	84	60	172	-112
395+95.750	46	5.34	0.00	14.66	9	0	45	68	228	-160
396+00.000	4	5.55	0.00	12.54	1	0	2	69	231	-162
396+50.000	50	6.01	0.00	5.55	11	0	17	80	252	-172
397+00.000	50	6.10	0.00	14.32	11	0	18	91	275	-184
397+17.831	18	5.22	0.00	9.47	4	0	8	95	285	-190
					95	0	228			

CULVERT 58045005904 - PERMANENT GRADING RT

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
393+21.197		4.82	0.00	3.10	0	0	0	0	0	0
393+50.000	29	4.23	0.00	3.48	5	0	4	5	4	0
394+00.000	50	4.56	0.00	4.80	8	0	8	13	14	-1
394+50.000	50	4.45	0.00	4.78	8	0	9	21	25	-4
394+75.000	25	4.67	0.00	5.88	4	0	5	26	31	-6
394+86.612	12	4.62	0.00	5.66	2	0	2	28	34	-7
394+93.000	6	4.53	0.00	5.51	1	0	1	29	36	-7
395+00.000	7	5.96	0.00	14.29	1	0	3	30	39	-9
395+50.000	50	5.33	0.00	4.47	10	0	17	40	61	-20
395+95.750	46	8.30	0.00	0.00	12	0	4	52	66	-14
					52	0	53			

NOTES:

1 - CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL DOES NOT SHOW UP IN CROSS SECTIONS

3 - UNEXPANDED FILL DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

8 - MASS ORDINATE = (CUT - SALVAGED PAVT) - (FILL * FILL FACTOR)

CULVERT 58045005909 - TEMPORARY WIDENING RT

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
448+14.025		2.27	0.00	0.01	0	0	0	0	0	0
448+39.579	26	14.37	0.00	0.00	8	0	0	8	0	8
448+79.234	40	11.13	0.00	0.00	19	0	0	27	0	27
449+00.000	21	10.15	0.00	0.35	8	0	0	35	0	35
449+35.724	36	7.30	0.00	0.00	12	0	0	46	0	46
449+43.656	8	6.75	0.00	0.00	2	0	0	48	0	48
449+51.786	8	5.99	0.00	1.79	2	0	0	50	1	50
450+00.000	48	4.34	0.00	4.42	9	0	6	60	8	52
450+09.670	10	4.16	0.00	4.59	2	0	2	61	10	51
450+62.429	53	1.86	0.00	0.00	6	0	4	67	15	52
450+74.502	12	1.10	0.00	0.00	1	0	0	68	15	52
					68	0	12			

CULVERT 58045005921 - PERMANENT GRADING RT

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
630+06.737		9.10	0.00	0.00	0	0	0	0	0	0
630+50.000	43	9.04	0.00	0.00	15	0	0	15	0	15
631+00.000	50	9.20	0.00	0.00	17	0	0	31	0	31
631+50.000	50	11.30	0.00	0.00	19	0	0	50	0	50
632+00.000	50	12.83	0.00	3.56	22	0	3	73	4	69
632+07.954	8	13.51	0.00	12.13	4	0	2	77	7	70
632+50.000	42	8.47	0.00	2.55	17	0	11	94	21	72
633+00.000	50	6.53	0.00	1.12	14	0	3	108	26	82
633+50.000	50	6.39	0.00	0.87	12	0	2	120	28	92
633+84.626	35	6.91	0.00	0.00	9	0	1	128	29	100
					128	0	23			

NOTES:
1 - CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL DOES NOT SHOW UP IN CROSS SECTIONS
3 - UNEXPANDED FILL DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE = (CUT - SALVAGED PAVT) - (FILL * FILL FACTOR)

USH 45 AT CTH N - SOUTH

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
440+75.000		26.23	0.00	7.58	0	0	0	0	0	0
441+50.000	75	22.00	0.00	11.37	67	0	26	67	33	34
442+00.000	50	32.90	0.00	10.59	51	0	20	118	58	60
442+50.000	50	52.98	6.84	9.05	80	6	18	197	81	110
442+60.705	11	56.84	6.18	8.78	22	3	4	219	85	125
443+00.000	39	49.65	1.06	5.16	77	5	10	297	98	184
443+50.000	50	30.60	0.00	4.27	74	1	9	371	109	247
443+52.656	3	37.72	0.00	3.40	3	0	0	374	110	250
444+00.000	47	24.49	0.00	4.64	55	0	7	429	118	295
444+50.000	50	28.71	0.00	1.94	49	0	6	478	126	337
445+00.000	50	36.44	1.56	1.01	60	1	3	538	129	392
445+28.784	29	47.16	2.09	0.00	45	2	1	583	130	434
445+49.990	21	54.75	2.15	0.00	40	2	0	623	130	473
445+79.527	30	40.29	0.00	2.75	52	1	2	675	132	522
446+00.000	20	33.36	0.00	2.19	28	0	2	703	134	547
446+50.000	50	33.16	0.00	2.13	62	0	4	764	139	604
447+00.000	50	37.91	0.00	6.69	66	0	8	830	149	659
					830	21	120			

NOTES:

1 - CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL DOES NOT SHOW UP IN CROSS SECTIONS

3 - UNEXPANDED FILL DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

8 - MASS ORDINATE = (CUT - SALVAGED PAVT) - (FILL * FILL FACTOR)

USH 45 AT CTH N - NORTH

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
448+54.466		44.52	1.23	13.56	0	0	0	0	0	0
448+75.000	21	41.40	1.23	0.27	33	1	5	33	7	25
449+00.000	25	37.04	1.24	2.58	36	1	1	69	8	59
449+20.842	21	37.15	1.26	5.59	29	1	3	98	12	82
449+47.676	27	96.85	0.00	2.57	67	1	4	164	17	143
450+00.000	52	50.19	0.00	13.53	142	0	16	307	37	266
450+50.000	50	47.05	0.00	12.69	90	0	24	397	67	326
451+00.000	50	29.95	0.00	12.74	71	0	24	468	97	368
451+50.000	50	26.52	0.00	14.86	52	0	26	520	128	388
452+00.000	50	25.87	0.00	17.49	49	0	30	569	166	399
452+50.000	50	27.57	0.00	19.03	49	0	34	618	208	406
453+00.000	50	51.98	9.66	0.00	74	9	18	692	230	449
453+50.000	50	22.97	0.00	10.71	69	9	10	761	243	497
454+00.000	50	20.75	0.00	7.88	40	0	17	802	264	516
454+50.000	50	27.33	0.00	1.11	45	0	8	846	275	550
455+00.000	50	38.95	0.00	0.01	61	0	1	908	276	610
455+11.519	12	28.08	0.00	0.00	14	0	0	922	276	625
455+11.519	0	15.48	0.00	0.00	0	0	0	922	276	625
455+40.000	28	0.88	0.00	0.05	9	0	0	931	276	633
455+50.000	10	1.20	0.00	0.00	0	0	0	931	276	634
455+70.000	20	1.86	0.00	0.00	1	0	0	932	276	635
455+97.534	28	2.44	0.00	0.00	2	0	0	934	276	637
					934	22	221			

NOTES:
1 - CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL DOES NOT SHOW UP IN CROSS SECTIONS
3 - UNEXPANDED FILL DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE = (CUT - SALVAGED PAVT) - (FILL * FILL FACTOR)

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CTH N - WEST

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
18+47.039		16.64	0.00	0.05	0	0	0	0	0	0
18+50.000	3	16.60	0.00	0.00	2	0	0	2	0	2
19+00.000	50	22.47	1.25	2.63	36	1	2	38	3	34
19+17.027	17	23.66	1.99	3.57	15	1	2	53	5	45
					53	2	4			

CTH N - EAST

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
10+85.915		8.39	0.44	1.73	0	0	0	0	0	0
11+00.000	14	8.69	0.79	3.87	4	0	1	4	2	2
11+28.317	28	14.22	1.51	0.00	12	1	2	16	4	11
11+50.000	22	7.92	1.06	2.67	9	1	1	25	6	17
12+00.000	50	17.71	0.00	2.37	24	1	5	49	12	34
12+10.000	10	18.00	0.00	1.86	7	0	1	56	13	40
					56	4	10			

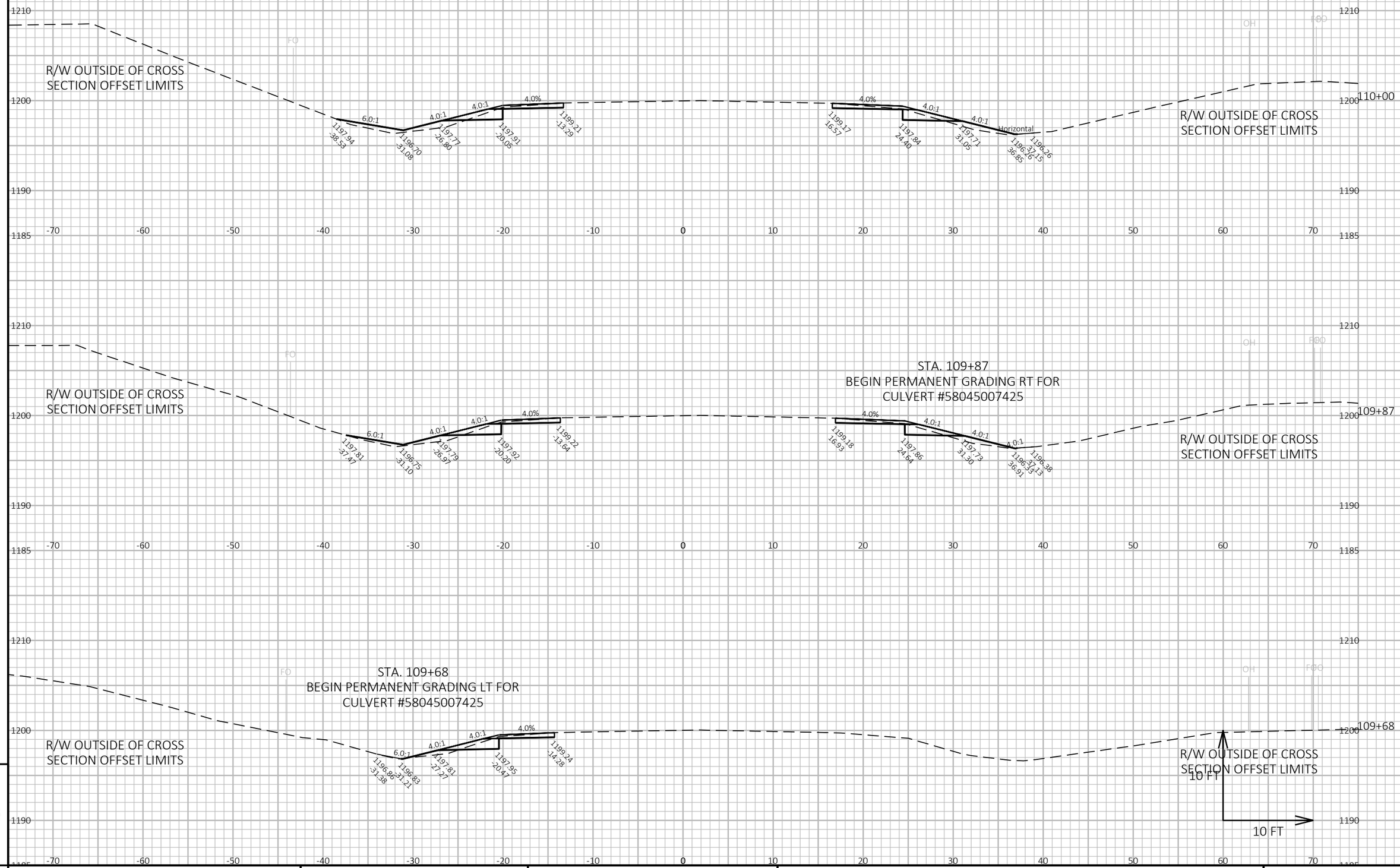
NOTES:

1 - CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL DOES NOT SHOW UP IN CROSS SECTIONS

3 - UNEXPANDED FILL DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

8 - MASS ORDINATE = (CUT - SALVAGED PAVT) - (FILL * FILL FACTOR)



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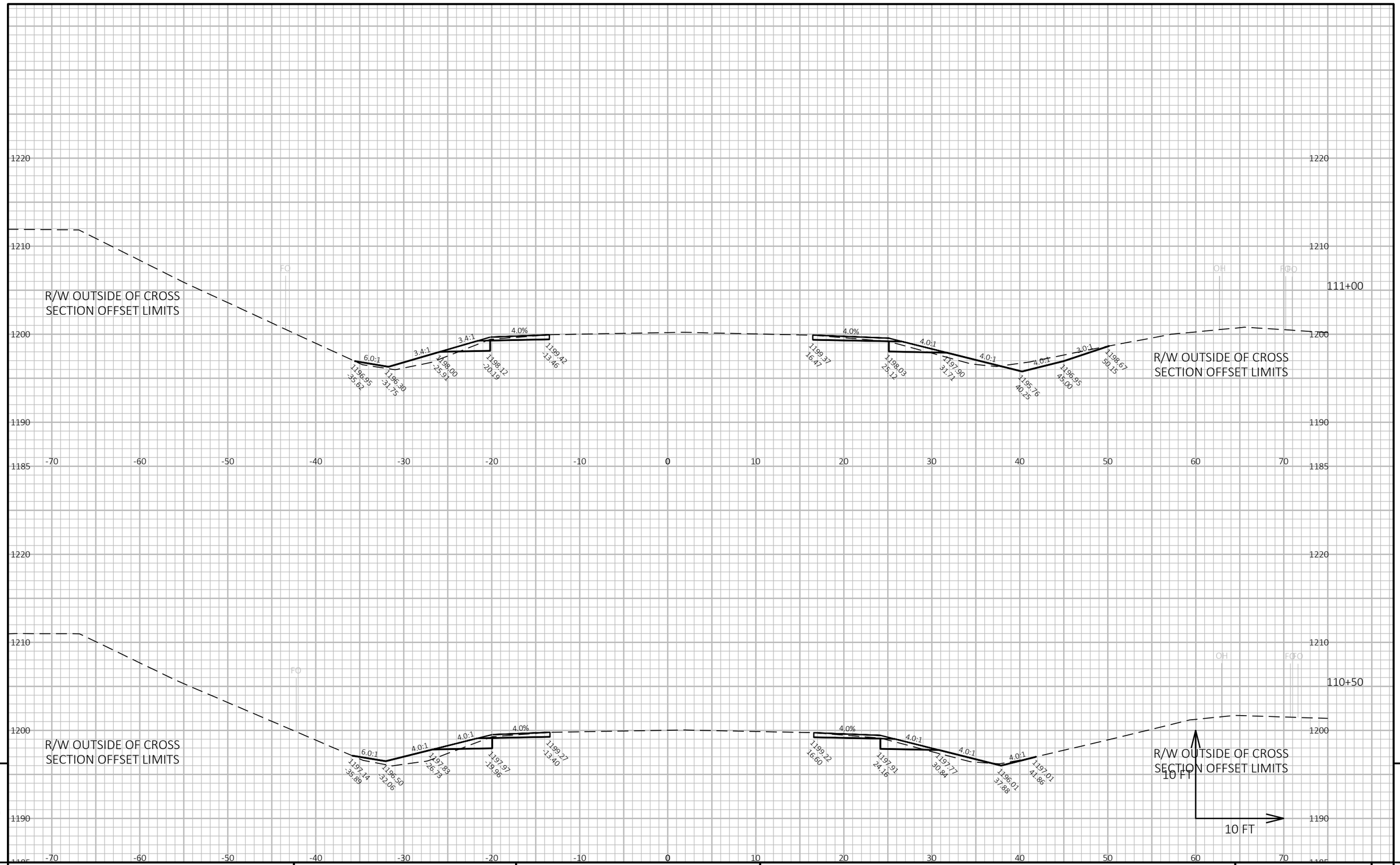
9

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 207	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG
LAYOUT NAME - 090201-xs-CR

PLOT DATE : 10/31/2023 12:21 AM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 208	E

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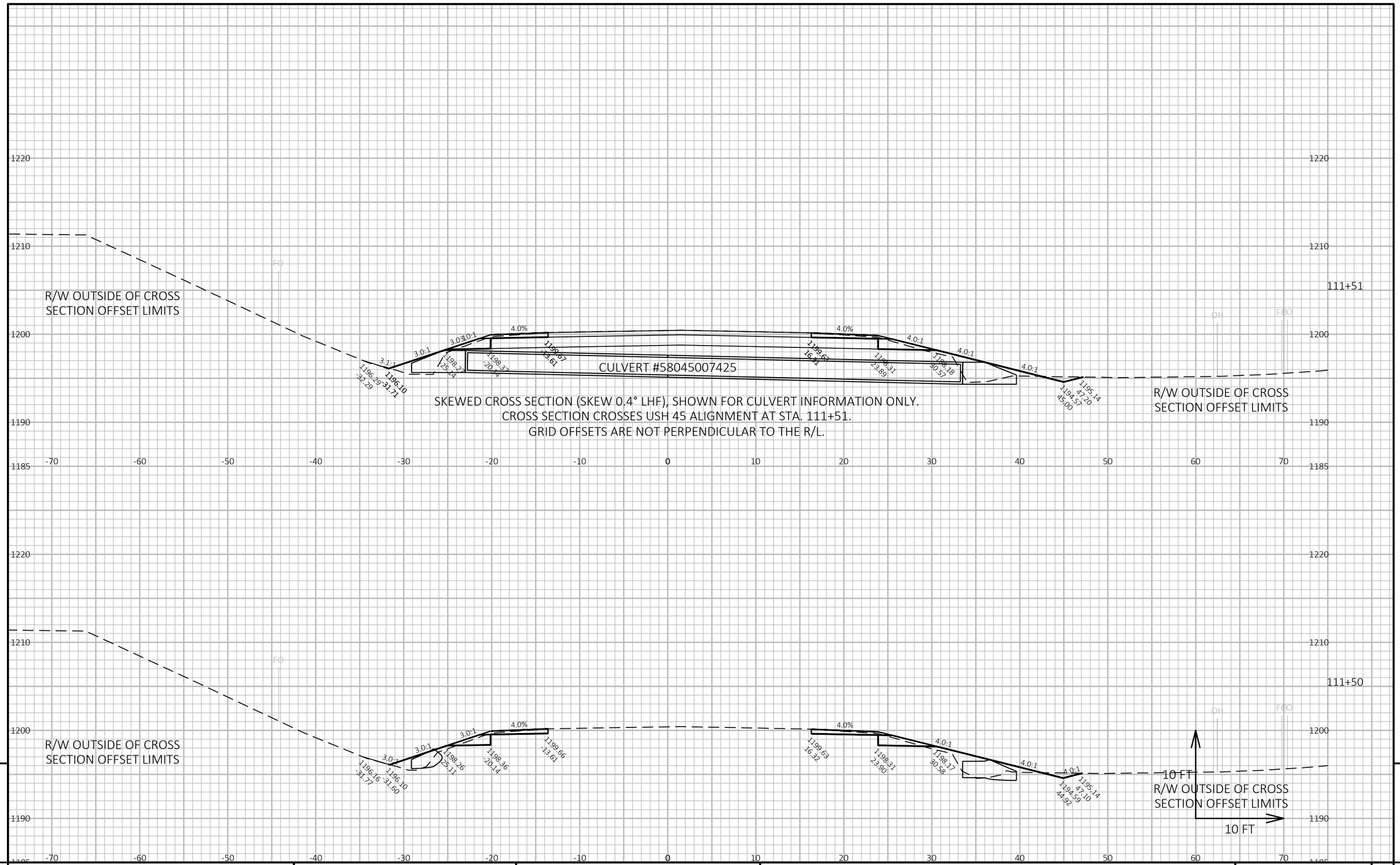
PLOT DATE : 10/31/2023 12:22 AM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

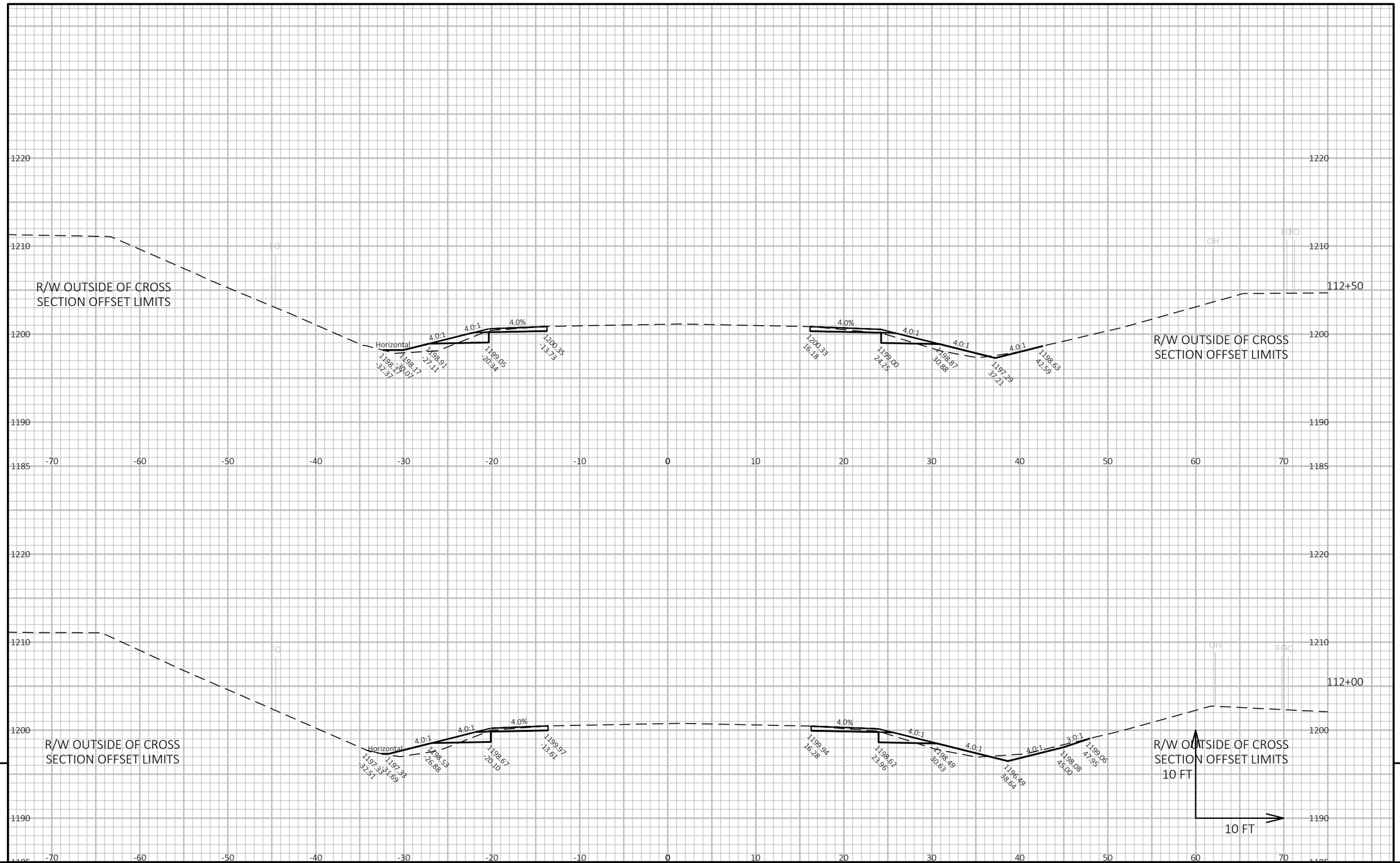


SKEWED CROSS SECTION (SKEW 0.4° LHF), SHOWN FOR CULVERT INFORMATION ONLY.
CROSS SECTION CROSSES USH 45 ALIGNMENT AT STA. 111+51.
GRID OFFSETS ARE NOT PERPENDICULAR TO THE R/L.

9 9

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 209	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG PLOT DATE : 10/31/2023 12:23 AM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 090203-xs-CR
WISDOT/CADDS SHEET 49



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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 210	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG
LAYOUT NAME - 090204-xs-CR

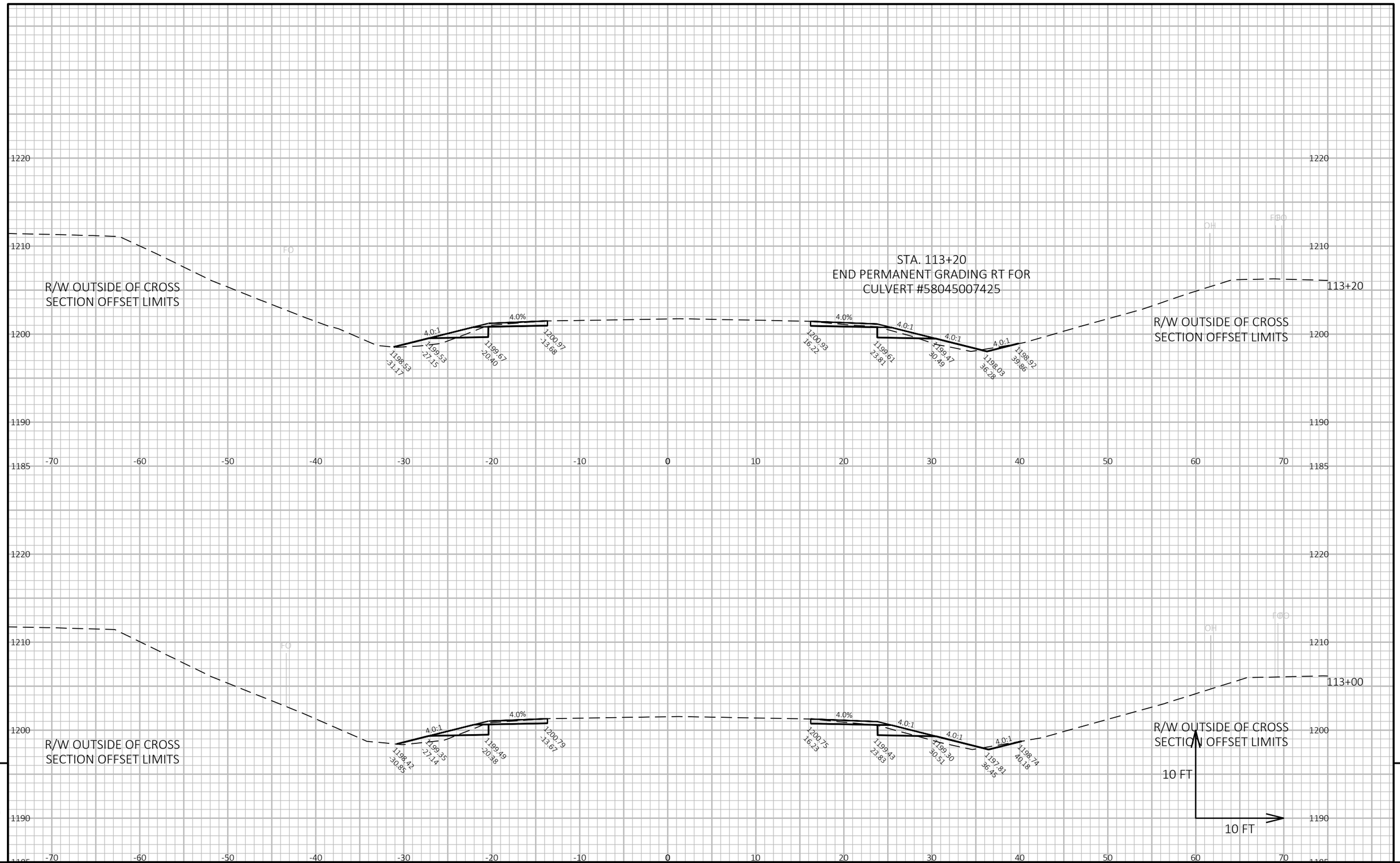
PLOT DATE : 10/31/2023 12:24 AM

PLOT BY : MROZ, ZACHARY

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 211	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG
LAYOUT NAME - 090205-xs-CR

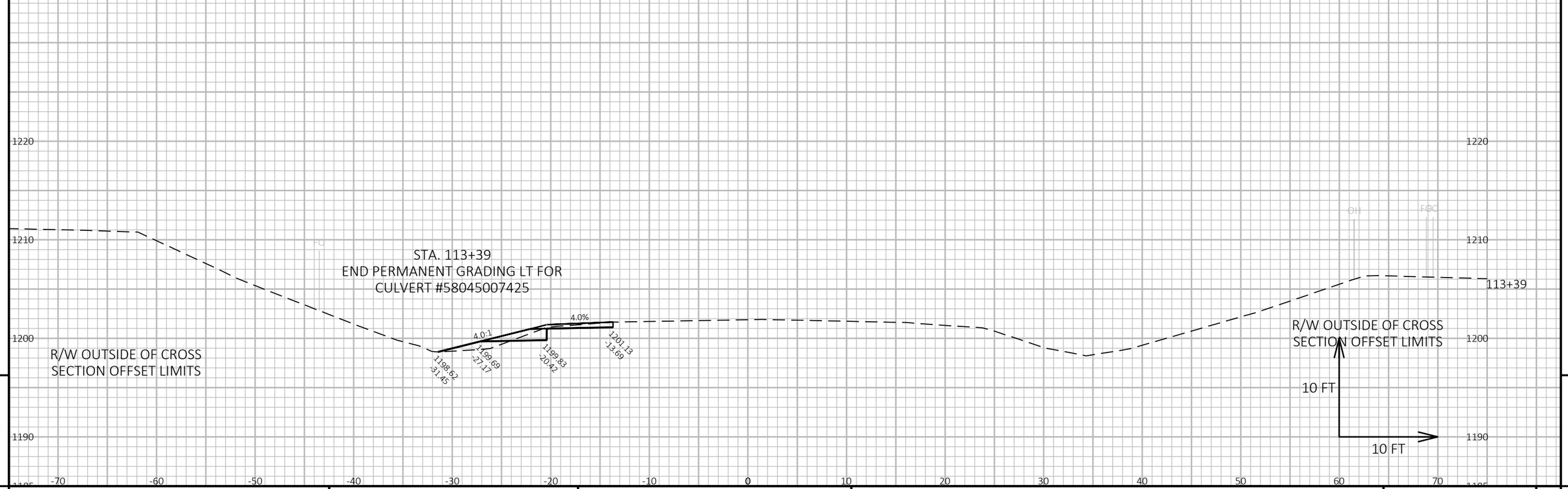
PLOT DATE : 10/31/2023 12:25 AM

PLOT BY : MROZ, ZACHARY

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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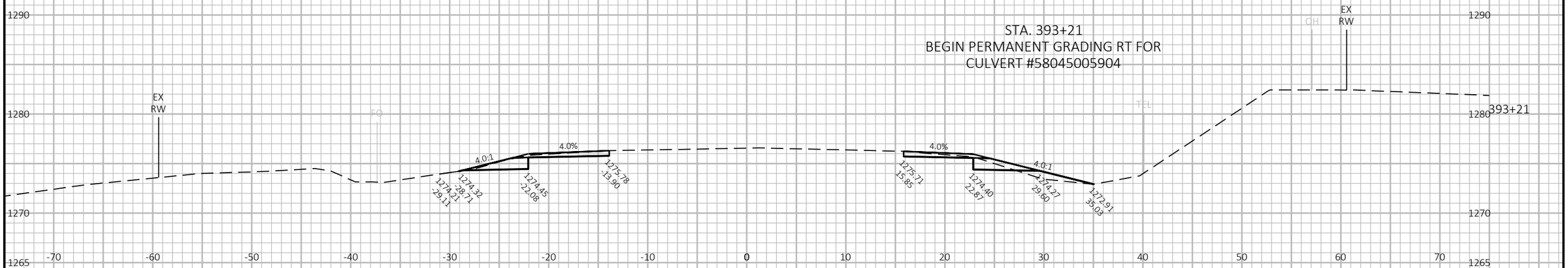
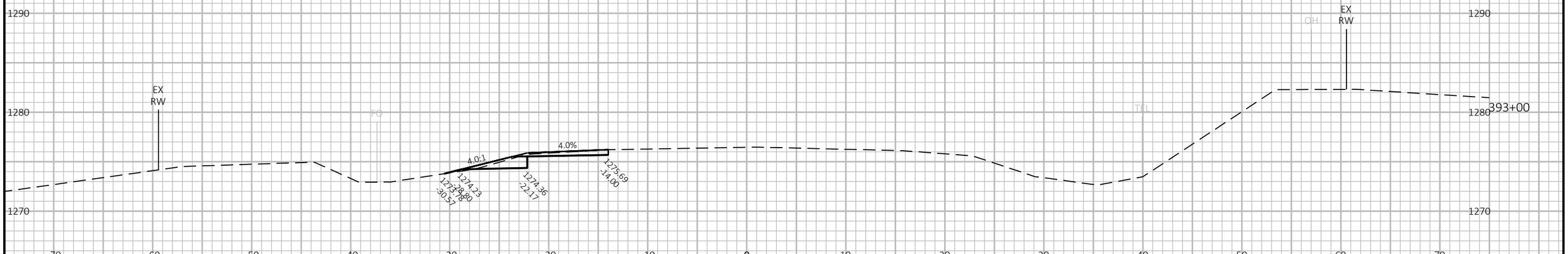
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 212	E

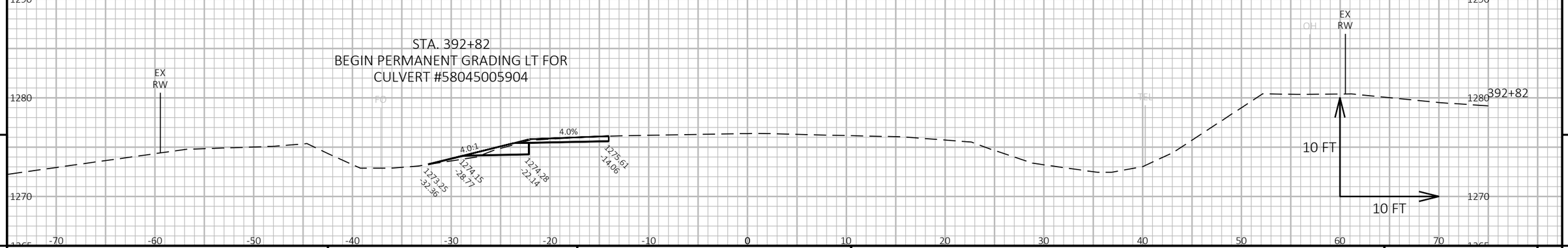
FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG
LAYOUT NAME - 090206-xs-CR
PLOT DATE : 10/31/2023 12:26 AM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

STA. 393+21
BEGIN PERMANENT GRADING RT FOR
CULVERT #58045005904





STA. 392+82
BEGIN PERMANENT GRADING LT FOR
CULVERT #58045005904



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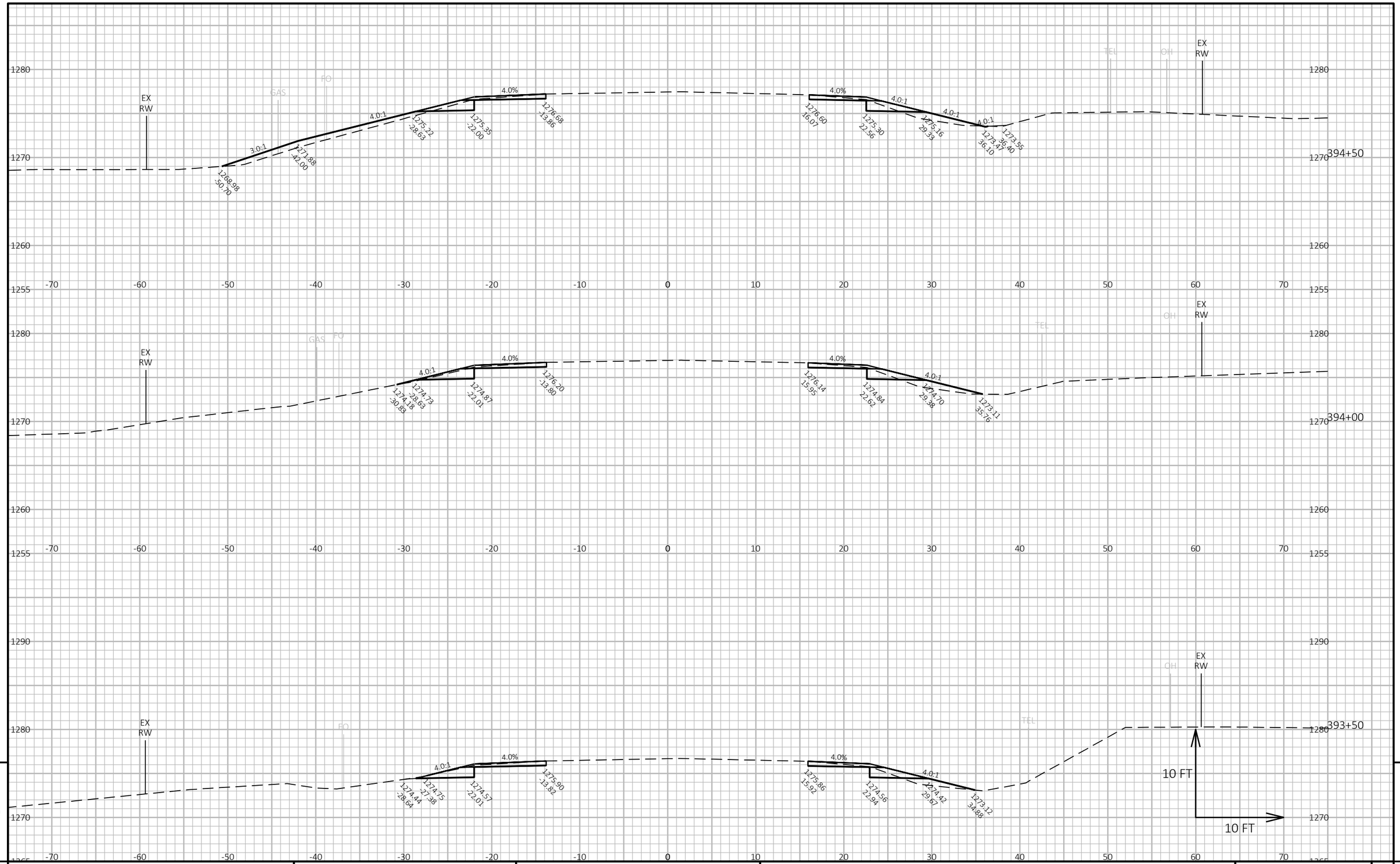
9

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 213	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG
LAYOUT NAME - 090211-xs-CR
PLOT DATE : 10/31/2023 12:27 AM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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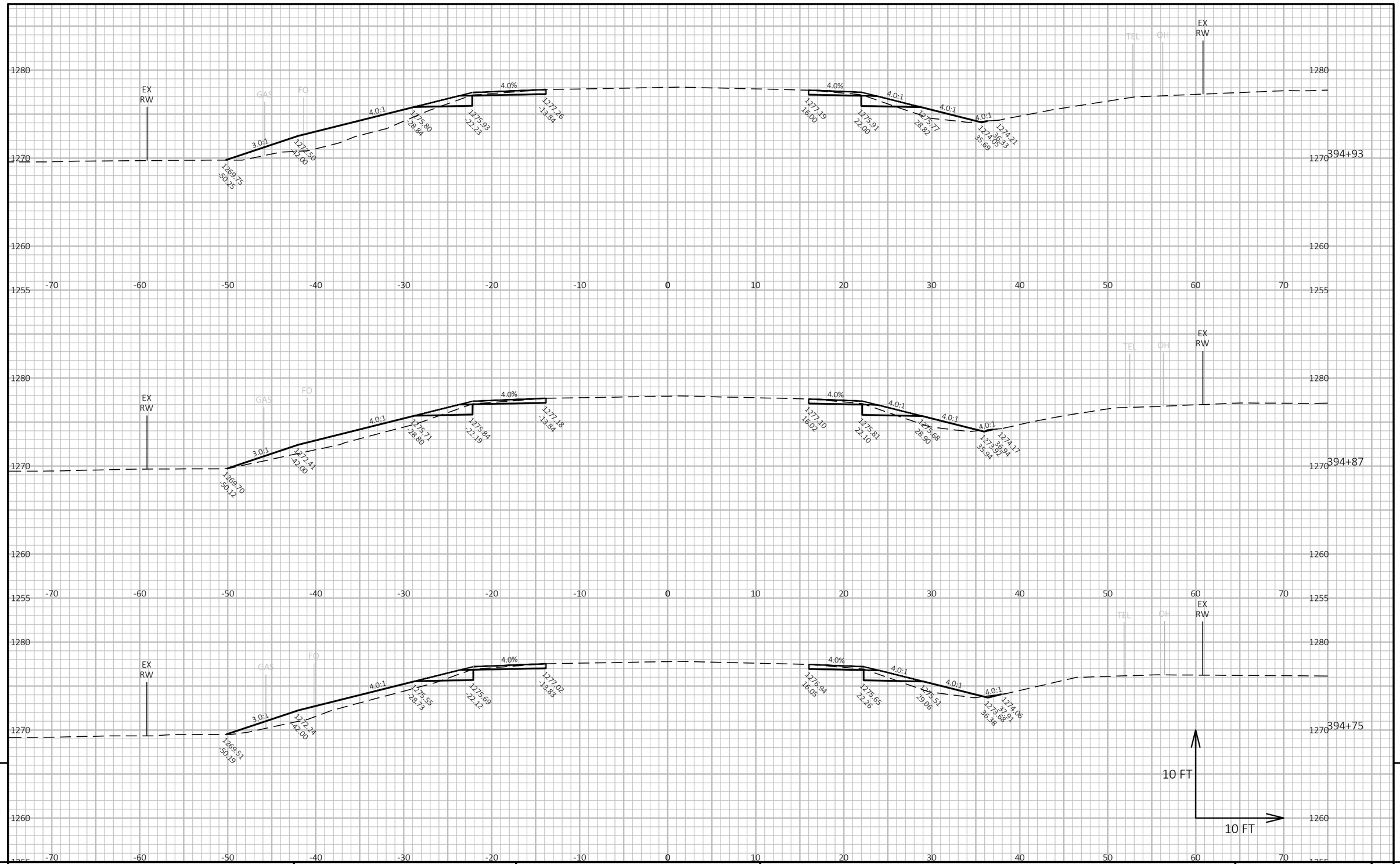
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 214	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG
LAYOUT NAME - 090212-xs-CR

PLOT DATE : 10/31/2023 12:28 AM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 215	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG
LAYOUT NAME - 090213-xs-CR

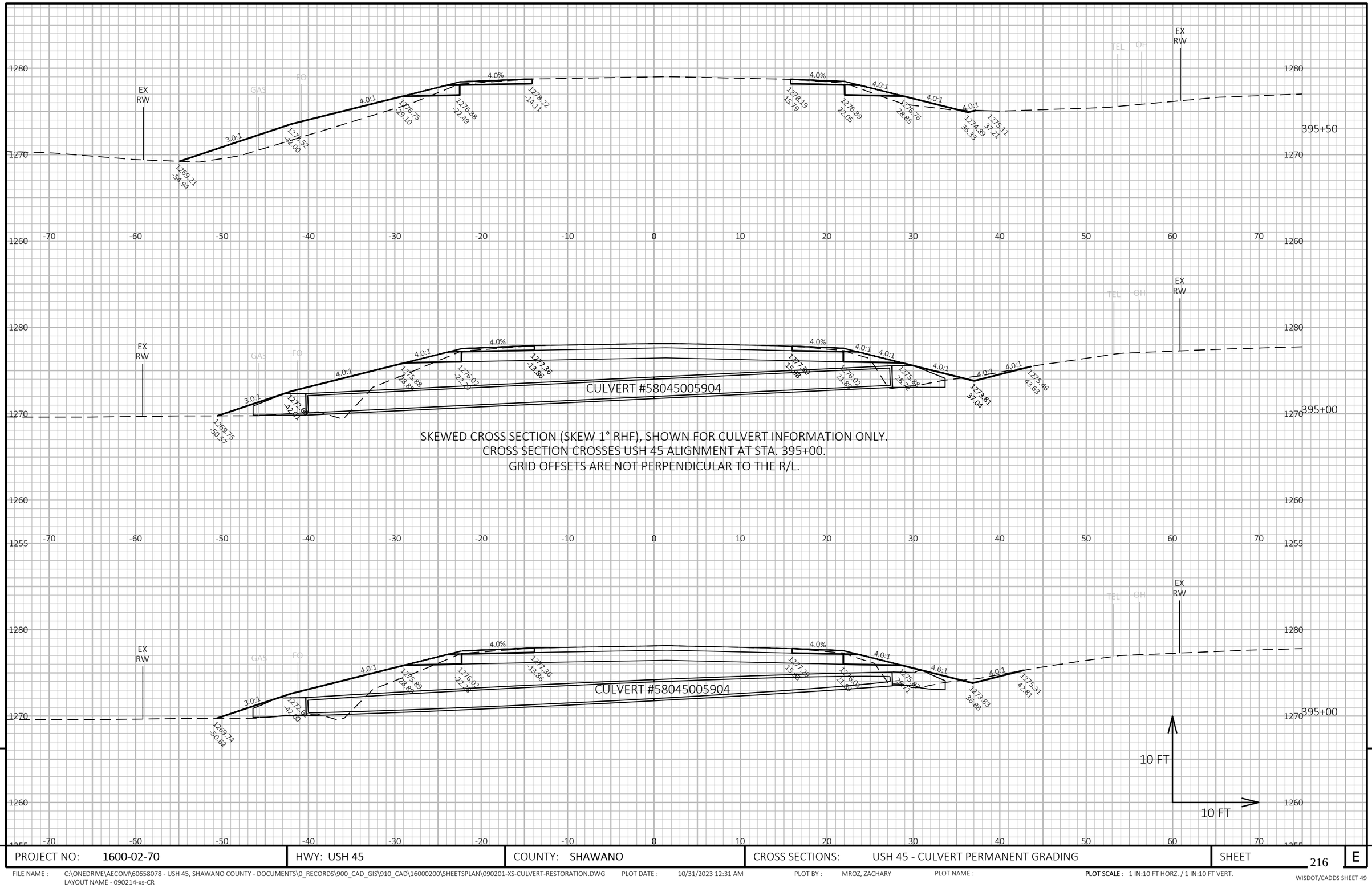
PLOT DATE : 10/31/2023 12:30 AM

PLOT BY : MROZ, ZACHARY

PLOT NAME :

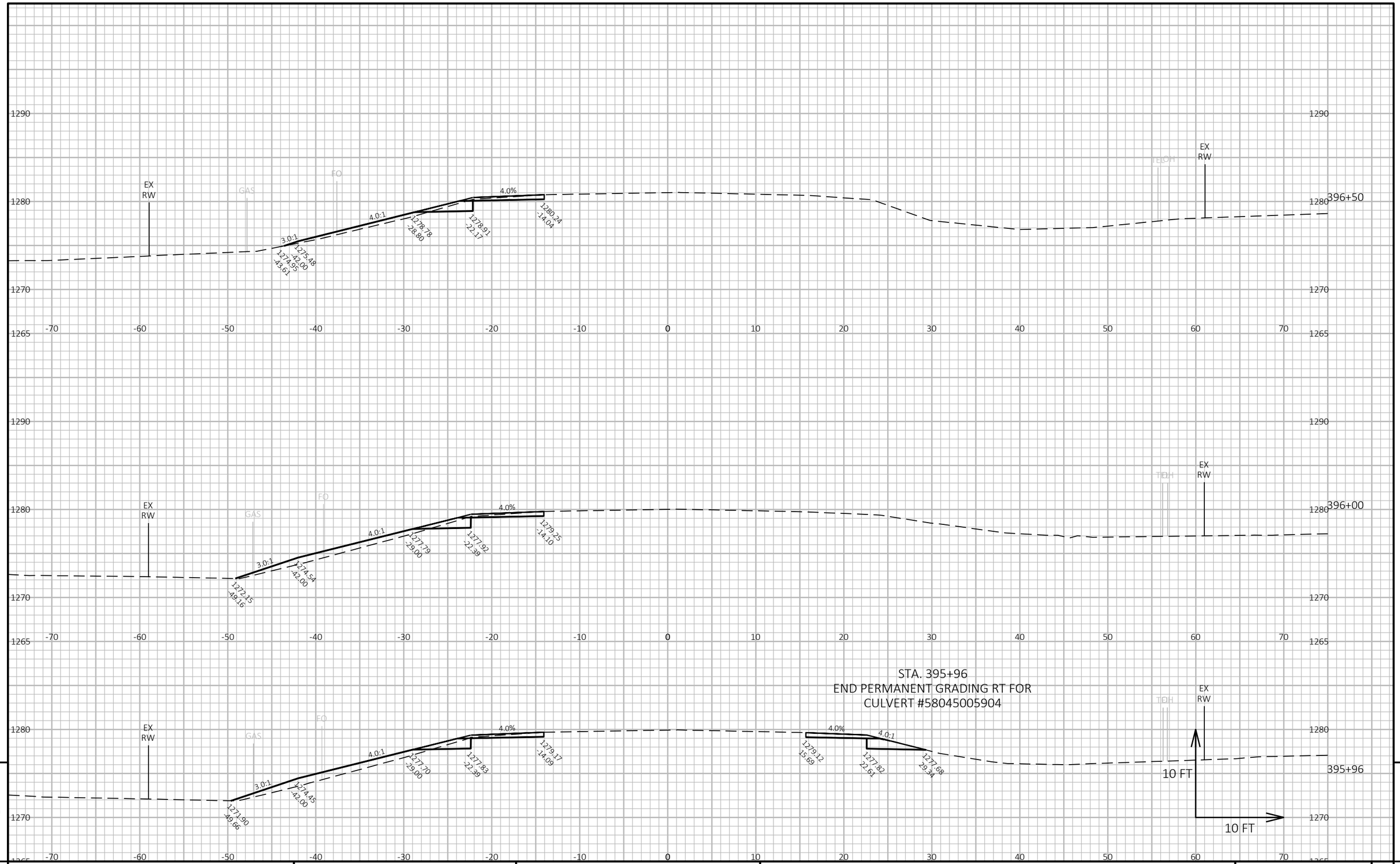
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 216 E

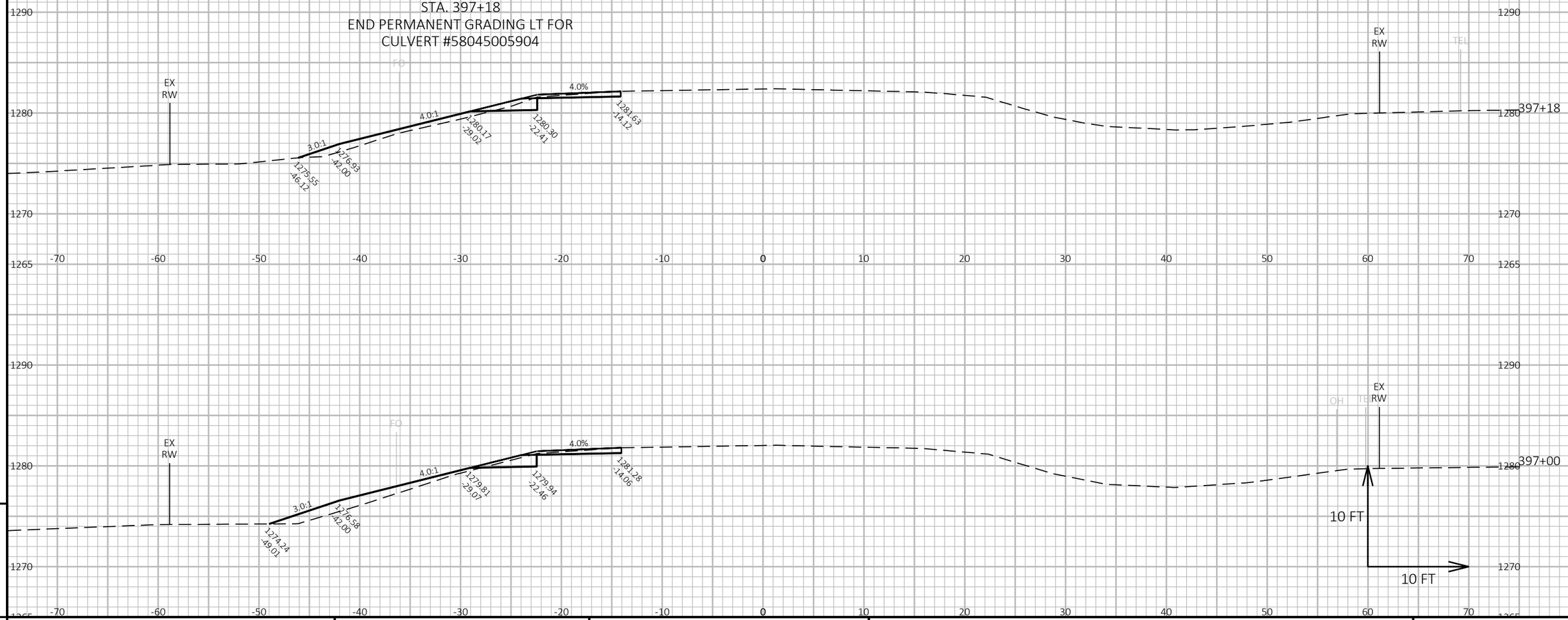
FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG
LAYOUT NAME - 090214-xs-CR
PLOT DATE : 10/31/2023 12:31 AM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 217	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG
LAYOUT NAME - 090215-xs-CR
PLOT DATE : 10/31/2023 12:33 AM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

STA. 397+18
END PERMANENT GRADING LT FOR
CULVERT #58045005904

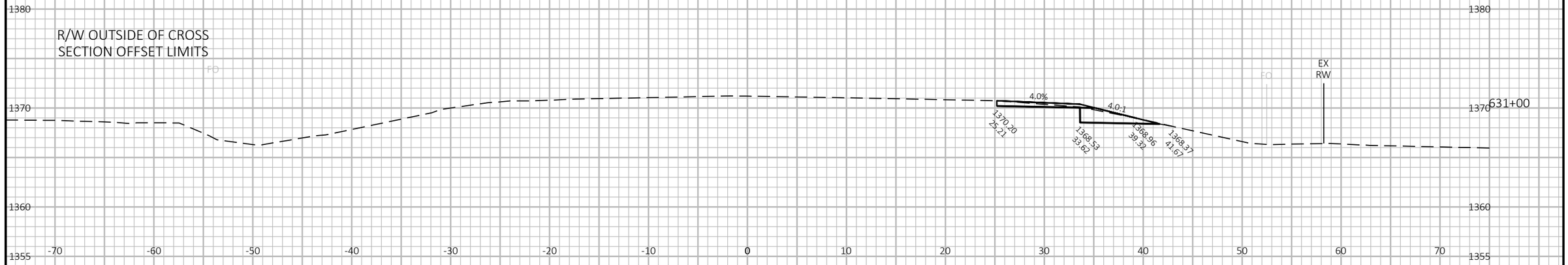


9 9

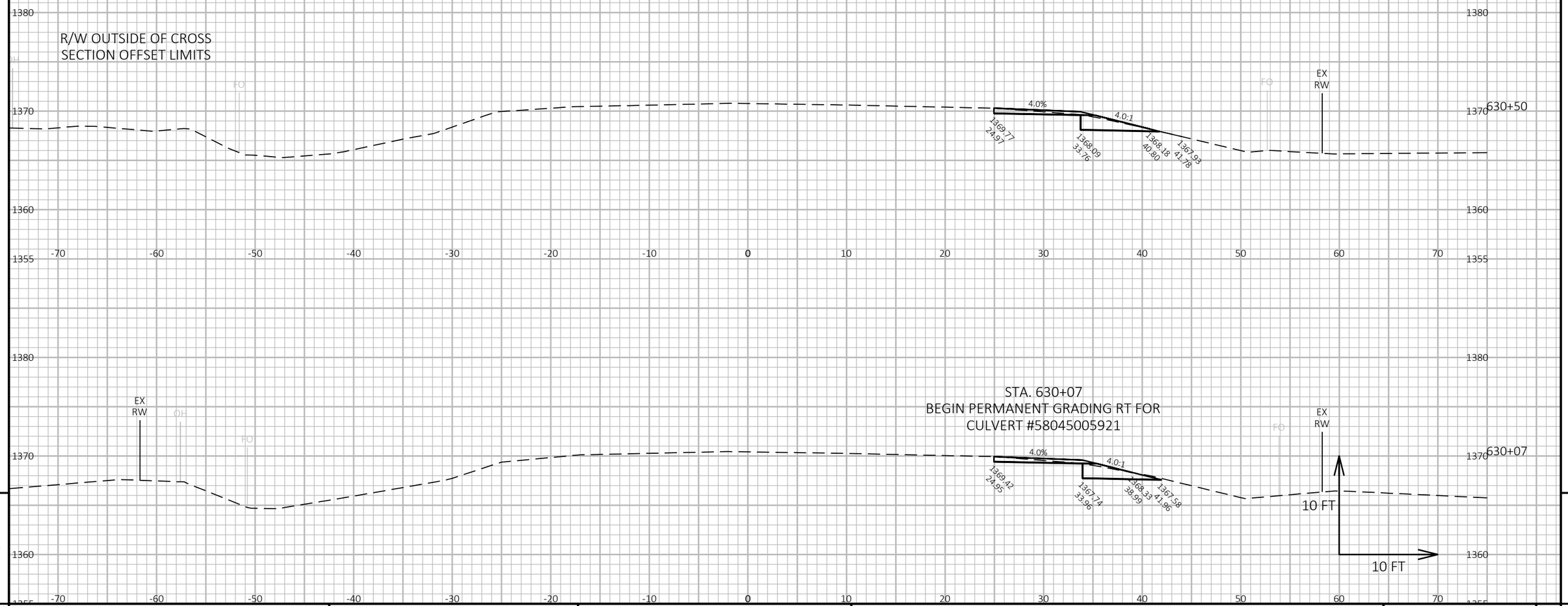
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 218	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG
LAYOUT NAME - 090216-xs-CR
PLOT DATE : 10/31/2023 12:34 AM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

R/W OUTSIDE OF CROSS SECTION OFFSET LIMITS



R/W OUTSIDE OF CROSS SECTION OFFSET LIMITS

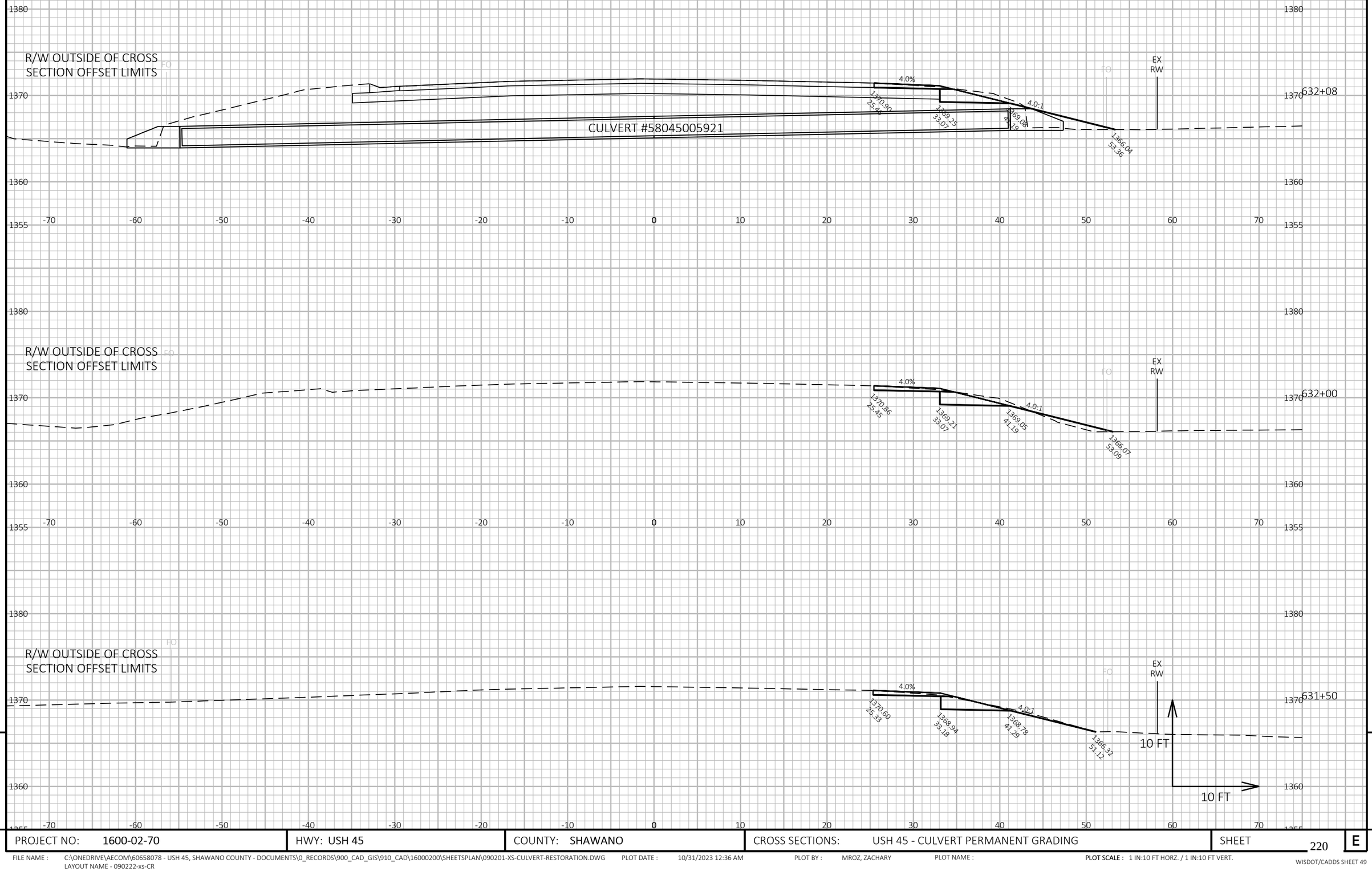


STA. 630+07
BEGIN PERMANENT GRADING RT FOR
CULVERT #58045005921

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 219	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG
LAYOUT NAME - 090221-xs-CR
PLOT DATE : 10/31/2023 12:35 AM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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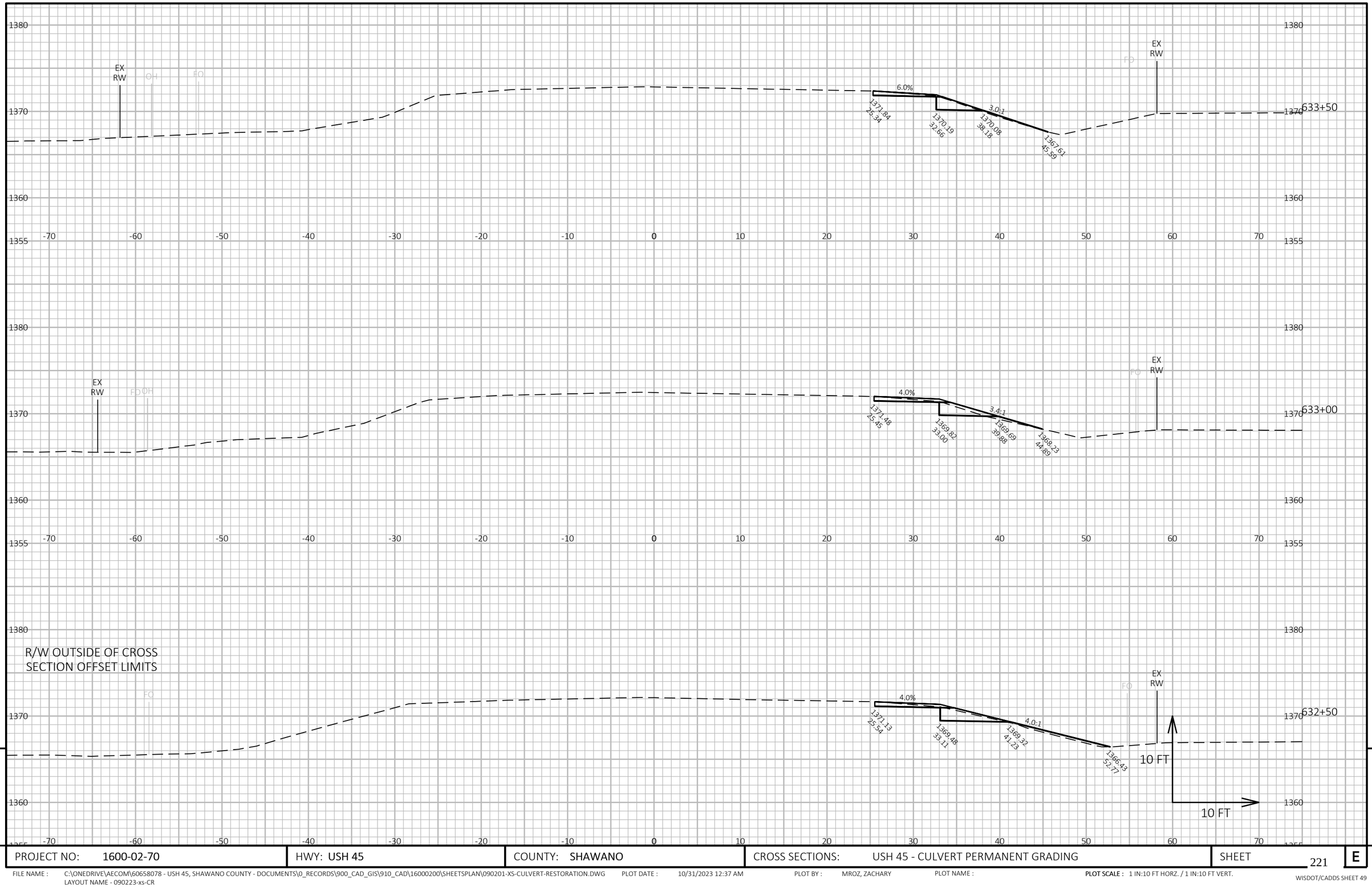
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 220	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG
LAYOUT NAME - 090222-xs-CR
PLOT DATE : 10/31/2023 12:36 AM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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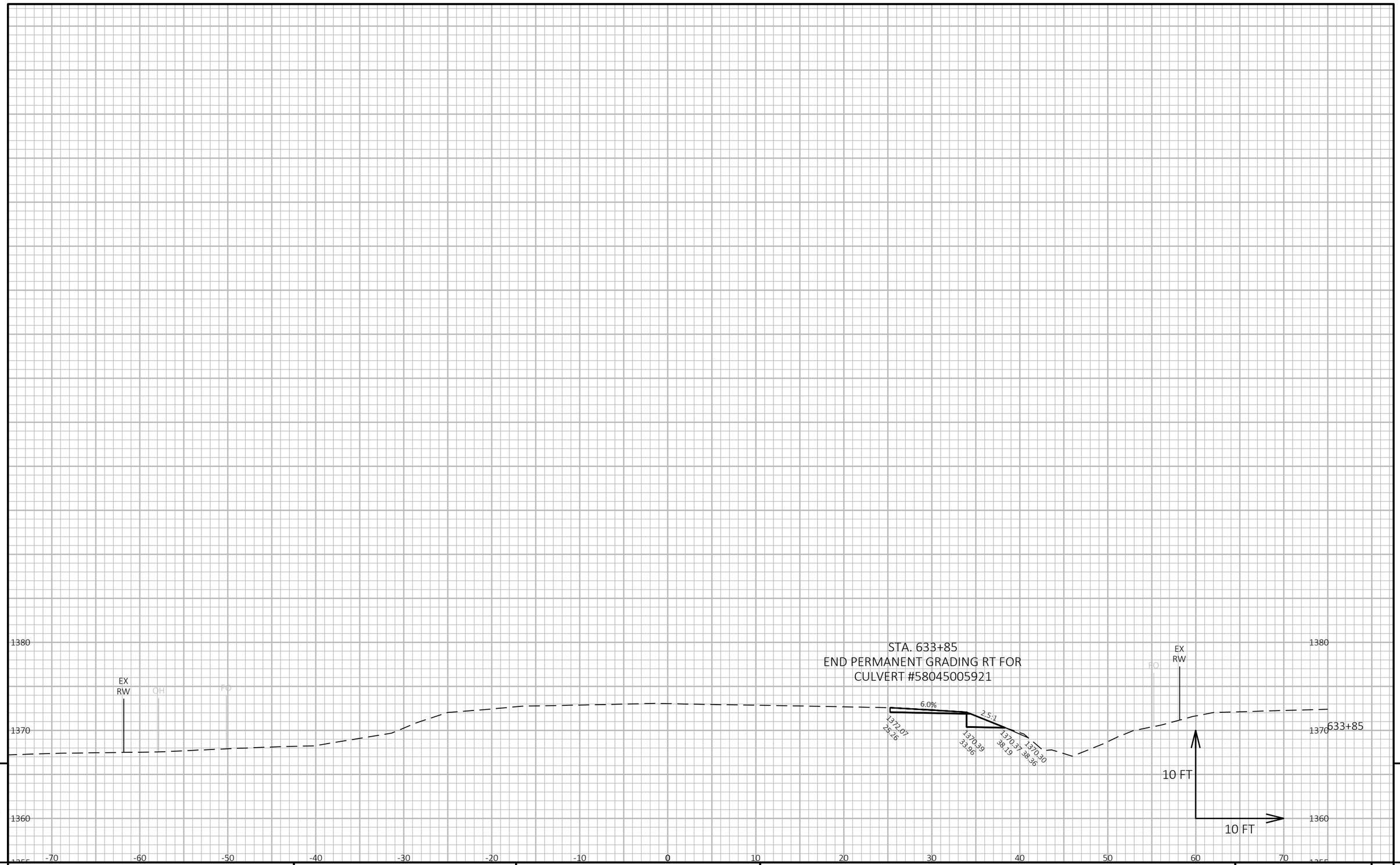
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 221	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG
LAYOUT NAME - 090223-xs-CR
PLOT DATE : 10/31/2023 12:37 AM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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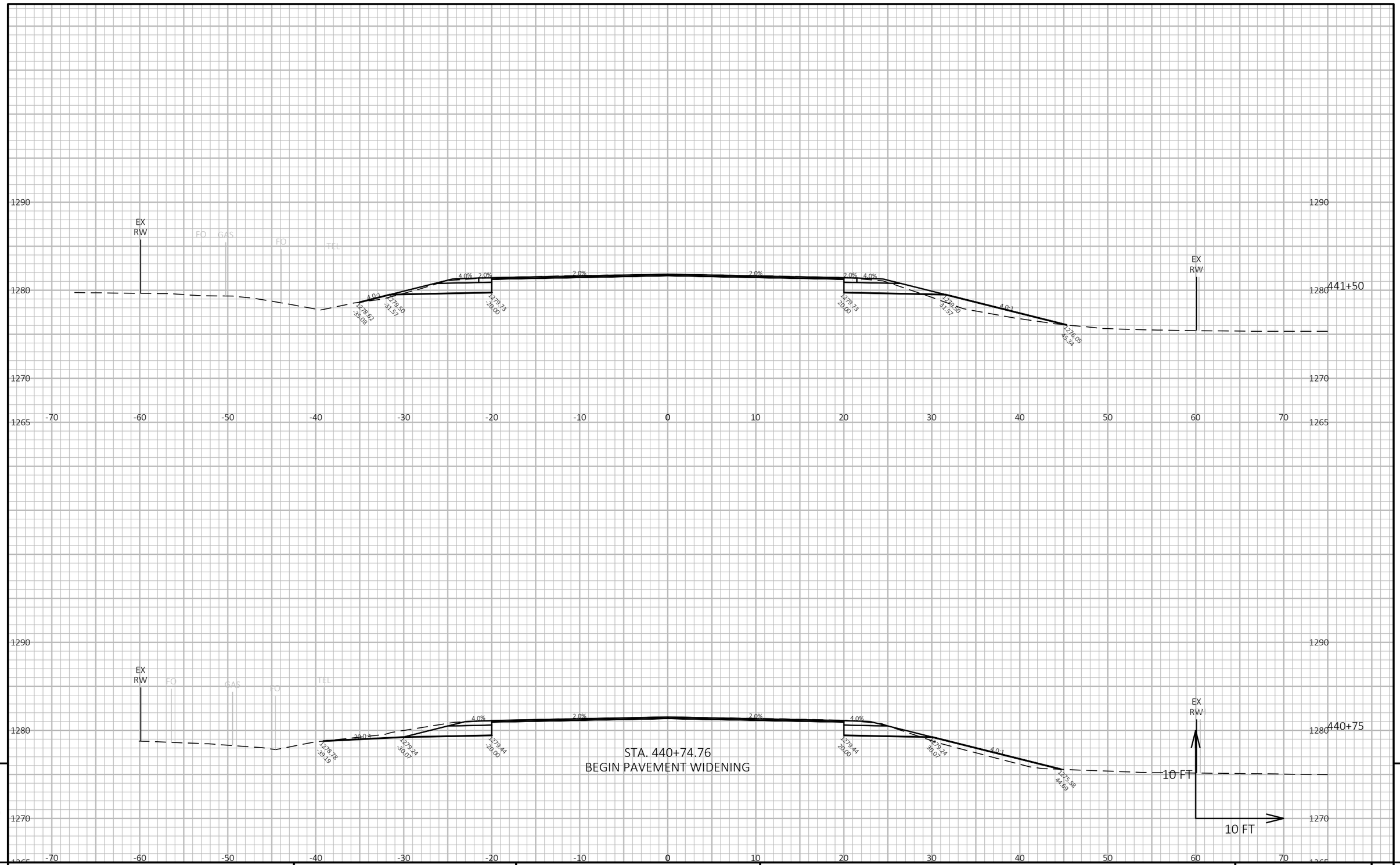
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - CULVERT PERMANENT GRADING	SHEET 222	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS-CULVERT-RESTORATION.DWG
LAYOUT NAME - 090224-xs-CR

PLOT DATE : 10/31/2023 12:38 AM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45	SHEET 223	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090204-xs

PLOT DATE : 10/30/2023 5:21 PM

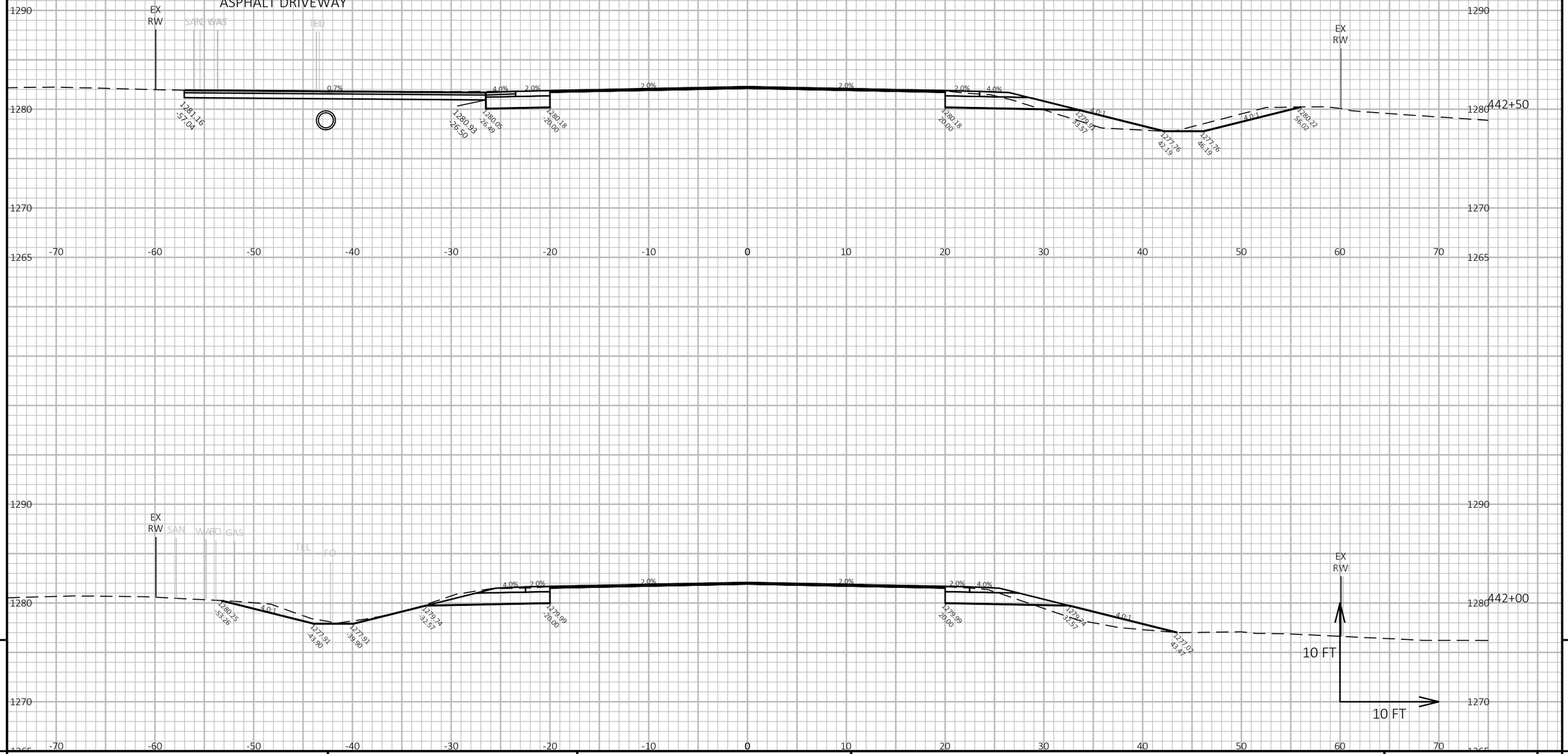
PLOT BY : MROZ, ZACHARY

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

STA. 442+61
ASPHALT DRIVEWAY



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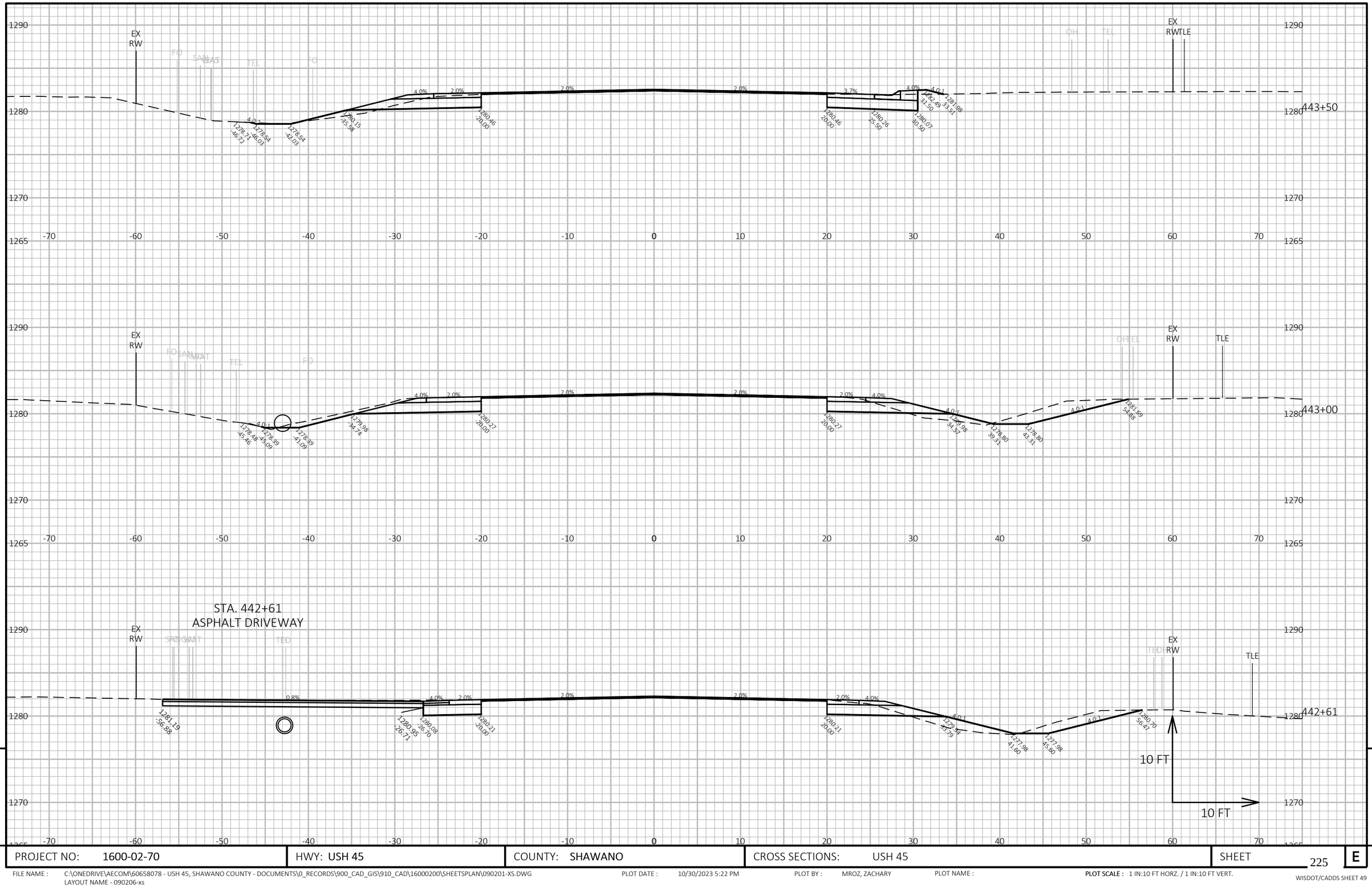
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45	SHEET 224	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090205-xs

PLOT DATE : 10/30/2023 5:21 PM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45	SHEET 225	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090206-xs

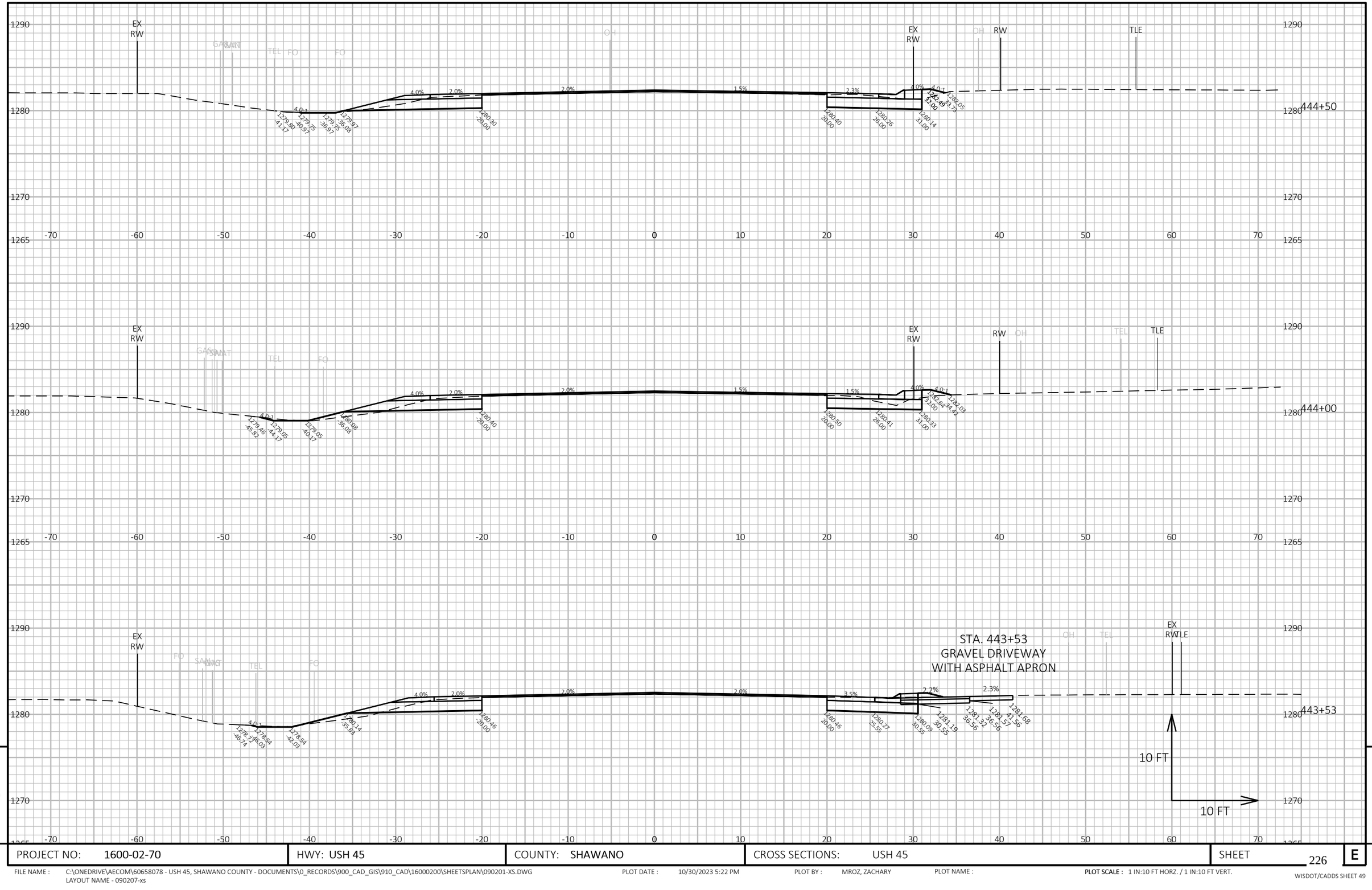
PLOT DATE : 10/30/2023 5:22 PM

PLOT BY : MROZ, ZACHARY

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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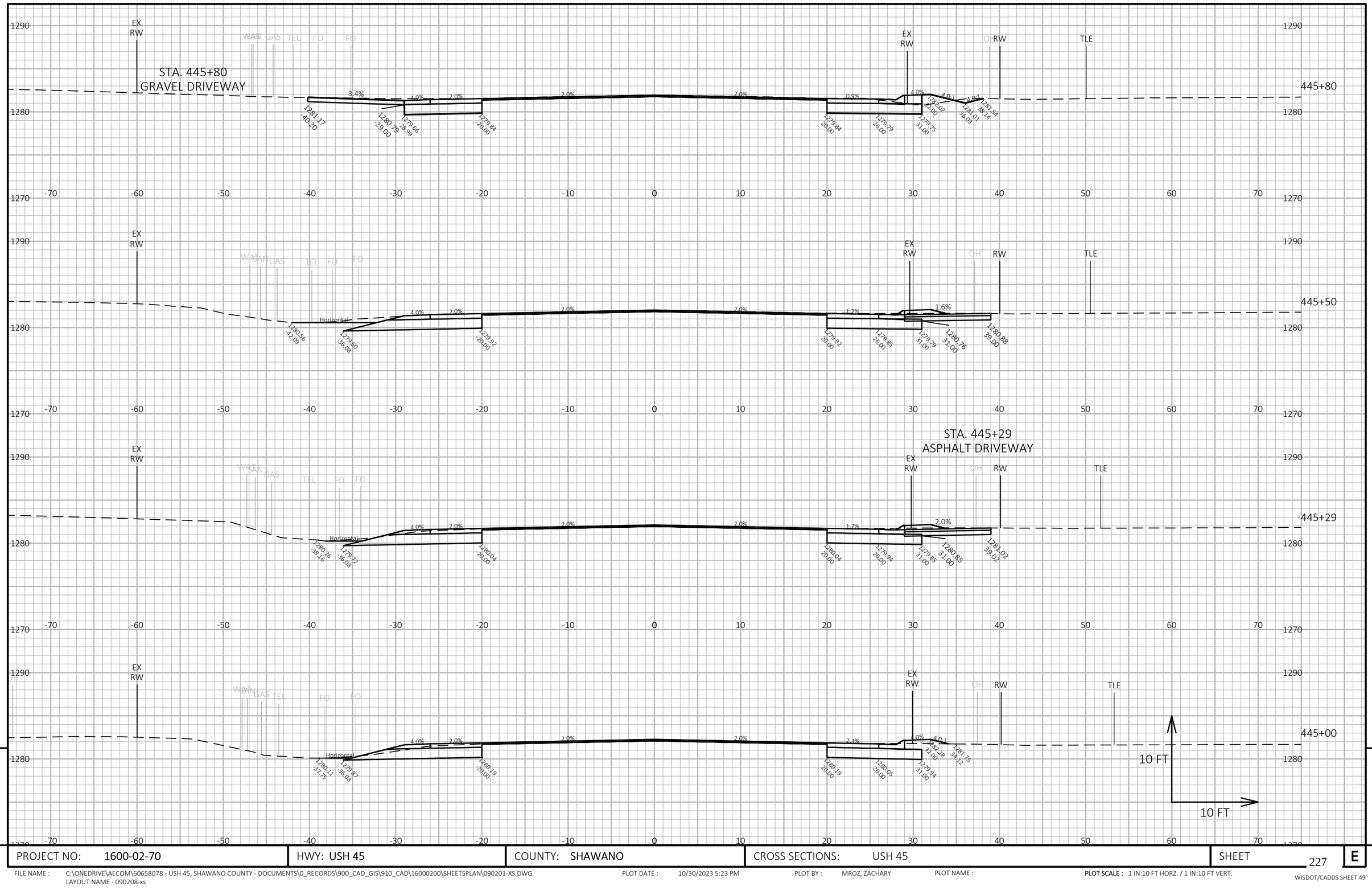
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45	SHEET 226	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090207-xs
PLOT DATE : 10/30/2023 5:22 PM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45	SHEET 227	E

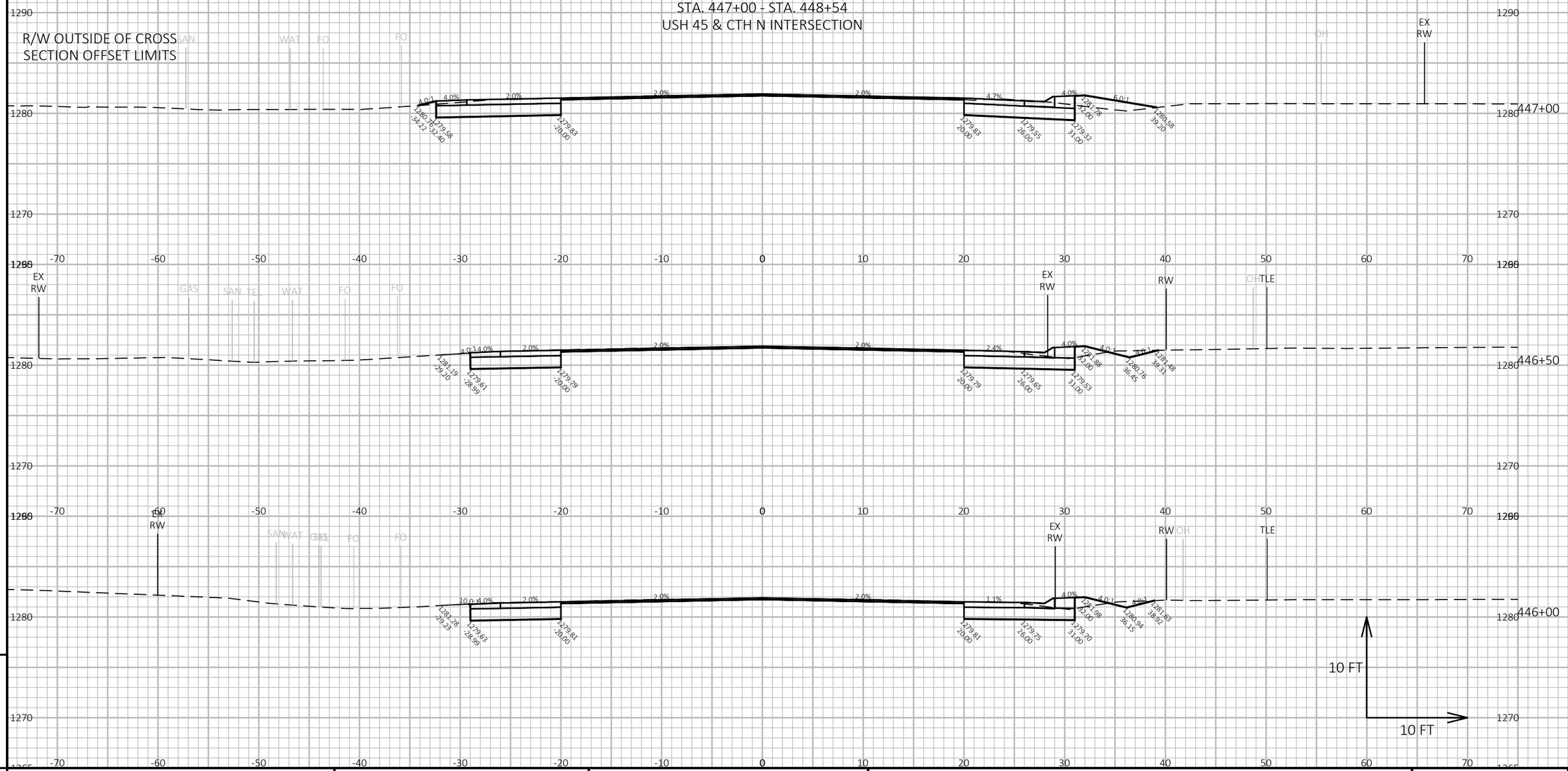
FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090208-xs

PLOT DATE : 10/30/2023 5:23 PM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

STA. 447+00 - STA. 448+54
USH 45 & CTH N INTERSECTION

R/W OUTSIDE OF CROSS SECTION OFFSET LIMITS

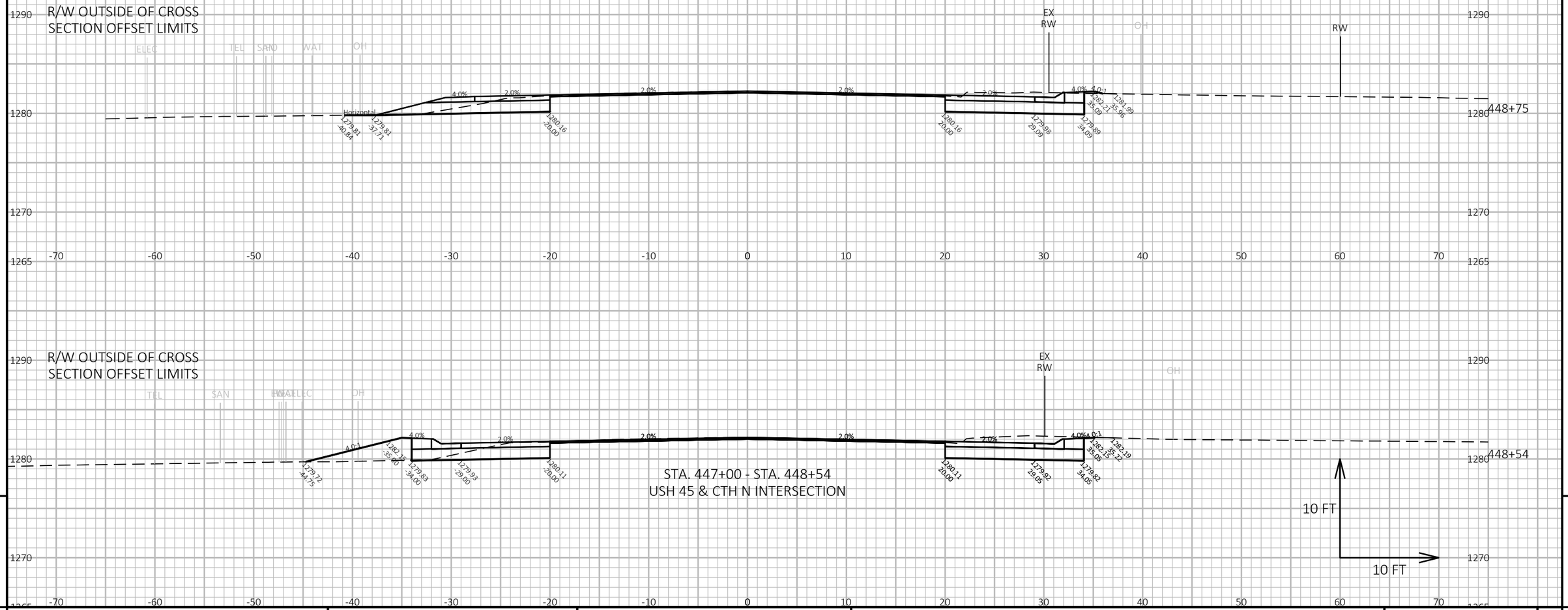


PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45	SHEET 228	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090209-xs
PLOT DATE : 10/30/2023 5:23 PM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

R/W OUTSIDE OF CROSS SECTION OFFSET LIMITS

R/W OUTSIDE OF CROSS SECTION OFFSET LIMITS



R/W OUTSIDE OF CROSS SECTION OFFSET LIMITS

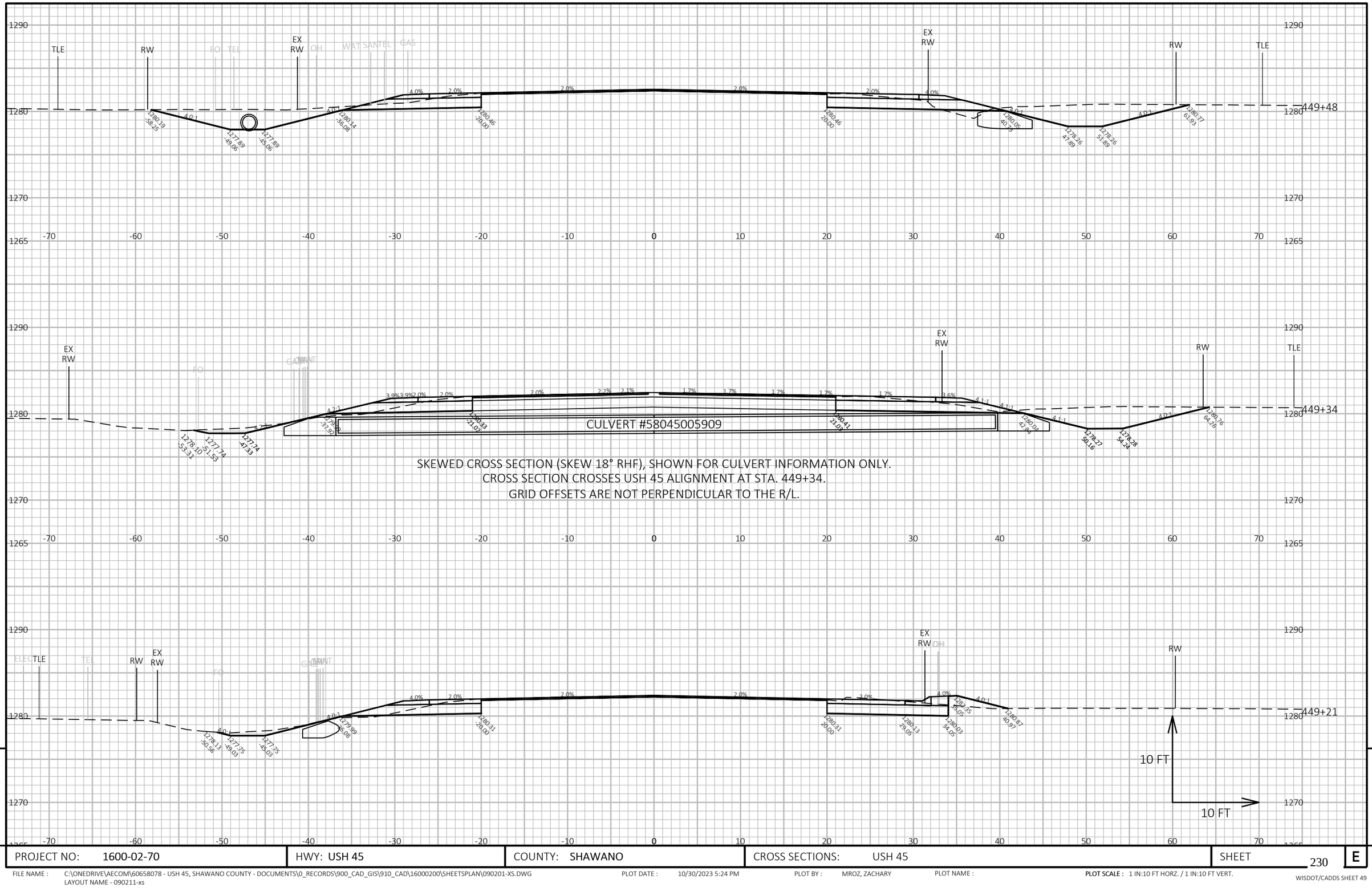
STA. 447+00 - STA. 448+54
USH 45 & CTH N INTERSECTION

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45	SHEET 229	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090210-xs

PLOT DATE : 10/30/2023 5:24 PM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

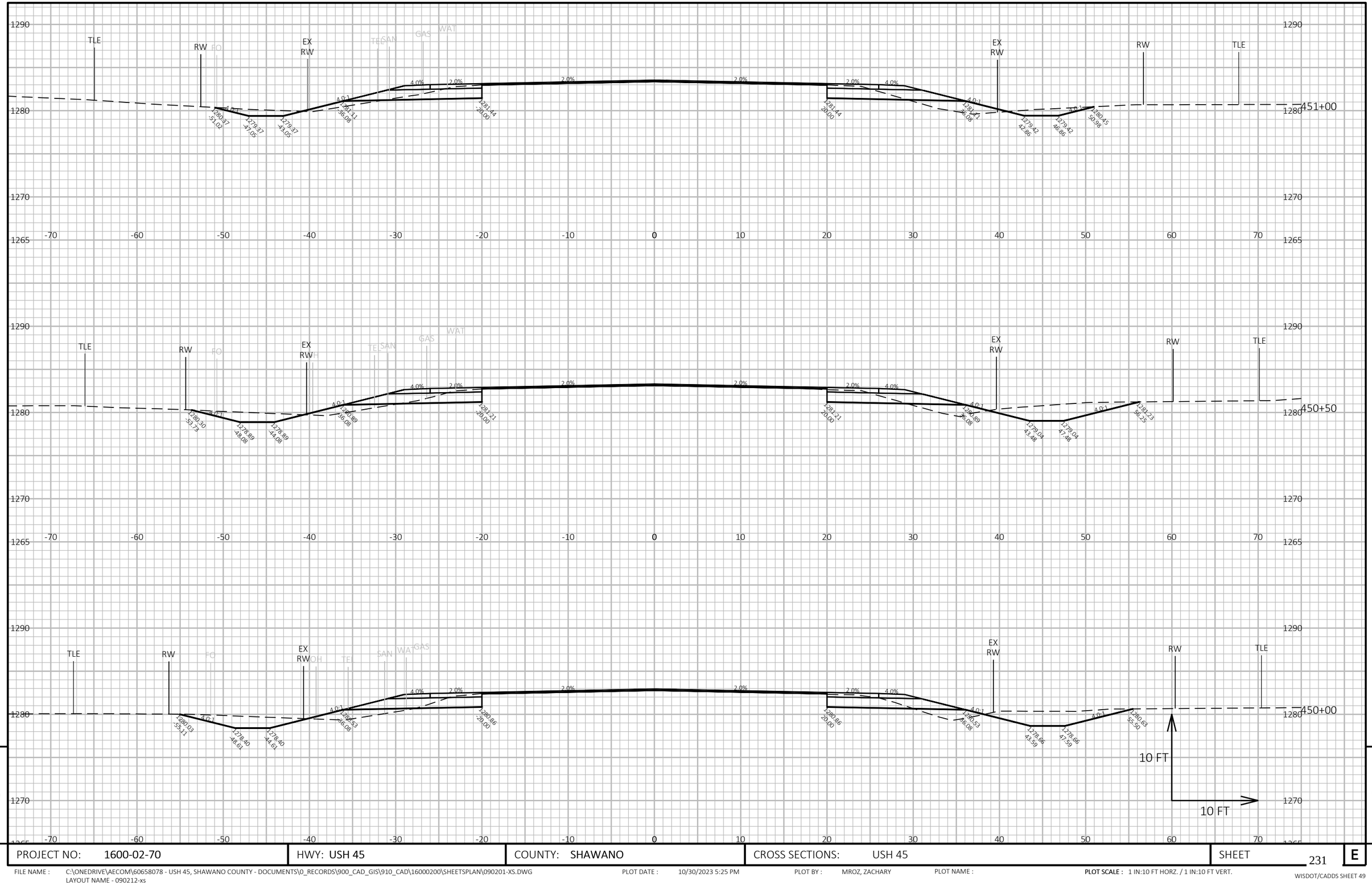


PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45	SHEET 230	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090211-xs

PLOT DATE : 10/30/2023 5:24 PM PLOT BY : MROZ, ZACHARY PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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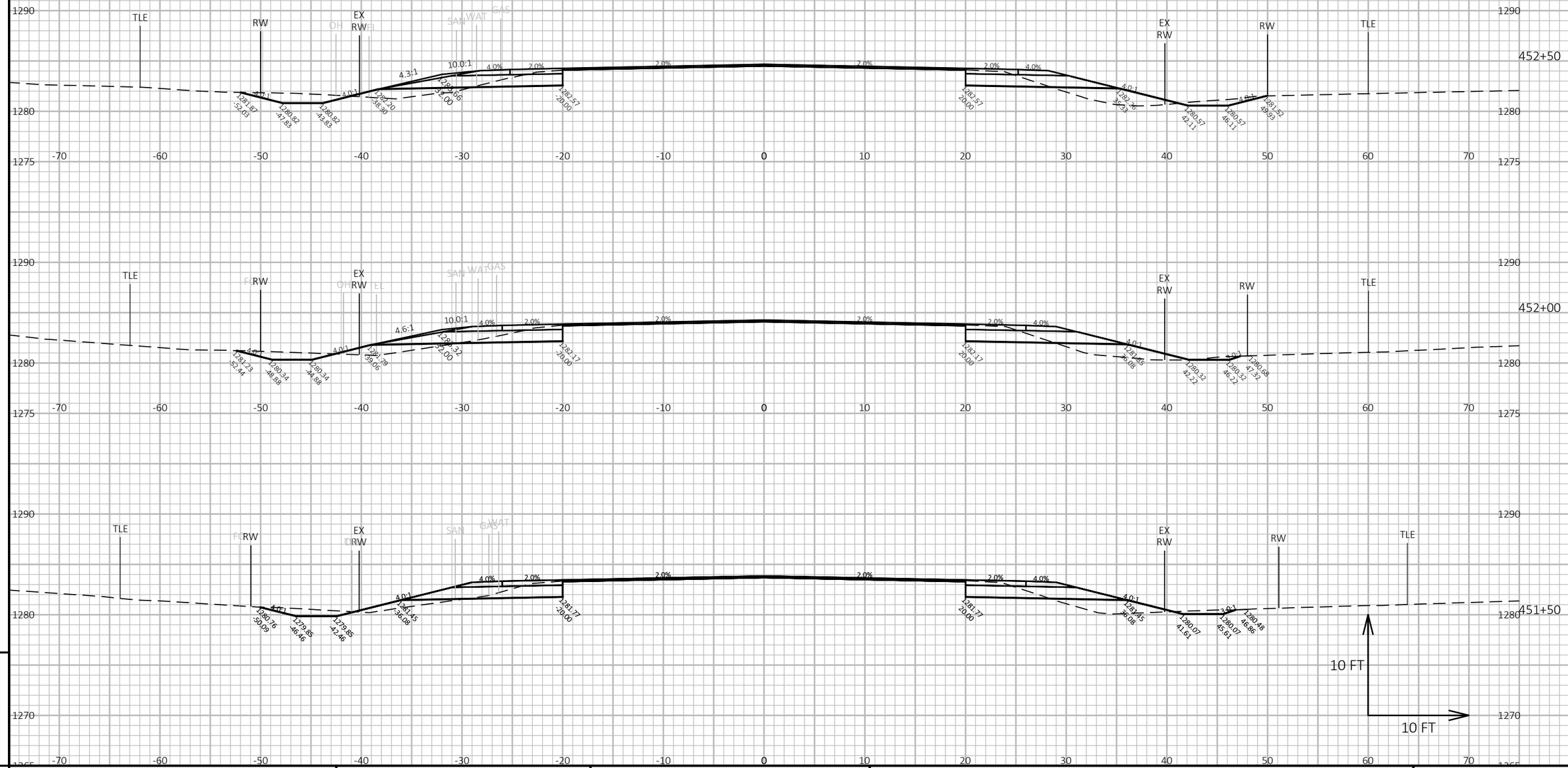
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45	SHEET 231	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090212-xs

PLOT DATE : 10/30/2023 5:25 PM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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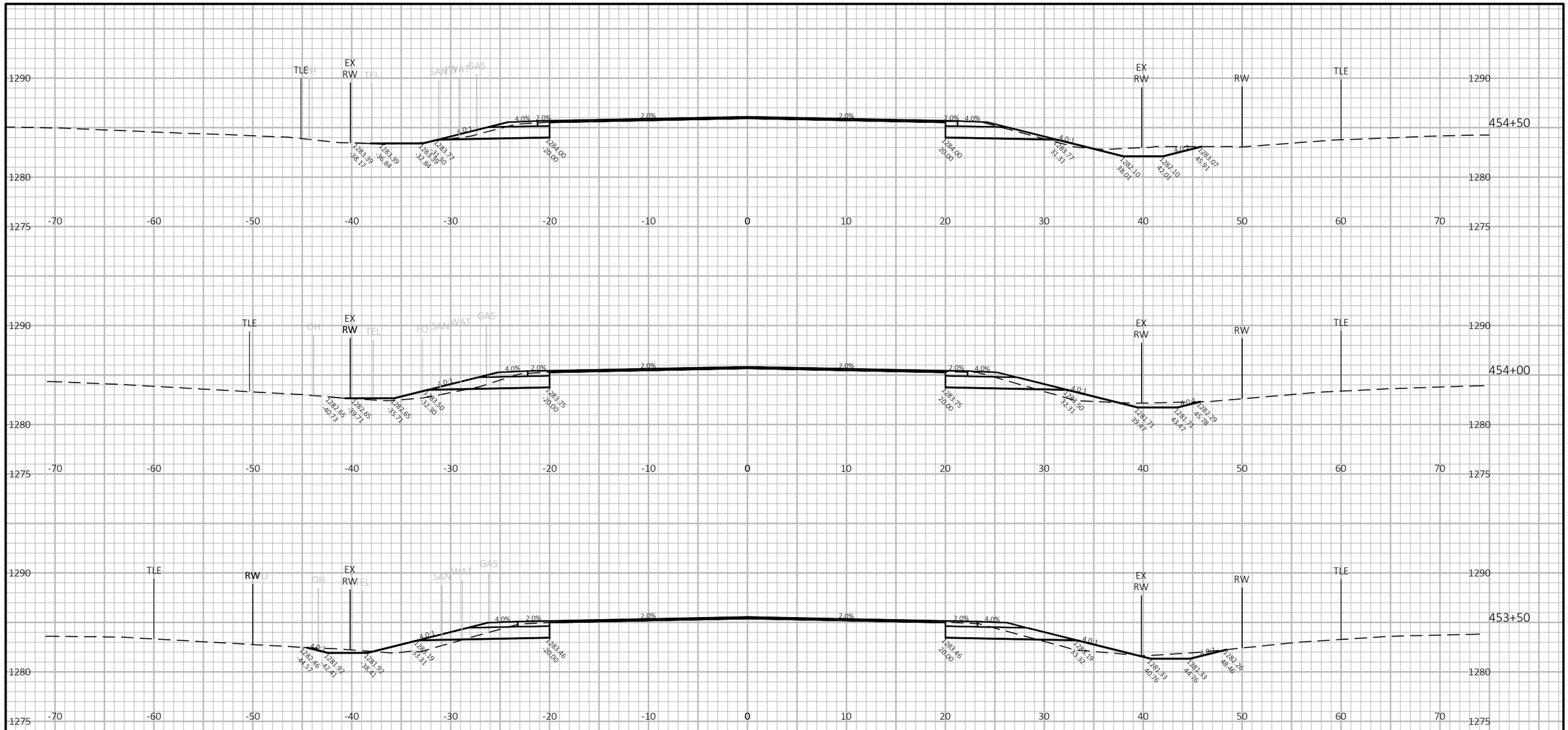
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45	SHEET 232	E

FILE NAME : C:\USERS\MROZZ\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090213-xs

PLOT DATE : 1/26/2024 2:14 PM PLOT BY : MROZ, ZACHARY PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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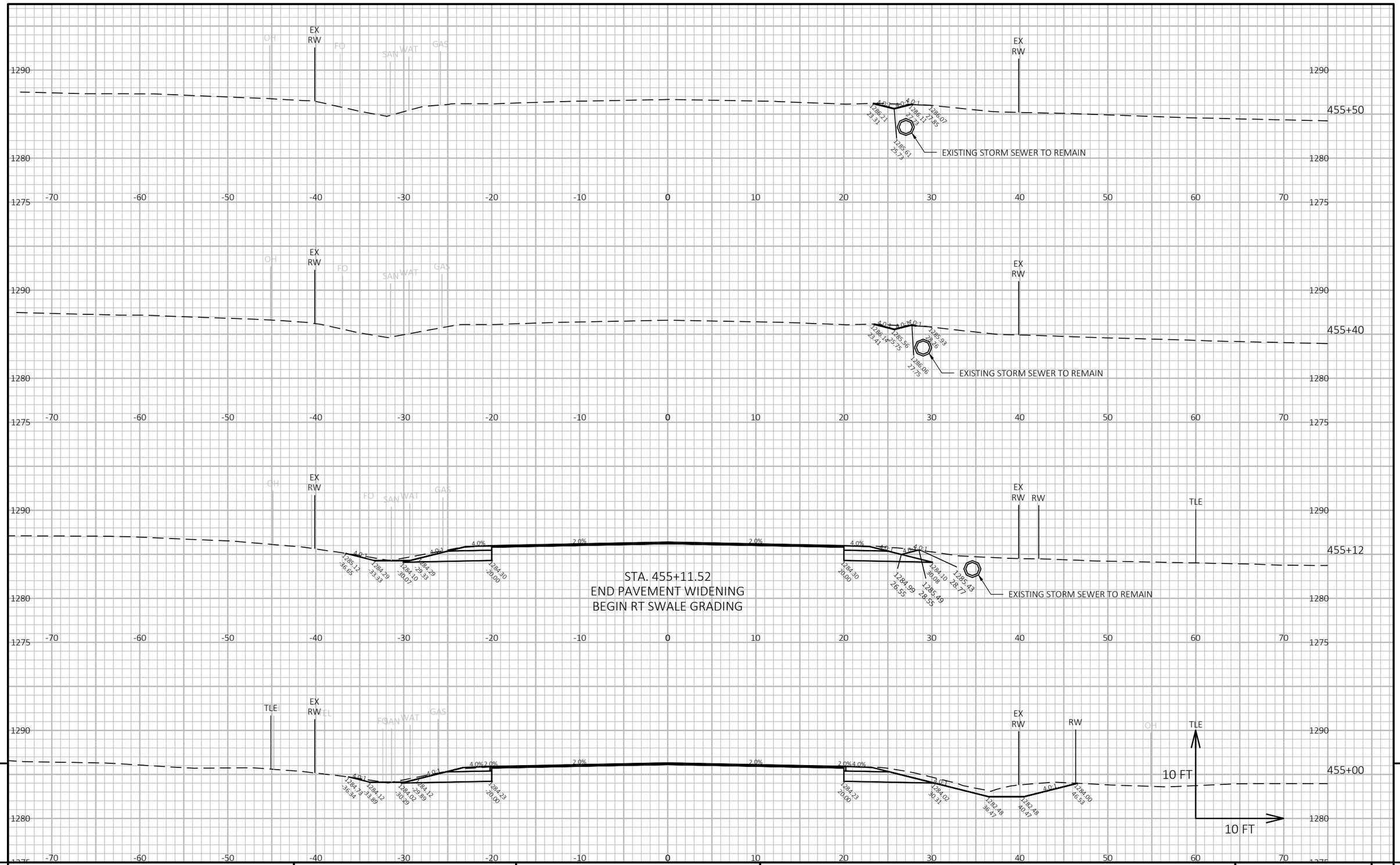
9

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45	SHEET 233	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090214-xs

PLOT DATE : 10/30/2023 5:26 PM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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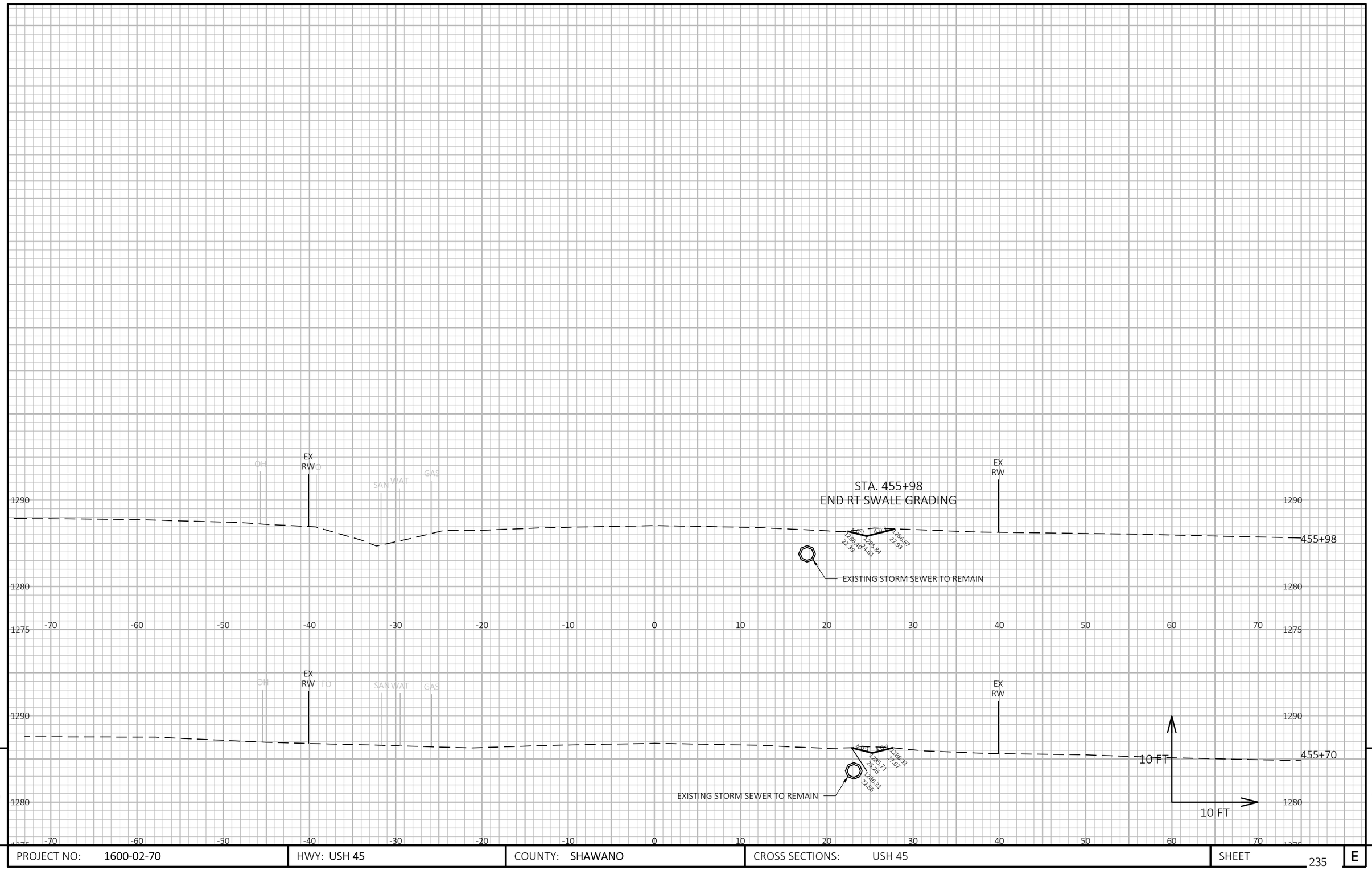
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45	SHEET 234	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090215-xs

PLOT DATE : 10/30/2023 5:26 PM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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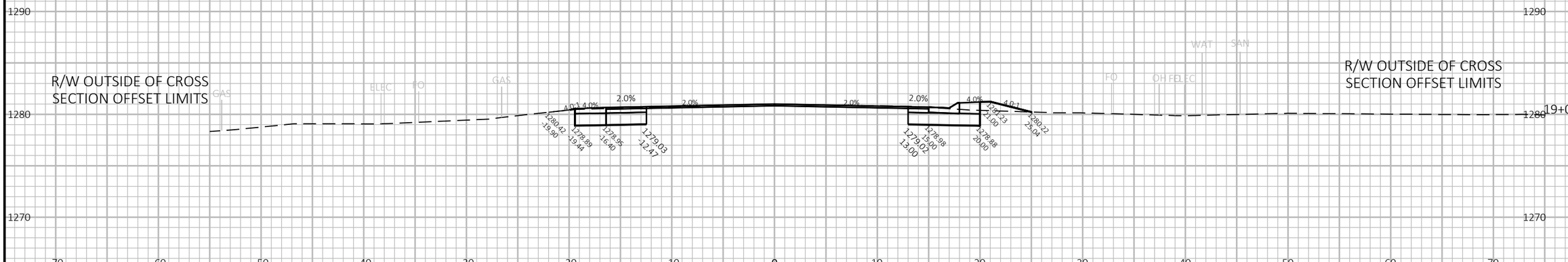
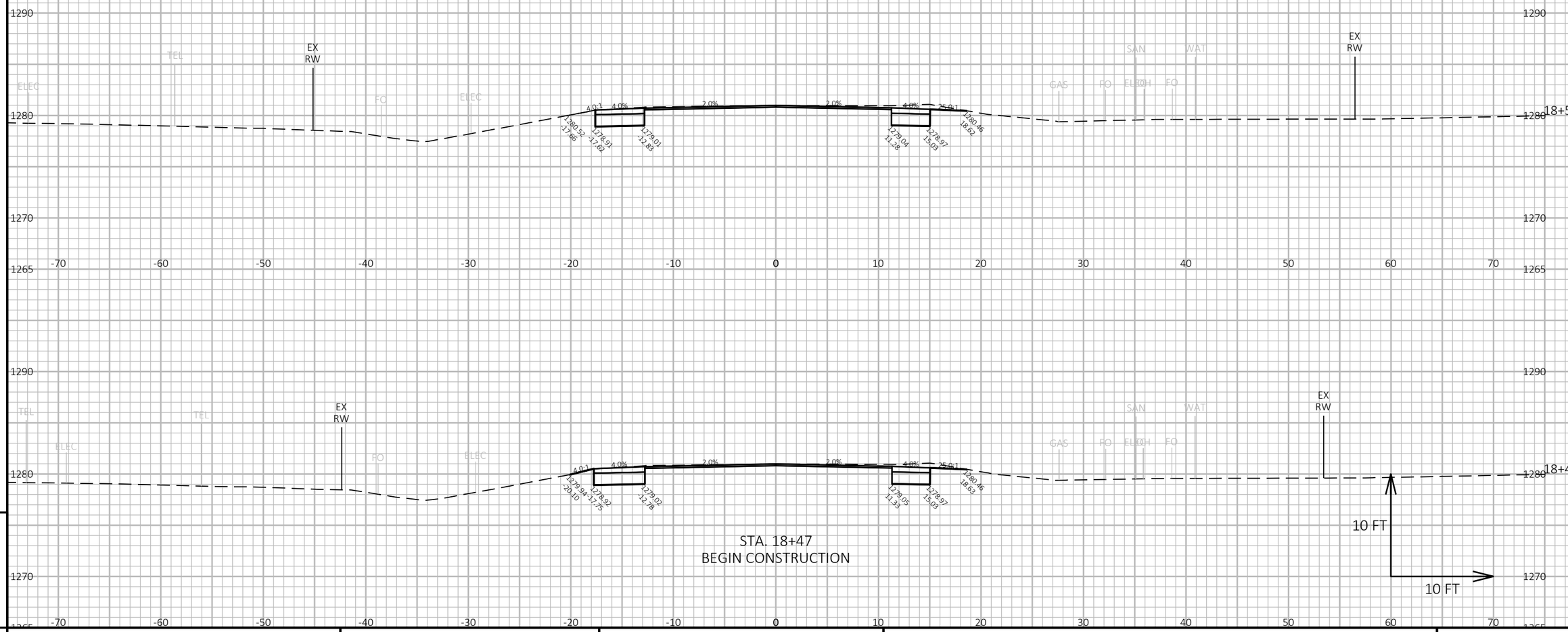
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45	SHEET 235	E

R/W OUTSIDE OF CROSS SECTION OFFSET LIMITS



R/W OUTSIDE OF CROSS SECTION OFFSET LIMITS



STA. 18+47
BEGIN CONSTRUCTION

9

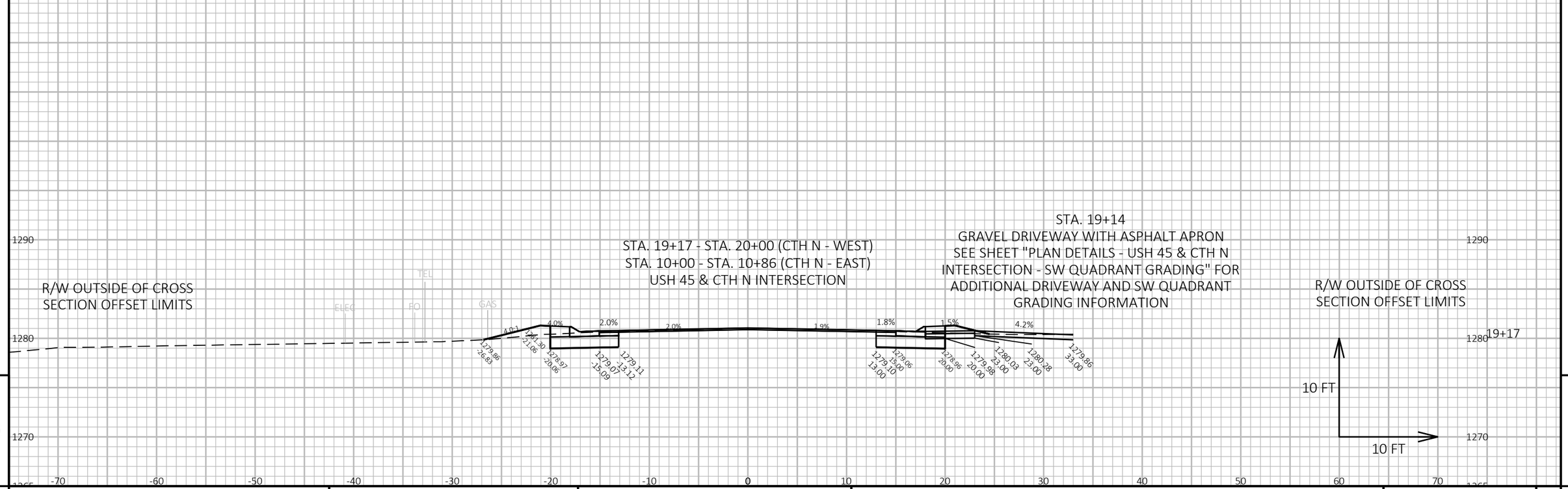
9

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: CTH N - WEST	SHEET 236	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090224-xs

PLOT DATE : 10/30/2023 5:30 PM PLOT BY : MROZ, ZACHARY PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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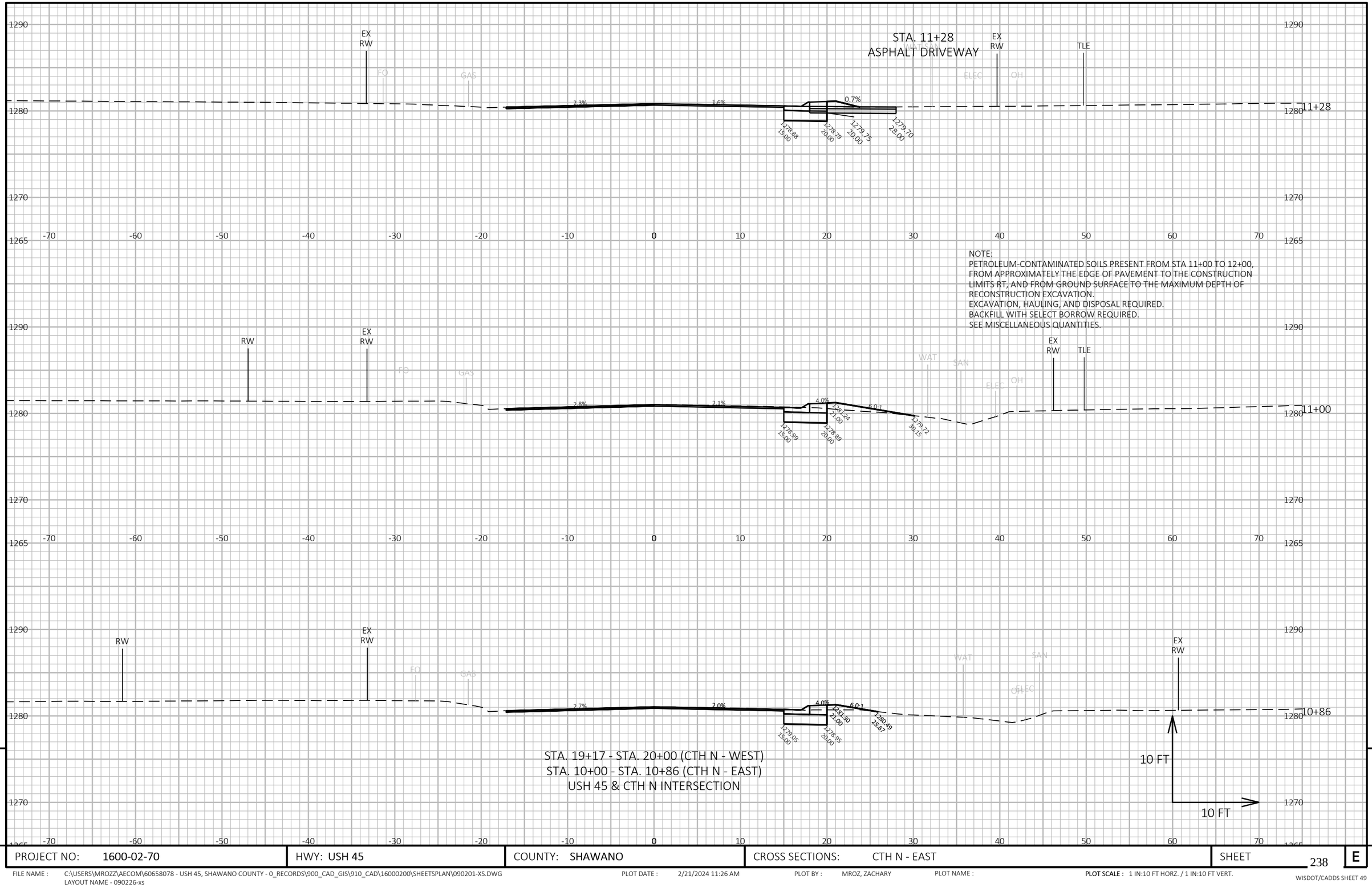
9

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: CTH N - WEST	SHEET 237	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090225-xs

PLOT DATE : 10/30/2023 5:31 PM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

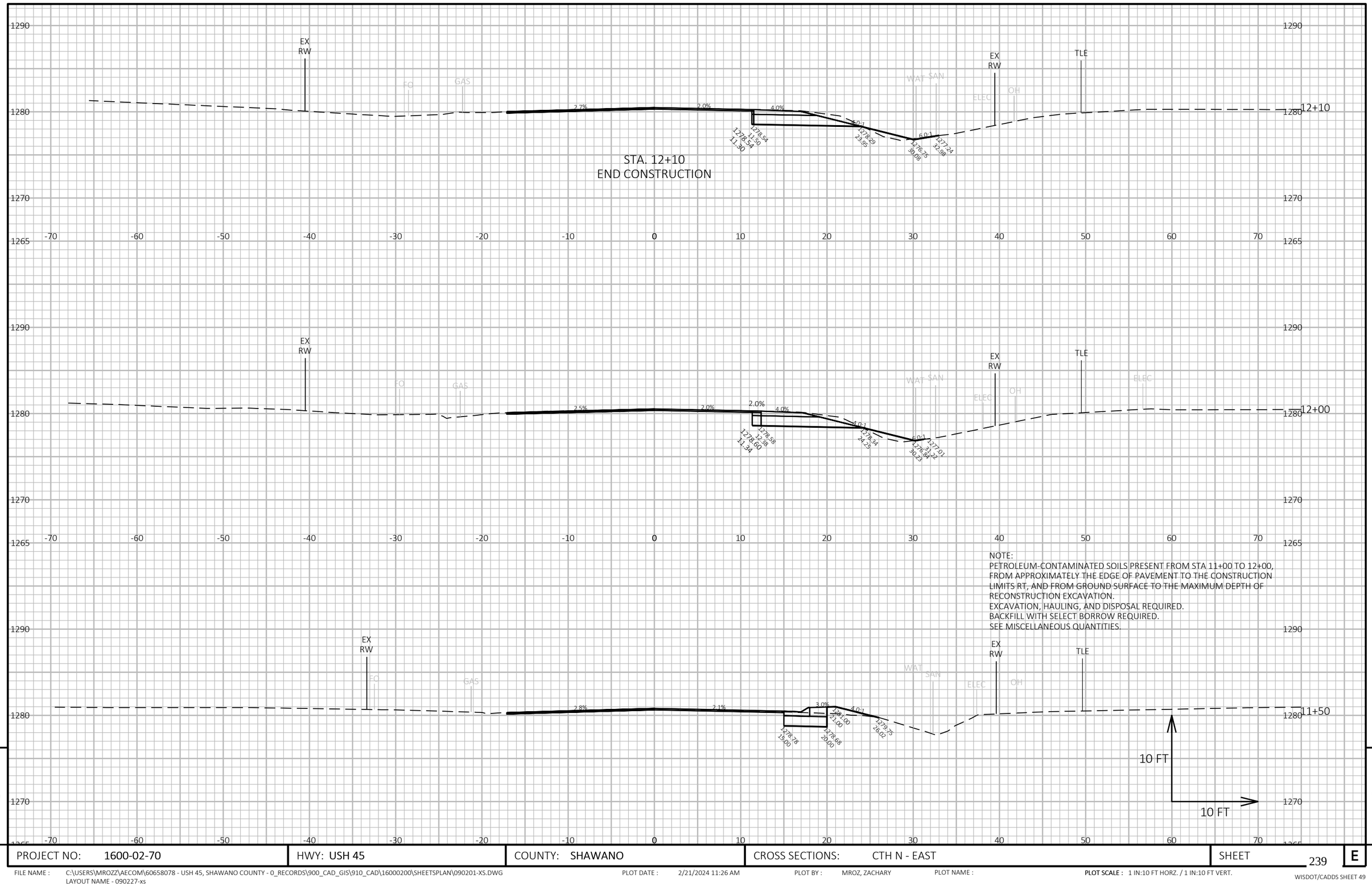


STA. 19+17 - STA. 20+00 (CTH N - WEST)
STA. 10+00 - STA. 10+86 (CTH N - EAST)
USH 45 & CTH N INTERSECTION

9 9

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: CTH N - EAST	SHEET 238	E

FILE NAME : C:\USERS\MROZZ\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090226-xs
PLOT DATE : 2/21/2024 11:26 AM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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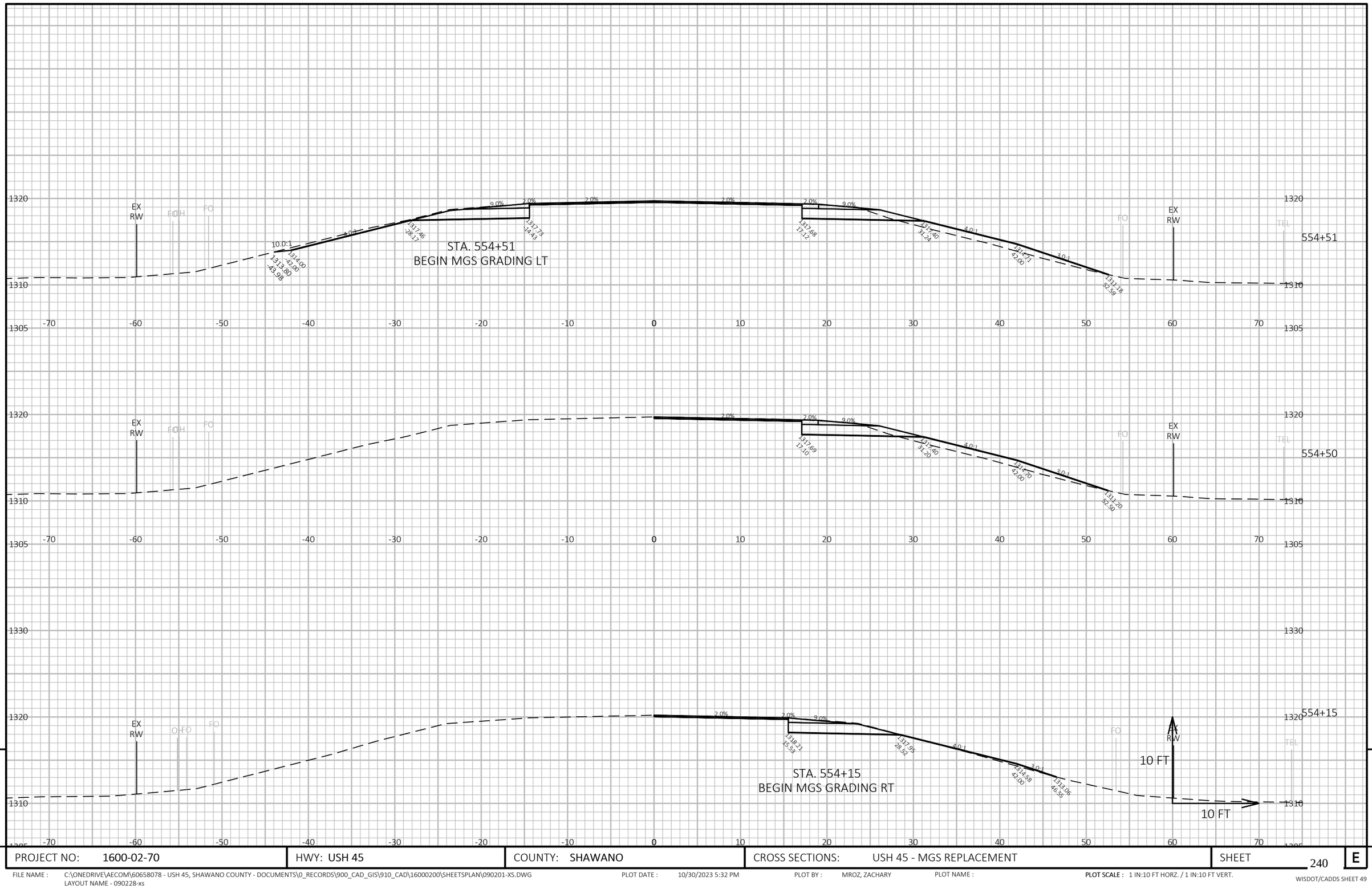
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: CTH N - EAST	SHEET 239	E

FILE NAME : C:\USERS\MROZZ\AECOM\60658078 - USH 45, SHAWANO COUNTY - 0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090227-xs

PLOT DATE : 2/21/2024 11:26 AM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

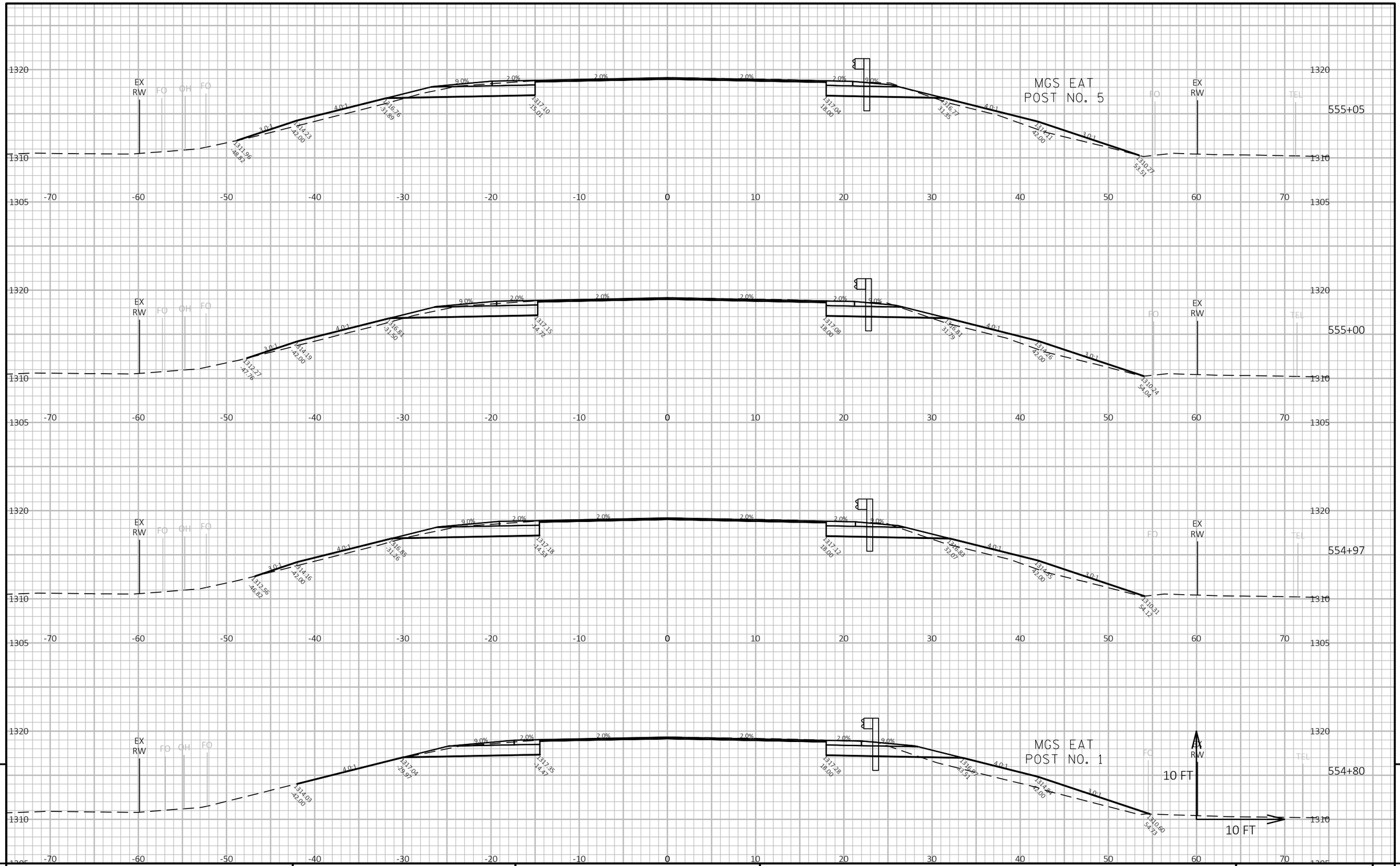


PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - MGS REPLACEMENT	SHEET 240	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090228-xs

PLOT DATE : 10/30/2023 5:32 PM PLOT BY : MROZ, ZACHARY PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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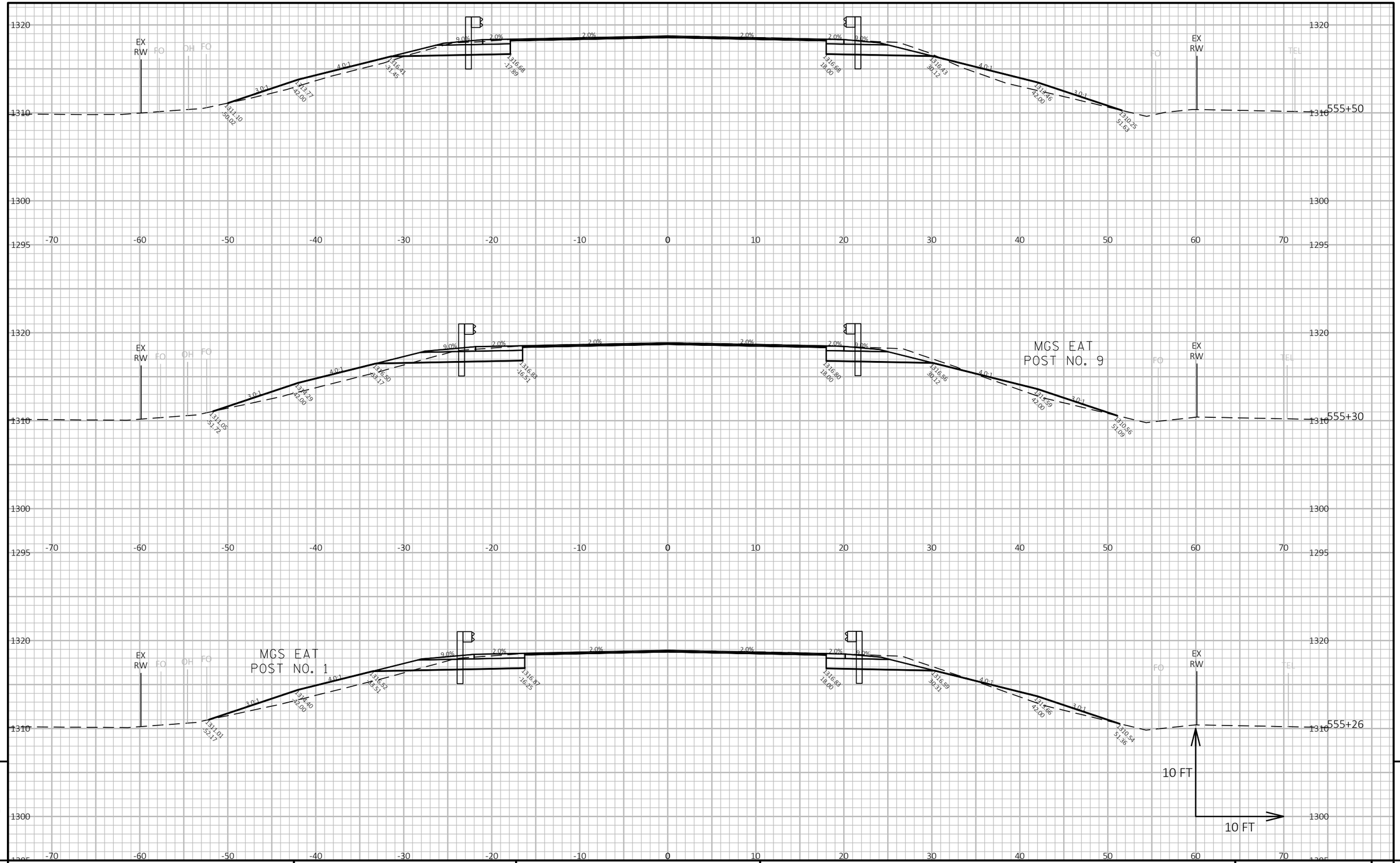
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - MGS REPLACEMENT	SHEET 241	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090229-xs

PLOT DATE : 10/30/2023 5:33 PM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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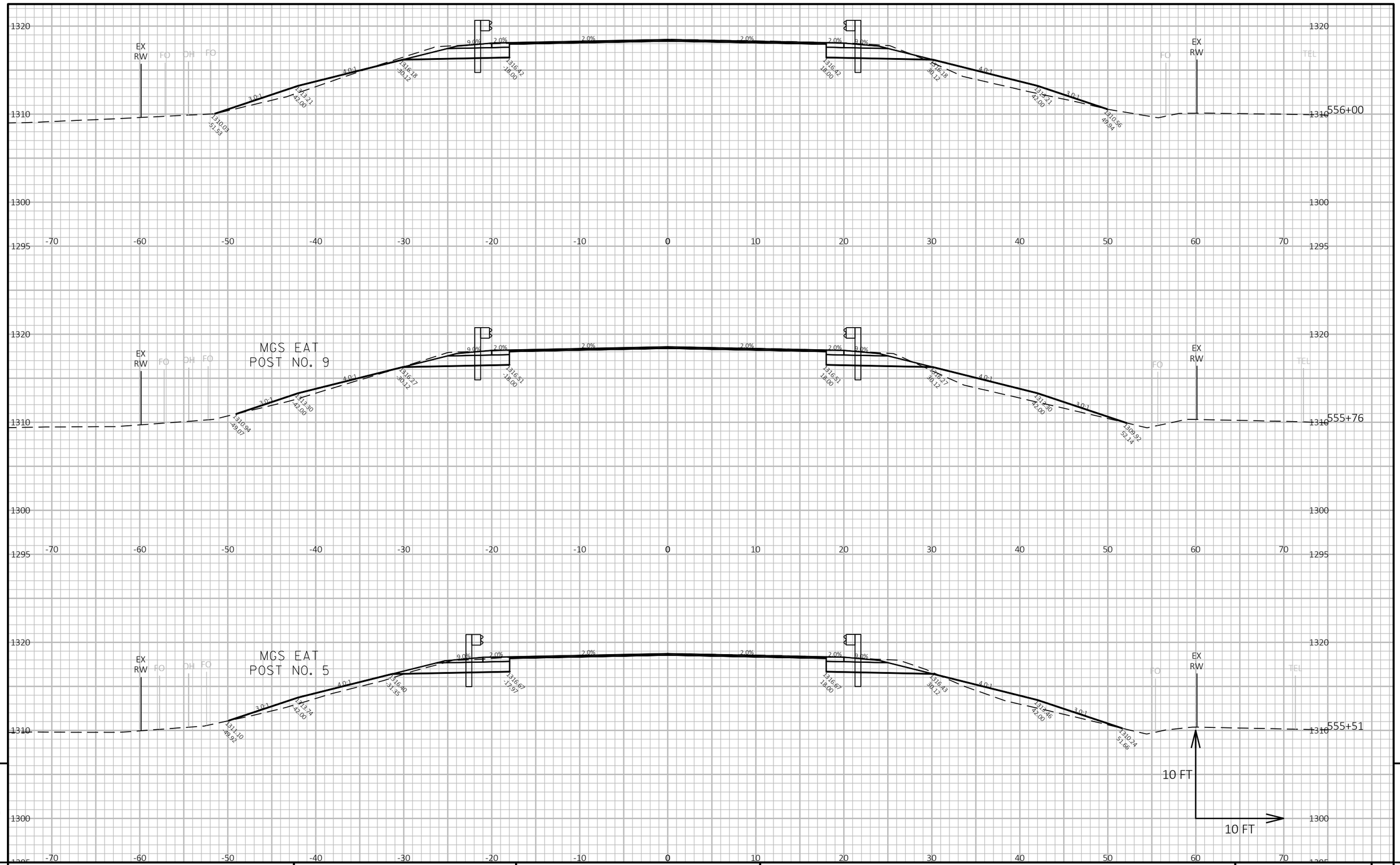
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - MGS REPLACEMENT	SHEET 242	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090230-xs

PLOT DATE : 10/30/2023 5:33 PM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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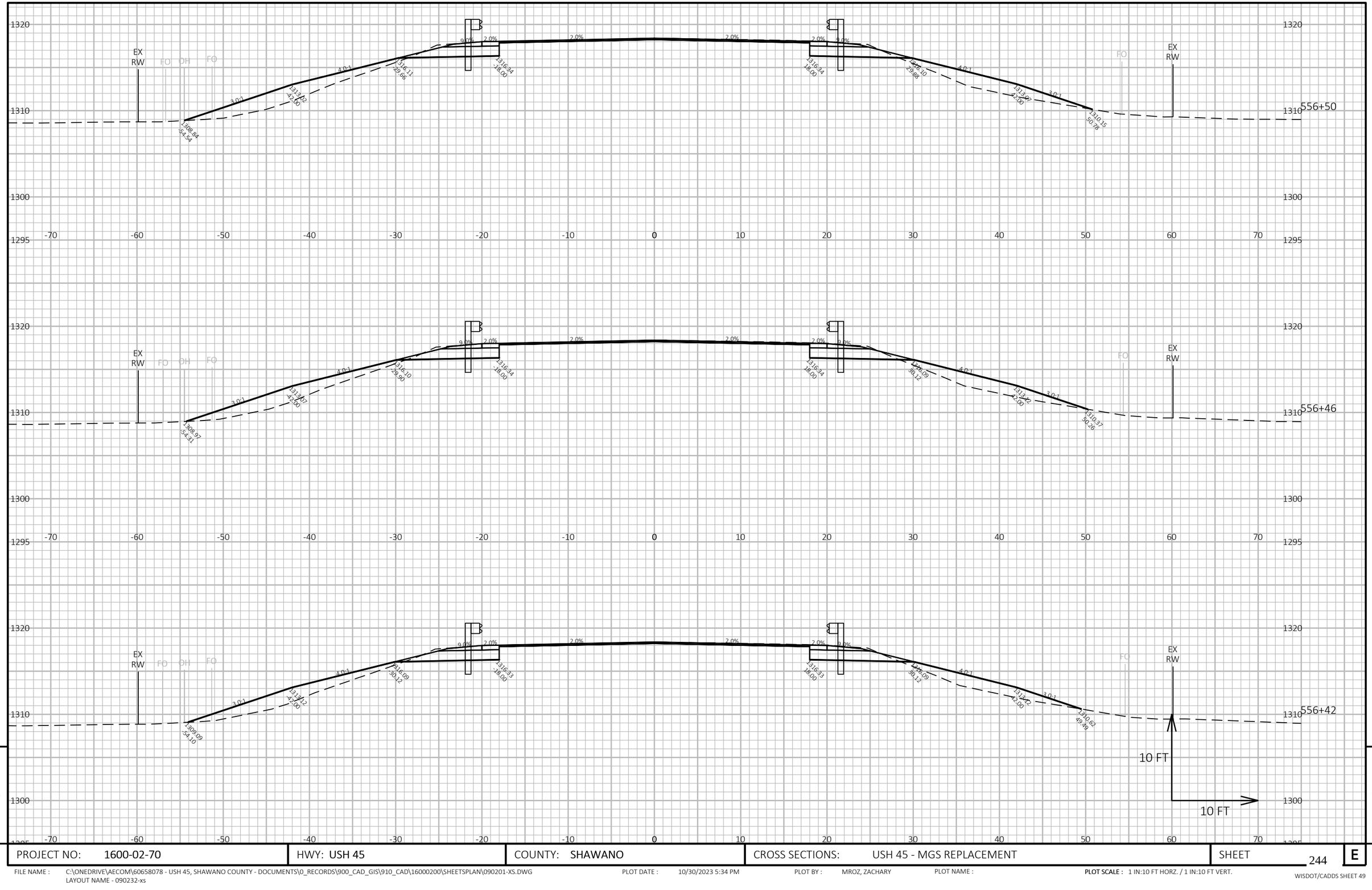
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - MGS REPLACEMENT	SHEET 243	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090231-xs

PLOT DATE : 10/30/2023 5:34 PM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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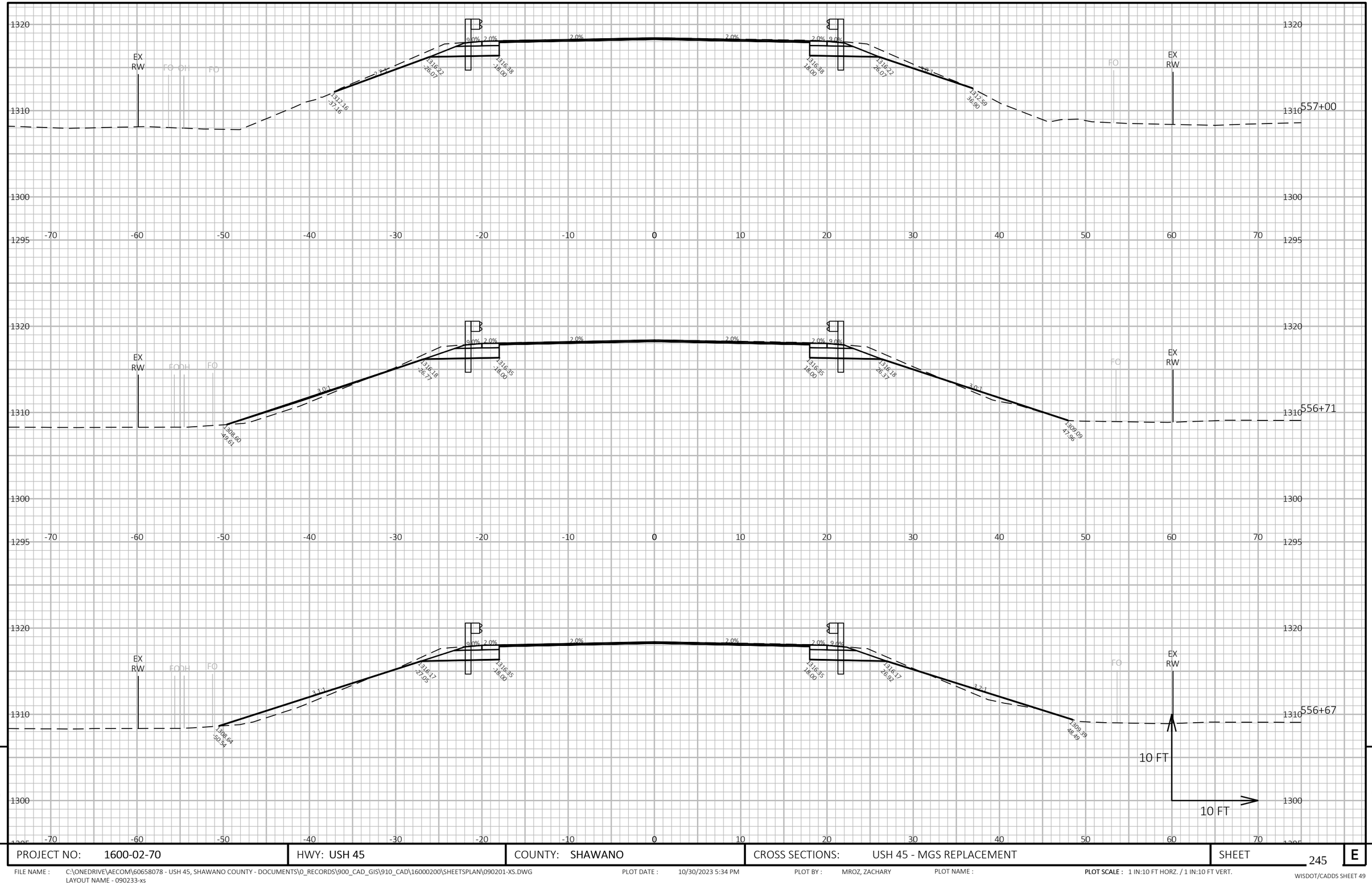
9

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - MGS REPLACEMENT	SHEET 244	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090232-xs

PLOT DATE : 10/30/2023 5:34 PM PLOT BY : MROZ, ZACHARY PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

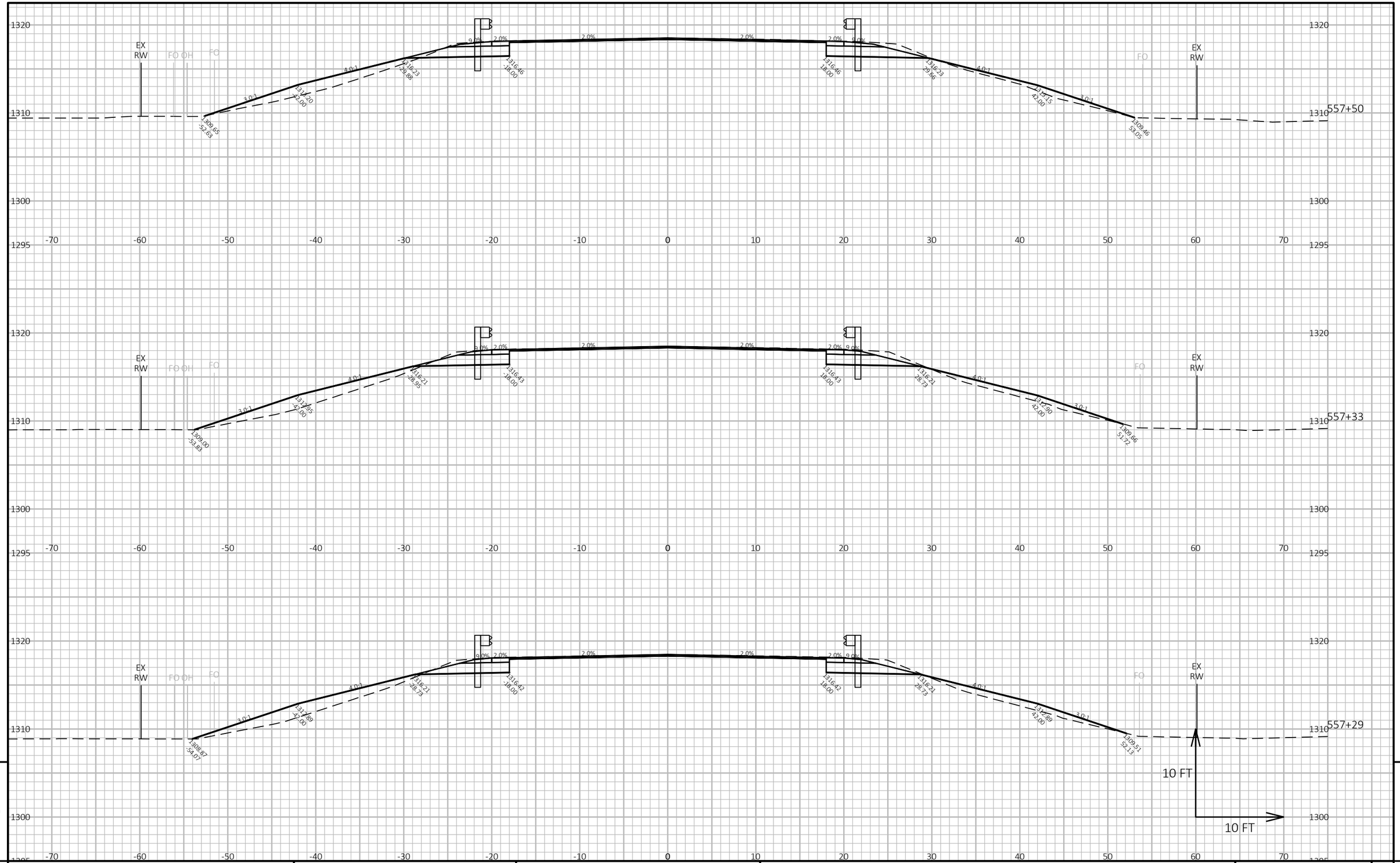
9

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - MGS REPLACEMENT	SHEET 245	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090233-xs

PLOT DATE : 10/30/2023 5:34 PM PLOT BY : MROZ, ZACHARY PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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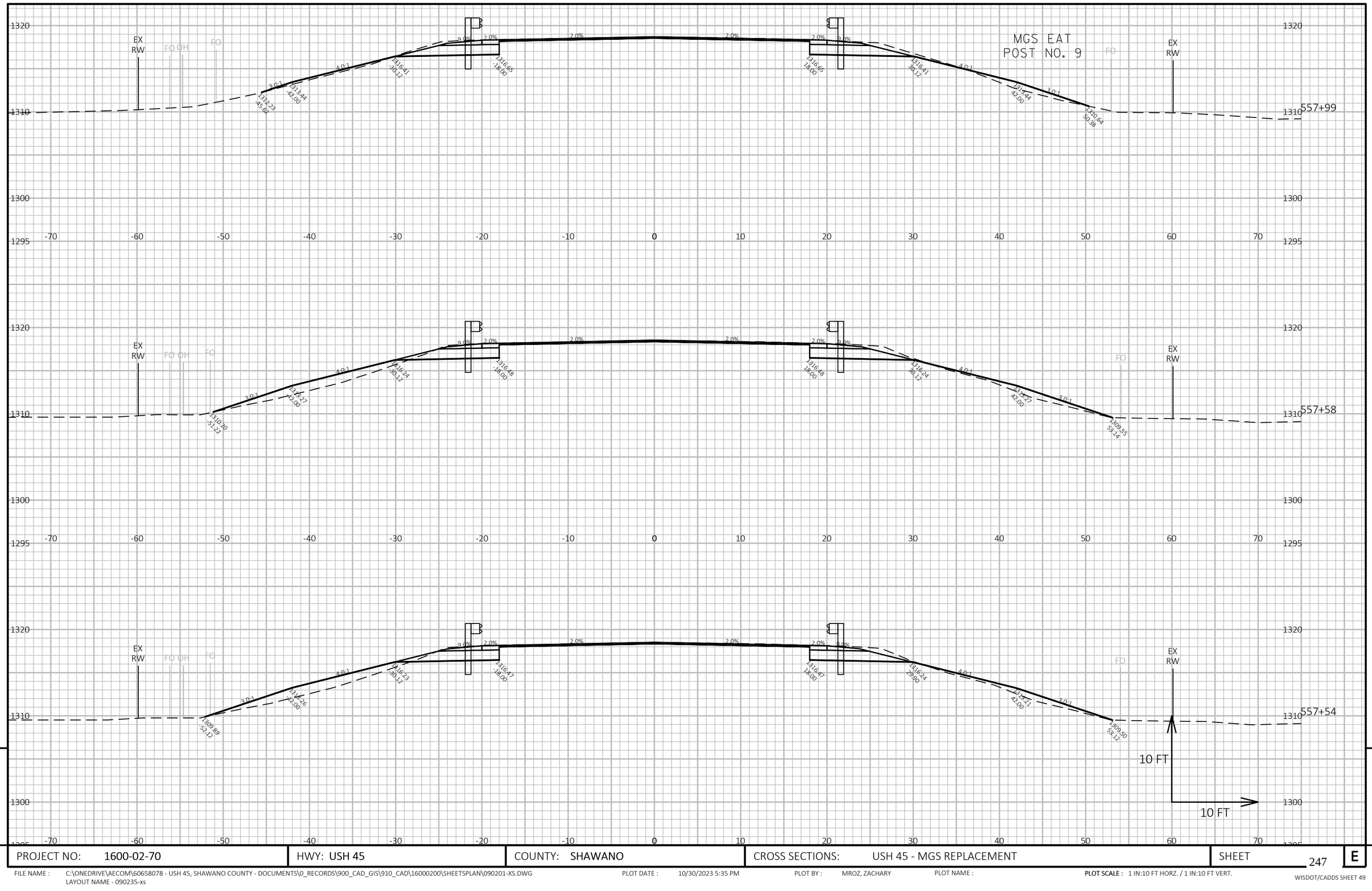
9

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - MGS REPLACEMENT	SHEET 246	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090234-xs

PLOT DATE : 10/30/2023 5:35 PM PLOT BY : MROZ, ZACHARY PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

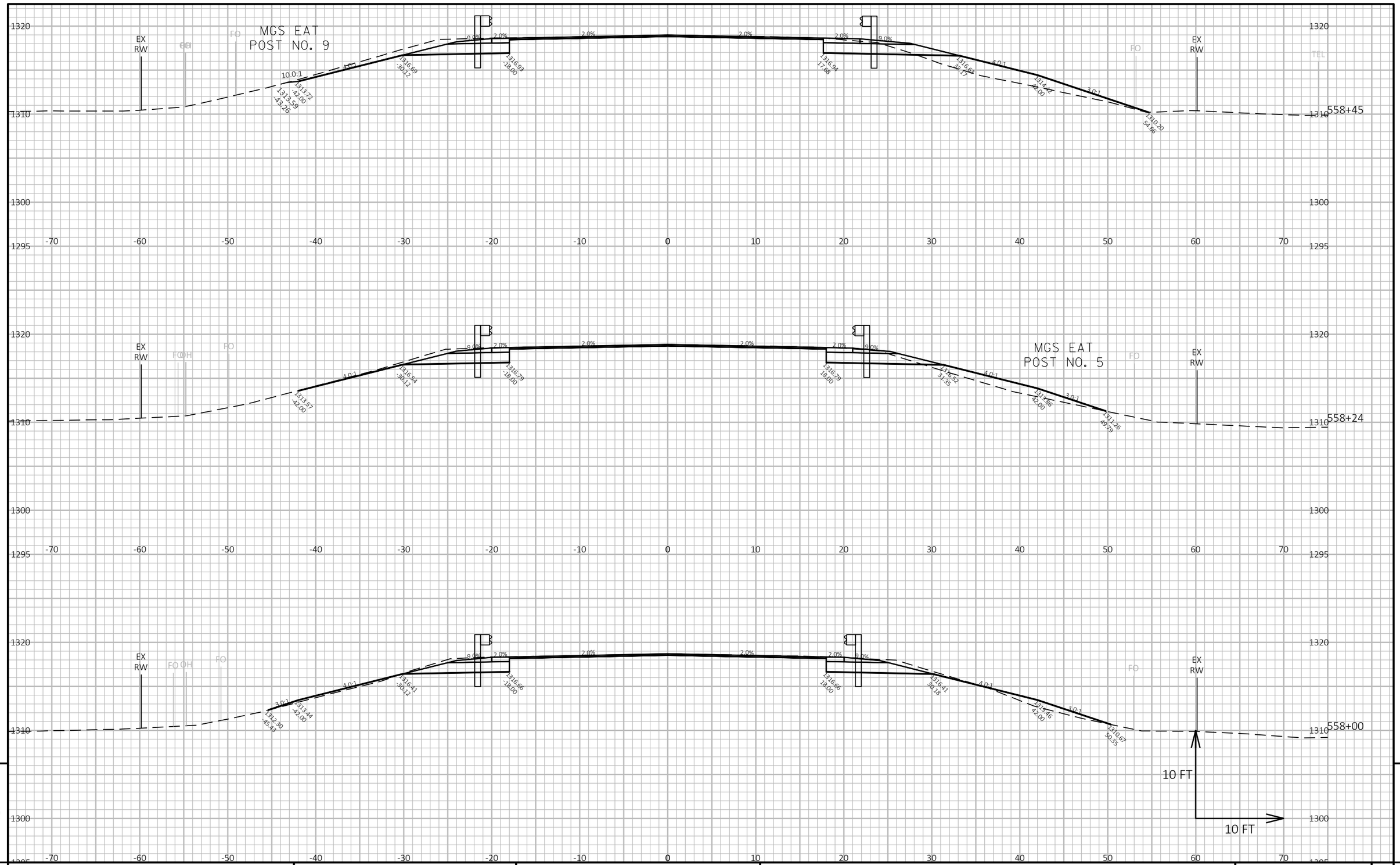


9

9

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - MGS REPLACEMENT	SHEET 247	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090235-xs
PLOT DATE : 10/30/2023 5:35 PM
PLOT BY : MROZ, ZACHARY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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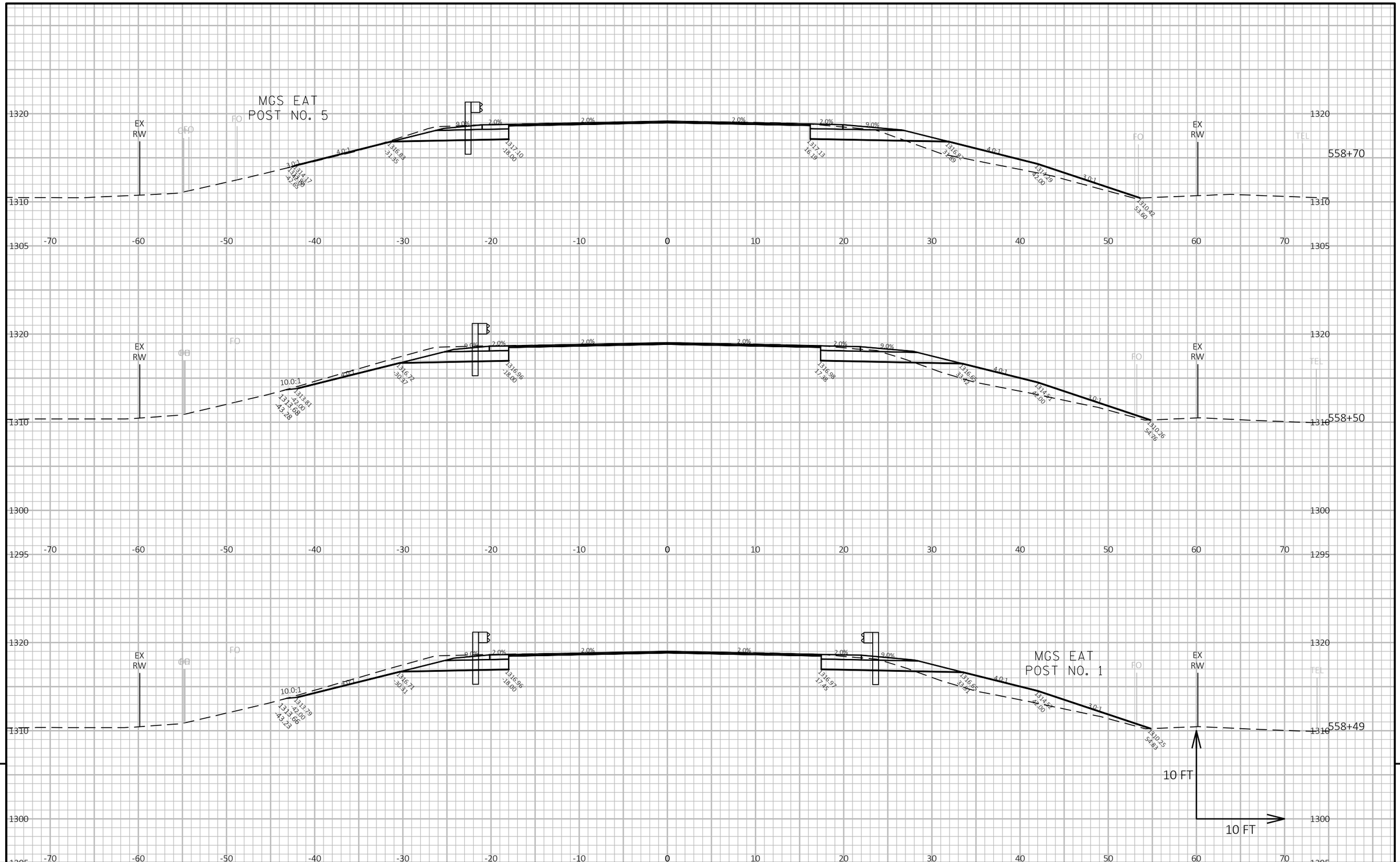
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - MGS REPLACEMENT	SHEET 248	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090236-xs

PLOT DATE : 10/30/2023 5:36 PM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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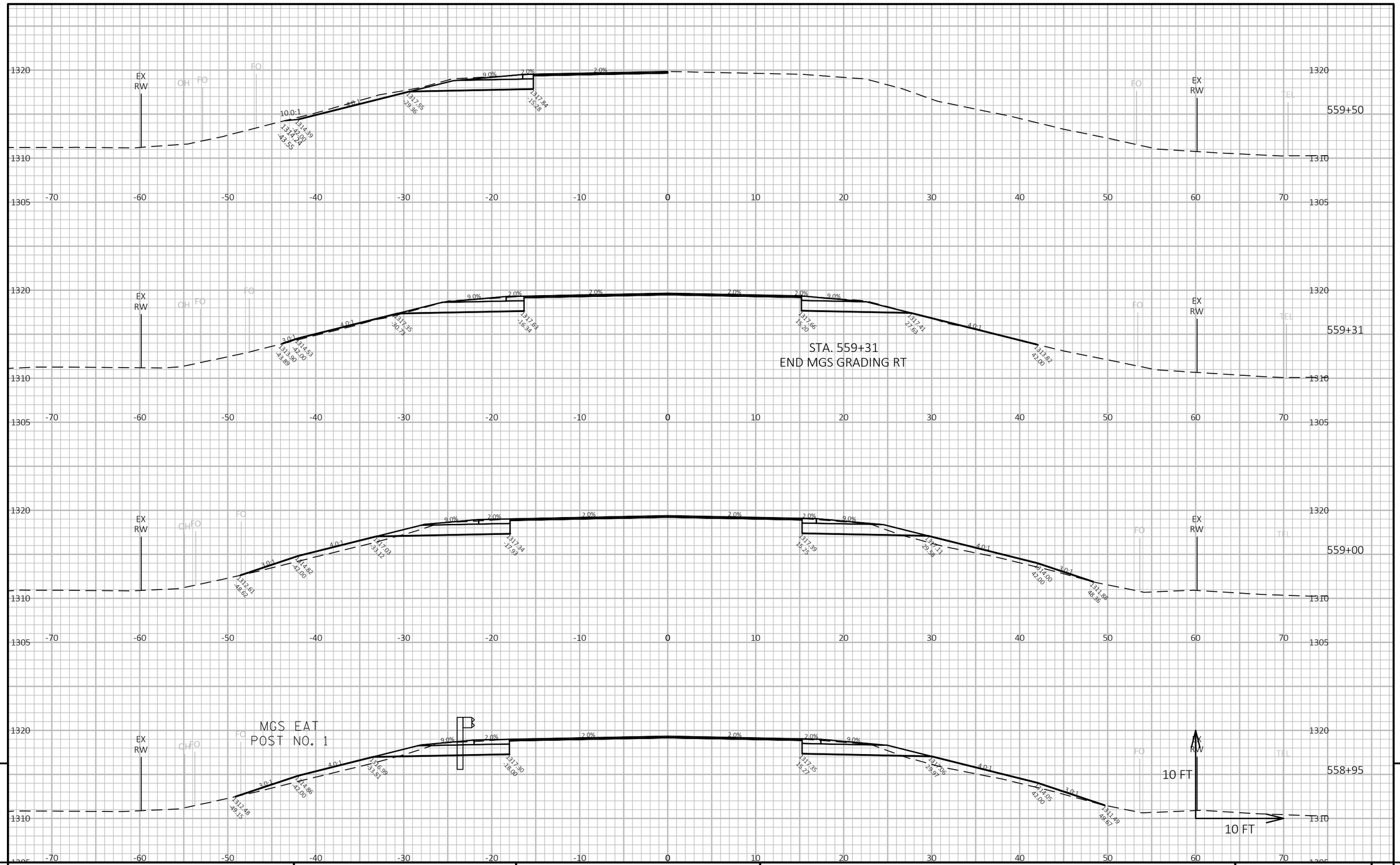
9

PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - MGS REPLACEMENT	SHEET 249	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090237-xs

PLOT DATE : 10/30/2023 5:36 PM PLOT BY : MROZ, ZACHARY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

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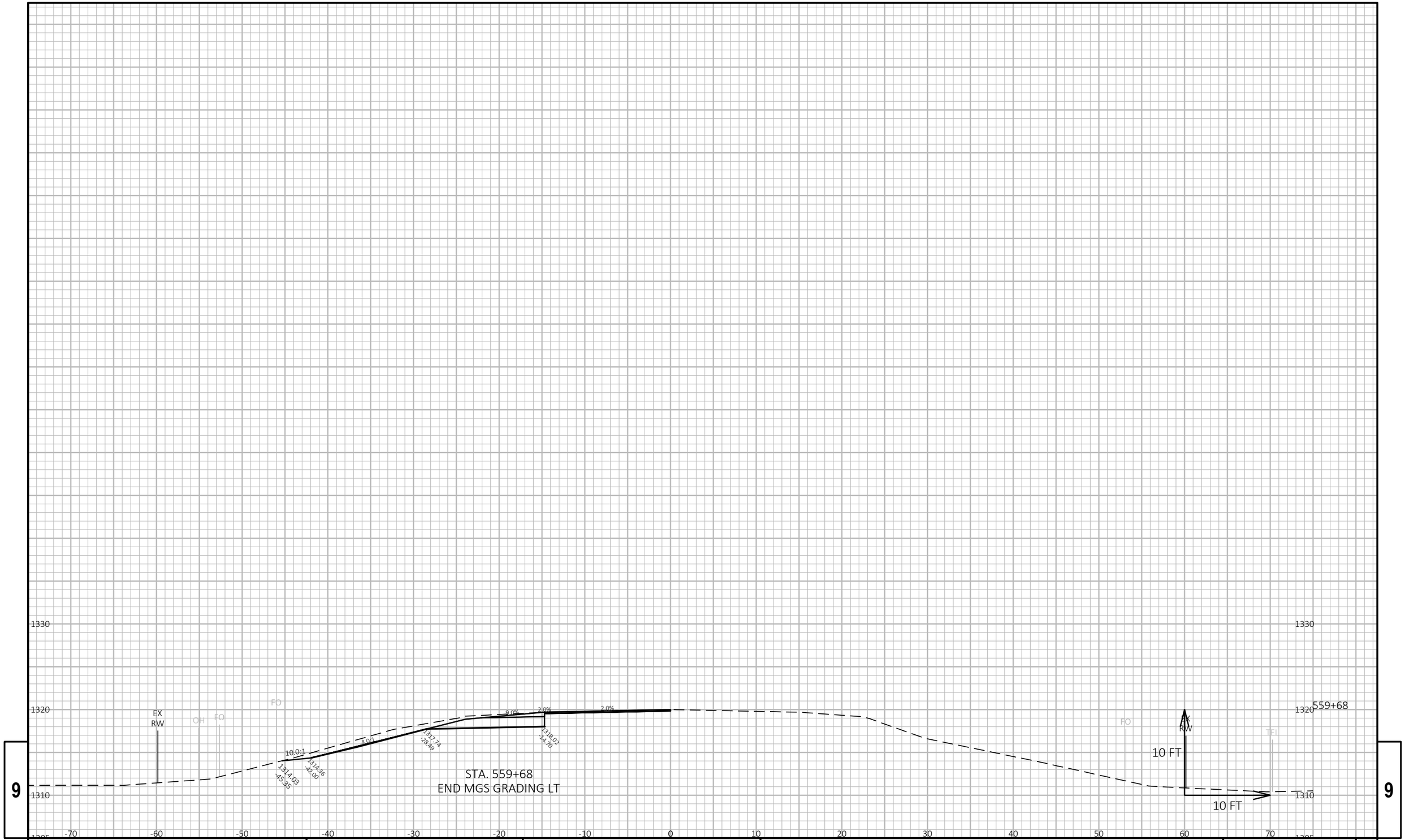
PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - MGS REPLACEMENT	SHEET 250	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090238-xs

PLOT DATE : 10/30/2023 5:37 PM PLOT BY : MROZ, ZACHARY PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 1600-02-70	HWY: USH 45	COUNTY: SHAWANO	CROSS SECTIONS: USH 45 - MGS REPLACEMENT	SHEET 251	E

FILE NAME : C:\ONEDRIVE\AECOM\60658078 - USH 45, SHAWANO COUNTY - DOCUMENTS\0_RECORDS\900_CAD_GIS\910_CAD\16000200\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090239-xs

PLOT DATE : 10/30/2023 5:37 PM PLOT BY : MROZ, ZACHARY PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
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