WIS APRIL 202

PROJECT ID: 1166-04-82

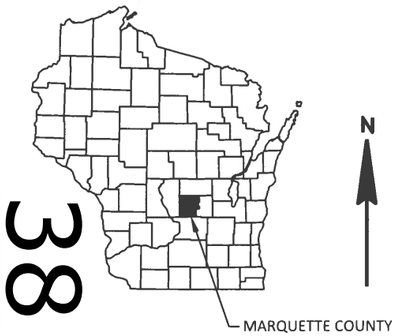
WITH: N/A

COUNTY: MARQUETTE

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 = 358



DESIGN DESIGNATION IH 39 NB

A.A.D.T.	2022	=	5,800 - 9,400
A.A.D.T.	2042	=	7,200 - 10,700
D.H.V.	2042	=	1,100 - 1,600
D.D.		=	58/42
T. (DHV)		=	8.8% - 10.5%
DESIGN SPEED		=	70 MPH
ESALS		=	N/A

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
- 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 (95.36)
- 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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

PORTAGE - COLOMA

(COLUMBIA CO LN TO WAUSHARA CO LN, NB)

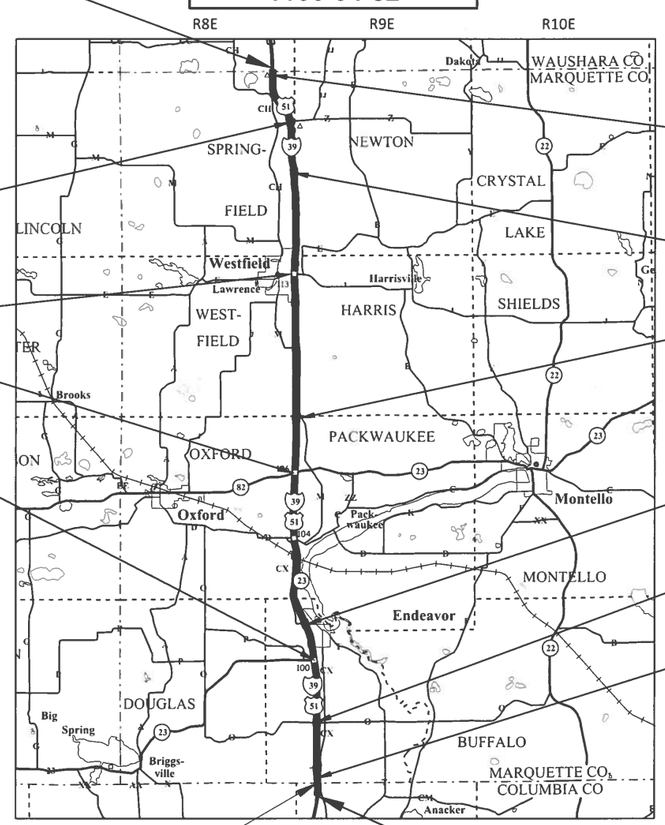
IH 39

MARQUETTE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1166-04-82	WISC 2022091	1

END PROJECT 1166-04-82
STA BACK = 1258'NB'+35.55
STA AHEAD = 3'NB'+00
PROJECT 1166-05-77

STATE PROJECT NUMBER
1166-04-82



STRUCTURE B-39-36
EXCEPTION TO NET CL LENGTH
STA 1253'NB'+23 TO STA 1254'NB'+28

STRUCTURE B-39-34
EXCEPTION TO NET CL LENGTH
STA 1158'NB'+81 TO STA 1160'NB'+42

STRUCTURE B-39-32
EXCEPTION TO NET CL LENGTH
STA 1069'NB'+66 TO STA 1071'NB'+23

STRUCTURE B-39-30
EXCEPTION TO NET CL LENGTH
STA 891'NB'+80 TO STA 894'NB'+10

STRUCTURE B-39-27
EXCEPTION TO NET CL LENGTH
STA 641'NB'+58 TO STA 642'NB'+66

STRUCTURE B-39-26
EXCEPTION TO NET CL LENGTH
STA 546'NB'+90 TO STA 548'NB'+26

STRUCTURE B-39-21
EXCEPTION TO NET CL LENGTH
STA 278'NB'+63 TO STA 279'NB'+92

STRUCTURE B-39-19
EXCEPTION TO NET CL LENGTH
STA 212'NB'+35 TO STA 214'NB'+14

STRUCTURE B-39-17
EXCEPTION TO NET CL LENGTH
STA 104'NB'+23 TO STA 105'NB'+39

STRUCTURE B-39-15
EXCEPTION TO NET CL LENGTH
STA 6'NB'+23 TO STA 7'NB'+32

EQUATION STA 2062'NB'+30.17 BK=
STA 0'NB'+00 AHD

LAYOUT

SCALE 0 5 MI

BEGIN PROJECT
STA 2049'NB'+30.00
Y=198,661.818
X=434,724.792

TOTAL NET LENGTH OF CENTERLINE = 23.808 MI.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MARQUETTE 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 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

ORIGINAL PLANS PREPARED BY
Westwood

WISCONSIN PROFESSIONAL ENGINEER
DAVID S. GALE
E-26283
Luxemburg, Wis.
2/1/22

DATE: _____ (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	QUEST/WESTWOOD
Designer	WESTWOOD
Project Manager	JEFF STEWART
Regional Examiner	NC REGION
Regional Supervisor	MICHAEL KRETSCHMER

APPROVED FOR THE DEPARTMENT

DATE: 2/1/2022 (Signature)

E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-010101-TI.DWG PLOT DATE : 7/29/2021 11:05 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

GENERAL NOTES

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

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	0.08	0.16	0.22	0.12	0.20	0.27	0.15	0.24	0.33	0.19	0.28	0.38
	0.22	0.30	0.38	0.26	0.34	0.44	0.30	0.37	0.50	0.34	0.41	0.56
MEDIAN STRIP -	0.19	0.20	0.24	0.19	0.22	0.26	0.20	0.23	0.30	0.20	0.25	0.30
TURF	0.24	0.26	0.30	0.25	0.28	0.33	0.26	0.30	0.37	0.27	0.32	0.40
SIDE SLOPE -			0.25			0.27			0.28			0.30
TURF			0.32			0.34			0.36			0.38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

EROSION CONTROL NOTES

RUNOFF COEFFICIENT FOR THIS PROJECT:
EXISTING PAVEMENT 0.95, EXISTING SLOPES 0.30,
NEW PAVEMENT 0.95, NEW SLOPES 0.30.

TOTAL PROJECT AREA = 649.36 ACRES.
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 132.76 ACRES

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

ORDER OF "SECTION 2" SHEETS

SHEET TITLE
GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
EROSION CONTROL
TRAFFIC CONTROL AND STAGING

UTILITIES

ELECTRIC	ADAMS-COLUMBIA ELECTRIC COOPERATIVE SHAWN SPIETCZAK PO BOX 70 FRIENDSHIP, WI 53934-0070 TELEPHONE: 800-831-8629 EXT. 323 EMAIL: SPIETCZAK@ACECWI.COM
ELECTRIC	ALLIANT ENERGY COREY CLINCH 880 N. WISCONSIN ST. BERLIN, WI 54923 TELEPHONE: (920) 290-6356 EMAIL: COREYCLINCH@ALLIANTENERGY.COM
ELECTRIC; TRANSMISSION	ATC MANAGEMENT INC. DOUG VOSBERG 2489 RINDEN RD. COTTAGE GROVE, WI 53527 TELEPHONE: 608-877-7650 EMAIL: DVOSBERG@ATCLLC.COM
GAS	ENBRIDGE ENERGY RYAN BOHMAN 4898 YOUNG RD. VESPER, WI 54489 TELEPHONE: 715-213-0398 EMAIL: RYAN.BOHMAN@ENBRIDGE.COM
COMMUNICATIONS	FRONTIER COMMUNICATIONS JERRY MOORE 2222 WEST WISCONSIN ST PORTAGE, WI 53901 TELEPHONE: 608-346-0353 EMAIL: JERALD.R.MOORE@FTR.COM
COMMUNICATIONS	MARQUETTE-ADAMS TELEPHONE COOPERATIVE, INC JASON SENGBUSCH 113 NORTH OXFORD ST PO BOX 45 OXFORD, WI 53952 TELEPHONE: 608-586-7070 CELL PHONE: 608-450-0707 EMAIL: JSENGBUSCH@MAADTELCO.COM
ELECTRIC	PIONEER POWER AND LIGHT CO. DENNIS DAHLKE 116 E. SECOND ST. WESTFIELD, WI 53964 TELEPHONE: 608-369-2421 EMAIL: PIONEERPOWERQUOTE@GMAIL.COM
GAS	WE ENERGIES LARRY KOCH 1921 8TH ST SOUTH WISCONSIN RAPIDS, WI 54494 TELEPHONE: 715-421-7249 CELL PHONE: 715-421-9293 EMAIL: LARRY.KOCH@WE-ENERGIES.COM

OTHER CONTACTS

	DEPARTMENT OF NATURAL RESOURCES CENTRAL REGION HEADQUARTERS CASEY JONES 473 GRIFFITH AVE WISCONSIN RAPIDS, WI 54494 TELEPHONE: 715-213-6371 EMAIL: casey.jones@wisconsin.gov
	WISCONSIN DOT RWIS PROGRAM COMMUNICATION TOWER MIKE ADAMS PO BOX 7986 MADISON, WI 53707-7986 TELEPHONE: 608-266-5004 EMAIL: MICHAEL.ADAMS@DOT.WI.GOV

CONTROL POINTS						
POINT	STATION	OFFSET	Y	X	ELEVATION	DESCRIPTION
950	2043+24.16	54.16 RT	198053.545	434762.791	788.299	CP IR W/ QUEST CAP
951	11+04.07	54.64 RT	201066.777	434665.098	783.631	CP IR W/ QUEST CAP
952	97+75.88	60.01 RT	209731.570	434676.750	796.558	CP IR W/ QUEST CAP
953	102+83.73	59.23 RT	210239.405	434680.594	806.744	CP IR W/ QUEST CAP
954	206+18.11	52.94 RT	220562.983	434436.564	808.495	CP IR W/ QUEST CAP
955	217+48.29	54.35 RT	221683.018	434285.457	834.361	CP IR W/ QUEST CAP
956	271+71.79	51.49 RT	226953.679	433080.910	808.460	CP IR W/ QUEST CAP

CONTROL POINTS						
POINT	STATION	OFFSET	Y	X	ELEVATION	DESCRIPTION
957	276+72.32	50.45 RT	227413.297	432882.705	803.974	CP IR W/ QUEST CAP
958	332+21.26	45.41 RT	232537.678	430813.913	787.697	CP IR W/ QUEST CAP
959	341+27.92	47.25 RT	233428.589	430824.974	778.001	CP IR W/ QUEST CAP
960	394+02.19	52.96 RT	238631.260	431442.407	780.176	CP IR W/ QUEST CAP
961	401+06.44	51.14 RT	239335.363	431456.602	777.437	CP IR W/ QUEST CAP
962	404+47.85	48.83 RT	239678.284	431460.218	776.804	CP IR W/ QUEST CAP
963	419+86.04	61.95 RT	241203.376	431207.524	775.222	CP IR W/ QUEST CAP

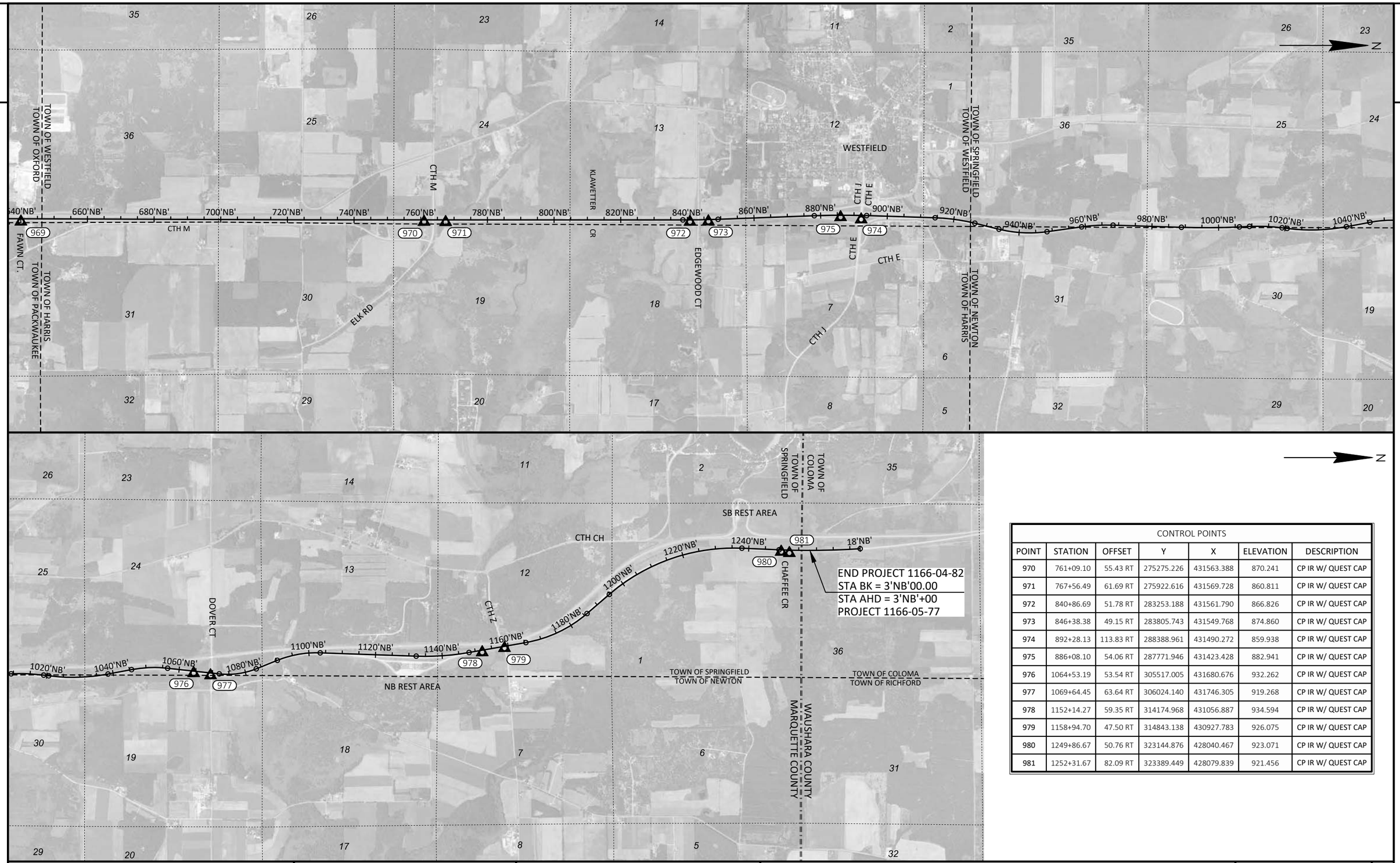
CONTROL POINTS						
POINT	STATION	OFFSET	Y	X	ELEVATION	DESCRIPTION
964	428+57.63	49.35 RT	242049.595	431031.010	774.148	CP IR W/ QUEST CAP
965	436+35.07	53.93 RT	242821.852	430985.100	776.821	CP IR W/ QUEST CAP
966	540+23.86	50.71 RT	253194.331	431235.283	877.612	CP IR W/ QUEST CAP
967	547+09.00	107.26 RT	253875.664	431326.896	853.085	CP IR W/ QUEST CAP
968	634+97.42	48.83 RT	262663.437	431523.219	884.578	CP IR W/ QUEST CAP
969	640+14.42	78.95 RT	263180.315	431555.316	881.679	CP IR W/ QUEST CAP
1000	6+44.42	35.58 RT	200607.331	434686.587	788.740	BM

BEGIN PROJECT
STA 2049'NB'30.00
Y=198,661.818
X=434,724.792

STA AHEAD = 0+00.00
STA BACK = 2062+30.17

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PROJECT OVERVIEW	SHEET 4 E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-020201-PO.DWG
LAYOUT NAME - 11660482-020201-po
PLOT DATE : 7/23/2021 10:00 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:0.5 MI



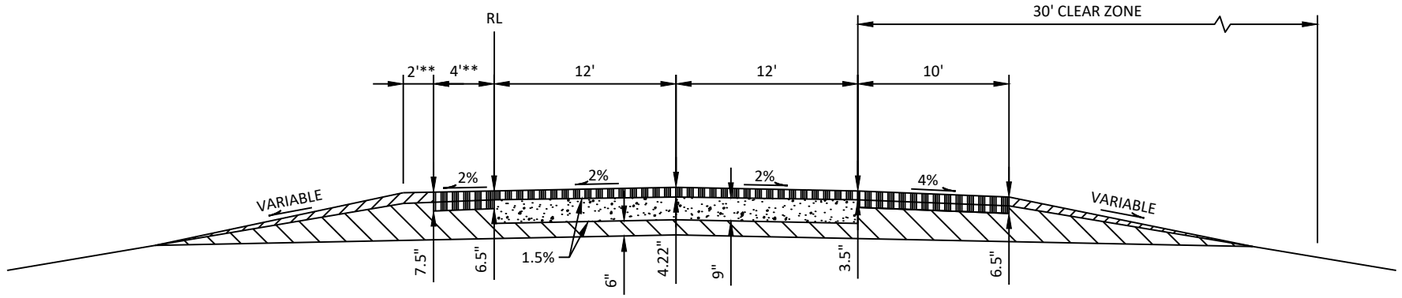
CONTROL POINTS						
POINT	STATION	OFFSET	Y	X	ELEVATION	DESCRIPTION
970	761+09.10	55.43 RT	275275.226	431563.388	870.241	CP IR W/ QUEST CAP
971	767+56.49	61.69 RT	275922.616	431569.728	860.811	CP IR W/ QUEST CAP
972	840+86.69	51.78 RT	283253.188	431561.790	866.826	CP IR W/ QUEST CAP
973	846+38.38	49.15 RT	283805.743	431549.768	874.860	CP IR W/ QUEST CAP
974	892+28.13	113.83 RT	288388.961	431490.272	859.938	CP IR W/ QUEST CAP
975	886+08.10	54.06 RT	287771.946	431423.428	882.941	CP IR W/ QUEST CAP
976	1064+53.19	53.54 RT	305517.005	431680.676	932.262	CP IR W/ QUEST CAP
977	1069+64.45	63.64 RT	306024.140	431746.305	919.268	CP IR W/ QUEST CAP
978	1152+14.27	59.35 RT	314174.968	431056.887	934.594	CP IR W/ QUEST CAP
979	1158+94.70	47.50 RT	314843.138	430927.783	926.075	CP IR W/ QUEST CAP
980	1249+86.67	50.76 RT	323144.876	428040.467	923.071	CP IR W/ QUEST CAP
981	1252+31.67	82.09 RT	323389.449	428079.839	921.456	CP IR W/ QUEST CAP

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PROJECT OVERVIEW	SHEET 5	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-020201-PO.DWG
LAYOUT NAME - 11660482-020202-po

PLOT DATE : 7/23/2021 10:00 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:0.5 MI

WISDOT/CADDS SHEET 44

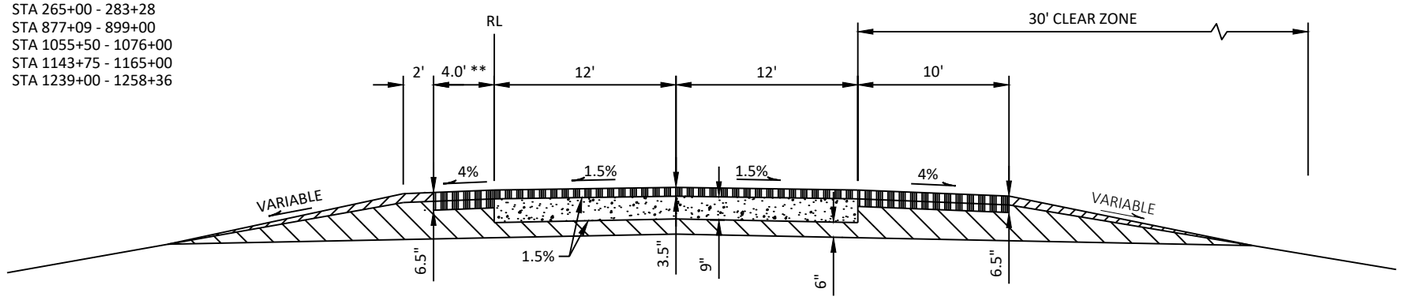


EXISTING TYPICAL SECTION - IH-39 NB

STA 2049+30 - 2062+30/0+00
STA 2062+30/0+00 - 6+23
STA 7+32 - 104+23
STA 105+39 - 212+35
STA 214+14 - 278+63
STA 279+92 - 340+55
STA 405+65 - 432+08
STA 434+16 - 546+90
STA 548+26 - 641+58
STA 642+66 -763+42
STA 1160+42 - 1253+23
STA 1254+28 - 1258+35

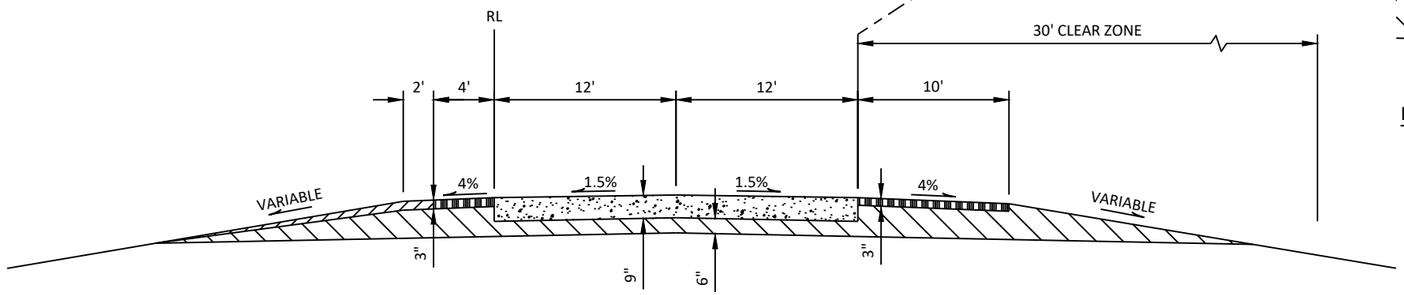
**6.0' PAVED SHOULDER AT FOLLOWING STATION RANGES:

STA 2055+20 - 32+17
STA 39+70 - 42+14
STA 90+72 - 109+20
STA 201+82 - 217+75
STA 265+00 - 283+28
STA 877+09 - 899+00
STA 1055+50 - 1076+00
STA 1143+75 - 1165+00
STA 1239+00 - 1258+36



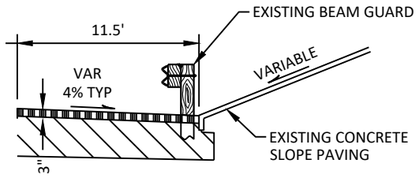
EXISTING TYPICAL SECTION - IH-39 NB

STA 765+54 - 842+62
STA 844+72 - 891+80
STA 894+10 - 1069+66
STA 1071+23 - 1158+81



EXISTING TYPICAL SECTION (CONCRETE PAVEMENT AT UNDERPASS) - IH-39 NB

STA 432+08 - 434+16
STA 763+42 - 765+54
STA 842+62 - 844+72



EXISTING SHOULDER AT UNDERPASS

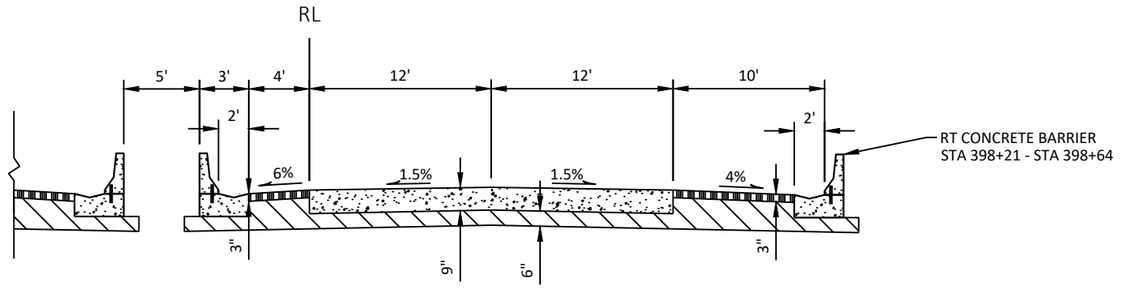
CTH D

LEGEND

- EXISTING ASPHALTIC CONCRETE PAVEMENT
- EXISTING CONCRETE PAVEMENT
- EXISTING CRUSHED AGGREGATE BASE COURSE
- EXISTING CRUSHED AGGREGATE BASE COURSE (SHOULDER)

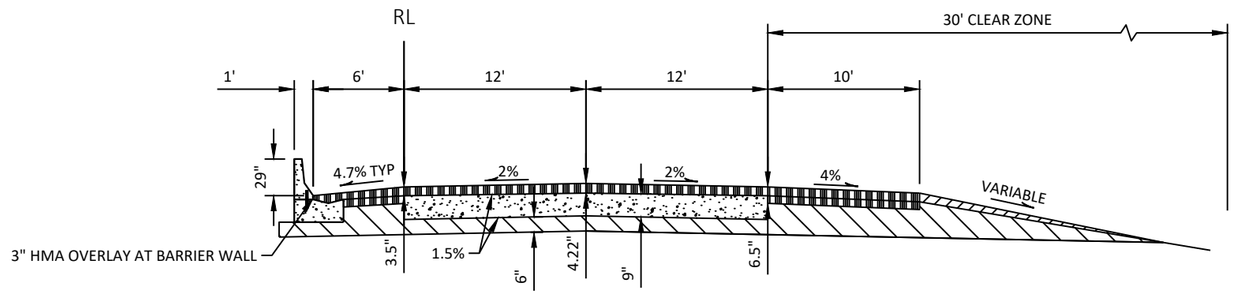
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN: TYPICAL SECTIONS	SHEET 6	E

2



EXISTING TYPICAL SECTION (RAILROAD UNDERPASS) IH-39 NB

STA 397+60 - 399+52



EXISTING TYPICAL SECTION (MEDIAN BARRIER WALL SECTION) IH-39 NB

STA 340+55 - 397+60
STA 399+52 - 405+65

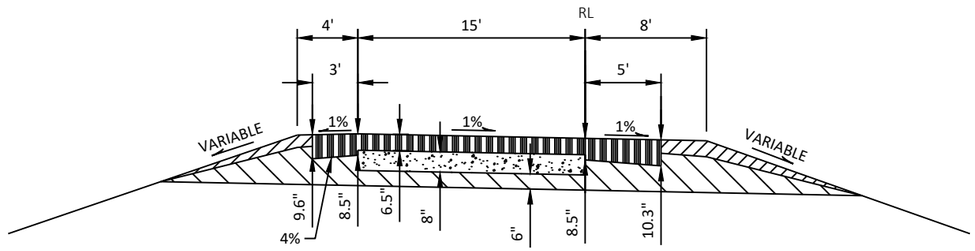
LEGEND

- EXISTING ASPHALTIC CONCRETE PAVEMENT
- EXISTING CONCRETE PAVEMENT
- EXISTING CRUSHED AGGREGATE BASE COURSE
- EXISTING CRUSHED AGGREGATE BASE COURSE (SHOULDER)

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN: TYPICAL SECTIONS	SHEET 7	E

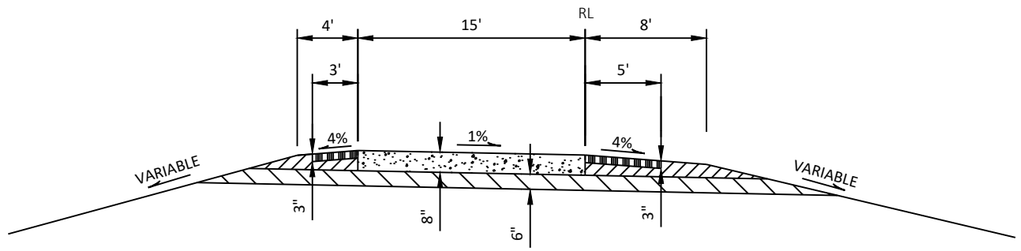
FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-020301-TS.DWG
LAYOUT NAME - 11660482-020302-ts

PLOT DATE : 4/21/2021 9:39 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT



EXISTING TYPICAL TANGENT RAMP SECTION

STA 196'AB'+97- 202'AB'+86
STA 218'AA'+48- 232'AA'+84
STA 418'BB'+33 - 427'BB'+10
STA 527'CB'+85 - 535'CB'+13
STA 556'CA'+24 - 569'CA'+37
STA 875'DB'+31 - 880'DB'+83
STA 899'DA'+18 - 907'DA'+84
STA 1113'EB'+33 - 1118'EB'+69
STA 1143'EA'+55 - 1152'EA'+49



EXISTING TYPICAL TANGENT RAMP SECTION

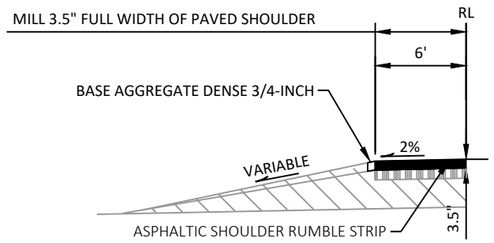
STA 202'AB'+86 - 212'AB'+66
STA 212'AA'+75 - 218'AA'+48
STA 427'BB'+10 - 431'BB'+18
STA 535'CB'+13 - 546'CB'+97
STA 549'CA'+95 - 556'CA'+24
STA 880'DB'+83 - 892'DB'+33
STA 893'DA'+20 - 899'DA'+18

LEGEND

- EXISTING ASPHALTIC CONCRETE PAVEMENT
- EXISTING CONCRETE PAVEMENT
- EXISTING CRUSHED AGGREGATE BASE COURSE
- EXISTING CRUSHED AGGREGATE BASE COURSE (SHOULDER)

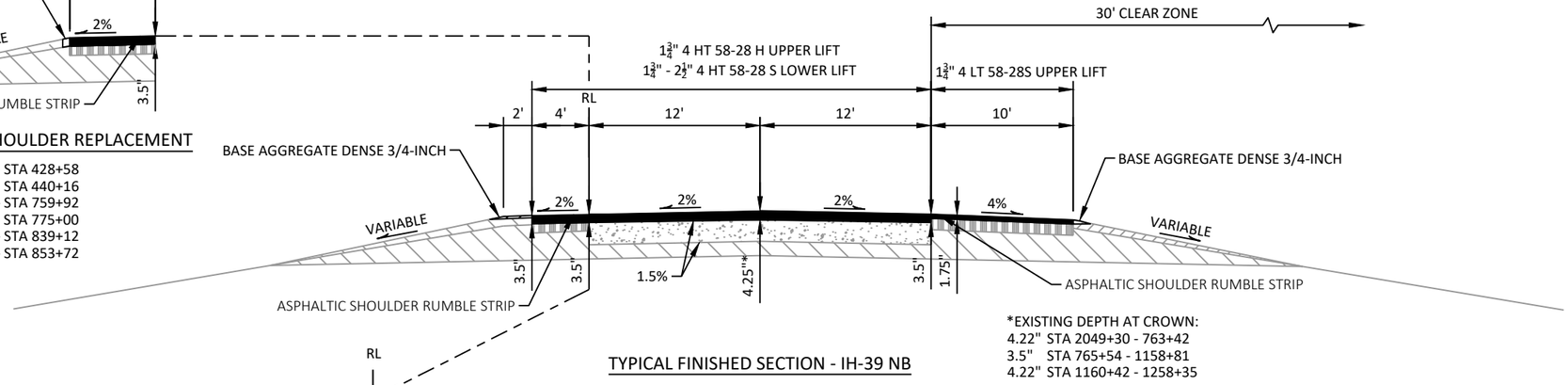
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN: TYPICAL SECTIONS	SHEET 8	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-020301-TS.DWG
LAYOUT NAME - 11660482-020303-ts
PLOT DATE : 4/21/2021 9:39 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT



EXISTING FULL PAVED SHOULDER REPLACEMENT

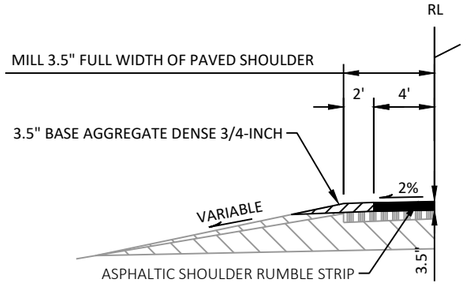
STA 423+08 - STA 428+58
STA 437+66 - STA 440+16
STA 754+42 - STA 759+92
STA 769+04 - STA 775+00
STA 833+62 - STA 839+12
STA 848+22 - STA 853+72



TYPICAL FINISHED SECTION - IH-39 NB

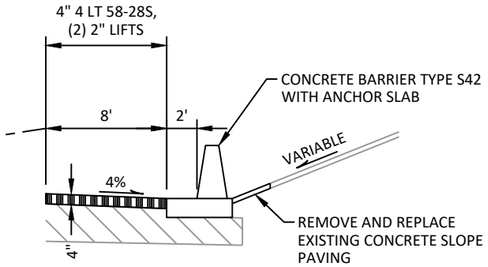
STA 2049+30 - STA 2055+20
STA 32+17 - STA 39+70
STA 42+14 - STA 90+72
STA 109+20 - STA 201+82
STA 217+75 - STA 265+00
STA 283+28 - STA 335+83
STA 408+95 - STA 423+08
STA 440+16 - STA 542+31
STA 548+26 - STA 637+53
STA 642+94 - STA 754+42
STA 778+00 - STA 833+62
STA 853+72 - STA 877+09
STA 899+00 - STA 1055+50
STA 1076+00 - STA 1143+75
STA 1165+00 - STA 1239+00

*EXISTING DEPTH AT CROWN:
4.22" STA 2049+30 - 763+42
3.5" STA 765+54 - 1158+81
4.22" STA 1160+42 - 1258+35



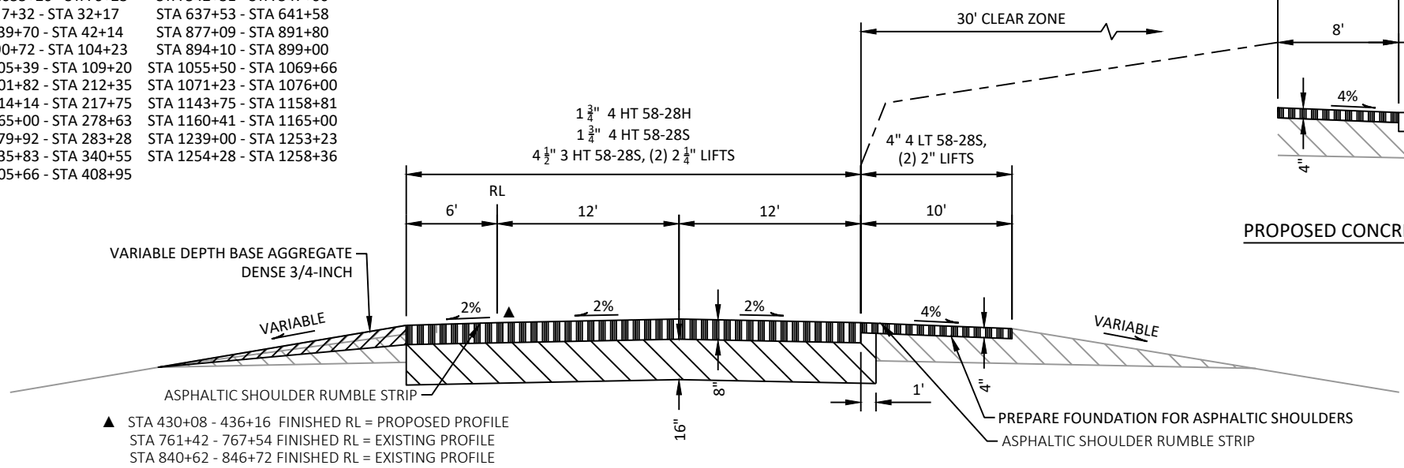
EXISTING FULL PAVED SHOULDER REMOVAL

STA 2055+20 - STA 6+23
STA 7+32 - STA 32+17
STA 39+70 - STA 42+14
STA 90+72 - STA 104+23
STA 105+39 - STA 109+20
STA 201+82 - STA 212+35
STA 214+14 - STA 217+75
STA 265+00 - STA 278+63
STA 279+92 - STA 283+28
STA 335+83 - STA 340+55
STA 405+66 - STA 408+95
STA 542+31 - STA 547+00
STA 637+53 - STA 641+58
STA 877+09 - STA 891+80
STA 894+10 - STA 899+00
STA 1055+50 - STA 1069+66
STA 1071+23 - STA 1076+00
STA 1143+75 - STA 1158+81
STA 1160+41 - STA 1165+00
STA 1239+00 - STA 1253+23
STA 1254+28 - STA 1258+36



PROPOSED CONCRETE BARRIER AT OVERPASS

CTH D



▲ STA 430+08 - 436+16 FINISHED RL = PROPOSED PROFILE
STA 761+42 - 767+54 FINISHED RL = EXISTING PROFILE
STA 840+62 - 846+72 FINISHED RL = EXISTING PROFILE

TYPICAL FINISHED SECTION (PAVEMENT REPLACEMENT AT UNDERPASS) - IH 39 NB

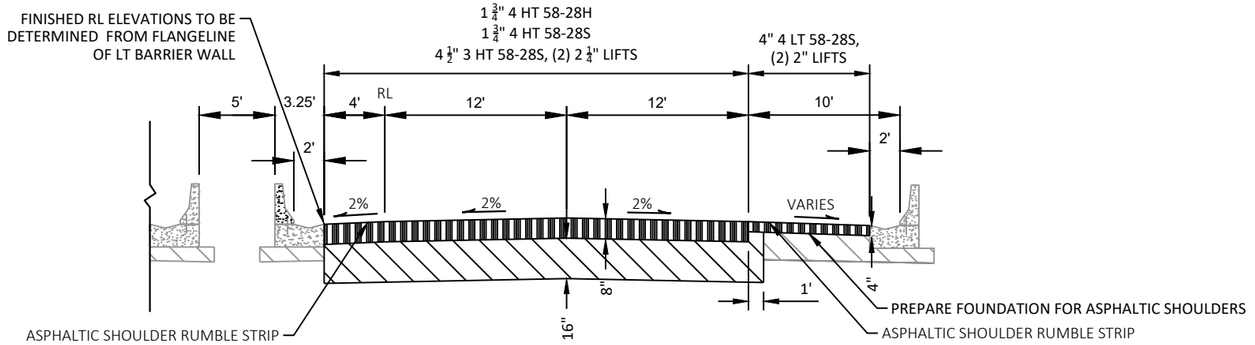
STA 428+58 - STA 437+66
STA 759+92 - STA 769+04
STA 839+12 - STA 848+22

LEGEND

- REMOVING ASPHALTIC SURFACE MILLING AND PROPOSED HMA PAVEMENT
- PROPOSED HMA PAVEMENT
- PROPOSED 1 1/4-INCH BASE AGGREGATE DENSE
- EXISTING ASPHALTIC CONCRETE PAVEMENT
- EXISTING CONCRETE PAVEMENT
- EXISTING CRUSHED AGGREGATE BASE COURSE
- EXISTING CRUSHED AGGREGATE BASE COURSE (SHOULDER)

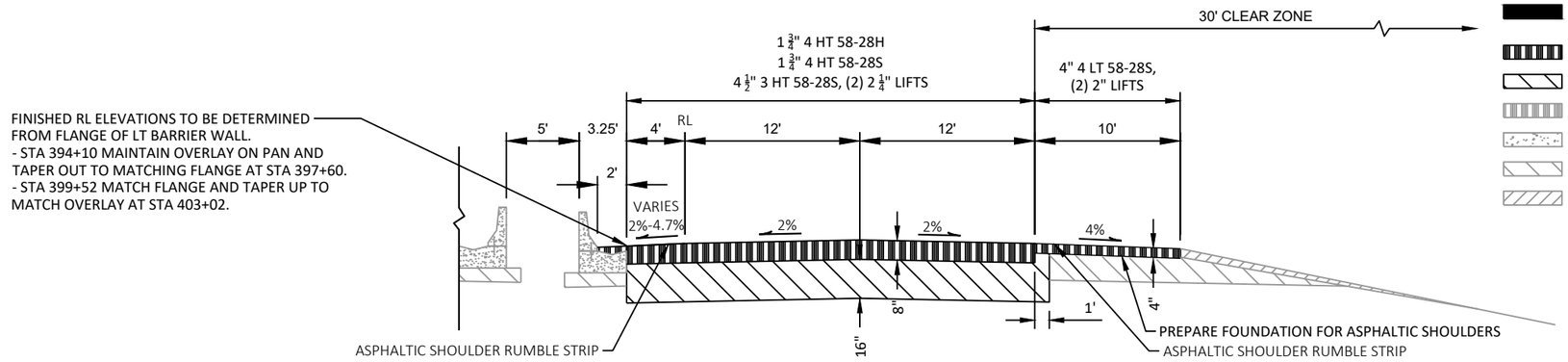
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN: TYPICAL SECTIONS	SHEET 9	E

2



TYPICAL FINISHED SECTION (PAVEMENT REPLACEMENT) - IH-39 NB

STA 398+21 - 398+64

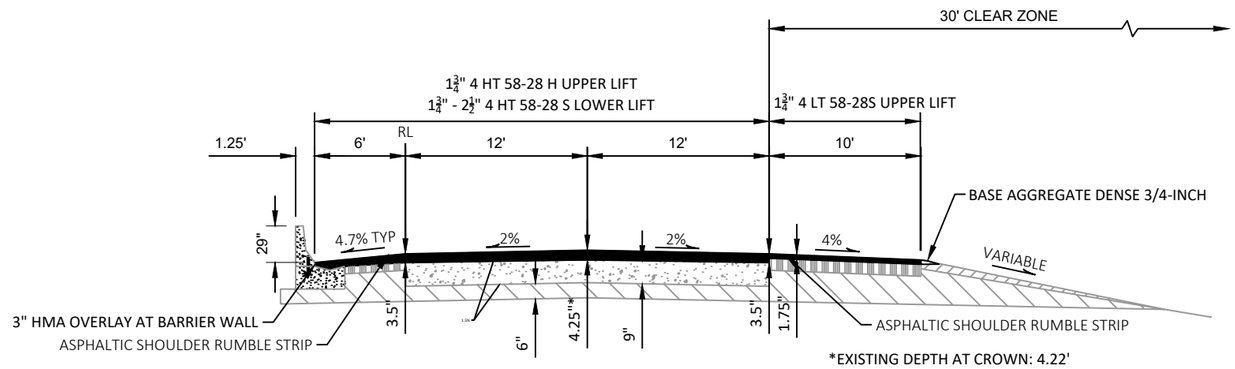


LEGEND

- REMOVING ASPHALTIC SURFACE MILLING AND PROPOSED HMA PAVEMENT
- PROPOSED HMA PAVEMENT
- PROPOSED 1 1/4-INCH BASE AGGREGATE DENSE
- EXISTING ASPHALTIC CONCRETE PAVEMENT
- EXISTING CONCRETE PAVEMENT
- EXISTING CRUSHED AGGREGATE BASE COURSE
- EXISTING CRUSHED AGGREGATE BASE COURSE (SHOULDER)

TYPICAL FINISHED SECTION (PAVEMENT REPACEMENT) - IH-39 NB

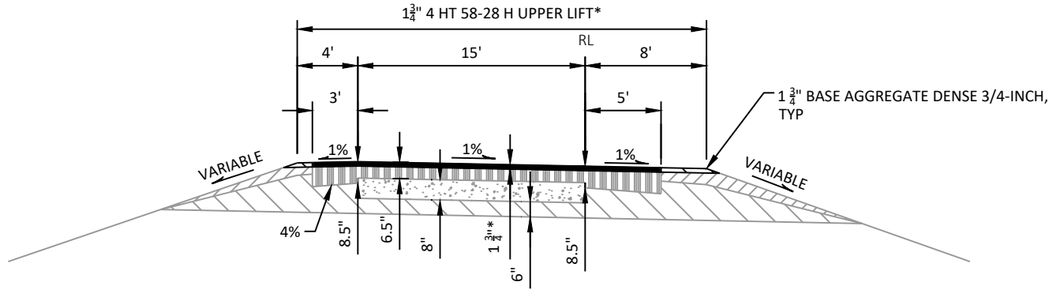
STA 394+10 - 398+21
STA 398+64 - 403+02



TYPICAL FINISHED SECTION (MEDIAN BARRIER WALL) - IH-39 NB

STA 340+55 - 394+10
STA 403+02 - 405+66

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN: TYPICAL SECTIONS	SHEET 10	E

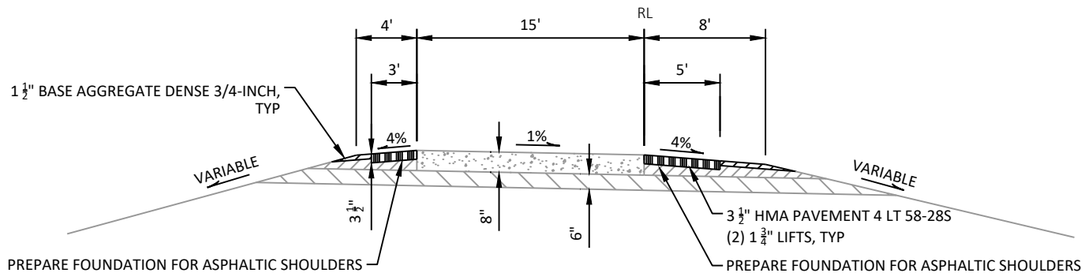


TYPICAL FINISHED SECTION RAMP

STA 196'AB'+97- 202'AB'+86
STA 218'AA'+48- 232'AA'+84
STA 418'BB'+33 - 427'BB'+10
STA 527'CB'+85 - 535'CB'+13
STA 556'CA'+24 - 569'CA'+37

STA 875'DB'+31 - 880'DB'+83*
STA 899'DA'+18 - 907'DA'+84*
STA 1113'EB'+33 - 1118'EB'+69
STA 1143'EA'+55 - 1152'EA'+49

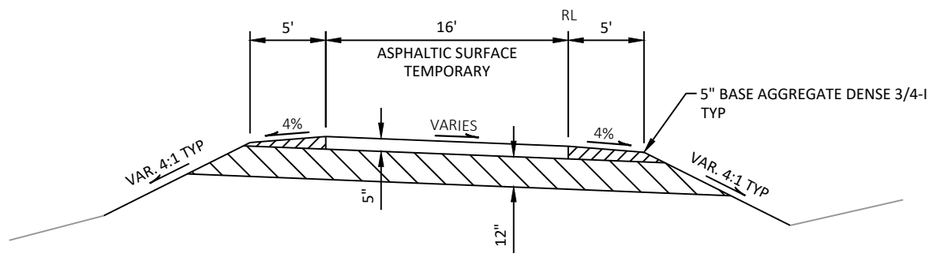
*CTH J RAMPS (STA 875'DB'+31 - 880'DB'+83 AND STA 899'DA'+18 - 907'DA'+84)
MILL 3.5" AND REPLACE WITH 1 ¾" 4 HT 58-28 H, 1 ¾" 4 HT 58-28 S



TYPICAL FINISHED SECTION RAMP

STA 202'AB'+86 - 212'AB'+66
STA 212'AA'+75 - 218'AA'+48
STA 427'BB'+10 - 431'BB'+18
STA 535'CB'+13 - 546'CB'+97
STA 549'CA'+95 - 556'CA'+24

STA 880'DB'+83 - 892'DB'+33
STA 893'DA'+20 - 899'DA'+18

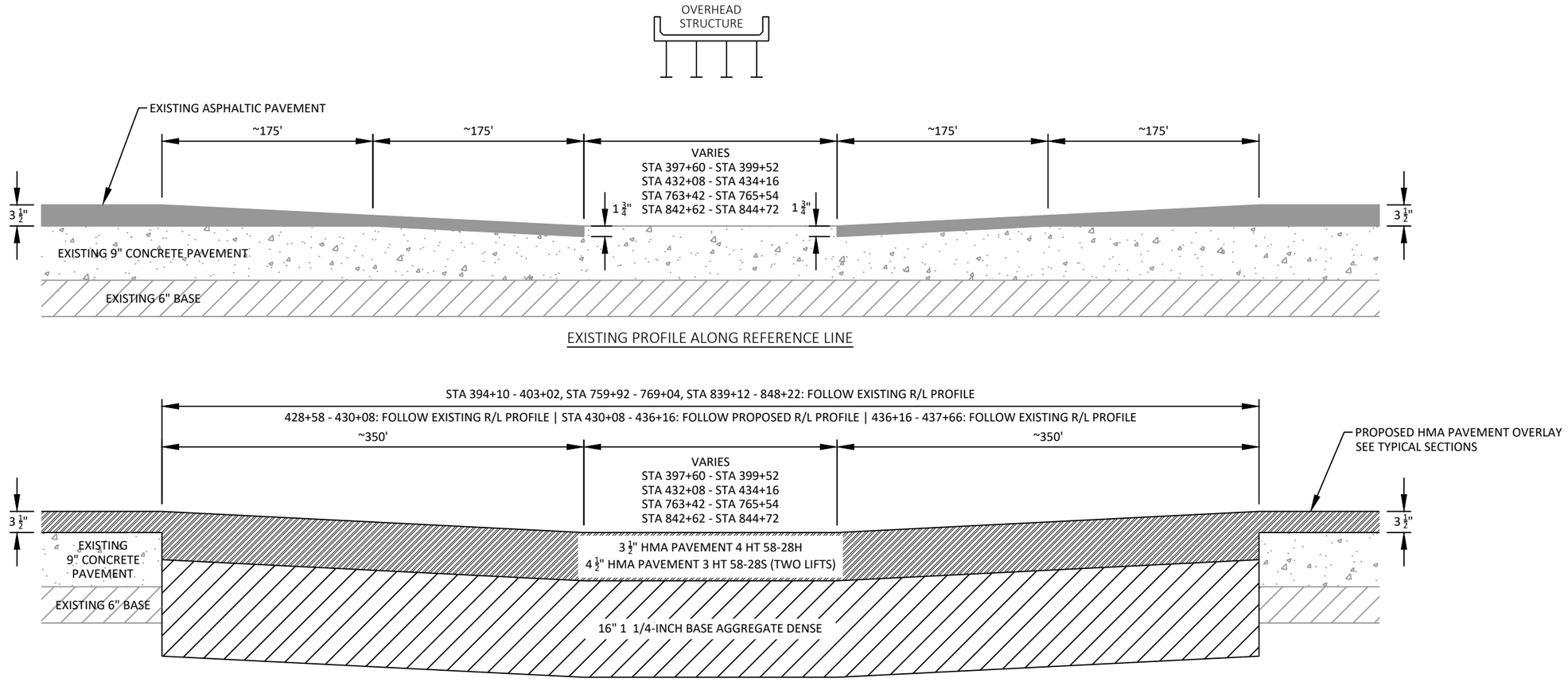


TYPICAL FINISHED SECTION CROSSOVER

STA 302'XO1'+91 - STA 319'XO1'+85
STA 434'XO2'+61 - STA 451'XO2'+79

LEGEND

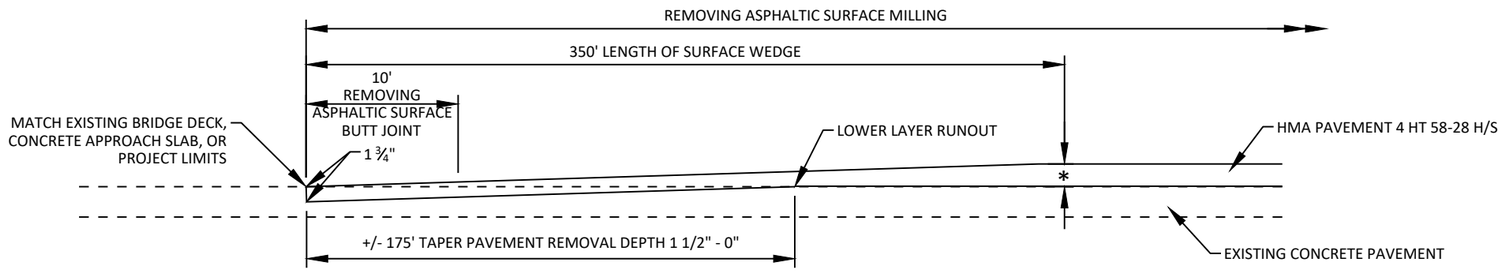
- REMOVING ASPHALTIC SURFACE MILLING AND PROPOSED HMA PAVEMENT
- PROPOSED HMA PAVEMENT
- PROPOSED 1 1/4-INCH BASE AGGREGATE DENSE
- EXISTING ASPHALTIC CONCRETE PAVEMENT
- EXISTING CONCRETE PAVEMENT
- EXISTING CRUSHED AGGREGATE BASE COURSE
- EXISTING CRUSHED AGGREGATE BASE COURSE (SHOULDER)



EXISTING PROFILE ALONG REFERENCE LINE

PROPOSED PROFILE ALONG REFERENCE LINE

DETAIL FOR PAVEMENT REPLACEMENT AT OVERHEAD STRUCTURES

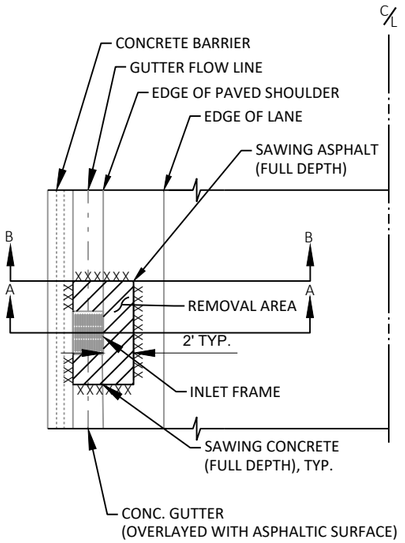


TYPICAL BUTT JOINT DETAIL

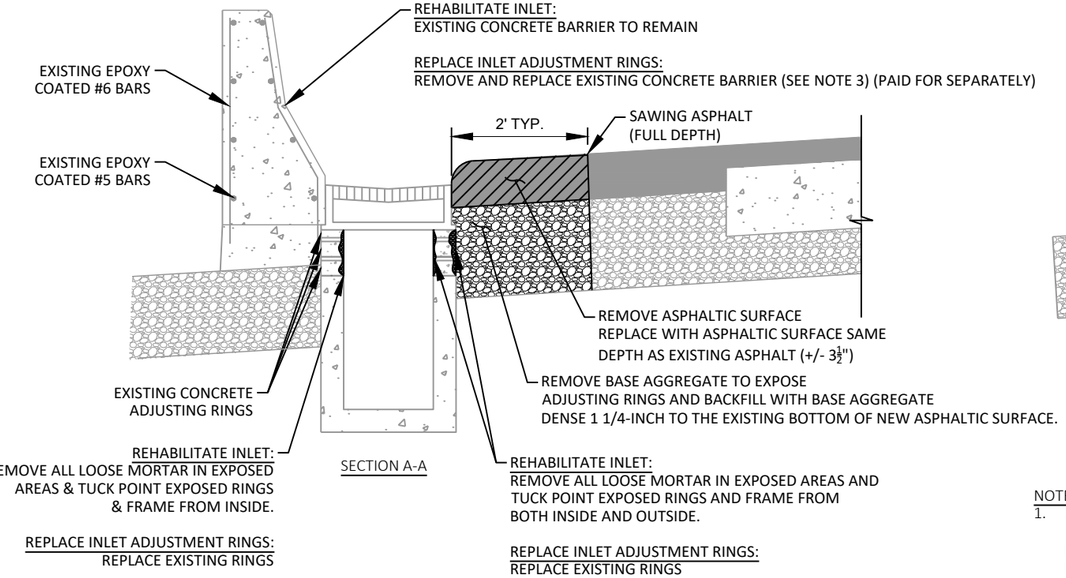
STA 2049+30: SOUTH PROJECT LIMITS
STA 547+75: B-39-26
STA 642+00: B-39-27
STA 1258+35: NORTH PROJECT LIMITS
EXIT/ENTRY RAMPS

* 4.25" AT CENTERLINE
3.5" AT 12' OFFSET FROM CENTERLINE

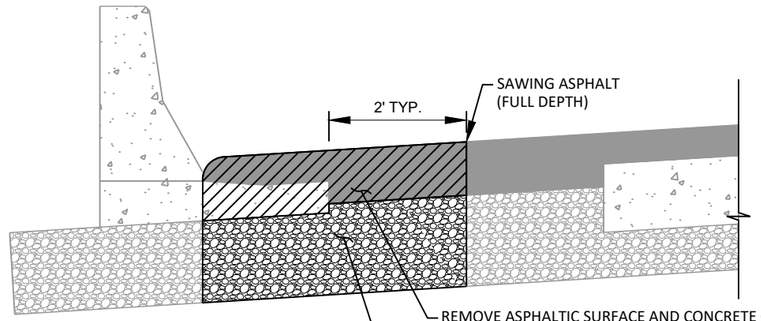
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN: CONSTRUCTION DETAILS	SHEET 12	E



PLAN VIEW



SECTION A-A

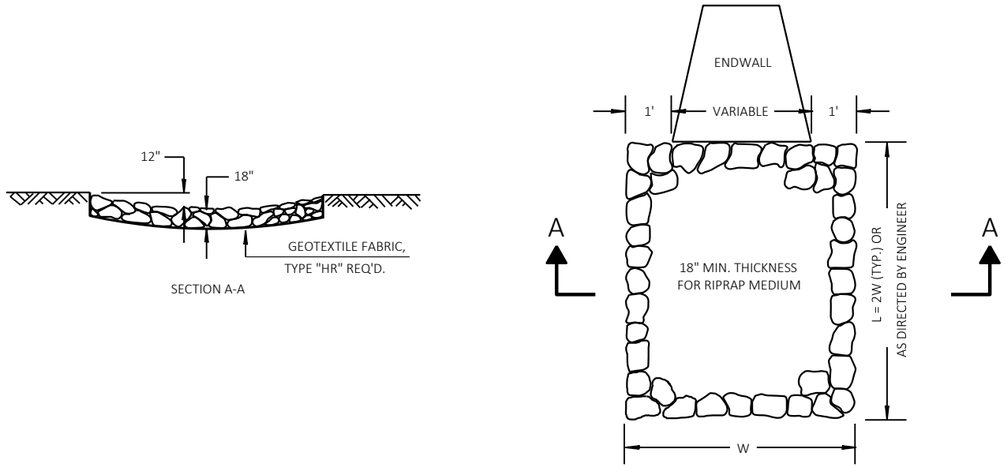


SECTION B-B

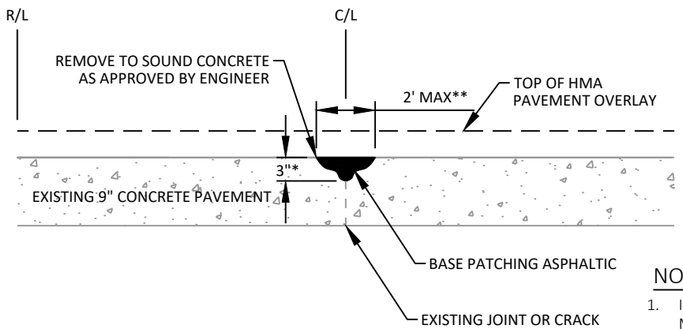
REHABILITATE INLET AND REPLACE INLET ADJUSTMENT RINGS DETAIL

NOTE:

1. ALL SAWING, PAVEMENT REMOVAL, CONCRETE GUTTER REMOVAL, EXCAVATION, BACKFILL, BASE AGGREGATE DENSE 1 1/4-INCH, ASPHALTIC SURFACE, TUCK POINTING, AND ANY OTHER WORK NECESSARY FOR REHABILITATE INLET OR REPLACE RINGS SHALL BE INCIDENTAL TO THE BID ITEM. REMOVAL AND REPLACEMENT OF CONCRETE BARRIER WILL BE PAID FOR AS A SEPARATE ITEM.
2. DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATION AND SPECIAL PROVISIONS.
3. PRESERVE EXISTING HORIZONTAL REINFORCING STEEL WHERE POSSIBLE. ALTERNATELY, DRILL AND EPOXY IN SAME SIZE EPOXY COATED HORIZONTAL REINFORCING STEEL WITH MINIMUM 2'-7" OVERLAP. PROVIDE NEW VERTICAL REINFORCING STEEL TO MATCH EXISTING. DRILL AND EPOXY INTO FOUNDATION PER MANUFACTURER'S REQUIREMENTS.



RIPRAP MEDIUM TREATMENT AT CULVERTS



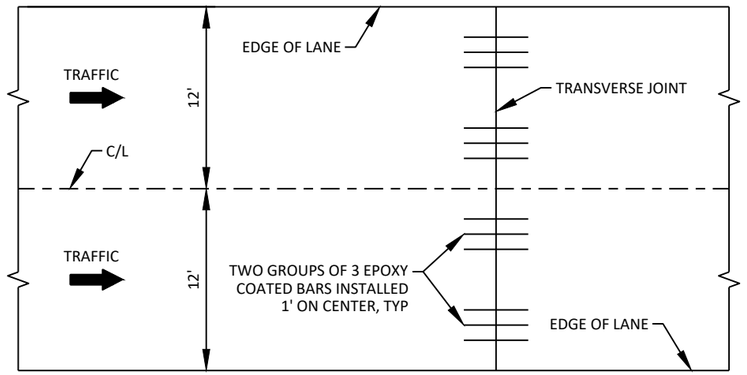
NOTES

1. IN ALL AREAS OF JOINT REPAIR REMOVE ASPHALTIC MATERIAL AND/OR LOOSE, DETERIORATED CONCRETE. CLEAN AND REPLACE WITH BASE PATCHING ASPHALTIC
2. LOCATIONS FOR JOINT REPAIR TO BE APPROVED BY THE ENGINEER PRIOR TO COMMENCEMENT OF REPAIR WORK.

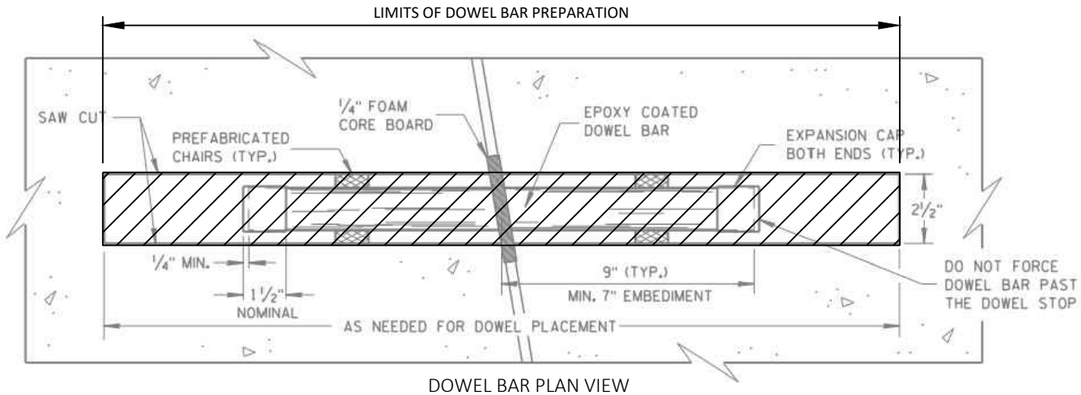
* ESTIMATED AVERAGE DEPTH FOR COMPUTATIONAL PURPOSES
**2.0' MAX OR AS DIRECTED BY THE ENGINEER.

CENTERLINE JOINT AND CRACK REPAIR

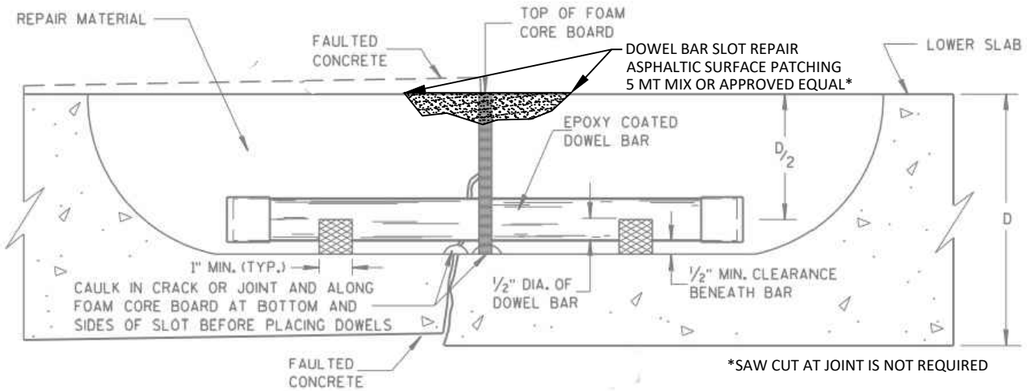
ITEM: BASE PATCHING ASPHALTIC



EXISTING DOWEL BAR SPACING



DOWEL BAR PLAN VIEW



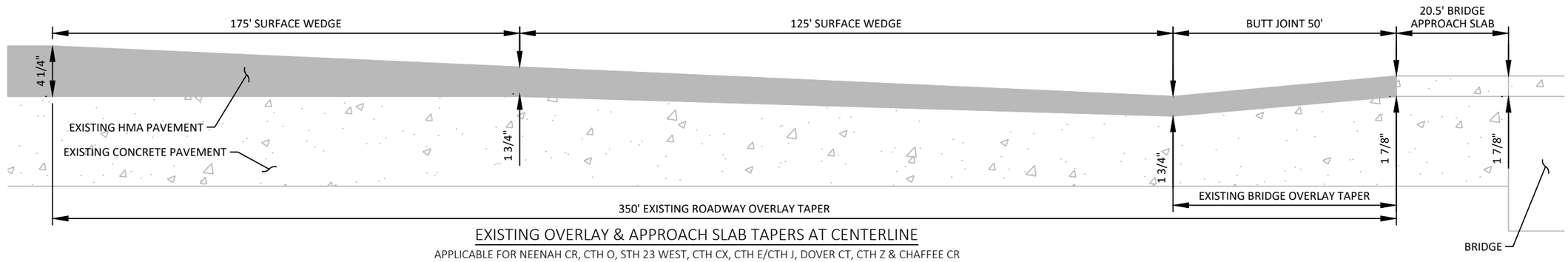
*SAW CUT AT JOINT IS NOT REQUIRED

DOWEL BAR SIDE VIEW

DOWEL BAR SLOT REPAIR

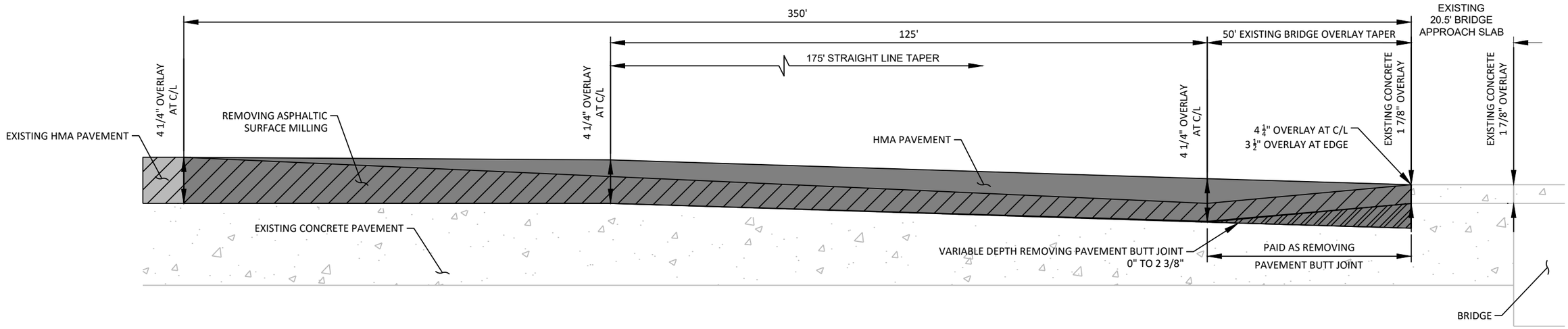
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN: CONSTRUCTION DETAILS	SHEET 14	E

2



EXISTING OVERLAY & APPROACH SLAB TAPERS AT CENTERLINE

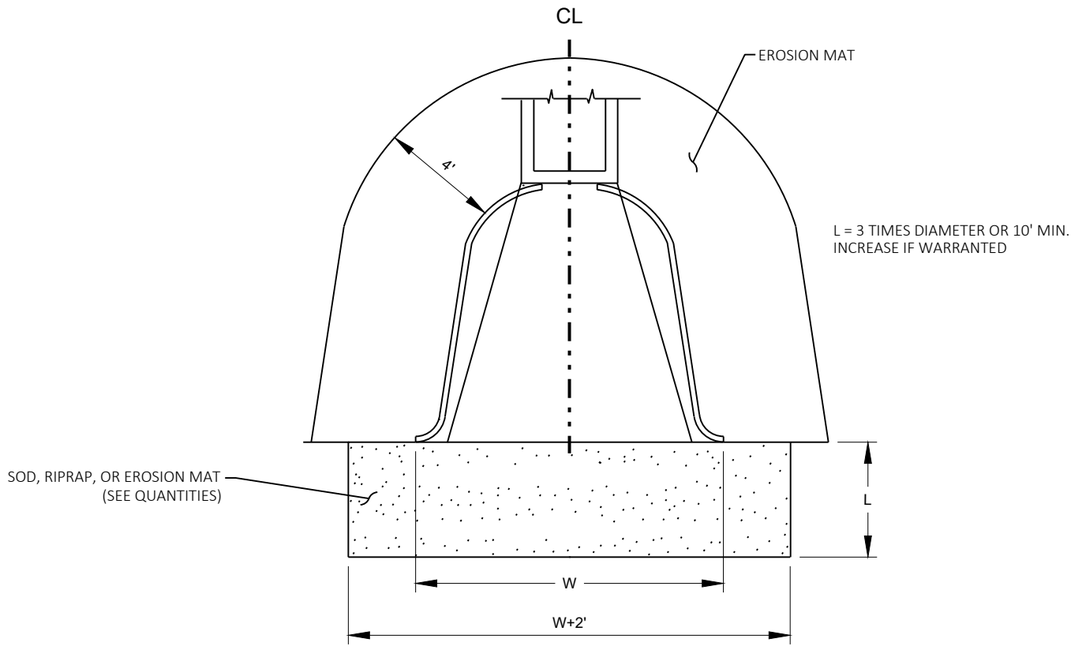
APPLICABLE FOR NEENAH CR, CTH O, STH 23 WEST, CTH CX, CTH E/CTH J, DOVER CT, CTH Z & CHAFFEE CR



PROPOSED OVERLAY & APPROACH SLAB TAPERS AT CENTERLINE

APPLICABLE FOR NEENAH CR, CTH O, STH 23 WEST, CTH CX, CTH E/CTH J, DOVER CT, CTH Z & CHAFFEE CR

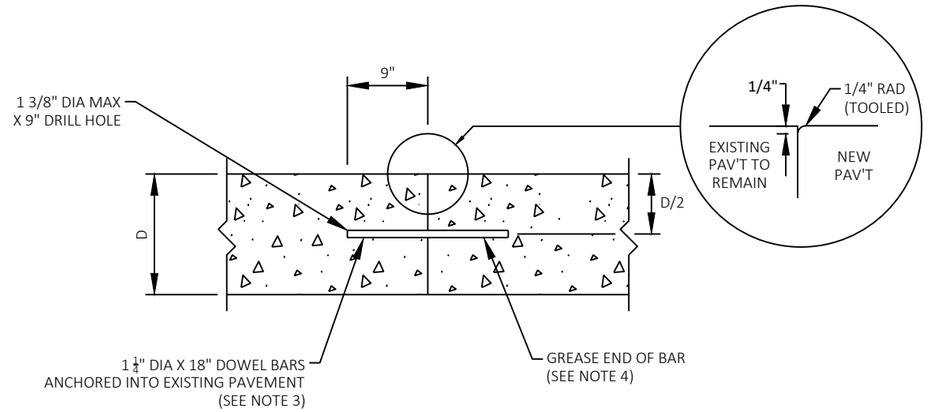
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN: CONSTRUCTION DETAILS	SHEET 15	E



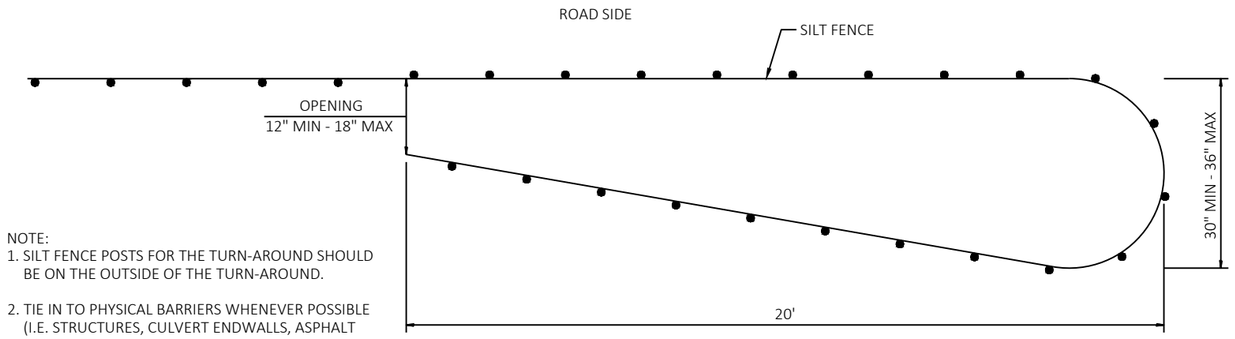
EROSION CONTROL AT PIPE ENDS

GENERAL NOTES

1. THE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS. DOWEL BARS SHALL BE COATED IN CONFORMANCE WITH SUBSECTION 505.2.6 OF THE STANDARD SPECIFICATIONS
2. DOWEL BARS SHALL BE INSTALLED PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE
3. DOWEL BARS SHALL BE ANCHORED INTO DRILL HOLES WITH AN APPROVED EPOXY GROUT
4. THE FREE END OF DOWEL BARS SHALL RECEIVE A THIN UNIFORM COATING OF BOND GREASE
5. JOINTS SHALL NOT BE SEALED OR FILLED
6. DOWEL BARS SHALL BE SPACED 1'-3" ON CENTER



DOWEL BAR
TRANSVERSE JOINTS ABUTTING EXISTING PAVEMENT

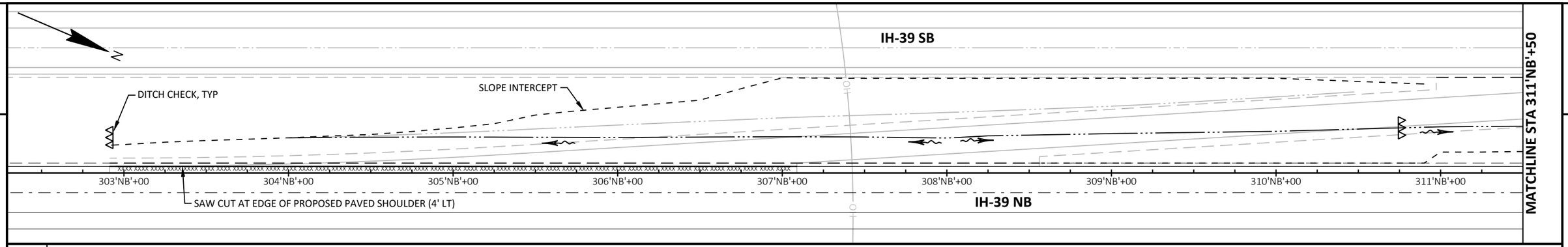


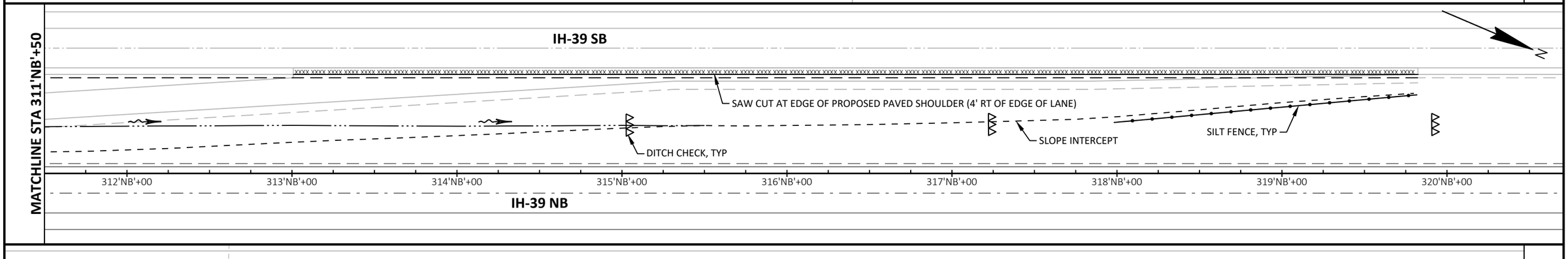
NOTE:
1. SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND.

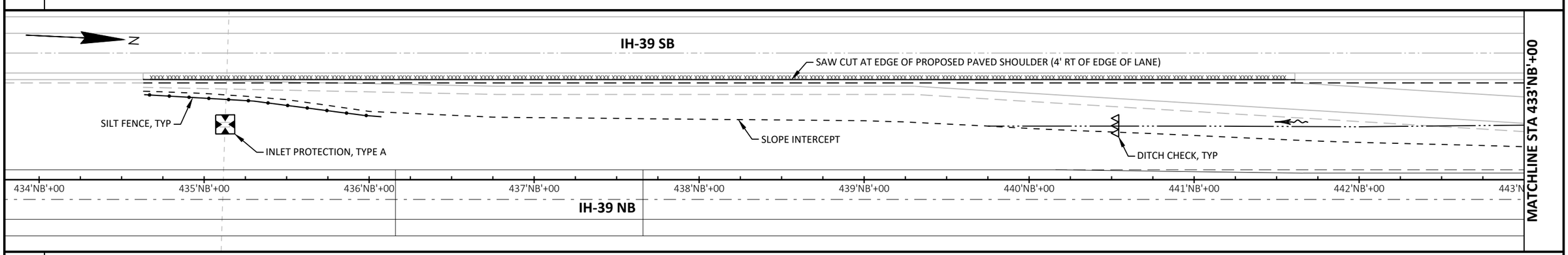
2. TIE IN TO PHYSICAL BARRIERS WHENEVER POSSIBLE (I.E. STRUCTURES, CULVERT ENDWALLS, ASPHALT DRIVES, ETC.)

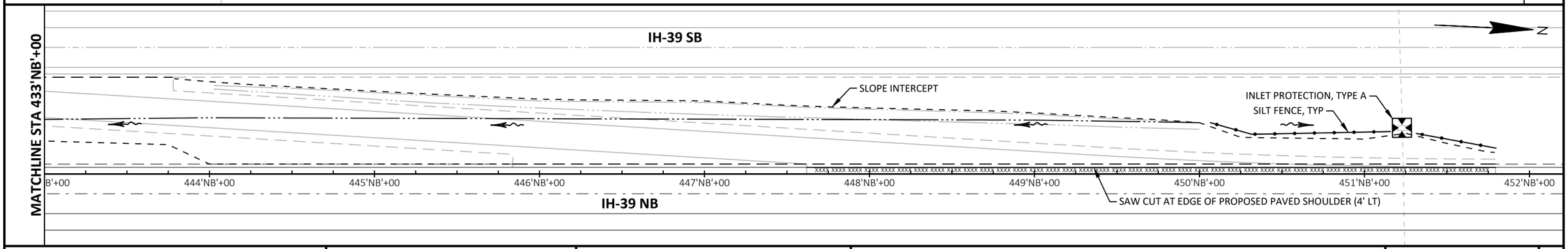
PLAN VIEW

SILT FENCE TURN-AROUND DETAIL



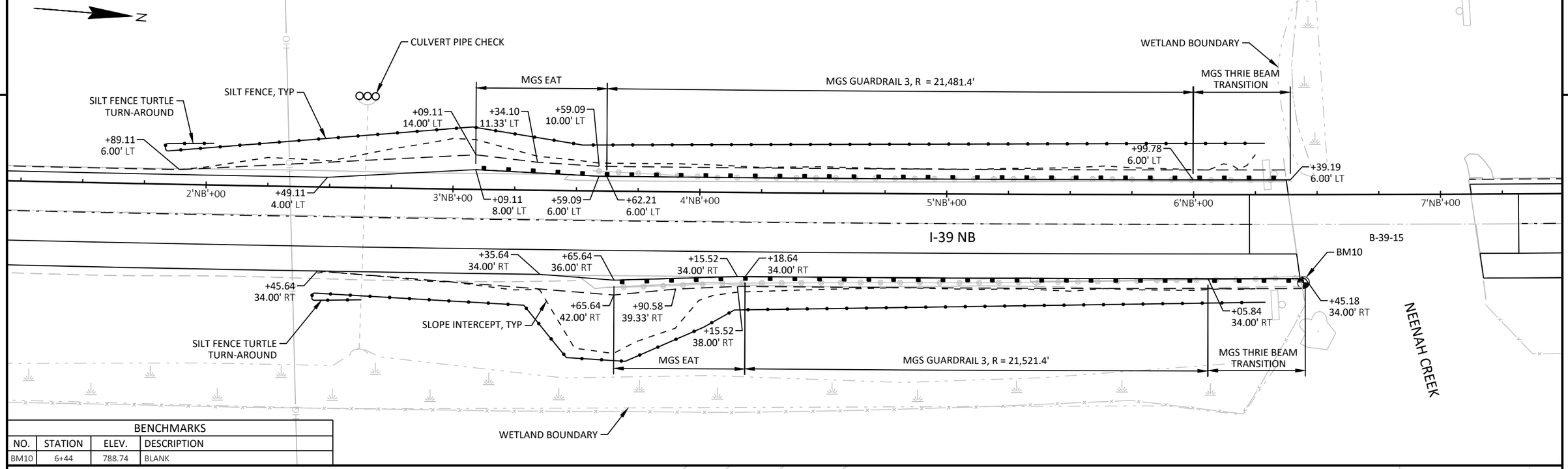




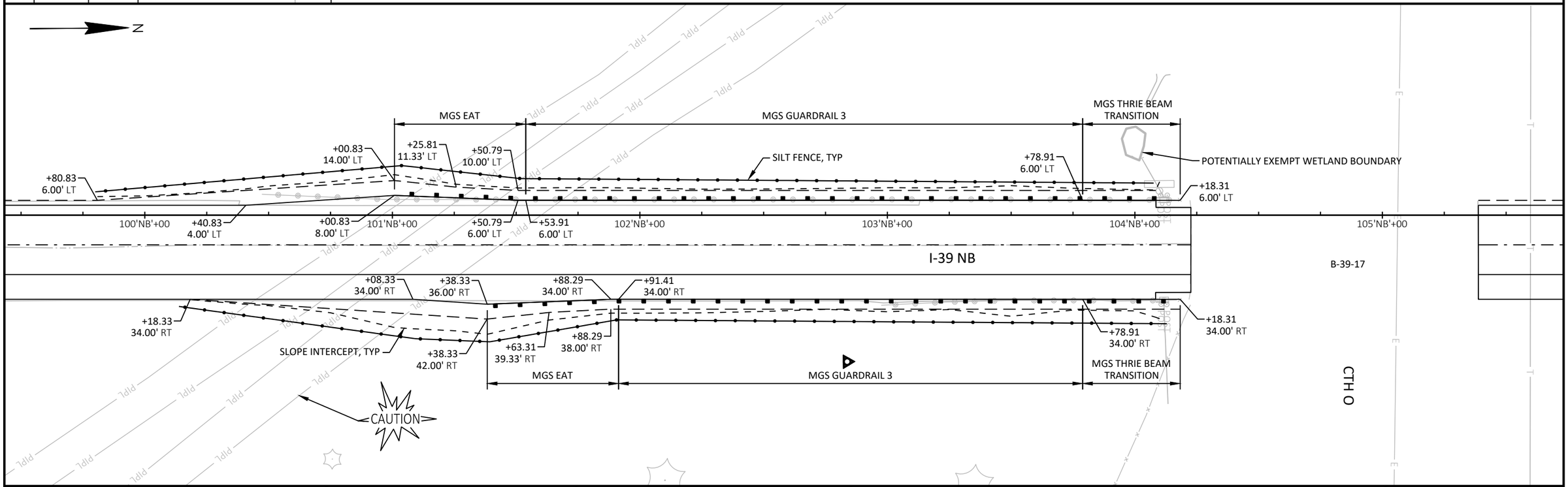


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSSOVER REMOVAL AND EROSION CONTROL	SHEET 17	E

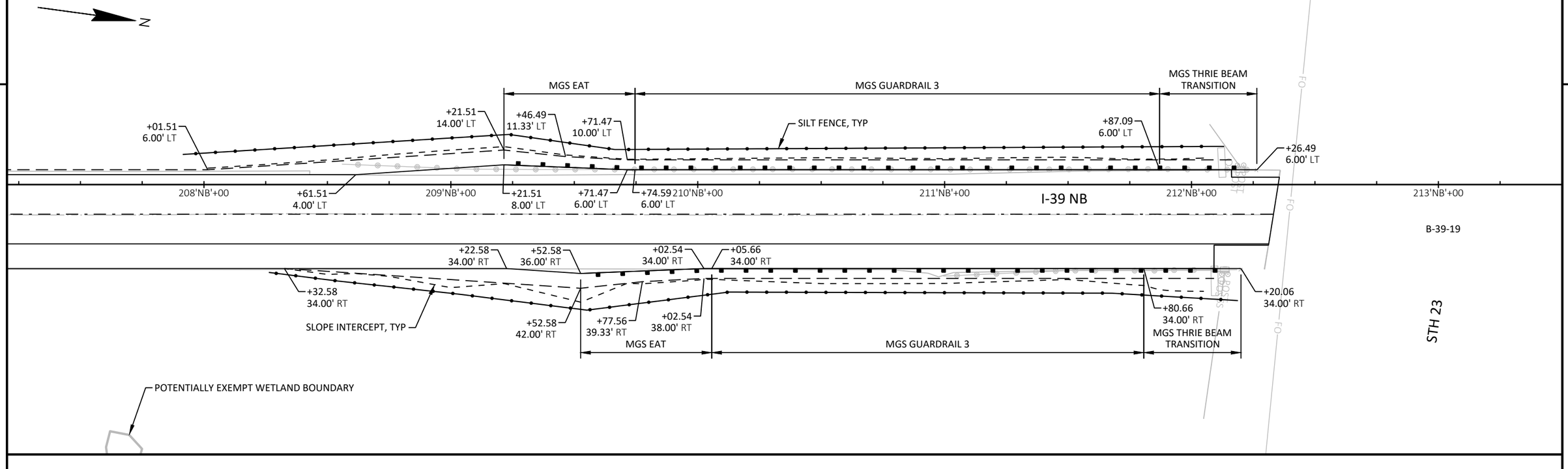
FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-021004-CD.DWG
LAYOUT NAME - 11660482-021004-cd
PLOT DATE : 4/22/2021 1:20 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:60 FT
WISDOT/CADDS SHEET 44



BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM10	6+44	788.74	BLANK

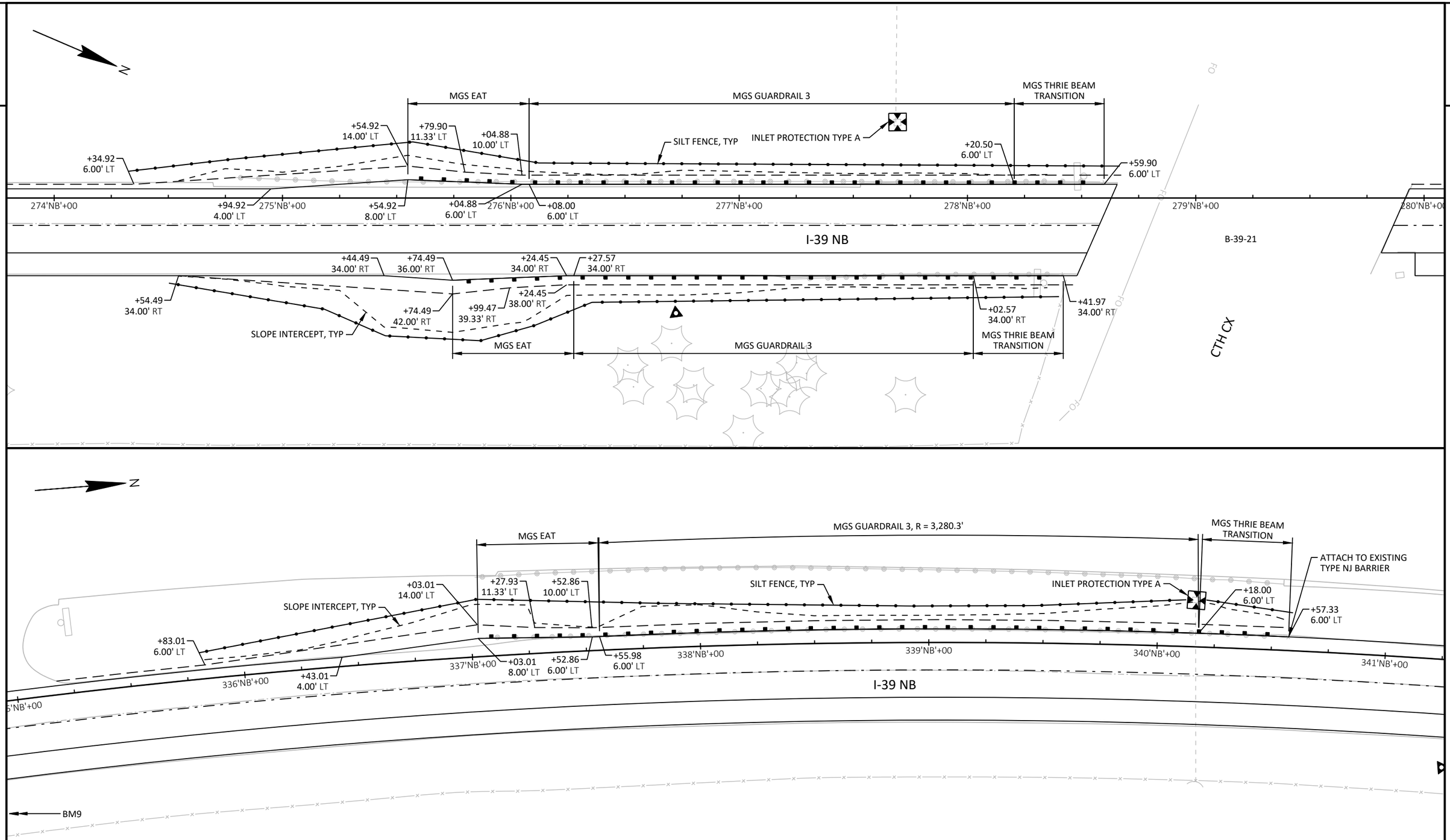


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS AND EROSION CONTROL	SHEET 18	E



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS AND EROSION CONTROL	SHEET 19	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-021201-PD.DWG
LAYOUT NAME - 11660482-021202-pd
PLOT DATE : 4/22/2021 1:25 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 44



BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
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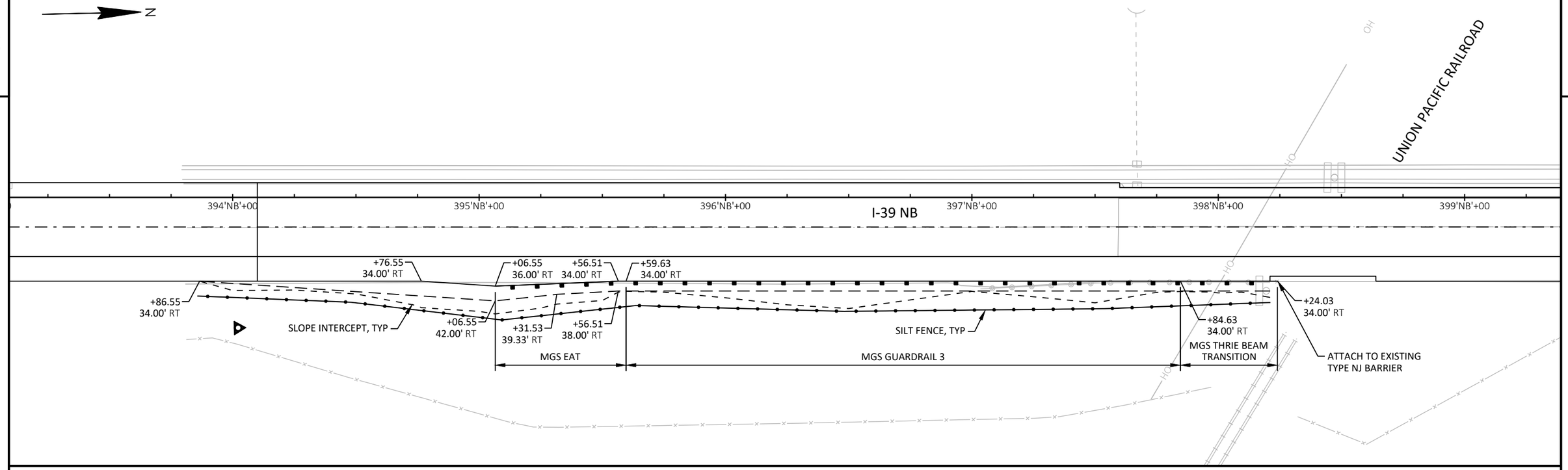
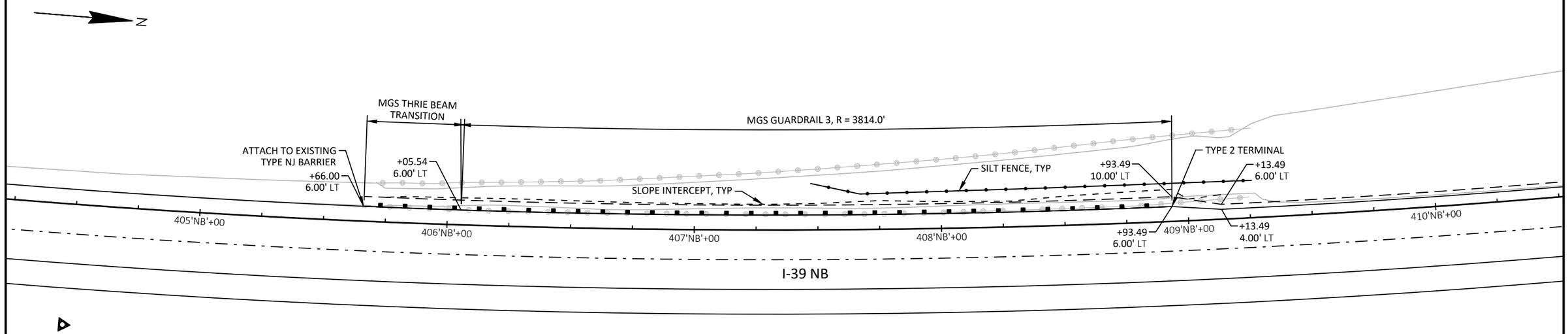
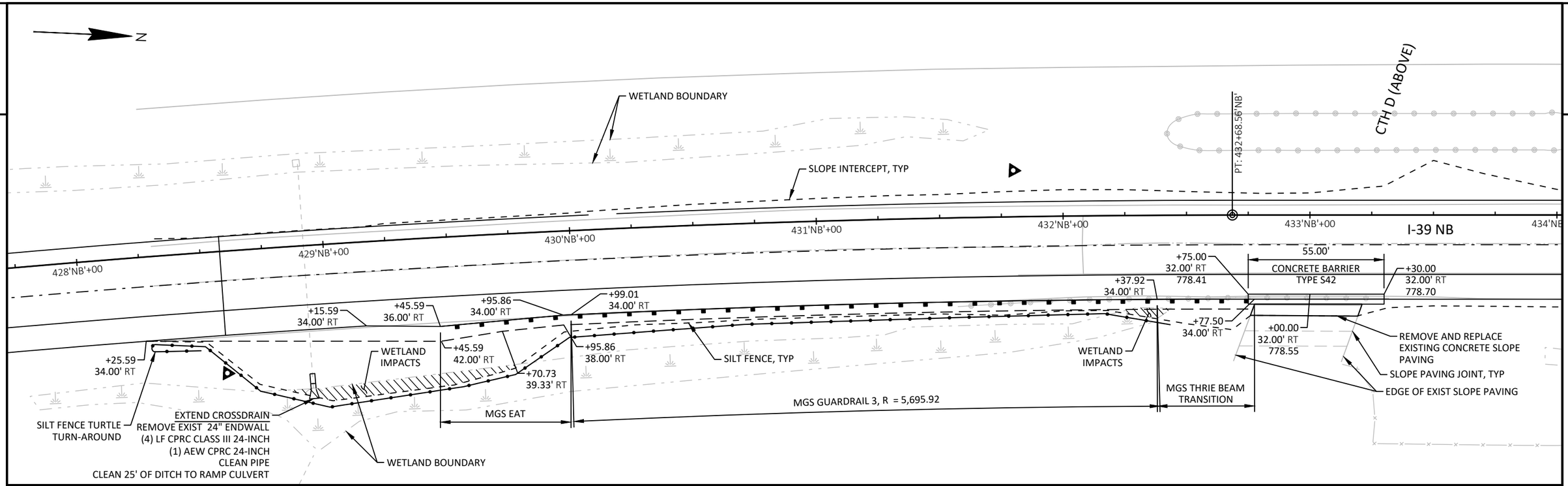
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS AND EROSION CONTROL	SHEET 20 E





PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS AND EROSION CONTROL	SHEET 21	E

2



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS AND EROSION CONTROL	SHEET 22	E

2

N

MGS EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
SILT FENCE, TYP
+53.23 6.00' LT
+73.23 14.00' LT
+98.21 11.33' LT
+23.19 10.00' LT
+13.81 6.00' LT
+53.21 6.00' LT
637'NB'+00
638'NB'+00
639'NB'+00
640'NB'+00
641'NB'+00
642'NB'+00
+13.23 4.00' LT
+73.23 8.00' LT
+23.19 6.00' LT
+26.31 6.00' LT
I-39 NB
B-39-27
+80.73 34.00' RT
+10.73 36.00' RT
+60.69 34.00' RT
+63.81 34.00' RT
+13.81 34.00' RT
+90.73 34.00' RT
+53.21 34.00' RT
SLOPE INTERCEPT, TYP
+10.73 42.00' RT
+35.71 39.33' RT
+60.69 38.00' RT
MGS EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
FAWN CT

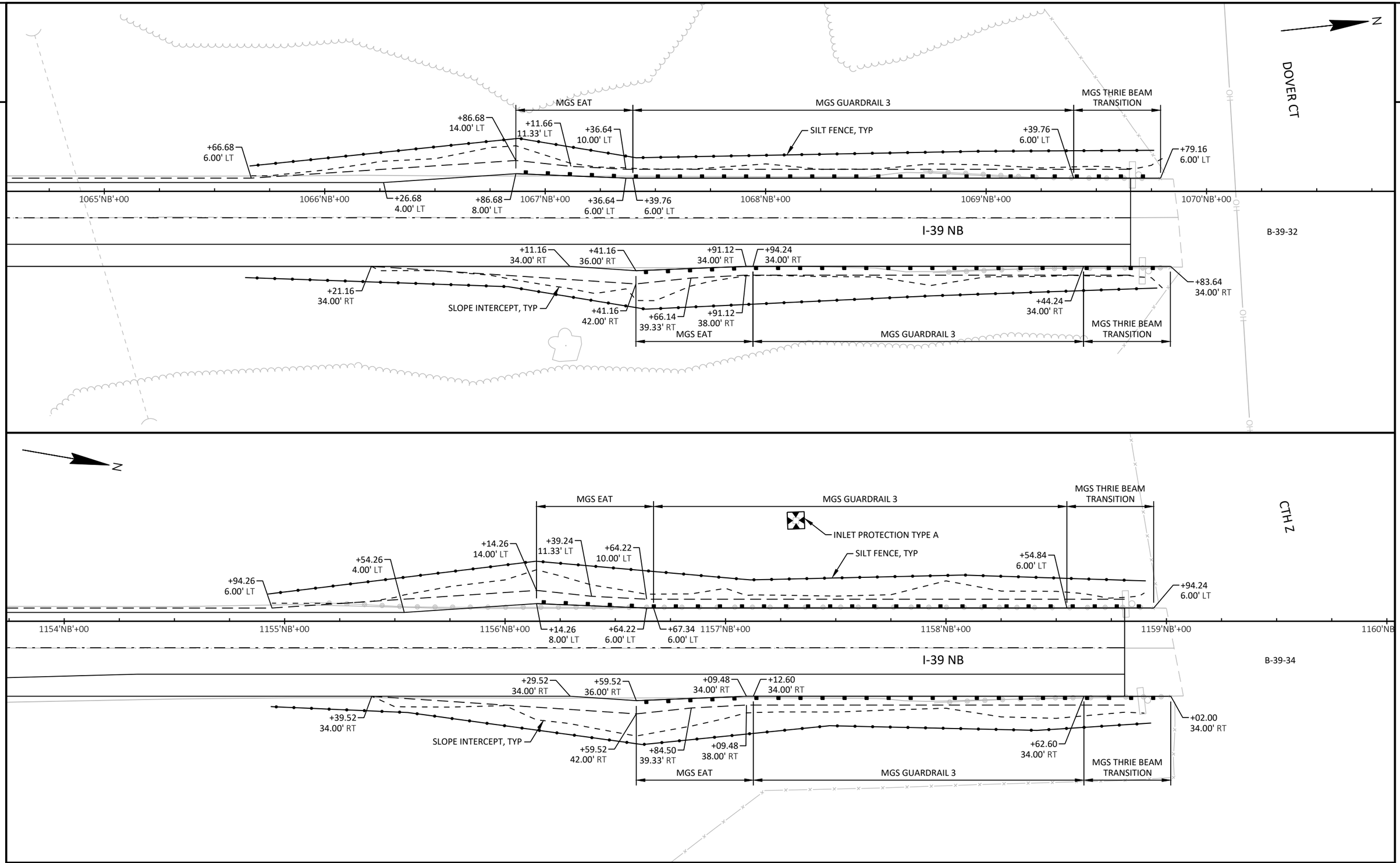
N

MGS EAT
MGS GUARDRAIL 3, R = 22,925.7'
MGS THRIE BEAM TRANSITION
INLET PROTECTION TYPE A
SILT FENCE, TYP
+27.24 14.00' LT
+52.21 11.00' LT
+77.19 10.00' LT
+80.31 6.00' LT
+67.76 6.00' LT
+07.24 6.00' LT
+07.15 6.00' LT
888'NB'+00
889'NB'+00
890'NB'+00
891'NB'+00
892'NB'+00
893'NB'+00
+67.24 4.00' LT
+27.24 8.00' LT
+77.19 6.00' LT
I-39 NB
B-39-30
+18.77 34.00' RT
+48.77 36.00' RT
+98.80 34.00' RT
+01.93 34.00' RT
+28.77 34.00' RT
+04.13 34.00' RT
SILT FENCE TURTLE TURN-AROUND
SLOPE INTERCEPT, TYP
+73.78 39.33' RT
+48.77 42.00' RT
+98.80 38.00' RT
+64.67 34.00' RT
MGS EAT
MGS GUARDRAIL 3, R = 22,885.7'
MGS THRIE BEAM TRANSITION
CTH E / CTH J
WETLAND BOUNDARY
NON-NATIVE LUPINE AREA (AVOID IMPACTS)

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS AND EROSION CONTROL	SHEET 23	E

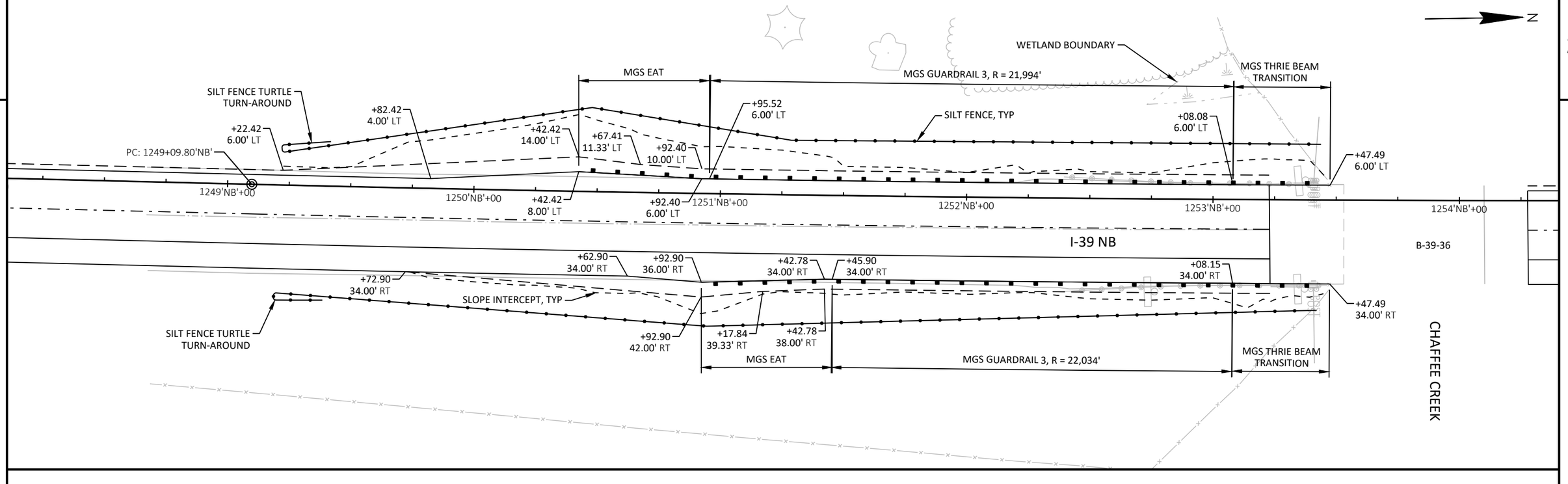
FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-021201-PD.DWG
LAYOUT NAME - 11660482-021206-pd
PLOT DATE : 4/22/2021 1:26 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

2



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS AND EROSION CONTROL	SHEET 24	E

2



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS AND EROSION CONTROL	SHEET 25	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-021201-PD.DWG
LAYOUT NAME - 11660482-021208-pd
PLOT DATE : 4/22/2021 1:26 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

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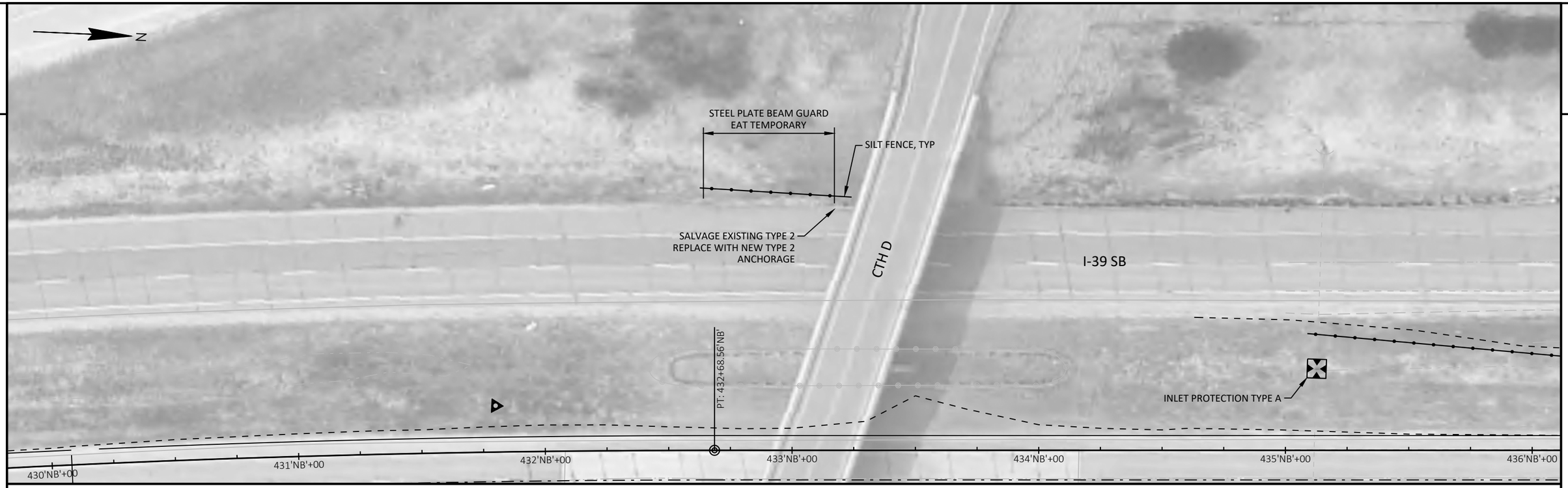
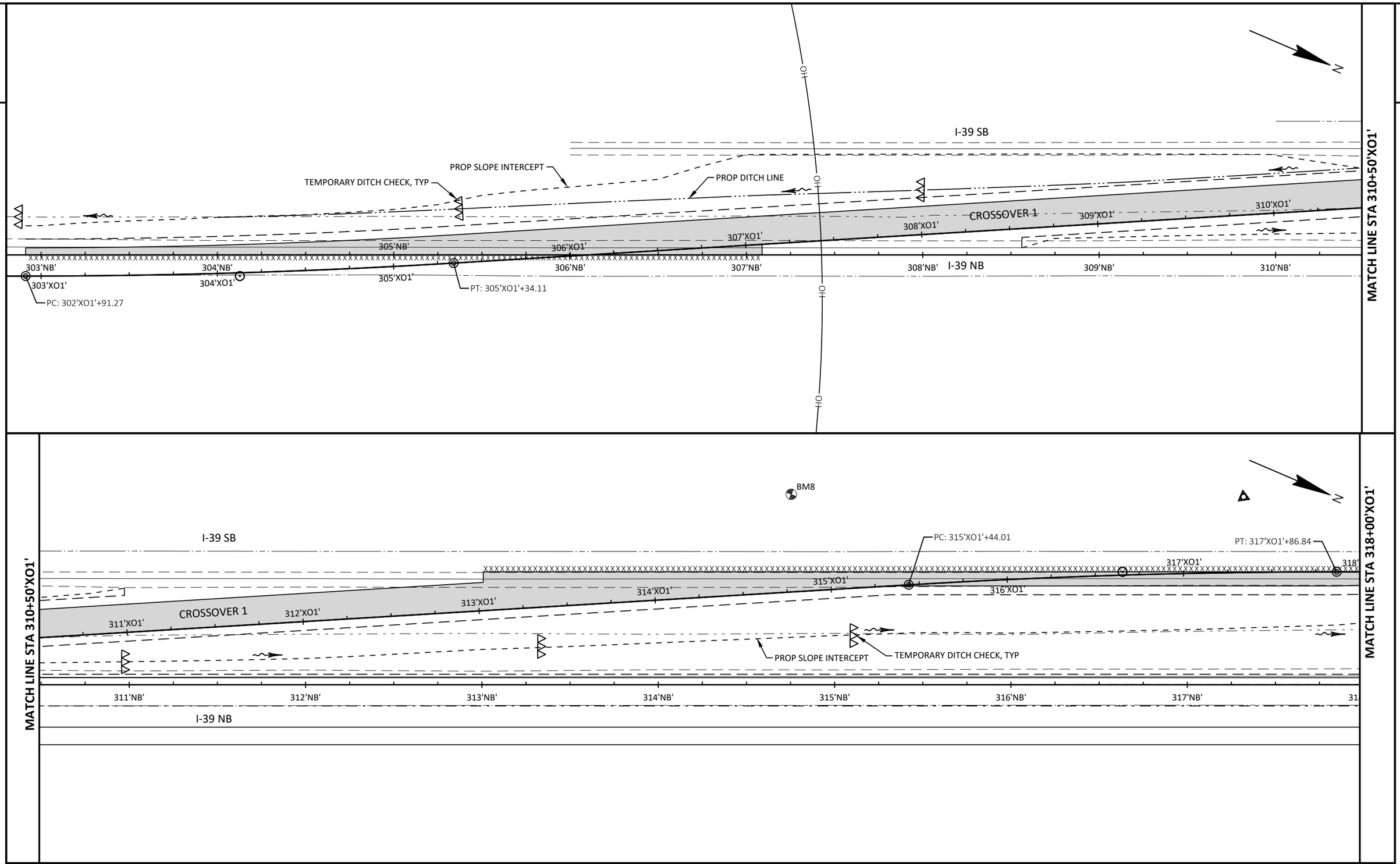


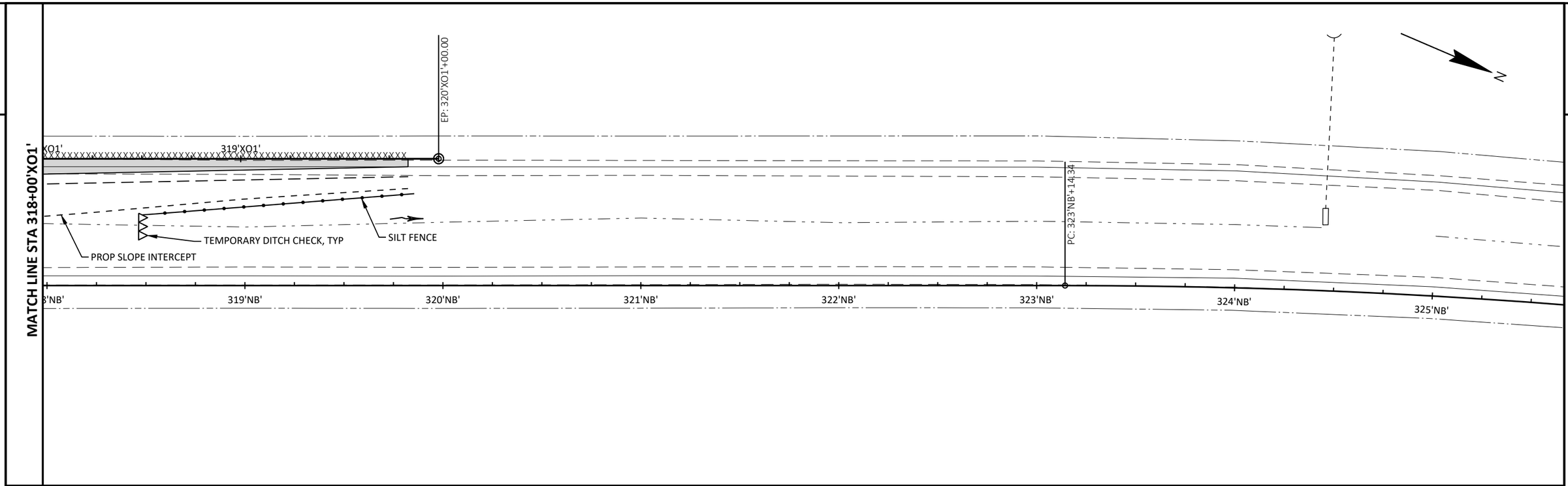
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS AND EROSION CONTROL	SHEET 26	E



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	EROSION CONTROL DETAILS	SHEET 27	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-022001-EC.DWG
LAYOUT NAME - 11660482-022001-ec
PLOT DATE : 2/4/2021 11:27 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

2



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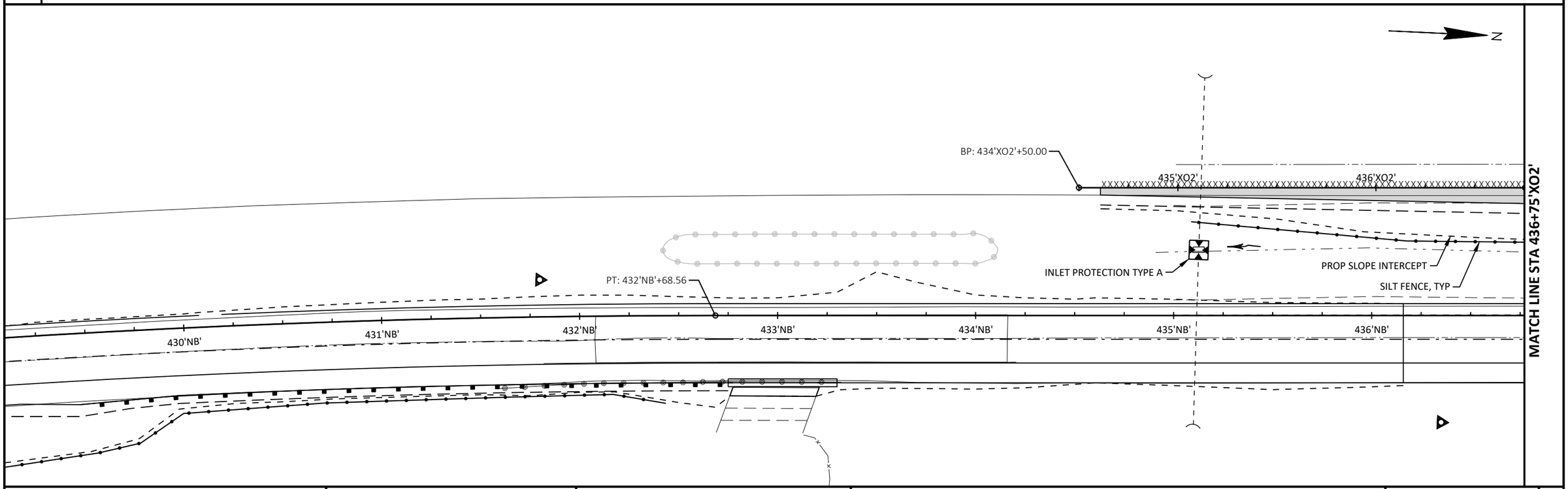

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	EROSION CONTROL DETAILS	SHEET 28	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-022001-EC.DWG
LAYOUT NAME - 11660482-022002-ec

PLOT DATE : 4/21/2021 1:07 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : ##########

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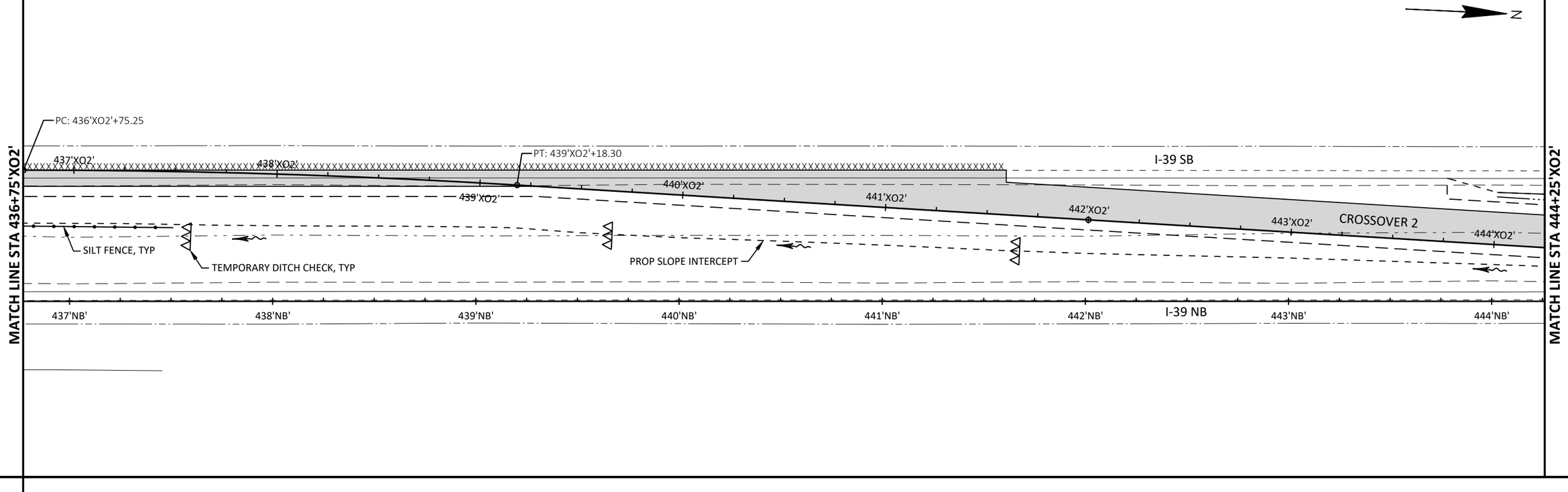
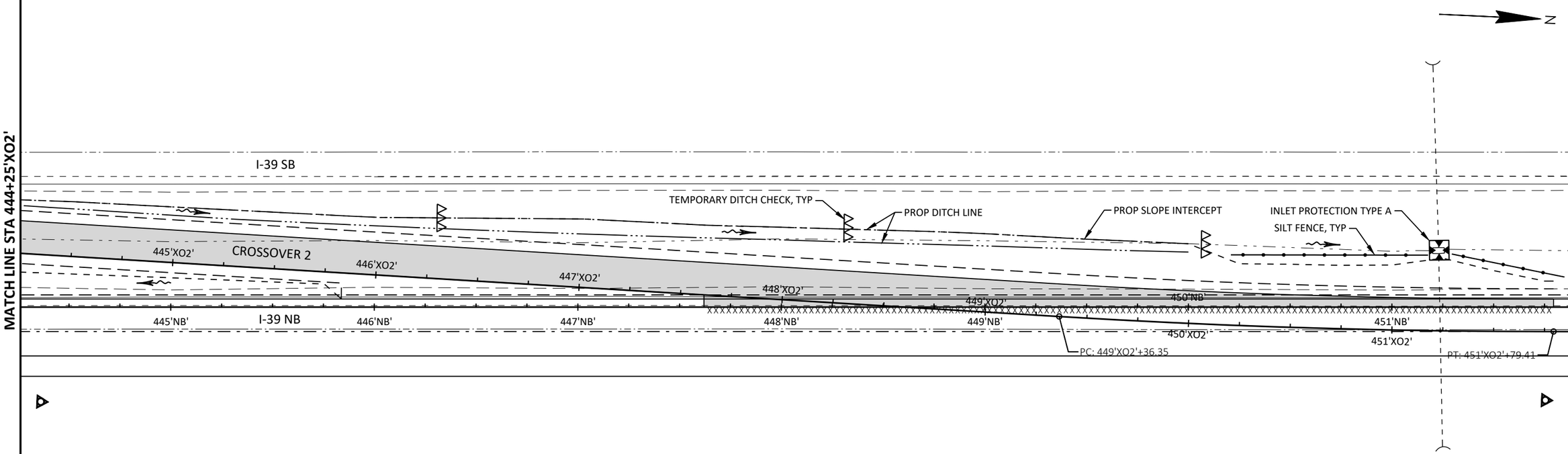




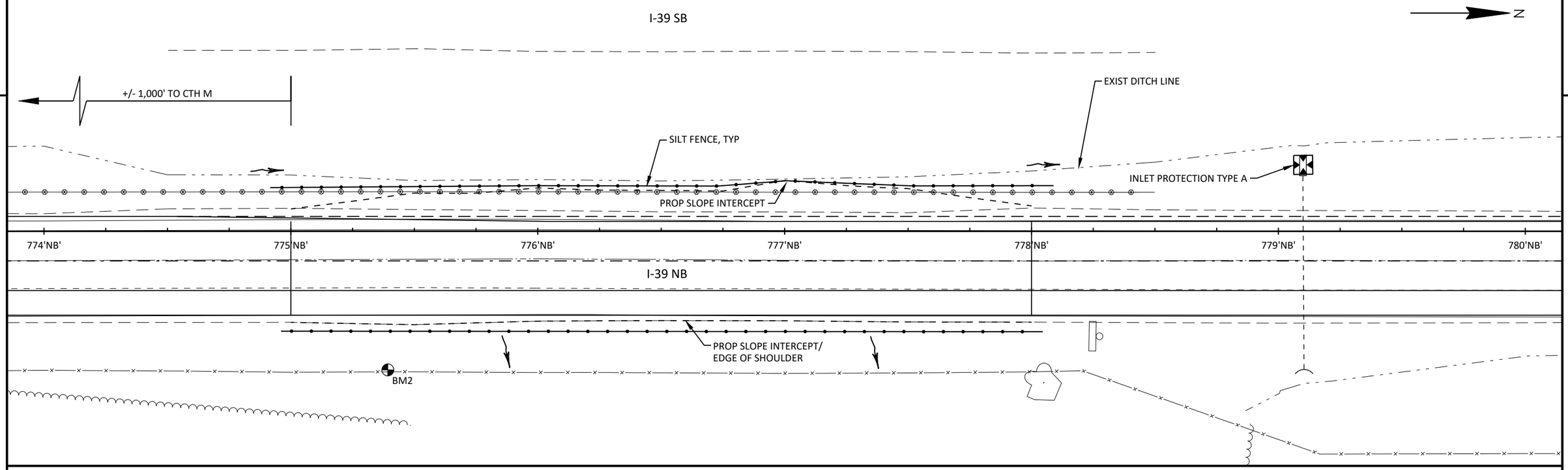
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	EROSION CONTROL DETAILS	SHEET 29	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-022001-EC.DWG
LAYOUT NAME - 11660482-022003-ec

PLOT DATE : 4/21/2021 1:09 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : ##########

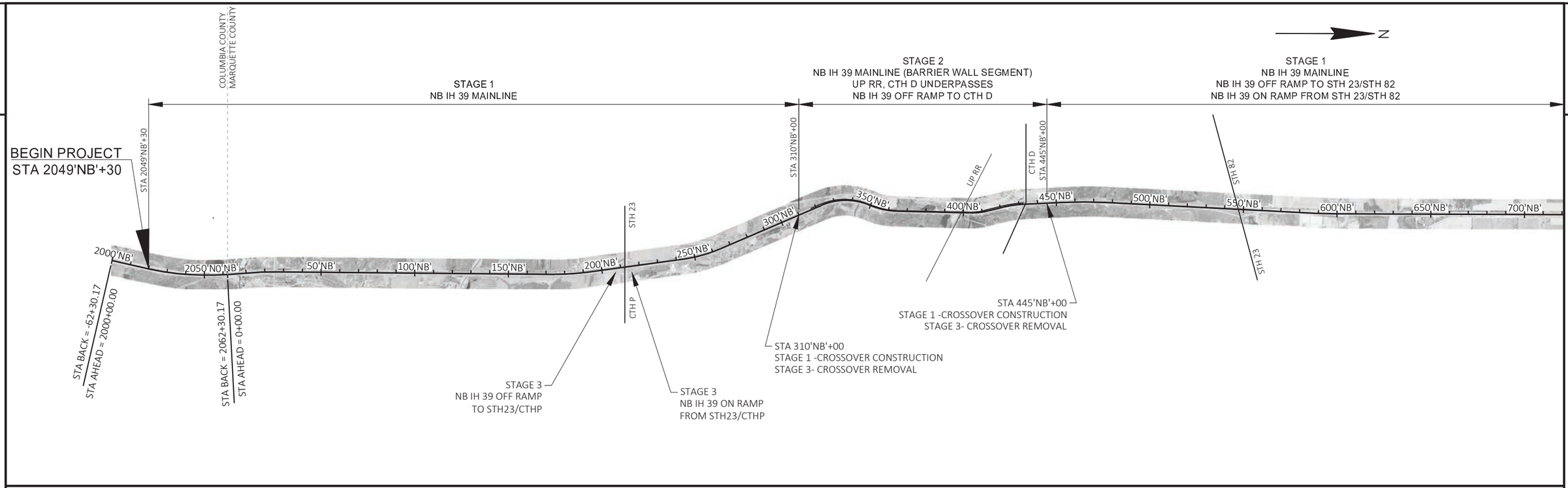
WISDOT/CADDS SHEET 44

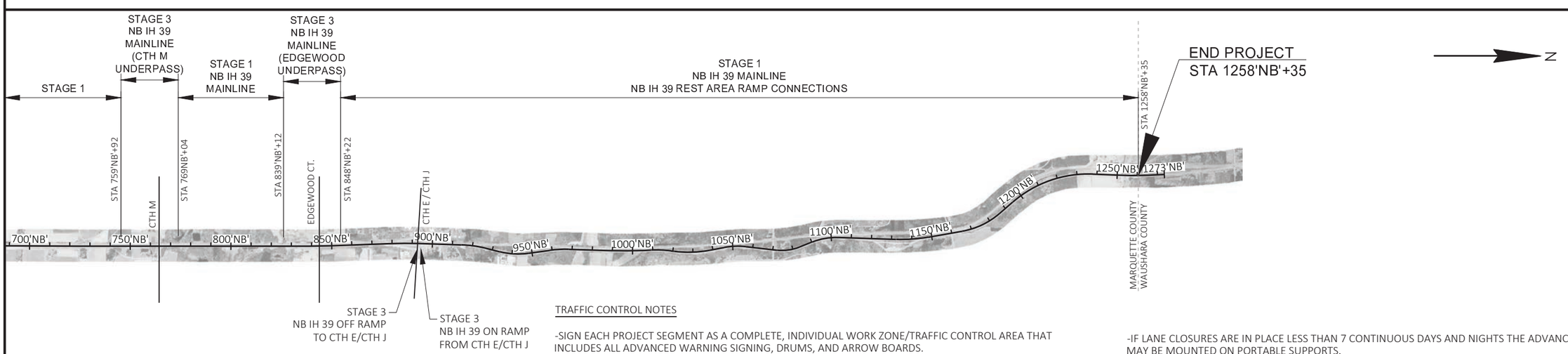
2



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	EROSION CONTROL DETAILS	SHEET 30	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-022001-EC.DWG
LAYOUT NAME - 11660482-022004-ec
PLOT DATE : 4/22/2021 1:28 PM
PLOT BY : ANDY WESTBROOK
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44





TRAFFIC CONTROL NOTES

-SIGN EACH PROJECT SEGMENT AS A COMPLETE, INDIVIDUAL WORK ZONE/TRAFFIC CONTROL AREA THAT INCLUDES ALL ADVANCED WARNING SIGNING, DRUMS, AND ARROW BOARDS.

-DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON METHODS OF SEQUENCE OF OPERATION.

-ADJUST SIGN SPACING TO AVOID CONFLICT WITH AND TO PROVIDE A MINIMUM SPACING OF 200 FEET (500 FEET DESIRABLE) TO EXISTING SIGNS.

- UNLESS NOTED, ALL WARNING SIGNS ARE 48" X 48".

- SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

-ALL DETOUR ASSEMBLIES SHALL HAVE ORANGE DIRECTIONAL ARROWS.

-CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM OF 1500 FEET IN FRONT OF DRUMS.

-IF LANE CLOSURES ARE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

-ANY SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND APPROVED BY THE ENGINEER.

REMOVE OR COVER WITH BLACK REMOVABLE TAPE ALL EXISTING PAVEMENT MARKINGS CONFLICTING WITH THE TRAFFIC CONTROL OR NOT APPROPRIATE TO THE TRAVEL PATH.

-DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" WARNING LIGHTS.

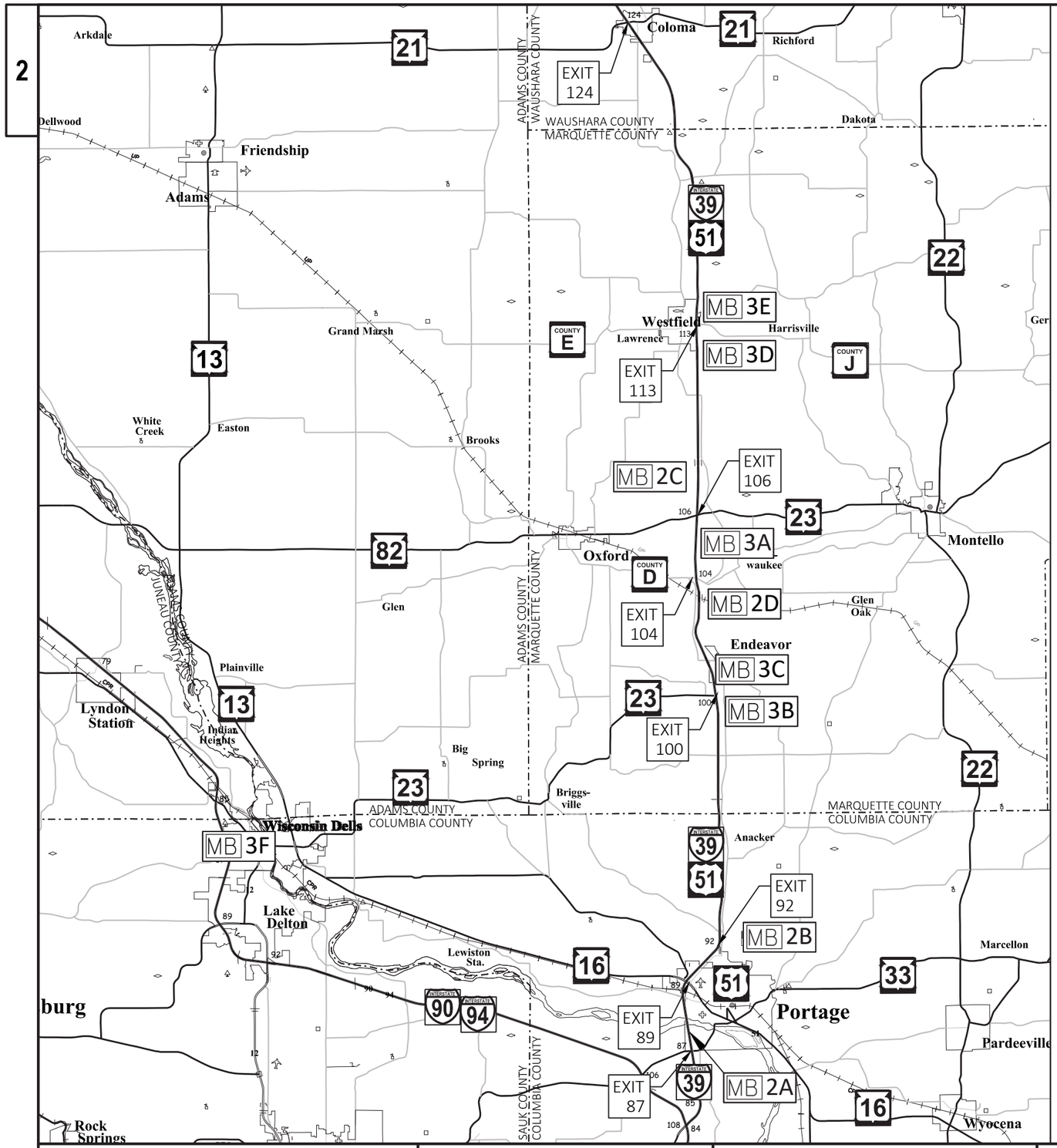
-WARNING LIGHTS SHALL NOT BE WORKING ON "COVERED" OR "DOWNED" SIGNS OR BARRICADES.

-LAYOUT INFORMATION PROVIDED IS NOT INTENDED TO REPLACE WHAT IS PROVIDED IN APPLICABLE STANDARD DETAIL DRAWINGS.

- SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC/STAGING REQUIREMENTS.

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CONSTRUCTION STAGING OVERVIEW	SHEET 31	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-025000-TC-OVERVIEW.DWG
LAYOUT NAME - (433)
PLOT DATE : 1/28/2022 1:28 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44



GENERAL NOTES FOR CHANGEABLE MESSAGE BOARDS

PCMS=PORTABLE CHANGEABLE MESSAGE SIGN

CONSIDER CLEAR ROADWAY GEOMETRICS WHEN LOCATING MESSAGE SIGNS. PLACE THE SIGNS SO THE DRIVER HAS A CLEAR VIEW OF THE MESSAGE FOR A MINIMUM OF 1500 FEET.

MESSAGE SIGNS SHOULD BE PLACED AS FAR AWAY FROM THE LIVE TRAFFIC LANES AS POSSIBLE WITHOUT HAMPERING VISIBILITY. IN ADVANCE OF INTERSTATE CONSTRUCTION PROJECTS, THE SIGNS SHOULD BE PLACED ON THE BACKSLOPE BEYOND THE DITCH. THE LOCATION SELECTED SHOULD BE AT OR SLIGHTLY ABOVE THE ROADWAY.

FOR INTERMITTENT WORK SUCH AS A FREEEWAY LANE CLOSURE, OR WHERE SITE CONDITIONS DO NOT ALLOW OTHERWISE, THE SIGNS MAY BE PLACED ON THE SHOULDER. THE SITE SHOULD BE VISITED TO ASSURE VISIBILITY, SAFETY AND MAINTENANCE CONSIDERATIONS. A TAPER OF FIVE (5) REFLECTORIZED DRUMS OR SHALL BE PLACED AHEAD OF A PCMS THAT IS PLACED ON THE SHOULDER IF IT IS NOT SHIELDED BY A BARRIER.

RAMP GATE INFORMATION:

RAMP GATES LOCATED AT THE FOLLOWING ON-RAMPS:

EXIT 100 (STH 23 / CTH P) NORTHBOUND AND SOUTHBOUND
EXIT 104 (CTH D) SOUTHBOUND
EXIT 106 (STH 23/82) NORTHBOUND AND SOUTHBOUND
EXIT 113 (CTH E/J) NORTHBOUND AND SOUTHBOUND
EXIT 124 (STH 21) NORTHBOUND AND SOUTHBOUND

RAMP GATES ARE NOT LOCATED AT THE FOLLOWING INTERCHANGES:

EXIT 92 (USH 51 SOUTH)

MB XX PCMS SITE LOCATONS

SITE	APPROXIMATE LOCATION
2A	ON NB IH 39 APPROXIMATELY 1 MILE NORTH OF EXIT 87
2B	ON USH 51 AT IH 39 NB ON RAMP TERMINAL
2C	ON SB IH 39 APPROXIMATELY 1 MILE NORTH OF EXIT 106
2D	ON CTH D OFF RAMP
3A	ON NB IH 39 APPROXIMATELY 1 MILES SOUTH OF EXIT 106
3B	ON CTH P/STH 23 OFF RAMP
3C	ON CTH P/STH 23 ON RAMP
3D	ON CTH E/CTH J OFF RAMP
3E	ON CTH E/CTH J ON RAMP
3F	ON EB STH 23 APPROXIMATELY 2 BLOCKS WEST OF STH 13

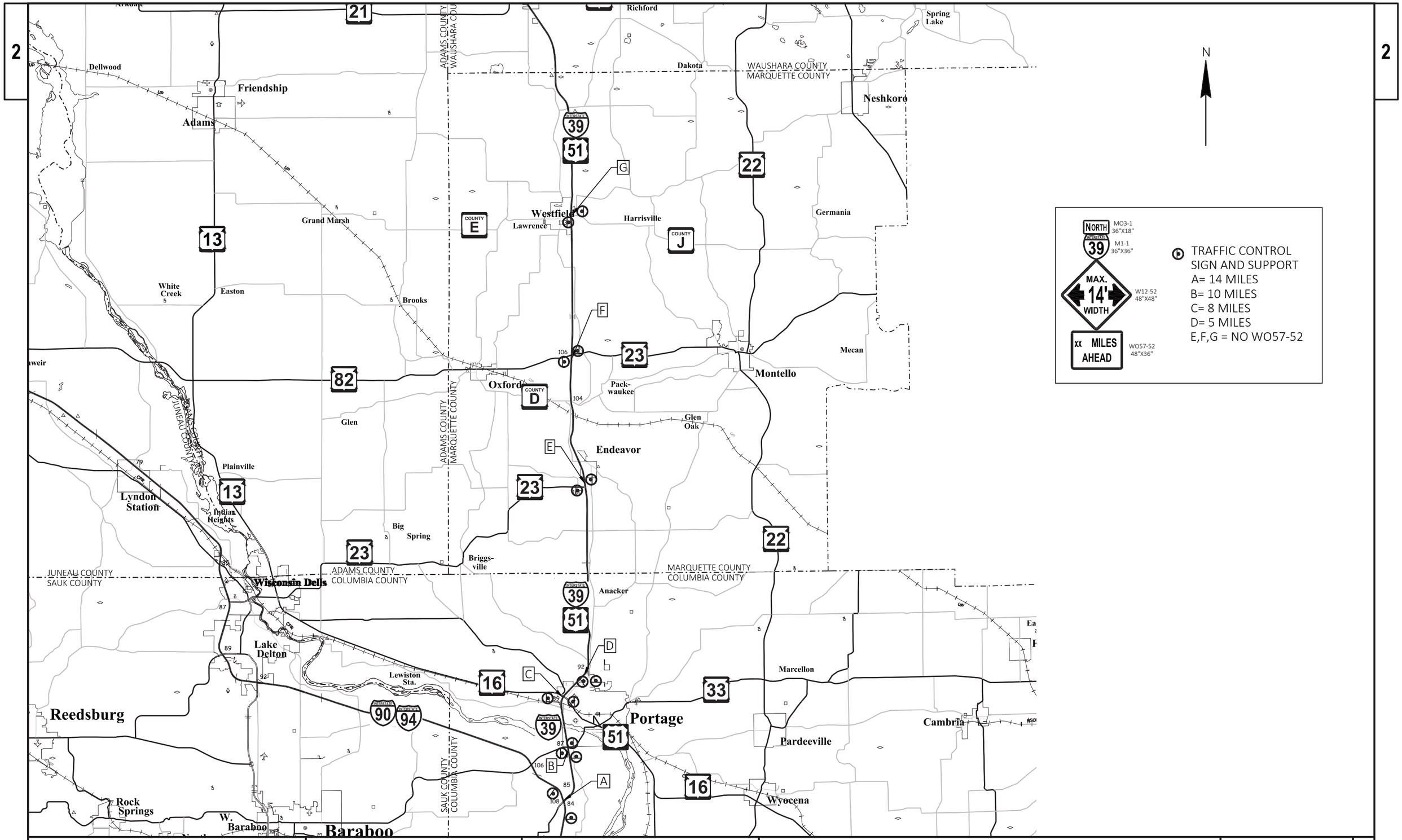
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL: PCMS LOCATIONS	SHEET 32 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-025030-TC-PCMS.DWG
LAYOUT NAME - Plan 1 IN 2000 FT
PLOT DATE : 1/28/2022 1:38 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1:4 mi
WISDOT/CADDS SHEET 42

2

SITE NO.	ROADWAY CONDITION/ CONSTRUCTION	STAGE 1 PHASE 1 (2 SEC)	STAGE 1 PHASE 2 (2 SEC)	7 DAYS PRIOR TO STAGE 2 PHASE 1 (2 SEC)	7 DAYS PRIOR TO STAGE 2 PHASE 2 (2 SEC)	STAGE 2 PHASE 1 (2 SEC)	STAGE 2 PHASE 2 (2 SEC)	7 DAYS PRIOR TO STAGE 3 PHASE 1 (2 SEC)	7 DAYS PRIOR TO STAGE 3 PHASE 2 (2 SEC)	STAGE 3 PHASE 1 (2 SEC)	STAGE 3 PHASE 2 (2 SEC)
SITE 2A (CELLULAR)	GENERAL	NO MESSAGE BOARD USED				I-39 ROAD WORK	13 MILES AHEAD	NO MESSAGE BOARD USED			
SITE 2B (CELLULAR)	GENERAL	NO MESSAGE BOARD USED				I-39 ROAD WORK	3 MILES AHEAD	NO MESSAGE BOARD USED			
SITE 2C (CELLULAR)	GENERAL	NO MESSAGE BOARD USED				LEFT LANE CLOSED	3 MILES AHEAD	NO MESSAGE BOARD USED			
SITE 2D	RAMP CLOSURE ADVANCE NOTICE	NO MESSAGE BOARD USED		RAMP TO CLOSE	MONTH DAY TIME	NO MESSAGE BOARD USED					
SITE 3A (CELLULAR)	GENERAL	NO MESSAGE BOARD USED								XXX LANE CLOSED	4 MILES AHEAD
	EXIT 106 (CTH E/J) OFF RAMP CLOSURE									EXIT 113 CTY E/J CLOSED	USE ALT ROUTE
SITE 3B	RAMP CLOSURE ADVANCE NOTICE	NO MESSAGE BOARD USED				RAMP TO CLOSE	MONTH DAY TIME	NO MESSAGE BOARD USED			
SITE 3C	RAMP CLOSURE ADVANCE NOTICE	NO MESSAGE BOARD USED				RAMP TO CLOSE	MONTH DAY TIME	NO MESSAGE BOARD USED			
SITE 3D	RAMP CLOSURE ADVANCE NOTICE	NO MESSAGE BOARD USED				RAMP TO CLOSE	MONTH DAY TIME	NO MESSAGE BOARD USED			
SITE 3E	RAMP CLOSURE ADVANCE NOTICE	NO MESSAGE BOARD USED				RAMP TO CLOSE	MONTH DAY TIME	NO MESSAGE BOARD USED			
SITE 3F	EB STH 23 DETOUR	NO MESSAGE BOARD USED				NO MESSAGE BOARD USED				RAMP TO NB I-39 CLOSED	19 MILES AHEAD
MISC	AT LANE CLOSURE (MILL AND OVERLAY)	STRADDLE RUMBLE STRIP	STRADDLE RUMBLE STRIP	NO MESSAGE BOARD USED		I-39 ROADWORK BEGINS	XXXDAY MONTH DAY			STRADDLE RUMBLE STRIP	STRADDLE RUMBLE STRIP

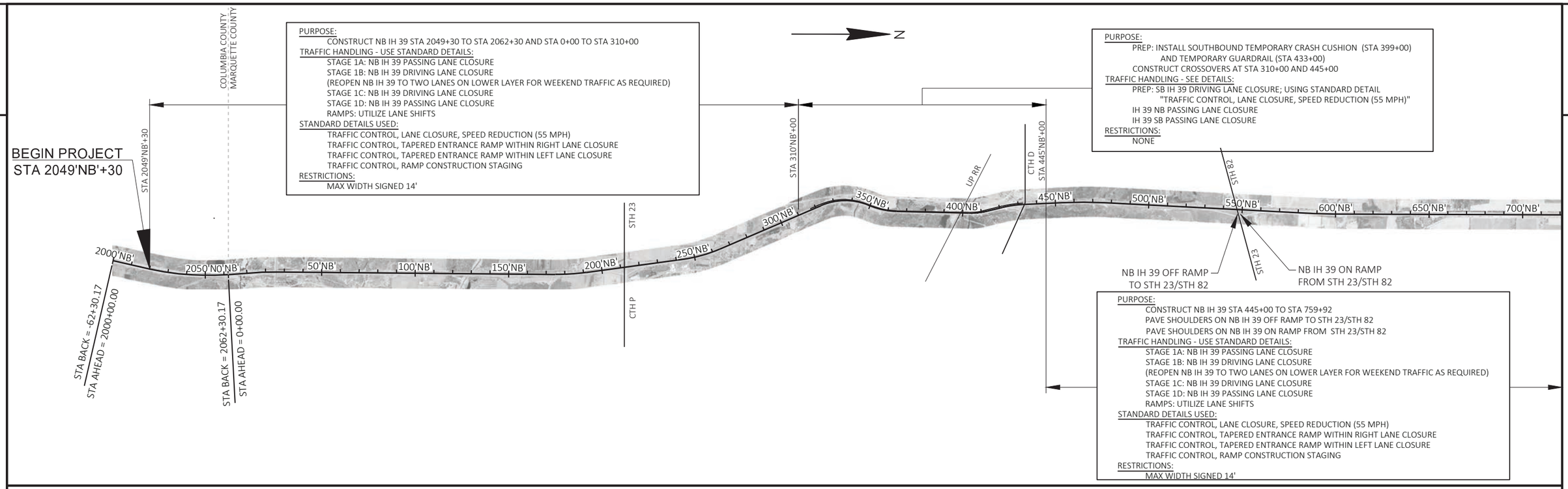
IN THE EVENT OF AN INCIDENT, NOTIFY THE TRAFFIC MANAGEMENT CENTER AT (800) 375-7302 FOR INCIDENT MANAGEMENT MESSAGING

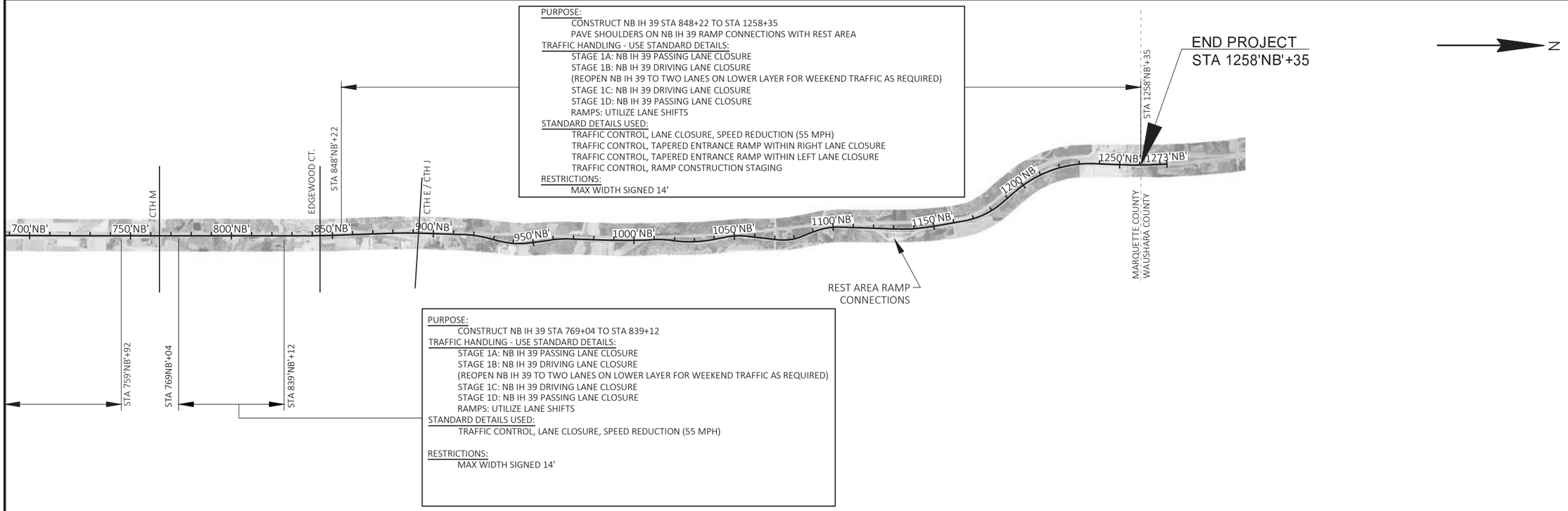


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - OSOW SIGNING	SHEET 34	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-025050-TC-OSOW.DWG
LAYOUT NAME - Plan 1 IN 2000 FT
PLOT DATE : 1/28/2022 7:23 AM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1:4 mi

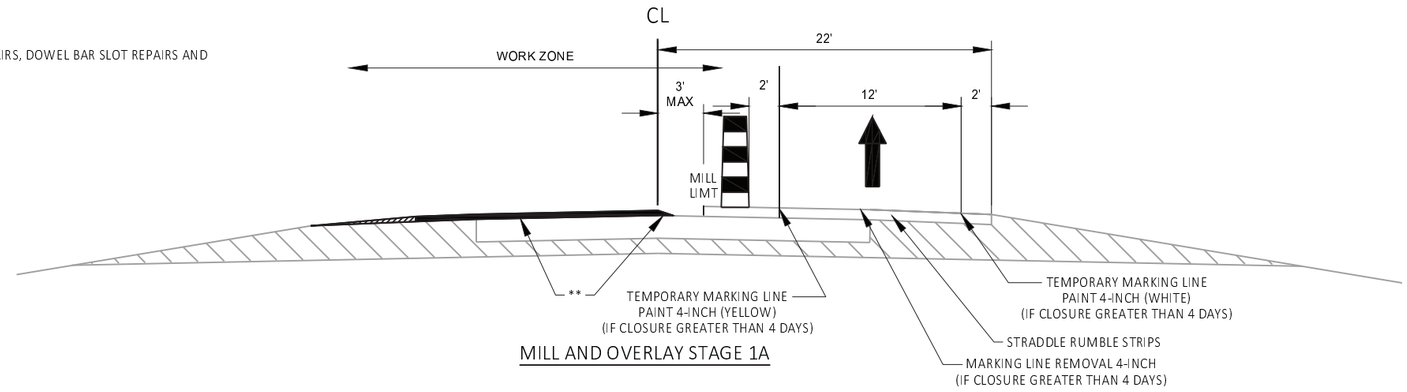
2





PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 1	SHEET 35	E

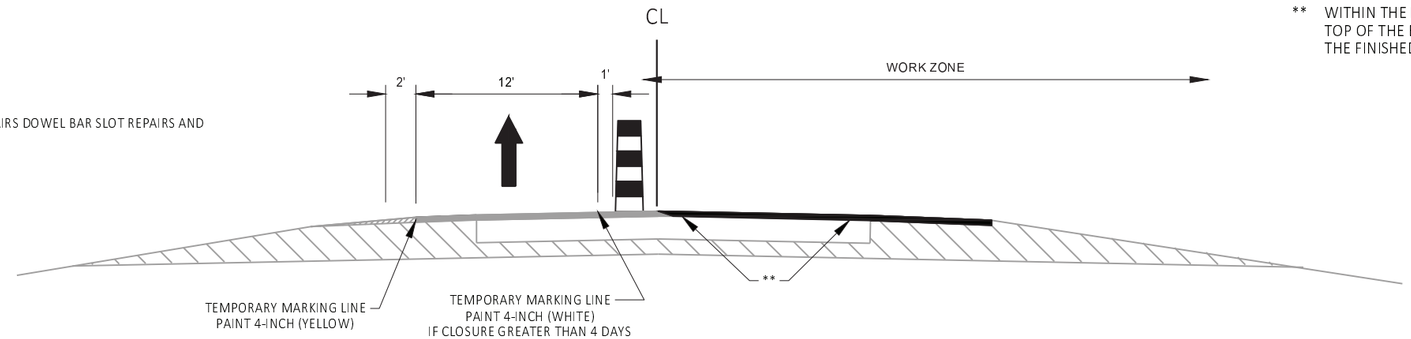
WORK:
MILL EXISTING ASPHALTIC SURFACE, CENTERLINE CONCRETE REPAIRS, DOWEL BAR SLOT REPAIRS AND INSTALL LOWER LIFT OF HMA PAVEMENT
INSIDE LANE AND SHOULDER



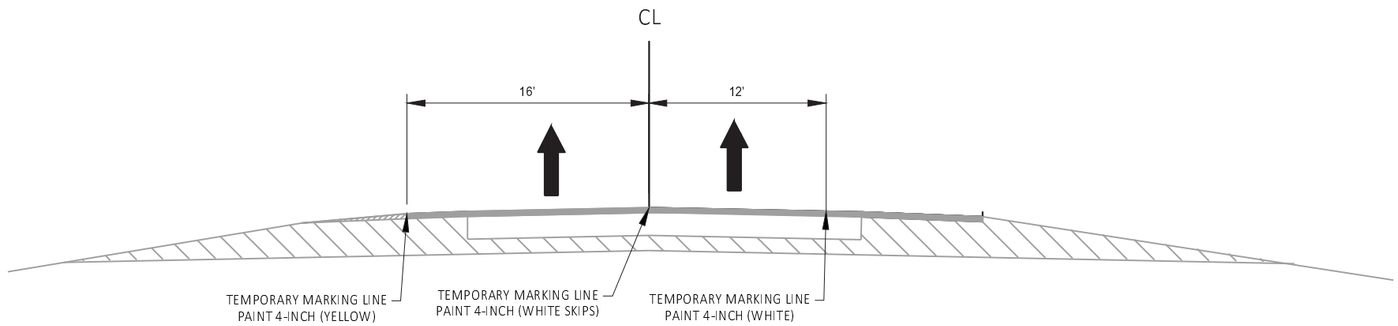
MILL AND OVERLAY STAGE 1A

** WITHIN THE DRIVING LANES, ALL MILLING SHALL EXPOSE THE TOP OF THE EXISTING CONCRETE SURFACE PRIOR TO PAVING THE FINISHED LOWER LAYER.

WORK:
MILL EXISTING ASPHALTIC SURFACE, CENTERLINE CONCRETE REPAIRS DOWEL BAR SLOT REPAIRS AND INSTALL LOWER LIFT OF HMA PAVEMENT
OUTSIDE LANE AND SHOULDER



MILL AND OVERLAY STAGE 1B (LOWER LAYER)



MILL AND OVERLAY (WEEKEND RE-OPEN, AS REQUIRED)

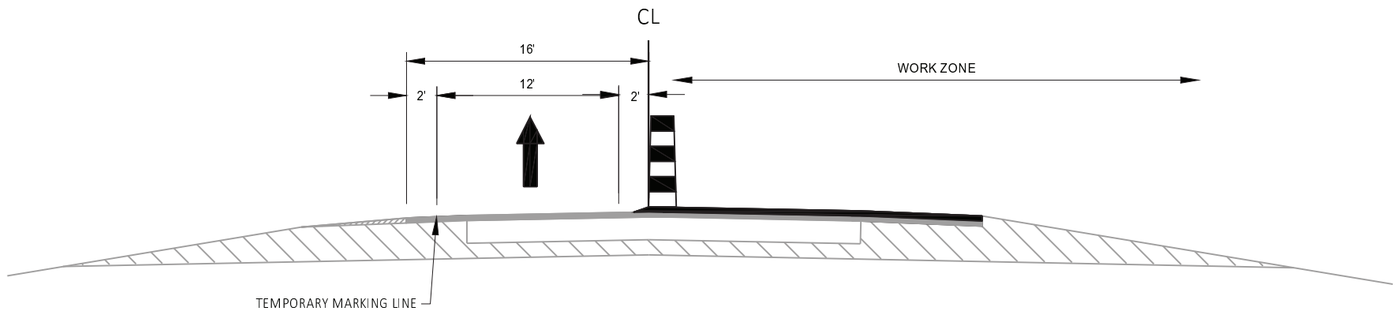
STA 2049+30 - STA 2062+30
STA 0+00 - STA 310+00
STA 445+00 - STA 759+92
STA 769+04 - STA 839+12
STA 848+22- STA 1258+35

PROJECT NO: 1166-04-82	HWY: IH 39 NB	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1 TYPICAL SECTIONS - MILL AND OVERLAY	SHEET 36	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026105-TC-S1-TS-OVERLAY.DWG
LAYOUT NAME - 05
PLOT DATE : 2/4/2022 8:59 AM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

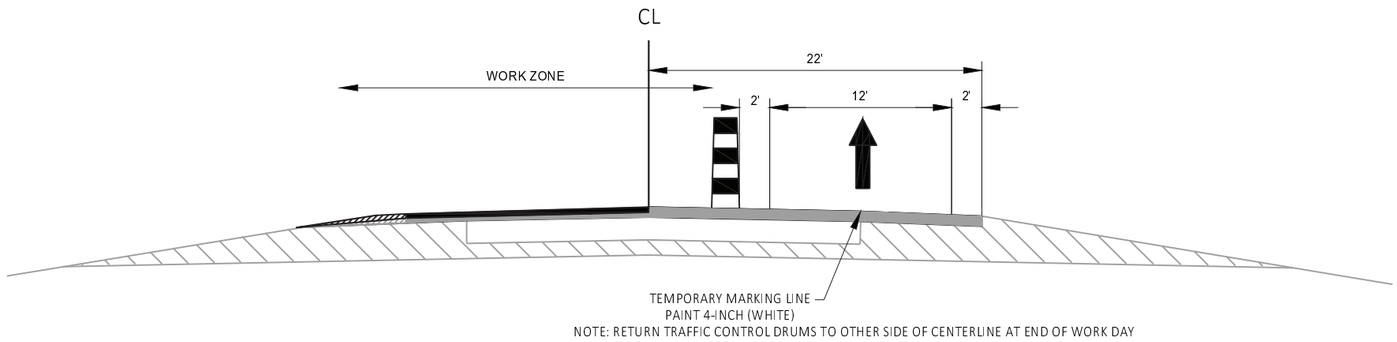
2

WORK:
INSTALL UPPER LIFT OF HMA PAVEMENT
OUTSIDE LANE AND SHOULDER



MILL AND OVERLAY STAGE 1C (UPPER LAYER)

WORK:
INSTALL UPPER LIFT OF HMA PAVEMENT
INSIDE LANE AND SHOULDER

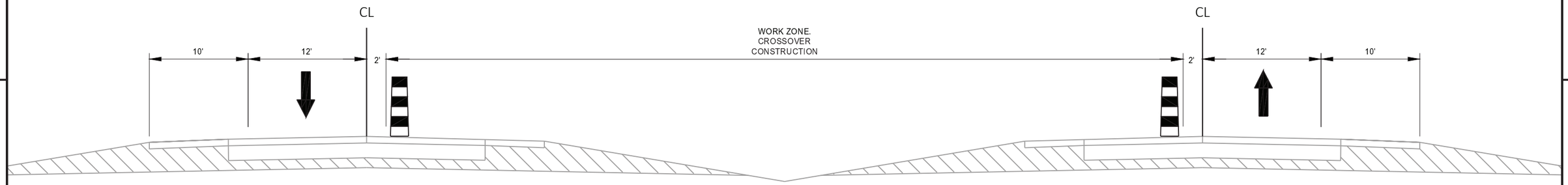


MILL AND OVERLAY STAGE 1D

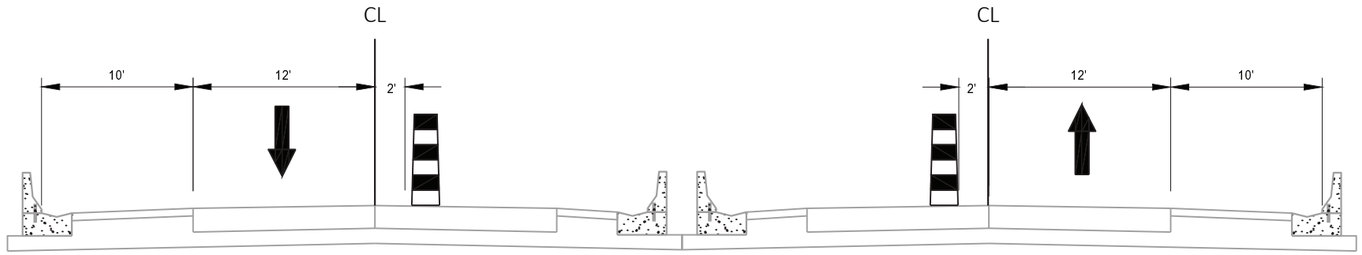
STA 2049+30 - STA 2062+30
STA 0+00 - STA 310+00
STA 445+00 - STA 759+92
STA 769+04 - STA 839+12
STA 848+22 - STA 1258+35

PROJECT NO: 1166-04-82	HWY: IH 39 NB	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1 TYPICAL SECTIONS - MILL AND OVERLAY	SHEET 37	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026105-TC-S1-TS-OVERLAY.DWG PLOT DATE : 2/4/2022 8:59 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - 026305 (2)
WISDOT/CADDS SHEET 42



CROSSOVER CONSTRUCTION STAGE 1
CROSSOVER REMOVAL STAGE 3



STAGES 1 AND 3 BETWEEN CROSSOVERS

STA 310+00 - STA 445+00

2

2

N

CTH CX

255'NB' 260'NB' 265'NB' 270'NB' 275'NB' 280'NB'

LEFT LANE CLOSED 1/2 MILE
W20-5R

SPEED LIMIT 55
W03-5

SPEED LIMIT 55
R2-1
48"X60"

W04-2L

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

N

720' LANE CLOSURE TAPER
INSTALL TEMPORARY MARKING MASK OUT TAPE 6-INCH
OVER EXISTING CENTERLINE PAVEMENT MARKING

50' TYP
50' TYP
360'

285'NB' 290'NB' 295'NB' 300'NB' 305'XO1' 305'NB' 310'XO1' 310'NB'

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)

283+00.00

313+00.00

SPEED LIMIT 70
R2-1
48"X60"

END ROAD WORK
G20-2A
48"X24"

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

100' TYP

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 1 AND STAGE 3 (CROSSOVERS)	SHEET 39	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026121_TC-S1-CROSSOVER.DWG
LAYOUT NAME - (253)
PLOT DATE : 2/1/2022 7:05 AM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

2

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

100'
TYP

315'XO1'
315'NB'
320'NB'
325'NB'
330'NB'
335'NB'
340'NB'

313+00.00

N

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

343+00.00

345'NB'
350'NB'
355'NB'
360'NB'
365'NB'
370'NB'

373+00.00

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 1 AND STAGE 3 (CROSSOVERS)	SHEET 40	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026121_TC-S1-CROSSOVER.DWG
LAYOUT NAME - (313)
PLOT DATE : 2/1/2022 7:05 AM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

2

373+00.00

403+00.00

403+00.00

433+00.00

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

SPEED LIMIT 55
R2-1
48"X60"
COVER EX
70 MPH SIGN

100'
TYP

375'NB'
380'NB'
385'NB'
390'NB'
395'NB'
400'NB'

TEMPORARY CRASH CUSHION
INSTALL PRIOR TO STAGE 2
REMOVE AFTER STAGE 2

N

UNION PACIFIC RAILROAD

405'NB'
410'NB'
415'NB'
420'NB'
425'NB'
430'NB'

25'
TYP

R1-2
48"X42"

50'
TYP

W3-2

ROAD WORK AHEAD
W20-1A

CTH D ON RAMP

CTH D OFF RAMP

CTH D

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 1 AND STAGE 3 (CROSSOVERS)	SHEET 41	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026121_TC-S1-CROSSOVER.DWG
LAYOUT NAME - (373)
PLOT DATE : 2/1/2022 7:06 AM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

TEMPORARY GUARDRAIL
INSTALL PRIOR TO STAGE 2
REMOVE AFTER STAGE 2

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

CTH D

100' TYP

435'XO2'
440'XO2'
445'XO2'
435'NB'
440'NB'
445'NB'
450'NB'
455'NB'
460'NB'

720' LANE CLOSURE TAPER
INSTALL TEMPORARY MARKING MASK OUT TAPE 6-INCH
OVER EXISTING CENTERLINE PAVEMENT MARKING
50' TYP
360'
50' TYP

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)

END ROAD WORK
G20-2A
48"X24"

433+00.00
463+00.00

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

WO4-2L

SPEED LIMIT 55
R2-1
48"X60"

WO3-5

LEFT LANE CLOSED 1/2 MILE
W20-5G

465'NB'
470'NB'
475'NB'
480'NB'
485'NB'
490'NB'

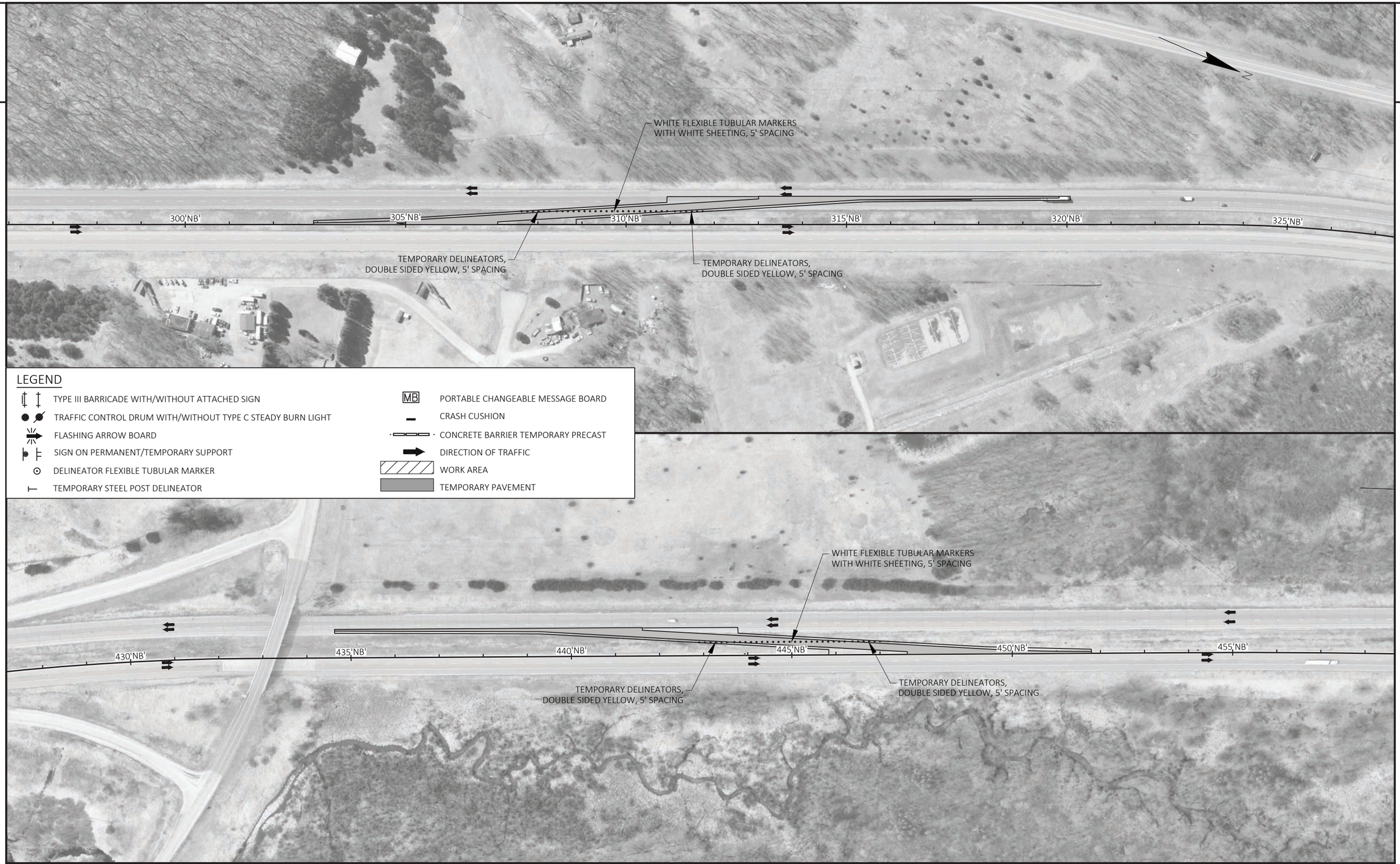
SPEED LIMIT 70
R2-1
48"X60"

463+00.00

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 1 AND STAGE 3 (CROSSOVERS)	SHEET 42	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026121_TC-S1-CROSSOVER.DWG
LAYOUT NAME - (433)
PLOT DATE : 2/1/2022 7:06 AM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:200 FT

2



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

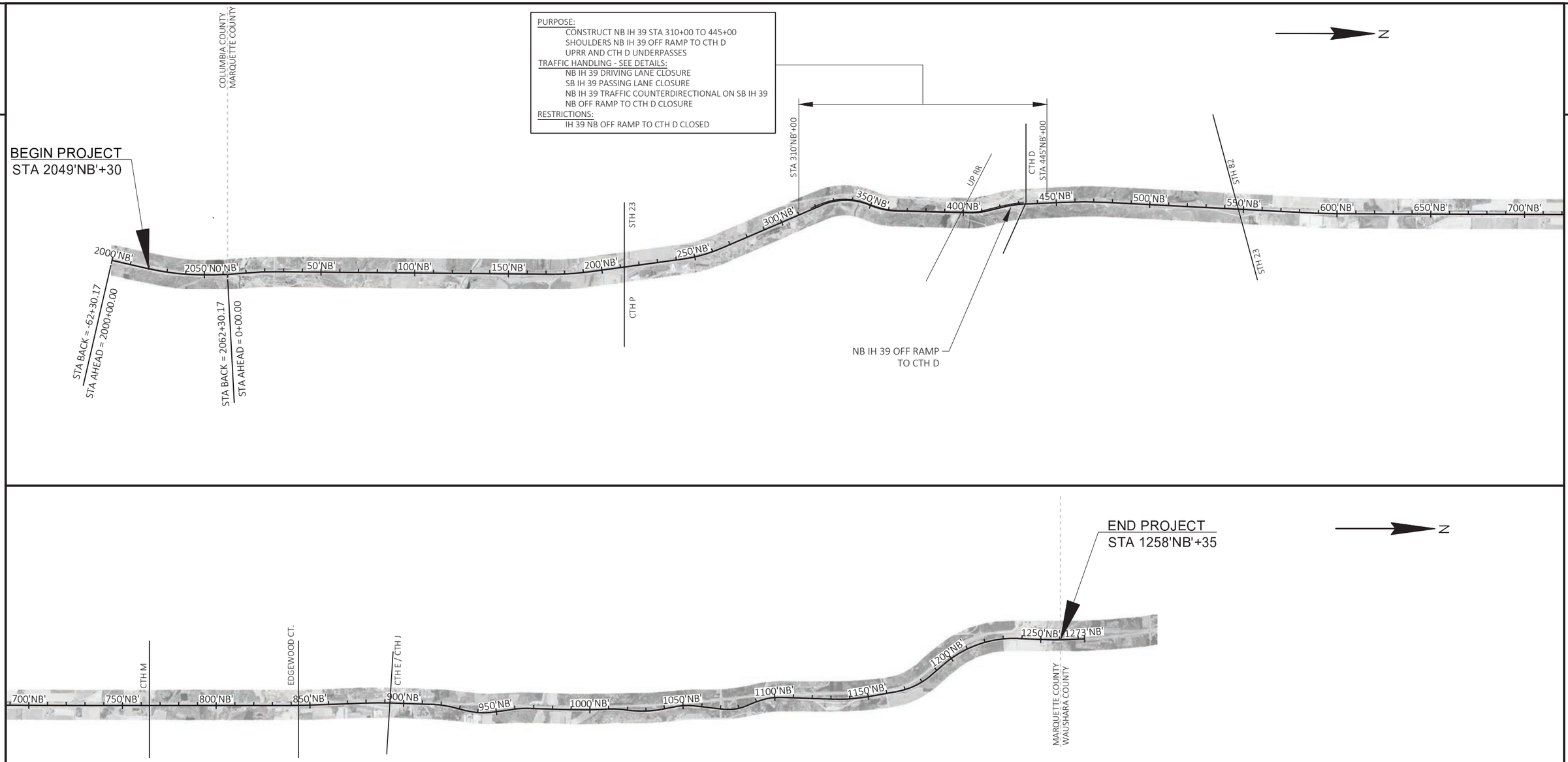
2

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 1/WINTER (COMPLETE - CLOSED TO TRAFFIC)	SHEET 43	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026125-TC-S-CROSSOVER(COMP).DWG
LAYOUT NAME - (253)
PLOT DATE : 1/24/2022 2:17 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

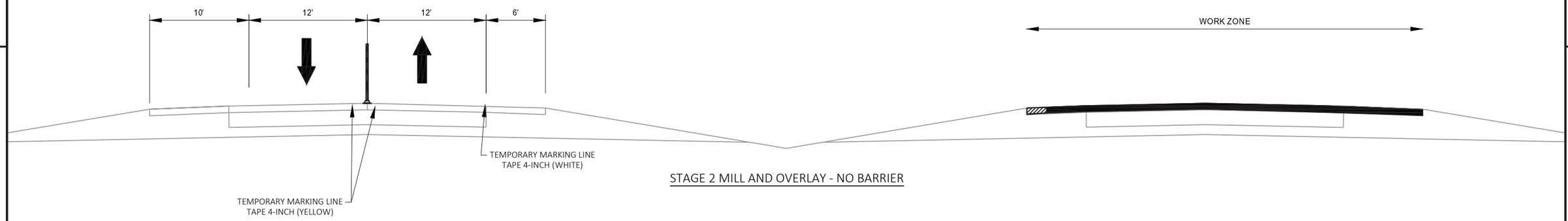
2

PURPOSE:
CONSTRUCT NB IH 39 STA 310+00 TO 445+00
SHOULDERS NB IH 39 OFF RAMP TO CTH D
UPRR AND CTH D UNDERPASSES
TRAFFIC HANDLING - SEE DETAILS:
NB IH 39 DRIVING LANE CLOSURE
SB IH 39 PASSING LANE CLOSURE
NB IH 39 TRAFFIC COUNTERDIRECTIONAL ON SB IH 39
NB OFF RAMP TO CTH D CLOSURE
RESTRICTIONS:
IH 39 NB OFF RAMP TO CTH D CLOSED

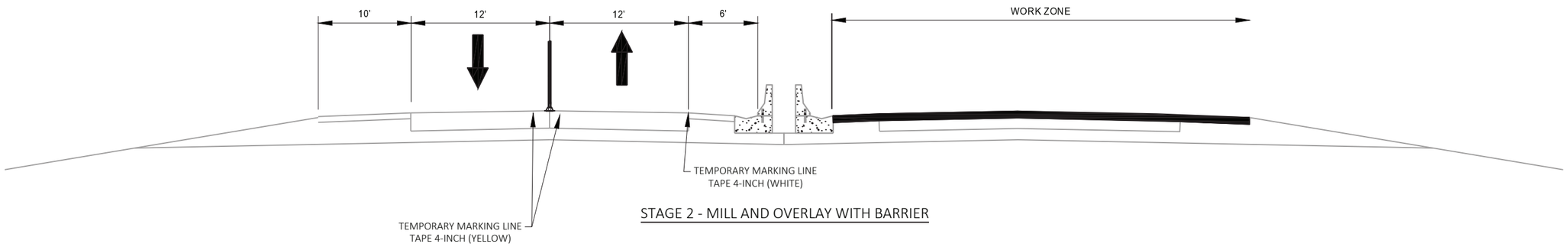


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 2	SHEET 44	E

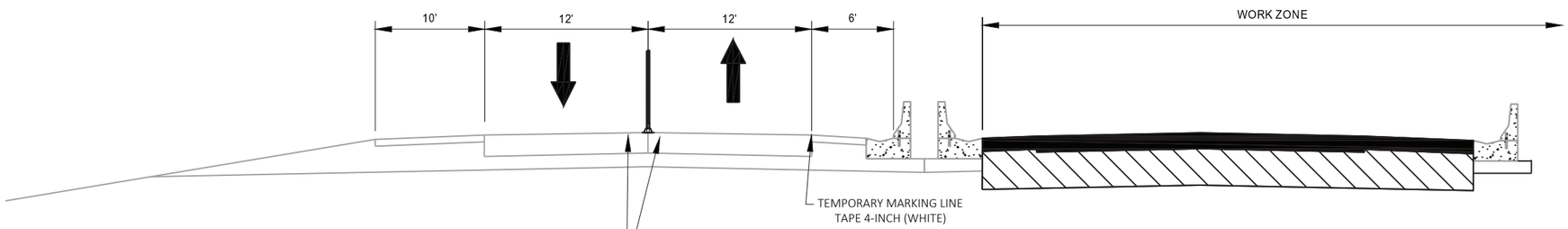
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026200-TC-S2OVERVIEW.DWG
LAYOUT NAME - (433)
PLOT DATE : 1/28/2022 2:28 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44



STAGE 2 MILL AND OVERLAY - NO BARRIER



STAGE 2 - MILL AND OVERLAY WITH BARRIER



STAGE 2 - UNDERPASS RECONSTRUCTION
UP RR
CTH D

STA 310+00 - STA 445+00

PROJECT NO: 1166-04-82	HWY: IH 39 NB	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 2 TYPICAL SECTIONS	SHEET 45	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026206-TC-S2-TS-CROSSOVER.DWG PLOT DATE : 1/31/2022 7:12 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - 026305
WISDOT/CADDS SHEET 42

2

2

283+00.00

313+00.00

283+00.00

N

CTH CX

255'NB'

260'NB'

265'NB'

270'NB'

275'NB'

280'NB'

285'NB'

290'NB'

295'NB'

300'NB'

305'XO1'

305'NB'

310'XO1'

310'NB'

RIGHT LANE CLOSED 1/2 MILE

W20-5G

WO3-5

SPEED LIMIT 55

R2-1
48"X60"

WO4-2R

SPEED LIMIT 70

R2-1
48"X60"

END ROAD WORK

G20-2A
48"X24"

50' TYP

360'

720' LANE CLOSURE TAPER

INSTALL TEMPORARY MARKING MASK OUT TAPE 6-INCH OVER EXISTING CENTERLINE PAVEMENT MARKING

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

MARKING LINE REMOVAL 4-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

WO1-6
48" X 24"

TYPE III BARRICADE

R11-2
48" X 30"

ROAD CLOSED

TYPE III BARRICADE

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 2	SHEET 46	E

2

2

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH
(DOUBLE YELLOW)

WO6-1

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)

MARKING LINE REMOVAL 4-INCH

25'
TYP

50'
TYP

315'NB'

320'NB'

325'NB'

330'NB'

335'NB'

340'NB'

50'
TYP

DO
NOT
PASS
R4-1
36"X48"

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (WHITE)

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH
(DOUBLE YELLOW)

313+00.00

343+00.00

WO6-3

NEXT
2 MILES
WO57-51
48"X24"

N

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

N

345'NB'

350'NB'

355'NB'

360'NB'

365'NB'

370'NB'

50'
TYP

343+00.00

373+00.00

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH
(DOUBLE YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (WHITE)

EXIT 104

D

Packwaukee

CLOSED

G20-60
108"X24"

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 2	SHEET 47	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026221_TC-S2CROSSOVER.DWG
LAYOUT NAME - (313)

PLOT DATE : 1/28/2022 8:00 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

2

373+00.00

403+00.00

WO6-3
NEXT
1 MILES
WO57-51
48"X24"

SPEED LIMIT 55
R2-1
48"X60"
COVER EXISTING
70 MPH SIGN

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH
(DOUBLE YELLOW)

TEMPORARY
CRASH
CUSHION

50'
TYP

375 NB
380 NB
385 NB
390 NB
395 NB
400 NB

WO6-3
NEXT
1 MILES
WO57-51
48"X24"

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (WHITE)

RAMP
CLOSED
AHEAD
W20-3A

UNION PACIFIC RAILROAD

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

403+00.00

433+00.00

DO
NOT
PASS
R4-1
36"X48"

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH
(DOUBLE YELLOW)

WO6-3

50'
TYP

405 NB
410 NB
415 NB
420 NB
425 NB
430 NB

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (WHITE)

YIELD
R1-2
48"X42"

WO3-2

ROAD
WORK
AHEAD
W20-1A

25'
TYP

50'
TYP

CTH D ON RAMP

MB 2D

CTH D OFF RAMP (CLOSED)

CTH D

EXIT 104
D
COVER
Packwaukee
CLOSED
G20-61
120"X30"

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 2	SHEET 48	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026221_TC-S2CROSSOVER.DWG
LAYOUT NAME - (373)
PLOT DATE : 1/28/2022 8:00 AM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:200 FT

2

2

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

TEMPORARY
GUARDRAIL

CTH D

W06-3

NEXT
2 MILES

W057-51
48"X24"

TEMPORARY
CRASH CUSHION

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)

R11-2L
48" X 30"

LANE
CLOSED

TYPE III BARRICADE

720' LANE CLOSURE TAPER

INSTALL TEMPORARY MARKING MASK OUT TAPE 6-INCH
OVER EXISTING CENTERLINE PAVEMENT MARKING

50'
TYP

100'
TYP

360'

435'XO2'

440'XO2'

445'XO2'

450'XO2'

435'NB'

440'NB'

445'NB'

450'NB'

455'NB'

460'NB'

MARKING LINE REMOVAL 4-INCH

MARKING LINE REMOVAL 4-INCH

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (WHITE)

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)

W6-1

END
ROAD WORK

G20-2A
48"X24"

433+00.00

463+00.00

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

WO

WO4-2L

SPEED
LIMIT
55

R2-1
48"X60"

WO3-5

LEFT LANE
CLOSED
1/2 MILE

W20-5G

465'NB'

470'NB'

475'NB'

480'NB'

485'NB'

490'NB'

SPEED
LIMIT
70

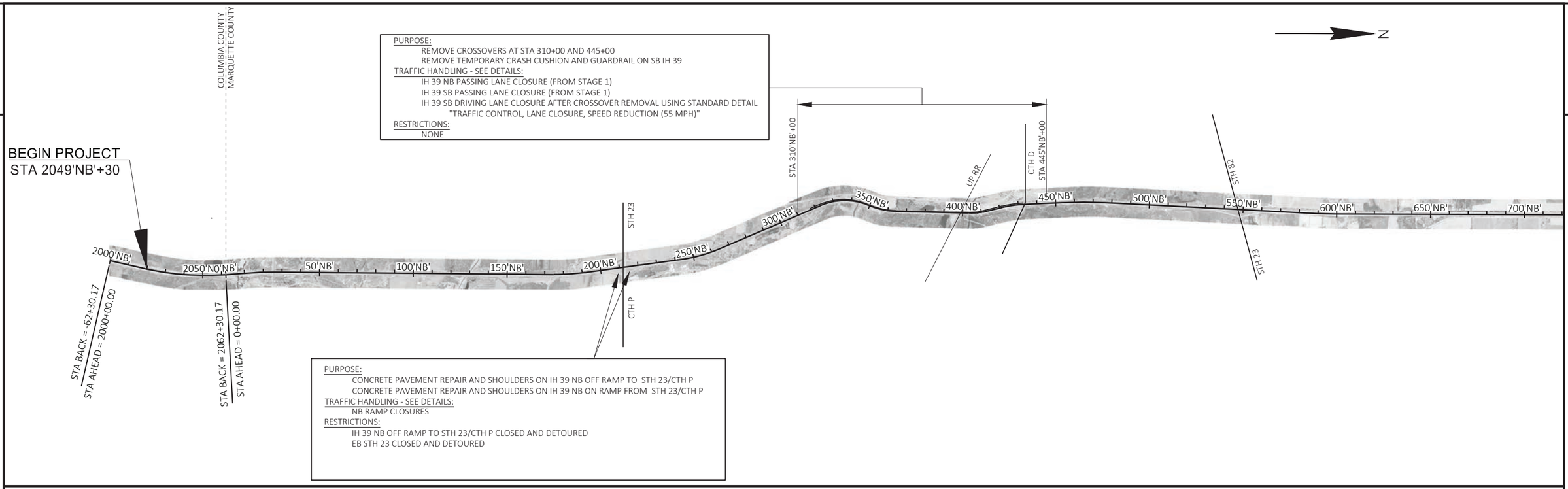
R2-1
48"X60"

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 2	SHEET 49	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026221_TC-S2CROSSOVER.DWG
LAYOUT NAME - (433)

PLOT DATE : 1/28/2022 8:00 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:200 FT

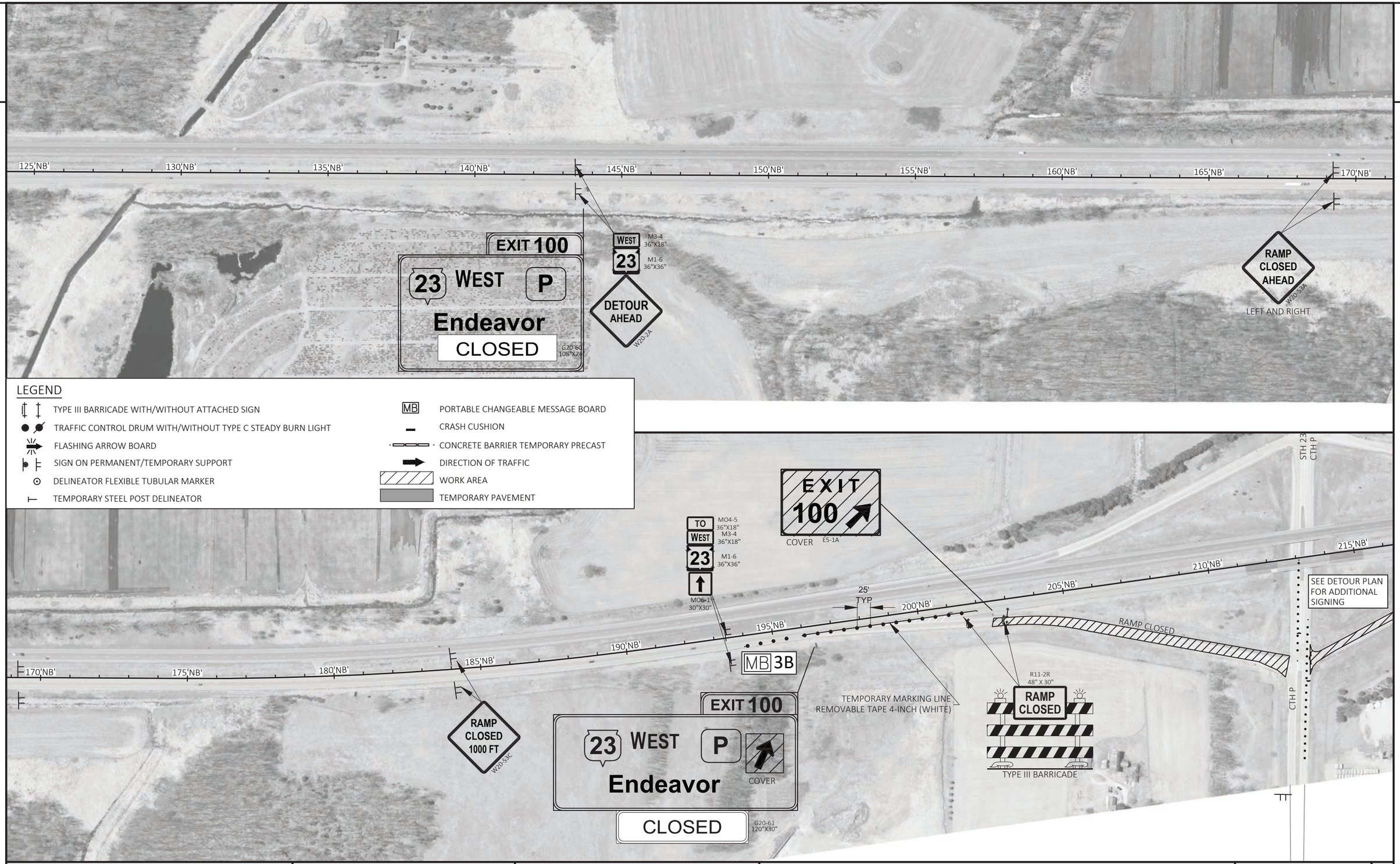
2



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3	SHEET 50	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026300-TC-S3OVERVIEW.DWG
LAYOUT NAME - (433)
PLOT DATE : 1/28/2022 2:29 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

2

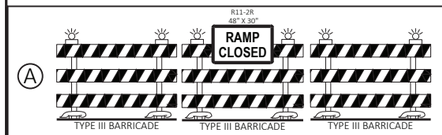


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3 (STH 23/CTH P RAMPS)	SHEET 51	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026311_TC-S3-STH23CTHPRAMP.DWG
LAYOUT NAME - (881)
PLOT DATE : 1/31/2022 7:48 AM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1:300 FT
WISDOT/CADDS SHEET 44

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT



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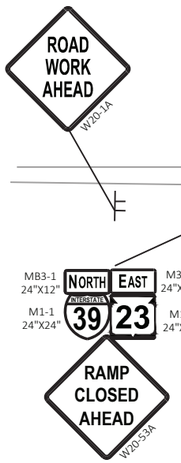
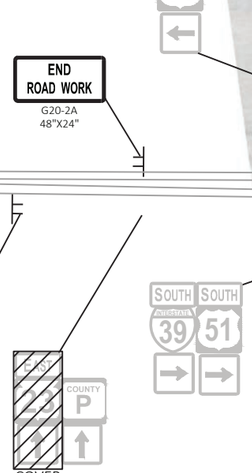
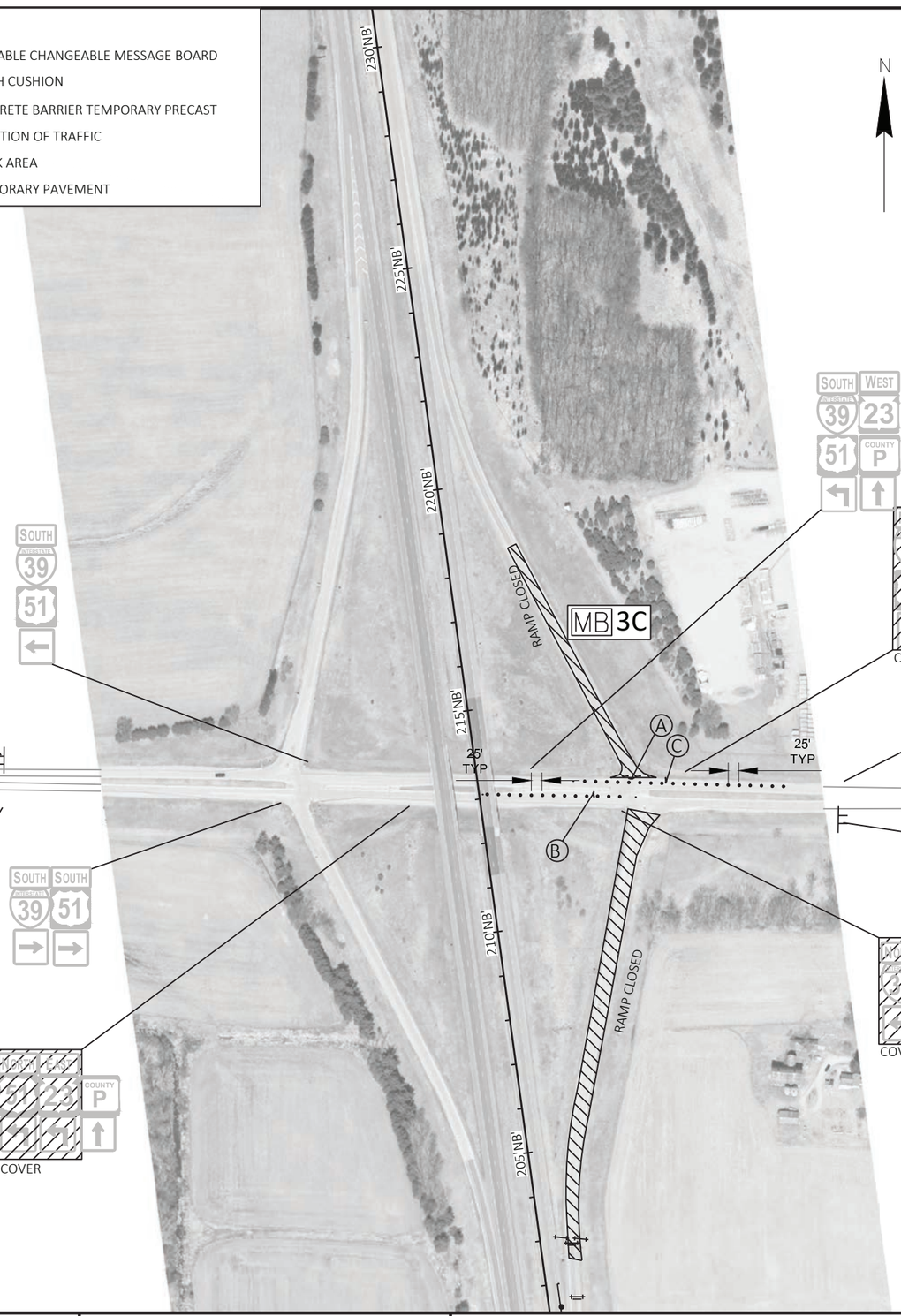
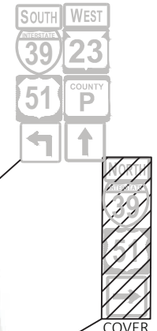
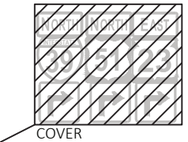
Ⓒ

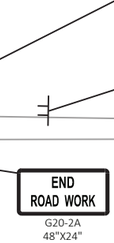


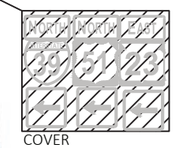












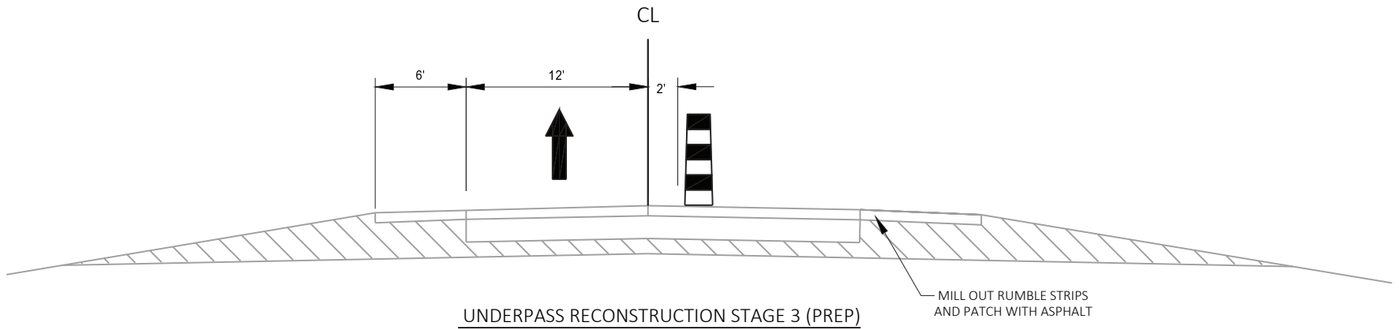
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3 (STH 23 / CTH P RAMPS)	SHEET 52	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026311_TC-S3-STH23CTHPRAMP.DWG
LAYOUT NAME - Plan 1 IN 200 FT
PLOT DATE : 1/31/2022 7:48 AM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1:300 FT

2

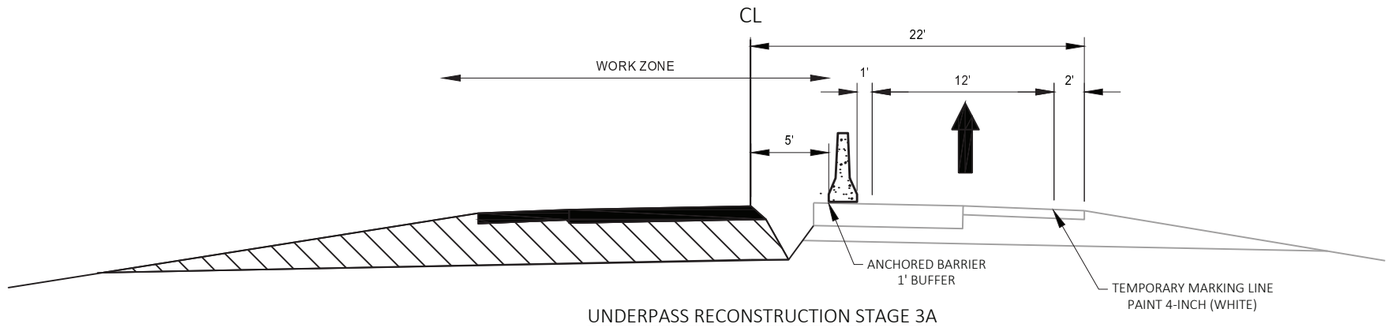
2

WORK:
MILL AND PAVE OUTSIDE RUMBLE STRIPS
STA 747+50 - STA 773+50
STA 826+50 - STA 852+50



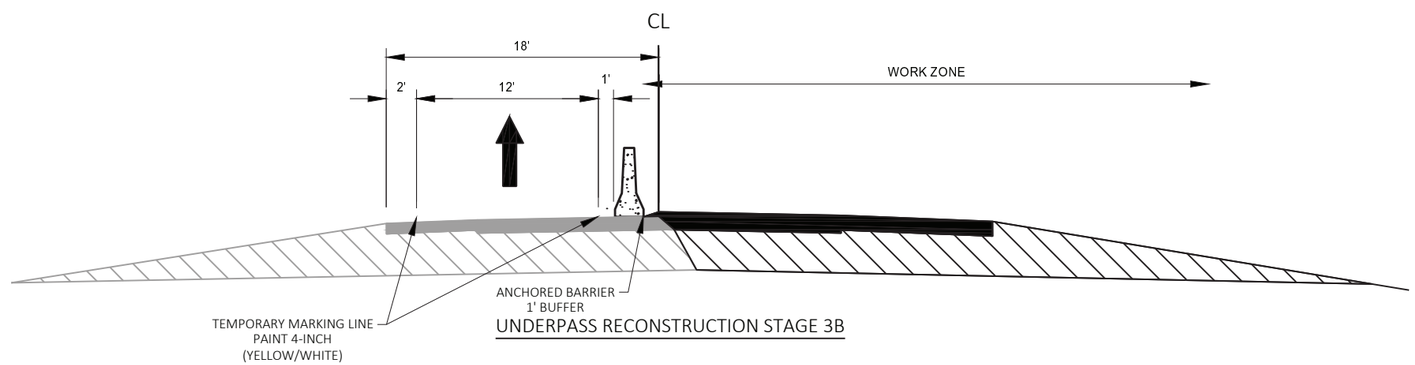
UNDERPASS RECONSTRUCTION STAGE 3 (PREP)

WORK:
EXCAVATE INSIDE LANE AND SHOULDER
CONSTRUCT BAD INSIDE LANE AND SHOULDER
PAVE LOWER LIFT INSIDE LANE AND SHOULDER



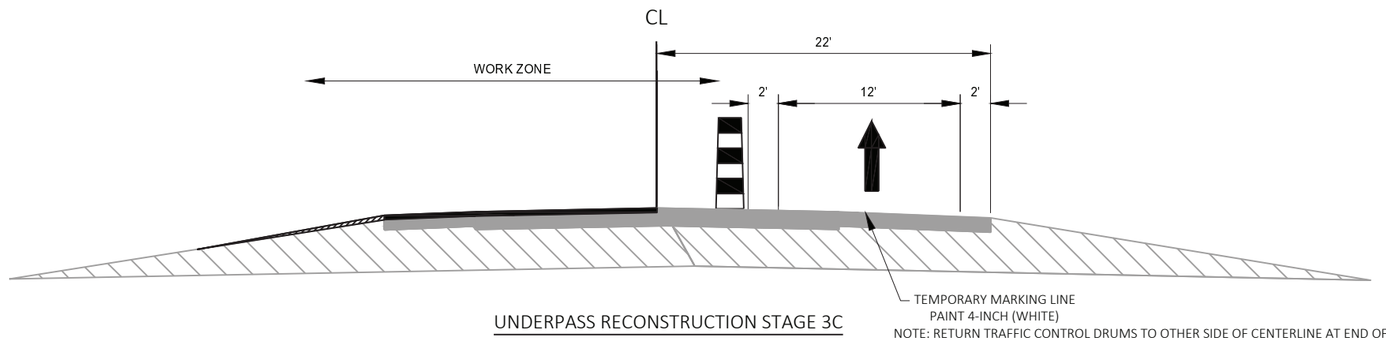
UNDERPASS RECONSTRUCTION STAGE 3A

WORK:
EXCAVATE OUTSIDE LANE AND SHOULDER
CONSTRUCT BAD OUTSIDE LANE AND SHOULDER
PAVE LOWER AND UPPER LIFTS OUTSIDE LANE AND SHOULDER



UNDERPASS RECONSTRUCTION STAGE 3B

WORK:
PAVE UPPER LIFT INSIDE LANE AND SHOULDER



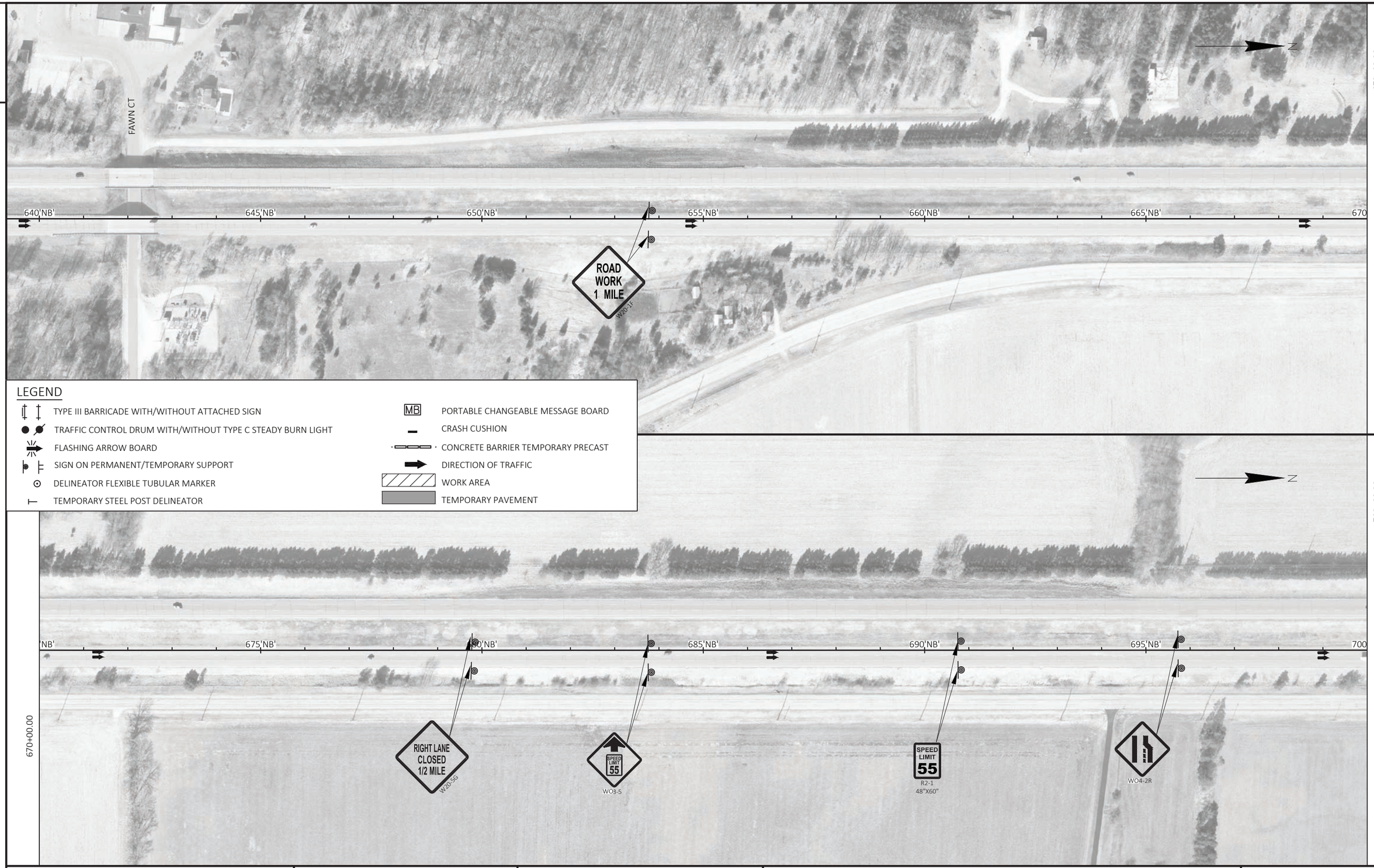
UNDERPASS RECONSTRUCTION STAGE 3C

NOTE: RETURN TRAFFIC CONTROL DRUMS TO OTHER SIDE OF CENTERLINE AT END OF WORK DAY

STA 759+92 - STA 769+04
STA 839+12- STA 848+22

PROJECT NO: 1166-04-82	HWY: IH 39 NB	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3 TYPICAL SECTIONS - UNDERPASS RECONSTRUCTION	SHEET 53	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026330-TC-S3-TS-NORTH.DWG
LAYOUT NAME - 026205
PLOT DATE : 1/28/2022 10:28 AM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3 (PREP)	SHEET 54	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026331_TC-S3P-NORTH.DWG
LAYOUT NAME - (880)
PLOT DATE : 1/24/2022 2:57 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (WHITE)

700+00.00

705'NB'

710'NB'

715'NB'

720'NB'

725'NB'

730

50'
TYP

50'
TYP

360'

720' LANE CLOSURE TAPER
INSTALL TEMPORARY MARKING MASK OUT TAPE 6-INCH
OVER EXISTING CENTERLINE PAVEMENT MARKING

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

100'
TYP

730+00.00

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

N

730+00.00

735'NB'

740'NB'

745'NB'

750'NB'

755'NB'

760

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

100'
TYP

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

760+00.00

730+00.00

N

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3 (PREP)	SHEET 55	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026331_TC-S3P-NORTH.DWG
LAYOUT NAME - (940)

PLOT DATE : 1/24/2022 2:57 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

2

760+00.00

CTH M

'NB' 765'NB' 770'NB' 775'NB' 780'NB' 785'NB' 790

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

100'
TYP

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

790+00.00

2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

790+00.00

'NB' 795'NB' 800'NB' 805'NB' 810'NB' 815'NB' 820

100'
TYP

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

820+00.00

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3 (PREP)	SHEET 56	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026331_TC-S3P-NORTH.DWG
LAYOUT NAME - (1000)

PLOT DATE : 1/24/2022 2:58 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

2

820+00.00

850+00.00

'NB' 825'NB' 830'NB' 835'NB' 840'NB' 845'NB' 850

100'
TYP

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

EDGEWOOD CT

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

N

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

N

CTH E/CTH J ON RAMP

'NB' 855'NB' 860'NB' 865'NB' 870'NB' 875'NB' 880'NB'

CTH E/CTH J OFF RAMP

850+00.00

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

100'
TYP

END
ROAD WORK
G20-2A
48"X24"
STA 888+00 LT & RT

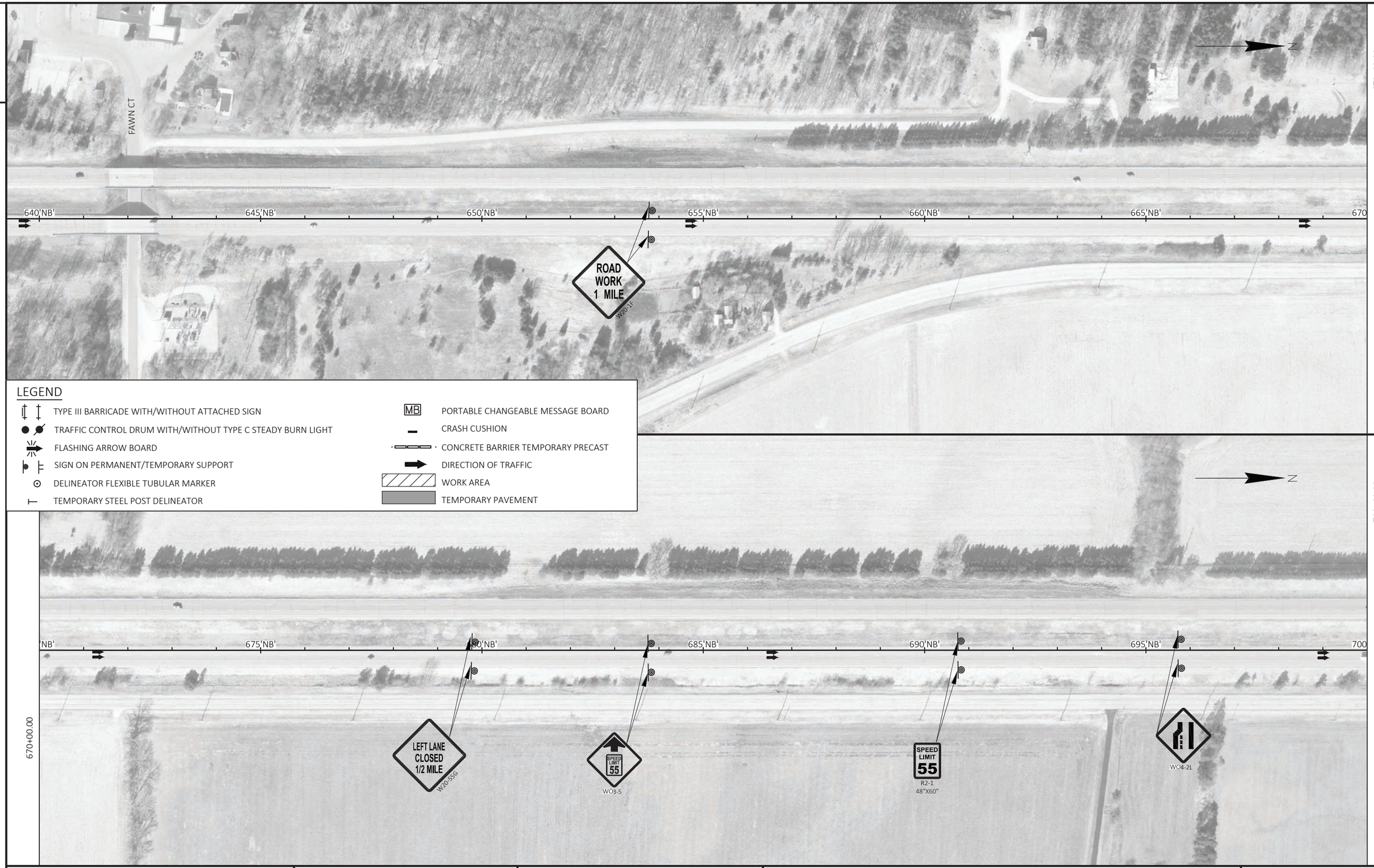
SPEED
LIMIT
70
R2-1
48"X60"
STA 895+00 LT & RT

TO ACCOMMODATE RAMP CONSTRUCTION

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3 (PREP)	SHEET 57	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026331_TC-S3P-NORTH.DWG
LAYOUT NAME - (1060)

PLOT DATE : 1/24/2022 2:58 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:200 FT



2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3A	SHEET 58	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026332_TC-S3A-NORTH.DWG
LAYOUT NAME - (880)

PLOT DATE : 1/24/2022 3:04 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

2

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)

N

700+00.00

730+00.00

'NB' 705'NB' 710'NB' 715'NB' 720'NB' 725'NB' 730

50' TYP

50' TYP

360'

720' LANE CLOSURE TAPER

RETAIN TEMPORARY MARKING MASK OUT TAPE 6-INCH
OVER EXISTING CENTERLINE PAVEMENT MARKING

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

100' TYP

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

WO1-6
48" X 24"

TYPE III BARRICADE

N

760+00.00

730+00.00

TEMPORARY MARKING LINE
PAINT 4-INCH (YELLOW)

50' TYP

100' TYP

'NB' 735'NB' 740'NB' 745'NB' 750'NB' 755'NB' 760

WO1-4R

R11-2L
48" X 30"

LANE CLOSED

W6

TYPE III BARRICADE

100' TYP

240' LANE SHIFT TAPER

TEMPORARY MARKING LINE
PAINT 4-INCH (WHITE)

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

WO5-52L
12"X36"

MARKING LINE REMOVAL 4-INCH

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3A	SHEET 59	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026332_TC-S3A-NORTH.DWG
LAYOUT NAME - (940)
PLOT DATE : 1/24/2022 3:04 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

PAVEMENT REPLACEMENT

TEMPORARY MARKING LINE
PAINT 4-INCH (YELLOW)

50'
TYP

760+00.00

'NB'

765'NB'

770'NB'

775'NB'

780'NB'

785'NB'

790

790+00.00

N

CTH M

WO1-4L

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

MARKING LINE REMOVAL 4-INCH

240' LANE SHIFT
TAPER

TEMPORARY MARKING LINE
PAINT 4-INCH (WHITE)

WO1-6
48" X 24"
TYPE III BARRICADE

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

100'
TYP

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

790+00.00

820+00.00

N

WO1-4R

'NB'

795'NB'

800'NB'

805'NB'

810'NB'

815'NB'

820

100'
TYP

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

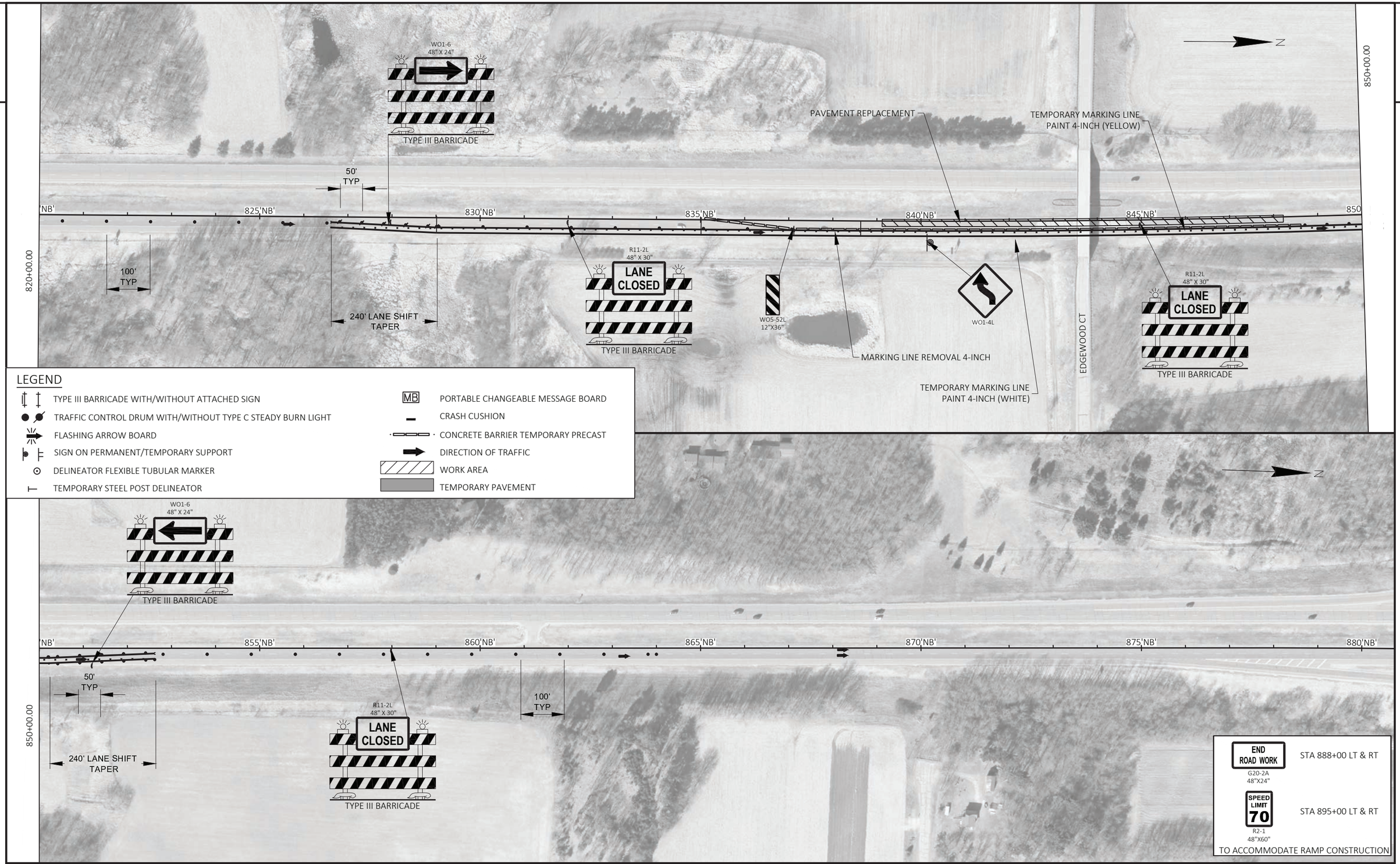
2

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3A	SHEET 60	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026332_TC-S3A-NORTH.DWG
LAYOUT NAME - (1000)

PLOT DATE : 1/24/2022 3:04 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:200 FT

2



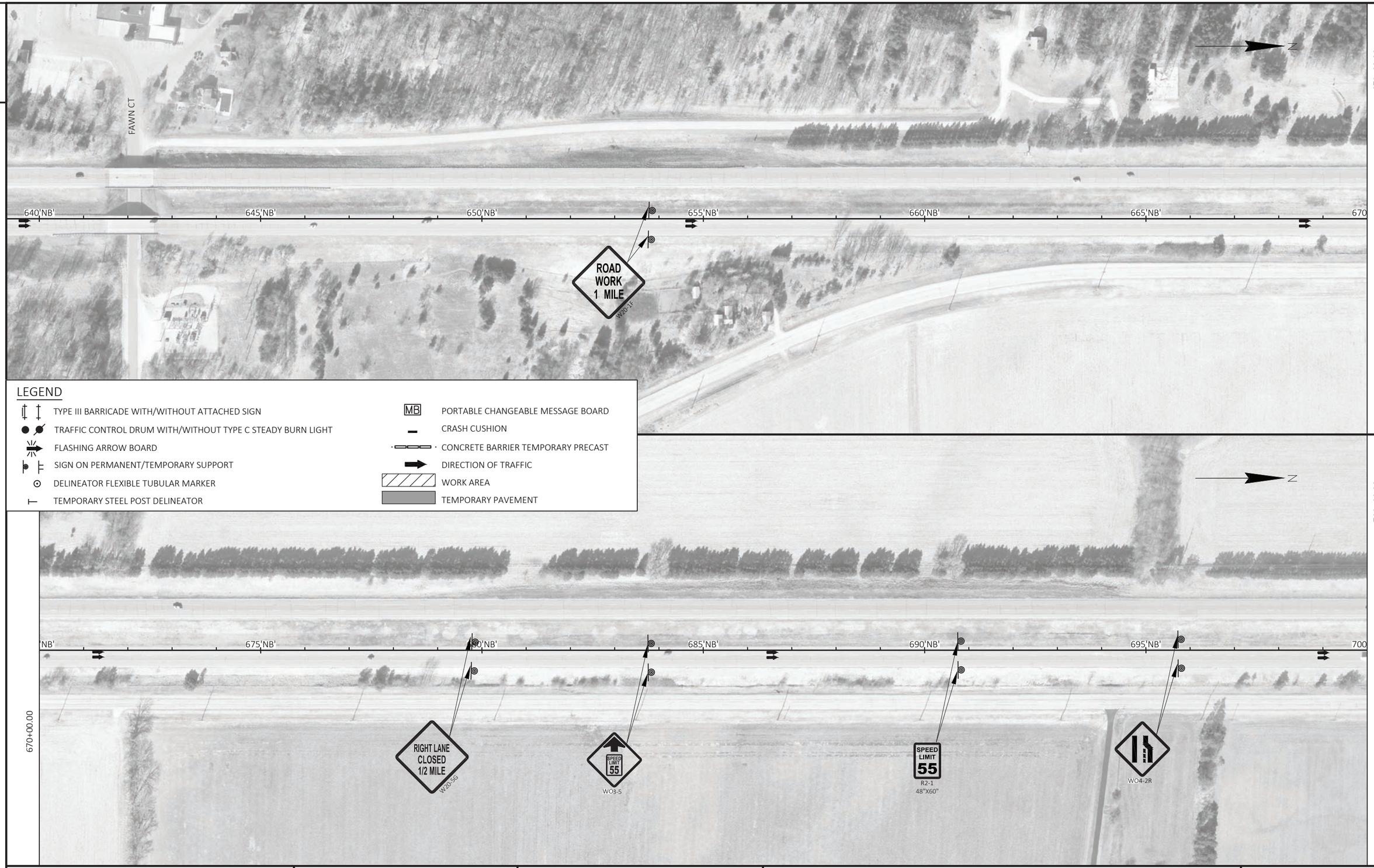
LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

2

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3A	SHEET 61	E

2



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3B	SHEET 62	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026333_TC-S3B-NORTH.DWG
LAYOUT NAME - (880)
PLOT DATE : 1/24/2022 3:10 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (WHITE)

N

700+00.00

730+00.00

705'NB' 710'NB' 715'NB' 720'NB' 725'NB' 730

50' TYP

50' TYP

360'

720' LANE CLOSURE TAPER

RETAIN TEMPORARY MARKING MASK OUT TAPE 6-INCH
OVER EXISTING CENTERLINE PAVEMENT MARKING

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

100' TYP

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

WO1-6
48" X 24"
TYPE III BARRICADE

N

760+00.00

730+00.00

TEMPORARY MARKING LINE
PAINT 4-INCH (YELLOW)

50' TYP

100' TYP

735'NB' 740'NB' 745'NB' 750'NB' 755'NB' 760

100' TYP

240' LANE SHIFT TAPER

TEMPORARY MARKING LINE
PAINT 4-INCH (WHITE)

WO1-4L

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

WO5-52R
12"X36"

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3B	SHEET 63	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026333_TC-S3B-NORTH.DWG
LAYOUT NAME - (940)

PLOT DATE : 1/24/2022 3:10 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

760+00.00

790+00.00

TEMPORARY MARKING LINE
PAINT 4-INCH (YELLOW)

50'
TYP

'NB' 765'NB' 770'NB' 775'NB' 780'NB' 785'NB' 790

N

WO1-4R

PAVEMENT REPLACEMENT

CTH M

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

240' LANE SHIFT
TAPER

TEMPORARY MARKING LINE
PAINT 4-INCH (WHITE)

WO1-6
48" X 24"
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

100'
TYP

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

790+00.00

820+00.00

N

WO1-4L

'NB' 795'NB' 800'NB' 805'NB' 810'NB' 815'NB' 820

100'
TYP

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

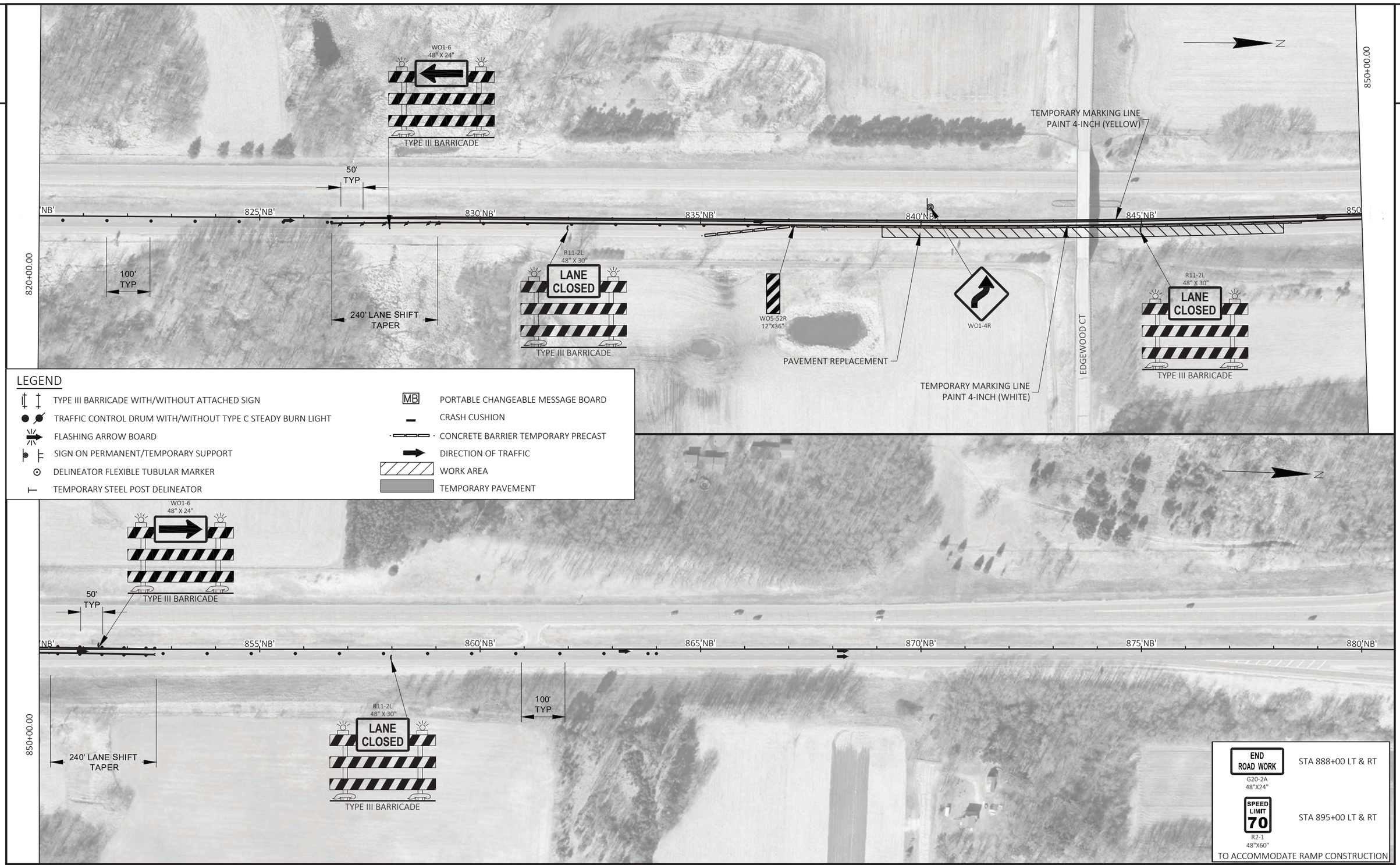
2

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3B	SHEET 64	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026333_TC-S3B-NORTH.DWG
LAYOUT NAME - (1000)

PLOT DATE : 1/24/2022 3:10 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:200 FT

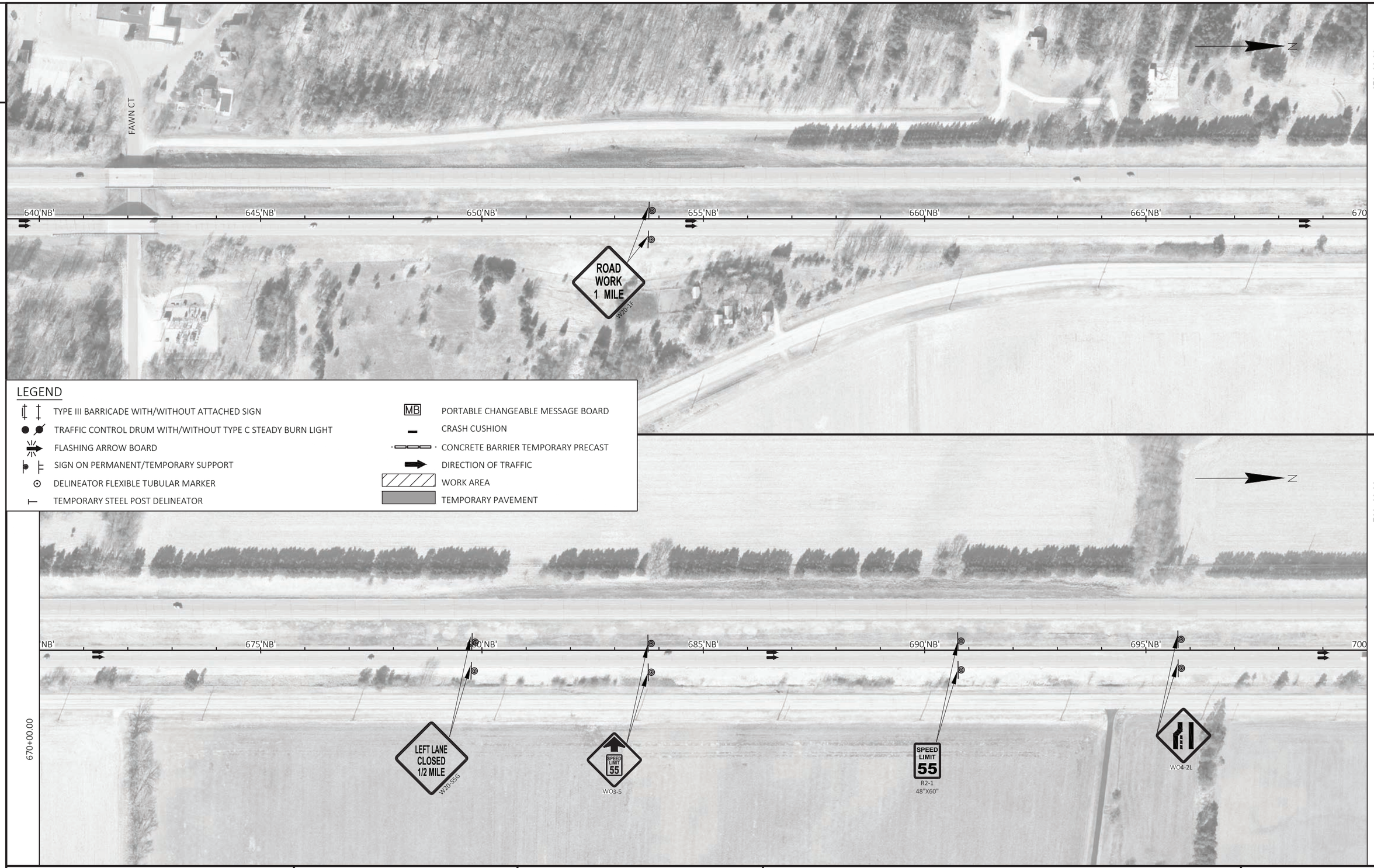
2



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3B	SHEET 65	E



2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3C	SHEET 66	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026334_TC-S3C-NORTH.DWG
LAYOUT NAME - (880)

PLOT DATE : 1/24/2022 3:19 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)

N

700+00.00

705'NB'

710'NB'

715'NB'

720'NB'

725'NB'

730

730+00.00

50'
TYP

50'
TYP

360'

720' LANE CLOSURE TAPER

RETAIN TEMPORARY MARKING MASK OUT TAPE 6-INCH
OVER EXISTING CENTERLINE PAVEMENT MARKING

R11-2L
48" X 30"

LANE
CLOSED

TYPE III BARRICADE

100'
TYP

R11-2L
48" X 30"

LANE
CLOSED

TYPE III BARRICADE

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

N

730+00.00

735'NB'

740'NB'

745'NB'

750'NB'

755'NB'

760

760+00.00

R11-2L
48" X 30"

LANE
CLOSED

TYPE III BARRICADE

100'
TYP

R11-2L
48" X 30"

LANE
CLOSED

TYPE III BARRICADE

2

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3C	SHEET 67	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026334_TC-S3C-NORTH.DWG
LAYOUT NAME - (940)

PLOT DATE : 1/24/2022 3:19 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

760+00.00

765'NB'

770'NB'

775'NB'

780'NB'

785'NB'

790

790+00.00

CTH M

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

100'
TYP

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

N

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

790+00.00

795'NB'

800'NB'

805'NB'

810'NB'

815'NB'

820

820+00.00

100'
TYP

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

N

2

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3C	SHEET 68	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026334_TC-S3C-NORTH.DWG
LAYOUT NAME - (1000)

PLOT DATE : 1/24/2022 3:19 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

2

820+00.00

850+00.00

'NB' 825'NB' 830'NB' 835'NB' 840'NB' 845'NB' 850

100'
TYP

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

EDGEWOOD CT

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

N

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

850+00.00

'NB' 855'NB' 860'NB' 865'NB' 870'NB' 875'NB' 880'NB'

R11-2L
48" X 30"
LANE
CLOSED
TYPE III BARRICADE

100'
TYP

N

END
ROAD WORK
G20-2A
48"X24"
STA 888+00 LT & RT

SPEED
LIMIT
70
R2-1
48"X60"
STA 895+00 LT & RT

TO ACCOMMODATE RAMP CONSTRUCTION

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3C	SHEET 69	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026334_TC-S3C-NORTH.DWG
LAYOUT NAME - (1060)

PLOT DATE : 1/24/2022 3:19 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

2

805'NB' 810'NB' 815'NB' 820'NB' 825'NB' 830'NB' 835'NB' 840'NB' 845'NB' 850'NB'

N

EDGEWOOD CT

COORDINATE DEVICES
WITH MAINLINE IH 39 LANE CLOSURES

EXIT 113
E J
Westfield
CLOSED
G20-60
108"X24"

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

N

CTH E
CTH J

EXIT 113
COVER
E5-1A
25'
TYP

COORDINATE DEVICES
WITH MAINLINE IH 39 LANE CLOSURES

850'NB' 855'NB' 860'NB' 865'NB' 870'NB' 875'NB' 880'NB' 885'NB' 890'NB' 895'NB'

MB 3D

RAMP CLOSED

RAMP CLOSED

RAMP CLOSED AHEAD
W20-53A

RAMP CLOSED 1000 FT
W20-53C

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (WHITE)

R11-2R
48" X 30"
RAMP CLOSED

TYPE III BARRICADE

EXIT 113
E J
COVER
Westfield
CLOSED
G20-61
120"X30"

CTH E
CTH J

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3 (CTH E/CTH J RAMPS)	SHEET 70	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026345_TC-S3-CTHECTHJRAMP.DWG
LAYOUT NAME - (881)
PLOT DATE : 1/28/2022 8:04 AM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1:300 FT

WISDOT/CADDS SHEET 44

2

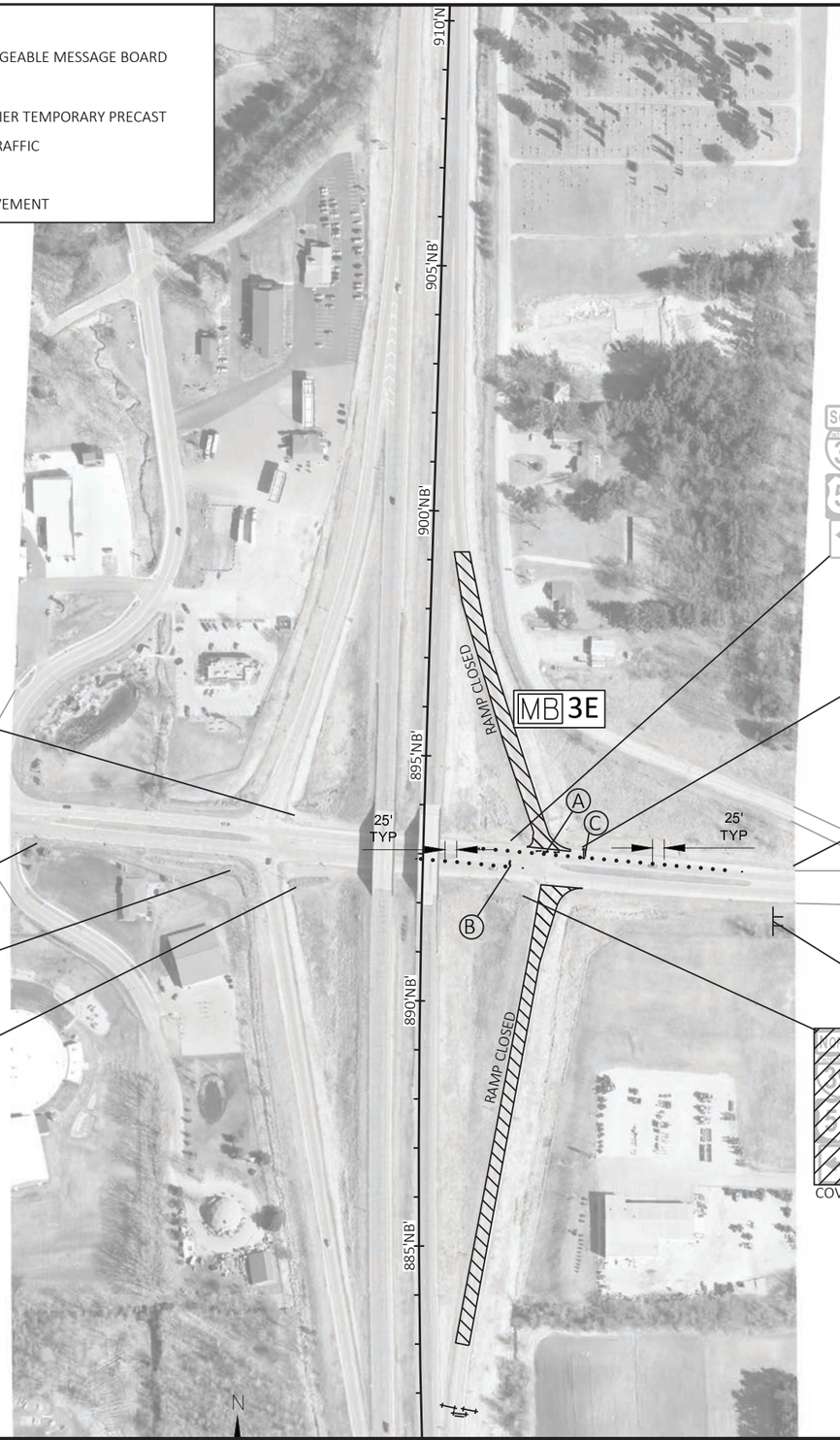
LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- TEMPORARY STEEL POST DELINEATOR
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

Ⓐ R11-2R 48"X 30" RAMP CLOSED — TYPE III BARRICADE, TYPE III BARRICADE, TYPE III BARRICADE

Ⓑ R3-2 24"X24" — TYPE III BARRICADE

Ⓒ R3-1 24"X24" — TYPE III BARRICADE



SOUTH INTERSTATE 39 51 — COVER

NORTH INTERSTATE 39 51 — COVER

SOUTH INTERSTATE 39 51 — COVER

NORTH INTERSTATE 39 51 — COVER

NORTH INTERSTATE 39 — MB3-1 24"X12", M1-1 24"X24" — RAMP CLOSED AHEAD W20-53A

ROAD WORK AHEAD W20-1A

END ROAD WORK G20-2A 48"X24"

NORTH INTERSTATE 39 — MB3-1 24"X12", M1-1 24"X24" — RAMP CLOSED AHEAD W20-53A

ROAD WORK AHEAD W20-1A

SOUTH INTERSTATE 39 51 — COVER

NORTH INTERSTATE 39 51 — COVER

END ROAD WORK G20-2A 48"X24"

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - STAGE 3 (CTH E/CTH J RAMPS)	SHEET 71	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-026345_TC-S3-CTHECTHJRAMP.DWG PLOT DATE : 1/28/2022 8:04 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1:300 FT
LAYOUT NAME - Plan 1 IN 200 FT

2

LEGEND

XXXXXX RAMP CLOSED

DETOUR ROUTE

SIGN ON PERMANENT/TEMPORARY SUPPORT

2

COUNTY P

23

100

COUNTY CX

DETAIL B

INTERSTATE 39 51 23

104

106

COUNTY D

82

N

XXX

DETAIL A

INTERSTATE 39 51

COUNTY CX

Endeavor

COUNTY M

COUNTY D

Packwaukee

23

COUNTY D

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	DETOUR - STAGE 3 - TO STH 23 WEST	SHEET 72	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-027311-DT-23P.DWG
LAYOUT NAME - 23P NB OFF

PLOT DATE : 1/31/2022 7:50 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:0.5 MI

WISDOT/CADDS SHEET 42

2

STH 23 WEST
CTH P

CTH CX

N

TO WEST 23 — M04-5 36"X18" / M3-4 36"X18" / M1-6 36"X36"

CTH P

DETAIL A

LEGEND

XXXXXX RAMP CLOSED

DETOUR ROUTE

SIGN ON PERMANENT/TEMPORARY SUPPORT

DETAIL B

N

UNION PACIFIC RAILROAD

CTH D

CTH CX

SOUTH 39 SOUTH 51 WEST 23 — TO WEST 23 — M04-5 24"X12" / M3-4 24"X12" / M1-6 24"X24" / MO6-1 21"X21"

TO WEST 23 — M04-5 36"X18" / M3-4 36"X18" / M1-6 36"X36" / MO5-2R 30"X30" — LEFT AND RIGHT

TO WEST 23 — M04-5 36"X18" / M3-4 36"X18" / M1-6 36"X36" / MO6-2 30"X30" — LEFT AND RIGHT

TO WEST 23 — M04-5 24"X12" / M3-4 24"X12" / M1-6 24"X24" / MO5-1L 21"X21"

TO WEST 23 — M04-5 24"X12" / M3-4 24"X12" / M1-6 24"X24" / MO5-1L 21"X21"

TO WEST 23 — M04-5 24"X12" / M3-4 24"X12" / M1-6 24"X24" / MO6-1 21"X21"

NORTH 39 COUNTY D

2

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	DETOUR - STAGE 3 - TO STH 23 WEST	SHEET 73	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-027311-DT-23P.DWG
LAYOUT NAME - CTH D
PLOT DATE : 1/31/2022 7:50 AM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 44

2

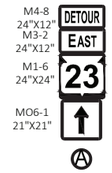
LEGEND

XXXXXX RAMP CLOSED

DETOUR ROUTE

TRAFFIC CONTROL SIGN ON PERMANENT/TEMPORARY SUPPORT

M4-8 24"X12" / M3-2 24"X12" / M1-6 24"X24" / MO6-1 21"X21"



2

DETAIL B

DETAIL C

DETAIL A

ADAMS COUNTY
JUNEAU COUNTY

ADAMS COUNTY
MARQUETTE COUNTY

JUNEAU COUNTY
SAUK COUNTY

ADAMS COUNTY
COLUMBIA COUNTY

MARQUETTE COUNTY
COLUMBIA COUNTY

Oxford

Packwaukee

Endeavor

Wisconsin Dells

Portage

RAMP CLOSED

CPR

UP

82 16 90 94 13 85 87 89 92 23 127 39 51 100 104 106

COUNTY A COUNTY B COUNTY D COUNTY G COUNTY K COUNTY O

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	DETOUR - STAGE 3 - STH 23 EAST	SHEET 74	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-027312-DT-23P-ON.DWG
LAYOUT NAME - 23P NB ON

PLOT DATE : 1/28/2022 8:06 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:2 MI

WISDOT/CADDS SHEET 42

2

LEGEND

XXXXXX ROAD/RAMP CLOSED

DETOUR ROUTE

TRAFFIC CONTROL SIGN ON PERMANENT/TEMPORARY SUPPORT

EXISTING SIGN

N

STH 13

STH 13/16/23

Plum St

STH 23

STH 16

MB 3F

M4-8 24"X12"
M3-2 24"X12"
DETOUR NORTH EAST ALTERNATE INTERSTATE 13 23 39
MO4-1 24"X12"
M1-1 24"X24"
M1-6 24"X24"

EAST 23
M3-2 24"X12"
M1-6 24"X24"
DETOUR AHEAD W20-2A

M4-8 24"X12" DETOUR NORTH EAST SOUTH 13 23 16
COVER MO5-1L 21"X21"

COVER 9 1/2"X9 1/2"
Montello
Wis Rapids
Portage

M4-8 24"X12"
M3-2 24"X12"
M1-6 24"X24"
DETOUR EAST 23
NORTH 13
SOUTH 16
MO6-1 21"X21"

COVER
EAST 23
INTERSTATE 39

COVER
Montello 31
Fond du Lac 76

M4-8 24"X12" DETOUR NORTH EAST ALTERNATE INTERSTATE 13 23 39
COVER MO6-1 21"X21"
COVER MO6-1 21"X21"

SOUTH 13
WEST 16
WEST 23

Wis Rapids
Wis Dells
Montello
COVER 9 1/2"X9 1/2"

M4-8 24"X12" DETOUR NORTH EAST ALTERNATE INTERSTATE 13 23 39
COVER MO6-1 21"X21"
COVER MO6-1 21"X21"

SOUTH 13
WEST 16
WEST 23

JCT 13
JCT 23

EAST 23
M3-2 24"X12"
M1-6 24"X24"
DETOUR AHEAD W20-2A

DETAIL A

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	DETOUR - STAGE 3 - STH 23 EAST	SHEET 75	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-027312-DT-23P-ON.DWG
LAYOUT NAME - 16
PLOT DATE : 1/28/2022 8:06 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:500 FT

2

LEGEND

XXXXXX ROAD/RAMP CLOSED

DETOUR ROUTE

TRAFFIC CONTROL SIGN ON PERMANENT/TEMPORARY SUPPORT

EXISTING SIGN

N

EAST 23 M3-2 24"X12" M1-6 24"X24"
JCT 13
DETOUR AHEAD W20-2A

M4-8 24"X12" M3-2 24"X12"
DETOUR EAST
SOUTH EAST NORTH
13 82 13 23 M1-6 24"X24"
M06-1 21"X21"

Oxford
Adams
Wis Dells

Wis Dells
Mauston
Oxford

STH 82

M4-8 24"X12" M3-2 24"X12" M1-6 24"X24" MO6-1 21"X21"
DETOUR EAST 23
EAST WEST 82 82

M4-8 24"X12" M3-2 24"X12" M1-6 24"X24" MO5-1L 21"X21"
DETOUR EAST 23
EAST SOUTH WEST 82 13 82

JCT 82
EAST 23 M3-2 24"X12" M1-6 24"X24"
DETOUR AHEAD W20-2A

STH 13

M4-8 24"X12" M3-2 24"X12"
DETOUR EAST
SOUTH NORTH
13 13 23 M1-6 24"X24"
MO6-1 21"X21"

JCT 82

WEST SOUTH EAST 82 13 82 23
DETOUR EAST
M4-8 24"X12" M3-2 24"X12" M1-6 24"X24" MO5-1R 21"X21"

Adams
Mauston
Oxford

M4-8 24"X12" M3-2 24"X12"
DETOUR EAST ALTERNATE INTERSTATE 39
WEST EAST 82 82 23
M1-6 24"X24" MO6-1 21"X21" MO4-1 24"X12" M1-1 24"X24"

M4-8 24"X12" M3-2 24"X12" M1-6 24"X24"
DETOUR EAST ALTERNATE INTERSTATE 39 MO4-1 24"X12" M1-1 24"X24"
23
EAST 82

STH 82

DETAIL B

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	DETOUR - STAGE 3 - STH 23 EAST	SHEET 76	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-027312-DT-23P-ON.DWG
LAYOUT NAME - 82
PLOT DATE : 1/28/2022 8:06 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : ########

WISDOT/CADDS SHEET 44

2

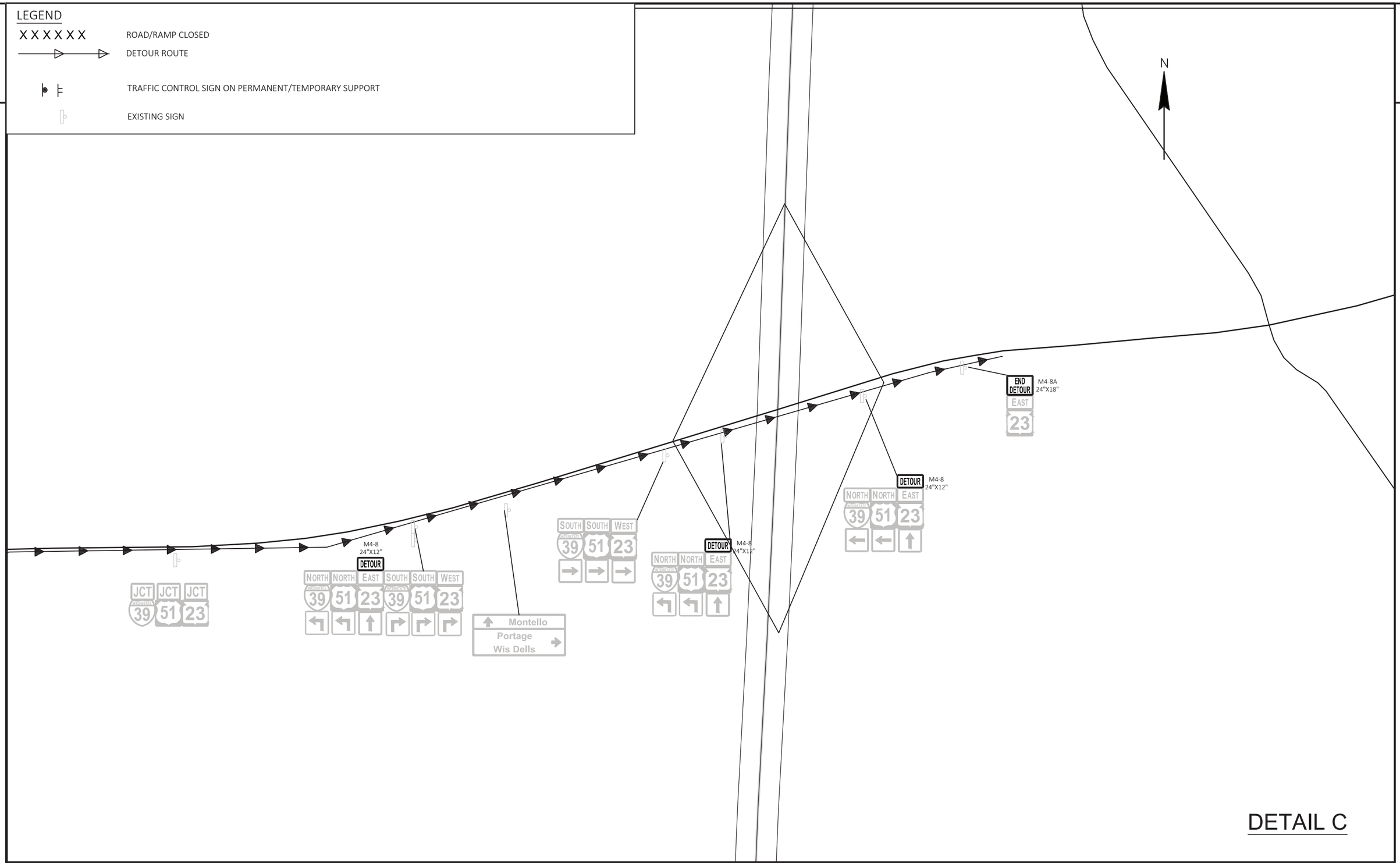
LEGEND

XXXXXX ROAD/RAMP CLOSED

DETOUR ROUTE

TRAFFIC CONTROL SIGN ON PERMANENT/TEMPORARY SUPPORT

EXISTING SIGN



DETAIL C

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	DETOUR - STAGE 3 - STH 23 EAST	SHEET 77	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\1166-04-12 (I-39_MARQUETTE COUNTY) - OMNNI\C3D\SHEETSPLAN-RE-LET\11660482-027312-DT-23P-ON.DWG
LAYOUT NAME - I39-82

PLOT DATE : 1/28/2022 8:07 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : ##########

1166-04-82

Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Concrete Pavement	SY	9,660.000	9,660.000
0004	204.0105	Removing Pavement Butt Joints	SY	3,472.000	3,472.000
0006	204.0110	Removing Asphaltic Surface	SY	4,794.000	4,794.000
0008	204.0115	Removing Asphaltic Surface Butt Joints	SY	482.000	482.000
0010	204.0120	Removing Asphaltic Surface Milling	SY	535,080.000	535,080.000
0012	204.0165	Removing Guardrail	LF	5,706.000	5,706.000
0014	204.0170	Removing Fence	LF	180.000	180.000
0016	204.0175	Removing Concrete Slope Paving	SY	23.000	23.000
0018	205.0100	Excavation Common	CY	10,580.000	10,580.000
0020	208.0100	Borrow	CY	1,240.000	1,240.000
0022	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1166-04-82	LS	1.000	1.000
0024	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	141.000	141.000
0026	213.0100	Finishing Roadway (project) 01. 1166-04-82	EACH	1.000	1.000
0028	305.0110	Base Aggregate Dense 3/4-Inch	TON	6,546.000	6,546.000
0030	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	16,500.000	16,500.000
0032	390.0201	Base Patching Asphaltic	TON	860.000	860.000
0034	416.0610	Drilled Tie Bars	EACH	540.000	540.000
0036	416.0620	Drilled Dowel Bars	EACH	375.000	375.000
0038	416.0750.S	Concrete Pavement Partial Depth Repair Joint Repair	LF	200.000	200.000
0040	416.0754.S	Concrete Pavement Partial Depth Repair Surface Repair	SF	200.000	200.000
0042	416.0758.S	Concrete Pavement Partial Depth Repair Full Depth Adjustment	SF	100.000	100.000
0044	416.1710	Concrete Pavement Repair	SY	340.000	340.000
0046	416.1720	Concrete Pavement Replacement	SY	750.000	750.000
0048	450.4000	HMA Cold Weather Paving	TON	12,600.000	12,600.000
0050	455.0605	Tack Coat	GAL	59,245.000	59,245.000
0052	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	3.000	3.000
0054	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0056	460.2000	Incentive Density HMA Pavement	DOL	37,920.000	37,920.000
0058	460.2005	Incentive Density PWL HMA Pavement	DOL	33,750.000	33,750.000
0060	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	103,660.000	103,660.000
0062	460.2010	Incentive Air Voids HMA Pavement	DOL	88,570.000	88,570.000
0064	460.5224	HMA Pavement 4 LT 58-28 S	TON	15,913.000	15,913.000
0066	460.7223	HMA Pavement 3 HT 58-28 S	TON	3,099.000	3,099.000
0068	460.7224	HMA Pavement 4 HT 58-28 S	TON	47,191.000	47,191.000
0070	460.7424	HMA Pavement 4 HT 58-28 H	TON	41,259.000	41,259.000
0072	465.0105	Asphaltic Surface	TON	20.000	20.000
0074	465.0110	Asphaltic Surface Patching	TON	60.000	60.000
0076	465.0125	Asphaltic Surface Temporary	TON	1,327.000	1,327.000
0078	465.0400	Asphaltic Shoulder Rumble Strips	LF	248,462.000	248,462.000
0080	520.8000	Concrete Collars for Pipe	EACH	9.000	9.000
0082	520.8700	Cleaning Culvert Pipes	EACH	10.000	10.000
0084	522.0118	Culvert Pipe Reinforced Concrete Class III 18-Inch	LF	4.000	4.000
0086	524.0118	Culvert Pipe Salvaged 18-Inch	LF	40.000	40.000
0088	524.0136	Culvert Pipe Salvaged 36-Inch	LF	16.000	16.000
0090	524.0618	Apron Endwalls for Culvert Pipe Salvaged 18-Inch	EACH	8.000	8.000
0092	524.0636	Apron Endwalls for Culvert Pipe Salvaged 36-Inch	EACH	1.000	1.000
0094	603.1142	Concrete Barrier Type S42	LF	55.000	55.000
0096	603.8000	Concrete Barrier Temporary Precast Delivered	LF	3,250.000	3,250.000
0098	603.8125	Concrete Barrier Temporary Precast Installed	LF	5,950.000	5,950.000

1166-04-82

Line	Item	Item Description	Unit	Total	Qty
0100	603.8500	Anchoring Concrete Barrier Temporary Precast	LF	3,640.000	3,640.000
0102	604.0400	Slope Paving Concrete	SY	23.000	23.000
0104	606.0200	Riprap Medium	CY	5.000	5.000
0106	614.0010	Barrier System Grading Shaping Finishing	EACH	24.000	24.000
0108	614.0115	Anchorages for Steel Plate Beam Guard Type 2	EACH	1.000	1.000
0110	614.0215	Steel Thrie Beam Structure Approach Retrofit Span	EACH	6.000	6.000
0112	614.0380	Steel Plate Beam Guard Energy Absorbing Terminal Temporary	EACH	1.000	1.000
0114	614.0905	Crash Cushions Temporary	EACH	2.000	2.000
0116	614.0925	Salvaged Guardrail End Treatments	EACH	1.000	1.000
0118	614.2300	MGS Guardrail 3	LF	4,775.000	4,775.000
0120	614.2500	MGS Thrie Beam Transition	LF	945.600	945.600
0122	614.2610	MGS Guardrail Terminal EAT	EACH	23.000	23.000
0124	614.2620	MGS Guardrail Terminal Type 2	EACH	1.000	1.000
0126	616.0100	Fence Woven Wire (height) 01. 4.5 FT	LF	180.000	180.000
0128	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1166-04-82	EACH	1.000	1.000
0130	619.1000	Mobilization	EACH	1.000	1.000
0132	624.0100	Water	MGAL	165.000	165.000
0134	625.0100	Topsoil	SY	24,680.000	24,680.000
0136	628.1504	Silt Fence	LF	14,500.000	14,500.000
0138	628.1520	Silt Fence Maintenance	LF	14,500.000	14,500.000
0140	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0142	628.1910	Mobilizations Emergency Erosion Control	EACH	5.000	5.000
0144	628.2002	Erosion Mat Class I Type A	SY	24,680.000	24,680.000
0146	628.7005	Inlet Protection Type A	EACH	12.000	12.000
0148	628.7504	Temporary Ditch Checks	LF	350.000	350.000
0150	628.7555	Culvert Pipe Checks	EACH	10.000	10.000
0152	628.7570	Rock Bags	EACH	50.000	50.000
0154	629.0210	Fertilizer Type B	CWT	7.000	7.000
0156	630.0130	Seeding Mixture No. 30	LB	214.000	214.000
0158	630.0500	Seed Water	MGAL	554.000	554.000
0160	633.1100	Delineators Temporary	EACH	196.000	196.000
0162	633.5200	Markers Culvert End	EACH	12.000	12.000
0164	642.5401	Field Office Type D	EACH	1.000	1.000
0166	643.0300	Traffic Control Drums	DAY	42,837.000	42,837.000
0168	643.0420	Traffic Control Barricades Type III	DAY	3,458.000	3,458.000
0170	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	465.000	465.000
0172	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	465.000	465.000
0174	643.0705	Traffic Control Warning Lights Type A	DAY	6,916.000	6,916.000
0176	643.0715	Traffic Control Warning Lights Type C	DAY	6,931.000	6,931.000
0178	643.0800	Traffic Control Arrow Boards	DAY	666.000	666.000
0180	643.0900	Traffic Control Signs	DAY	23,643.000	23,643.000
0182	643.0910	Traffic Control Covering Signs Type I	EACH	4.000	4.000
0184	643.0920	Traffic Control Covering Signs Type II	EACH	28.000	28.000
0186	643.1050	Traffic Control Signs PCMS	DAY	45.000	45.000
0188	643.1051	Traffic Control Signs PCMS with Cellular Communications	DAY	301.000	301.000
0190	643.5000	Traffic Control	EACH	1.000	1.000
0192	645.0120	Geotextile Type HR	SY	35.000	35.000
0194	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	282,120.000	282,120.000
0196	646.1555	Marking Line Grooved Contrast Permanent Tape 4-Inch	LF	31,784.000	31,784.000

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Line	Item	Item Description	Unit	Total	Qty
0198	646.3020	Marking Line Epoxy 8-Inch	LF	358.000	358.000
0200	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	7,848.000	7,848.000
0202	646.5420	Marking Aerial Enforcement Bar Epoxy	EACH	30.000	30.000
0204	646.6120	Marking Stop Line Epoxy 18-Inch	LF	185.000	185.000
0206	646.6464	Cold Weather Marking Epoxy 4-Inch	LF	36,000.000	36,000.000
0208	646.7220	Marking Chevron Epoxy 24-Inch	LF	1,007.000	1,007.000
0210	646.9000	Marking Removal Line 4-Inch	LF	81,977.000	81,977.000
0212	649.0105	Temporary Marking Line Paint 4-Inch	LF	759,462.000	759,462.000
0214	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	99,520.000	99,520.000
0216	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	3,000.000	3,000.000
0218	649.0960	Temporary Marking Removable Mask Out Tape 6-Inch	LF	4,740.000	4,740.000
0220	650.4500	Construction Staking Subgrade	LF	7,032.000	7,032.000
0222	650.5000	Construction Staking Base	LF	7,032.000	7,032.000
0224	650.8000	Construction Staking Resurfacing Reference	LF	139,022.000	139,022.000
0226	650.9910	Construction Staking Supplemental Control (project) 01. 1166-04-82	LS	1.000	1.000
0228	650.9920	Construction Staking Slope Stakes	LF	7,105.000	7,105.000
0230	690.0150	Sawing Asphalt	LF	4,626.000	4,626.000
0232	690.0250	Sawing Concrete	LF	2,100.000	2,100.000
0234	740.0440	Incentive IRI Ride	DOL	95,232.000	95,232.000
0236	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,100.000	2,100.000
0238	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	4,800.000	4,800.000
0240	SPV.0060	Special 01. Rehabilitate Inlet	EACH	1.000	1.000
0242	SPV.0060	Special 02. Replace Inlet Adjustment Rings	EACH	5.000	5.000
0244	SPV.0060	Special 04. Dowel Bar Slot Repair	EACH	14,885.000	14,885.000
0246	SPV.0060	Special 05. Dowel Bar Spall Repair	EACH	400.000	400.000
0248	SPV.0090	Special 01. Remove and Replace Concrete Barrier	LF	35.000	35.000
0250	SPV.0090	Special 02. Remove and Reset Cable Guard	LF	250.000	250.000
0252	SPV.0090	Special 03. Ditch Cleaning	LF	25.000	25.000

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REMOVING CONCRETE PAVEMENT

STATION TO STATION			ROADWAY	204.0100 SY
PROJECT 1166-04-82				
CATEGORY 0010				
394+10	-	403+02	IH 39 NB	2,380
428+58	-	437+66	IH 39 NB	2,420
759+92	-	769+04	IH 39 NB	2,430
839+12	-	848+22	IH 39 NB	2,430
		PROJECT TOTAL		9,660

REMOVING PAVEMENT BUTT JOINTS

LOCATION	ROADWAY	204.0105 REMOVING PAVEMENT BUTT JOINTS SY	COMMENTS
PROJECT 1166-04-82			
CATEGORY 0010			
6+75, B-39-15	IH 39 NB	433	
104+75, B-39-17	IH 39 NB	400	
213+00, B-39-19	IH 39 NB	439	
279+25, B-39-21	IH 39 NB	467	
893+00, B-39-30	IH 39 NB	433	
1070+25, B-39-32	IH 39 NB	433	
1159+50, B-39-34	IH 39 NB	433	
1253+75, B-39-36	IH 39 NB	433	
PROJECT TOTALS		3,472	

REMOVING FENCE & FENCE WOVEN WIRE 4'-6" HEIGHT

STATION	CULVERT #	LOCATION	DIR	204.0170 REMOVING FENCE LF	616.0100 FENCE WOVEN WIRE 4'-6" HEIGHT LF
PROJECT 1166-04-82					
CATEGORY 0010					
352+70	39039005228	IH 39 NB	RT	30	30
354+96	39039005229	IH 39 NB	RT	30	30
356+70	39039005230	IH 39 NB	RT	30	30
358+43	39039005231	IH 39 NB	RT	30	30
379+42	39039005235	IH 39 NB	RT	30	30
383+18	39039005237	IH 39 NB	RT	30	30
		PROJECT TOTAL		180	180

REMOVING ASPHALTIC SURFACE

LOCATION	ROADWAY	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	COMMENTS
PROJECT 1166-04-82				
CATEGORY 0010				
2049+30 SOUTH PROJECT LIMITS	IH 39 NB	---	42	
547+75, B-39-26	IH 39 NB	---	86	
642+00, B-39-27	IH 39 NB	---	82	
1258+35, NORTH PROJECT LIMITS	IH 39 NB	---	42	
202+86 - 212+66	RAMP AB	838	26	REPLACE SHOULDER
212+75 - 218+48	RAMP AA	481	26	REPLACE SHOULDER
427+10 - 431+18	RAMP BB	349	26	REPLACE SHOULDER
535+13 - 546+97	RAMP CB	1,052	26	REPLACE SHOULDER
549+95 - 556+24	RAMP CA	559	26	REPLACE SHOULDER
880+83 - 892+33	RAMP DB	1,004	26	REPLACE SHOULDER
893+20 - 899+18	RAMP DA	511	26	REPLACE SHOULDER
1118+69	RAMP EB	---	26	
1143+55	RAMP EA	---	26	
PROJECT TOTALS		4,794	482	

REMOVING GUARDRAIL

STATION TO STATION			DIR	ROADWAY	204.0165 REMOVING GUARDRAIL LF	COMMENT
PROJECT 1166-04-82						
CATEGORY 0010						
3+56	-	6+39	LT	IH 39 NB	283	B-39-15, NEENAH CREEK
3+63	-	6+45	RT	IH 39 NB	282	
100+47	-	104+18	LT	IH 39 NB	371	B-39-17, CTH 0
102+98	-	104+18	RT	IH 39 NB	120	
208+56	-	212+26	LT	IH 39 NB	370	B-39-19, STH 23 WEST
210+99	-	212+20	RT	IH 39 NB	121	
214+24	-	216+31	LT	IH 39 NB	207	
274+77	-	278+60	LT	IH 39 NB	383	B-39-21, CTH CX
277+21	-	278+42	RT	IH 39 NB	121	
337+07	-	340+57	LT	IH 39 NB	350	SOUTH END MEDIAN BARRIER
397+04	-	398+24	RT	IH 39 NB	120	UP RR OVERPASS
405+66	-	409+25	LT	IH 39 NB	359	NORTH END MEDIAN BARRIER
431+57	-	433+32	RT	IH 39 NB	175	CTH D OVERPASS
542+72	-	546+68	LT	IH 39 NB	396	B-39-26, STH 23 EAST
545+64	-	546+84	RT	IH 39 NB	120	
637+58	-	641+53	LT	IH 39 NB	395	B-39-27, FAWN CT
640+33	-	641+53	RT	IH 39 NB	120	
888+25	-	892+07	LT	IH 39 NB	382	B-39-30, CTH E
890+96	-	892+04	RT	IH 39 NB	108	
1068+71	-	1069+79	LT	IH 39 NB	108	B-39-32, DOVER CT
1068+76	-	1069+84	RT	IH 39 NB	108	
1155+11	-	1158+94	LT	IH 39 NB	383	B-39-34, CTH Z
1157+94	-	1159+02	RT	IH 39 NB	108	
1252+39	-	1253+47	LT	IH 39 NB	108	B-39-36, CHAFFEE CREEK
1252+39	-	1253+47	RT	IH 39 NB	108	
				PROJECT TOTAL	5,706	

REMOVING ASPHALTIC SURFACE MILLING

STATION	TO	STATION	ROADWAY	LOCATION	204.0120 SY	MILL DEPTH
PROJECT 1166-04-82						
CATEGORY 0010						
2049+30	-	38+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	9,700	3.5" - 4.22"
				RT LANE	6,650	3.5" - 4.22"
				OUTSIDE SHOULDER	5,610	1.75"
38+00	-	98+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,890	3.5" - 4.22"
				RT LANE	8,000	3.5" - 4.22"
				OUTSIDE SHOULDER	6,670	1.75"
98+00	-	158+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,620	3.5" - 4.22"
				RT LANE	7,850	3.5" - 4.22"
				OUTSIDE SHOULDER	6,540	1.75"
158+00	-	218+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,600	3.5" - 4.22"
				RT LANE	7,770	3.5" - 4.22"
				OUTSIDE SHOULDER	7,320	1.75"
218+00	-	278+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,920	3.5" - 4.22"
				RT LANE	8,010	3.5" - 4.22"
				OUTSIDE SHOULDER	8,110	1.75"
278+00	-	338+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,420	3.5" - 4.22"
				RT LANE	7,740	3.5" - 4.22"
				OUTSIDE SHOULDER	6,430	1.75"
338+00	-	398+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	11,220	3.5" - 4.22"
				RT LANE	7,480	3.5" - 4.22"
				OUTSIDE SHOULDER	6,230	1.75"
398+00	-	458+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	8,300	3.5" - 4.22"
				RT LANE	6,120	3.5" - 4.22"
				OUTSIDE SHOULDER	5,900	1.75"
458+00	-	518+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,670	3.5" - 4.22"
				RT LANE	8,000	3.5" - 4.22"
				OUTSIDE SHOULDER	6,660	1.75"
518+00	-	578+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,430	3.5" - 4.22"
				RT LANE	7,820	3.5" - 4.22"
				OUTSIDE SHOULDER	8,470	1.75"
578+00	-	638+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,670	3.5" - 4.22"
				RT LANE	8,000	3.5" - 4.22"
				OUTSIDE SHOULDER	6,670	1.75"
638+00	-	698+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,480	3.5" - 4.22"
				RT LANE	7,860	3.5" - 4.22"
				OUTSIDE SHOULDER	6,540	1.75"
698+00	-	758+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,670	3.5" - 4.22"
				RT LANE	8,000	3.5" - 4.22"
				OUTSIDE SHOULDER	6,670	1.75"
				RT OUTSIDE RUMBLE STRIP	190	1"
758+00	-	818+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	9,050	3.5" - 4.22"
				RT LANE	6,780	3.5" - 4.22"
				OUTSIDE SHOULDER	5,650	1.75"
				RT OUTSIDE RUMBLE STRIP	290	1"
				COLUMN TOTALS	344,670	

REMOVING ASPHALTIC SURFACE MILLING CONTINUED

STATION	TO	STATION	ROADWAY	LOCATION	204.0120 SY	MILL DEPTH
PROJECT 1166-04-82						
CATEGORY 0010						
818+00	-	878+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	9,070	3.5"
				RT LANE	6,790	3.5"
				OUTSIDE SHOULDER	5,980	1.75"
				RT OUTSIDE RUMBLE STRIP	480	1"
878+00	-	938+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,750	3.5"
				RT LANE	7,690	3.5"
				OUTSIDE SHOULDER	7,840	1.75"
938+00	-	998+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,670	3.5"
				RT LANE	8,000	3.5"
				OUTSIDE SHOULDER	6,670	1.75"
998+00	-	1058+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,720	3.5"
				RT LANE	8,000	3.5"
				OUTSIDE SHOULDER	6,660	1.75"
1058+00	-	1118+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,760	3.5"
				RT LANE	7,790	3.5"
				OUTSIDE SHOULDER	7,370	1.75"
1118+00	-	1178+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,840	3.5" - 4.22"
				RT LANE	7,800	3.5" - 4.22"
				OUTSIDE SHOULDER	7,410	1.75"
1178+00	-	1238+00	IH 39 NB	LT LANE AND INSIDE SHOULDER	10,660	3.5" - 4.22"
				RT LANE	7,980	3.5" - 4.22"
				OUTSIDE SHOULDER	6,650	1.75"
1238+00	-	1258+35	IH 39 NB	LT LANE AND INSIDE SHOULDER	3,850	3.5" - 4.22"
				RT LANE	2,580	3.5" - 4.22"
				OUTSIDE SHOULDER	2,170	1.75"
201+37	-	202+86	RAMP AB	LANE AND SHOULDERS	380	1.75"
218+48	-	221+99	RAMP AA	LANE AND SHOULDERS	900	1.75"
422+65	-	427+10	RAMP BB	LANE AND SHOULDERS	1,140	1.75"
531+74	-	535+13	RAMP CB	LANE AND SHOULDERS	870	1.75"
556+24	-	559+26	RAMP CA	LANE AND SHOULDERS	770	1.75"
897+27	-	880+83	RAMP DB	LANE AND SHOULDERS	400	3.5"
889+18	-	899+59	RAMP DA	LANE AND SHOULDERS	100	3.5"
1117+61	-	1118+69	RAMP EB	LANE AND SHOULDERS	270	1.75"
1143+55	-	1145+12	RAMP EA	LANE AND SHOULDERS	400	1.75"
				COLUMN TOTAL	190,410	
				PROJECT TOTAL	535,080	

3

EARTHWORK SUMMARY

ROADWAY	FROM/TO STATION	205.0100 COMMON EXCAVATION CY	SALVAGED/UNUSABLE PAVEMENT MATERIAL	AVAILABLE MATERIAL	UNEXPANDED FILL	EXPANDED FILL FACTOR 1.20	MASS ORDINATE +/-	WASTE	208.0100 BORROW	COMMENT
IH 39 NB	394+10 - 403+02	1,060	0	1,060	0	0	1,060	1,060	0	
IH 39 NB	428+58 - 437+66	1,060	0	1,060	0	0	1,060	1,060	0	
IH 39 NB	759+92 - 769+04	1,060	0	1,060	0	0	1,060	1,060	0	
IH 39 NB	775+00 - 778+00	0	0	0	65	80	-80	0	80	
IH 39 NB	839+12 - 848+22	1,060	0	1,060	0	0	1,060	1,060	0	
NORTH CROSSOVER	434+61 - 451+79	750	0	750	910	1,090	-340	0	340	
SOUTH CROSSOVER	302+91 - 319+85	920	0	920	1,450	1,740	-820	0	820	
NORTH CROSSOVER REMOVAL	434+64 - 451+79	2,210	0	2,210	10	10	2,200	2,200	0	
SOUTH CROSSOVER REMOVAL	303+00 - 319+80	2,460	0	2,460	260	310	2,150	2,150	0	
PROJECT TOTALS		10,580							1,240	

PREPARE FOUNDATION FOR ASPHALTIC PAVING

STATION	TO	STATION	ROADWAY	211.0100 LS
PROJECT 1166-04-82				
CATEGORY 0010				
2049+30	-	1258+35	IH 39 NB	1
196+97	-	212+66	RAMP AB	
212+75	-	232+84	RAMP AA	
418+33	-	431+18	RAMP BB	
527+85	-	546+97	RAMP CB	
549+95	-	569+40	RAMP CA	
875+31	-	892+33	RAMP DB	
893+20	-	907+84	RAMP DA	
1113+33	-	1121+50	RAMP EB	
1141+60	-	1152+49	RAMP EA	
302+91		319+85	S CROSSOVER	
434+61		451+79	N CROSSOVER	
			PROJECT TOTAL	1

3

BASE AGGREGATE DENSE

STATION		TO STATION	ROADWAY	AREA	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL	COMMENTS
PROJECT 1166-04-82									
CATEGORY 0010									
2049+30	-	6+23	IH 39 NB	SHOULDERS	---	179	---	---	
7+32	-	104+23	IH 39 NB	SHOULDERS	---	522	---	---	
105+39	-	212+35	IH 39 NB	SHOULDERS	---	392	---	---	
214+14	-	278+63	IH 39 NB	SHOULDERS	---	305	---	---	
279+92	-	394+10	IH 39 NB	SHOULDERS	---	277	---	---	
394+10	-	403+02	IH 39 NB	FULL ROADWAY	7	52	2,731	27	
401+52	-	428+58	IH 39 NB	SHOULDERS	---	87	---	---	
428+58	-	437+66	IH 39 NB	FULL ROADWAY	7	159	2,780	28	
437+66	-	546+90	IH 39 NB	SHOULDERS	---	357	---	---	
548+26	-	641+58	IH 39 NB	SHOULDERS	---	299	---	---	
642+66	-	759+92	IH 39 NB	SHOULDERS	---	284	---	---	
759+92	-	769+04	IH 39 NB	FULL ROADWAY	7	99	2,792	28	
769+04	-	775+00	IH 39 NB	SHOULDERS	---	23	---	---	
775+00	-	778+00	IH 39 NB	SHOULDERS	---	95	---	---	
778+00	-	839+12	IH 39 NB	SHOULDERS	---	148	---	---	
839+12	-	848+22	IH 39 NB	FULL ROADWAY	7	99	2,786	28	
848+22	-	891+80	IH 39 NB	SHOULDERS	---	234	---	---	
894+10	-	1069+66	IH 39 NB	SHOULDERS	---	575	---	---	
1071+23	-	1158+81	IH 39 NB	SHOULDERS	---	356	---	---	
1160+41	-	1253+23	IH 39 NB	SHOULDERS	---	383	---	---	
1254+28	-	1258+35	IH 39 NB	SHOULDERS	---	30	---	---	
196+59	-	212+51	RAMP AB	SHOULDERS	20	54	---	---	
212+75	-	234+27	RAMP AA	SHOULDERS	12	72	---	---	
417+94	-	431+18	RAMP BB	SHOULDERS	9	45	---	---	
527+48	-	546+97	RAMP CB	SHOULDERS	24	72	---	---	
549+95	-	570+82	RAMP CA	SHOULDERS	13	70	---	---	
874+93	-	892+33	RAMP DB	SHOULDERS	23	60	---	---	
893+43	-	908+83	RAMP DA	SHOULDERS	12	51	---	---	
1112+97	-	1121+50	RAMP EB	SHOULDERS	---	18	---	---	
1141+60	-	1153+59	RAMP EA	SHOULDERS	---	31	---	---	
302+91	-	319+85	S CROSSOVER	FULL ROADWAY	---	375	2,690	27	
434+61	-	451+79	N CROSSOVER	FULL ROADWAY	---	373	2,721	27	
302+91	-	319+82	IH 39 NB (CROSSOVER REMOVAL)	SHOULDER	---	184	---	---	
434+63	-	451+79	IH 39 NB (CROSSOVER REMOVAL)	SHOULDER	---	187	---	---	
				PROJECT TOTALS	141	6,546	16,500	165	

3

CONCRETE PAVEMENT

STATION TO STATION	DIR	LOCATION	CROSSROAD	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.0750.S CONCRETE PAVEMENT PARTIAL DEPTH REPAIR JOINT REPAIR LF	416.0754.S CONCRETE PAVEMENT PARTIAL DEPTH REPAIR SURFACE REPAIR SF	416.0758.S CONCRETE PAVEMENT PARTIAL DEPTH REPAIR FULL DEPTH ADJUSTMENT SF	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	690.0250 SAWING CONCRETE LF
PROJECT 1166-04-82											
CATEGORY 0010											
202+86 - 212+75	R/L	RAMP AB	CTH P / STH 23	35	10	30	---	---	60	160	515
212+70 - 218+48	R/L	RAMP AA	CTH P / STH 23	145	80	20	---	---	65	---	175
427+10 - 431+55	R/L	RAMP BB	CTH D	10	5	50	---	---	---	10	50
535+13 - 546+97	R/L	RAMP CB	STH 82 / STH 23	---	---	---	---	---	---	---	---
549+95 - 556+25	R/L	RAMP CA	STH 82 / STH 23	---	---	---	---	---	---	---	---
880+83 - 892+57	R/L	RAMP DB	CTH E / CTH J	140	110	---	---	---	60	330	550
892+78 - 899+18	R/L	RAMP DA	CTH E / CTH J	120	100	---	---	---	55	250	460
UNDISTRIBUTED			---	90	70	100	200	100	100	---	350
PROJECT TOTALS				540	375	200	200	100	340	750	2,100

NOTE: UNDISTIBUTED QUANTITY PROVIDED FOR REPAIRS ON RAMPS OUTSIDE OF TERMINAL AREAS

ASPHALTIC ITEMS

STATION		TO STATION	ROADWAY	AREA	PAVEMENT SECTION	PAVEMENT AVG DEPTH IN	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	460.7223 HMA PAVEMENT 3 HT 58-28 S TON	460.7224 HMA PAVEMENT 4 HT 58-28 S TON	460.7424 HMA PAVEMENT 4 HT 58-28 H TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF	COMMENTS
PROJECT 1166-04-82															
CATEGORY 0010															
2049+30	-	6+23	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	114	---	---	96	96	---	1,923	
				LANES		3.875	---	616	---	---	627	516	---	---	
				OUTSIDE SHLD		1.75	---	130	218	---	---	---	---	1,925	
7+32	-	104+23	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	528	---	---	443	443	---	9,710	
				LANES		3.875	---	3,101	---	---	3,157	2,600	---	---	
				OUTSIDE SHLD		1.75	---	647	1,085	---	---	---	---	9,704	
105+39	-	212+35	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	580	---	---	487	487	---	10,696	
				LANES		3.875	---	3,423	---	---	3,485	2,870	---	---	
				OUTSIDE SHLD		1.75	---	683	1,145	---	---	---	---	10,399	
214+14	-	278+63	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	355	---	---	297	297	---	6,449	
				LANES		3.875	---	2,064	---	---	2,101	1,731	---	---	
				OUTSIDE SHLD		1.75	---	358	600	---	---	---	---	5,704	
279+92	-	394+10	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	763	---	---	640	640	---	11,418	
				LANES		3.875	---	3,654	---	---	3,720	3,064	---	---	
				OUTSIDE SHLD		1.75	---	760	1,275	---	---	---	---	11,418	
394+10	-	403+02	IH 39 NB	INSIDE SHLD	FULL DEPTH	8	---	92	---	132	51	51	---	892	
				LANES		8	---	428	---	615	239	239	---	---	
				OUTSIDE SHLD		4	---	119	228	---	---	---	---	892	
403+02	-	428+58	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	168	---	---	141	141	---	2,556	
				LANES		3.875	---	818	---	---	833	686	---	---	
				OUTSIDE SHLD		1.75	---	142	238	---	---	---	---	2,257	
428+58	-	437+66	IH 39 NB	INSIDE SHLD	FULL DEPTH	8	---	109	---	157	61	61	---	908	
				LANES		8	---	435	---	626	243	243	---	---	
				OUTSIDE SHLD		4	---	122	234	---	---	---	---	906	
437+66	-	546+90	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	602	---	---	505	505	---	10,924	
				LANES		3.875	---	3,497	---	---	3,560	2,932	---	---	
				OUTSIDE SHLD		1.75	---	703	1,179	---	---	---	---	10,639	
548+26	-	641+58	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	508	---	---	426	426	---	9,332	
				LANES		3.875	---	2,985	---	---	3,039	2,503	---	---	
				OUTSIDE SHLD		1.75	---	554	928	---	---	---	---	8,070	
642+66	-	759+92	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	642	---	---	539	539	---	11,726	
				LANES		3.875	---	3,752	---	---	3,821	3,146	---	---	
				OUTSIDE SHLD		1.75	---	781	1,310	---	---	---	---	11,726	
759+92	-	769+04	IH 39 NB	INSIDE SHLD	FULL DEPTH	8	---	109	---	157	61	61	---	912	
				LANES		8	---	438	---	629	245	245	---	---	
				OUTSIDE SHLD		4	---	122	233	---	---	---	---	912	
769+04	-	775+00	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	47	---	---	40	40	---	596	
				LANES		3.875	---	191	---	---	194	160	---	---	
				OUTSIDE SHLD		1.75	---	40	67	---	---	---	---	596	
775+00	-	778+00	IH 39 NB	INSIDE SHLD	DIP CORRECTION	5.5	---	25	---	---	30	14	---	300	
				LANES		5.5	---	144	---	---	173	81	---	---	
				OUTSIDE SHLD		5.5	---	60	34	---	72	---	---	300	
778+00	-	839+12	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	343	---	---	287	287	---	6,112	
				LANES		3.875	---	1,956	---	---	1,992	1,640	---	---	
				OUTSIDE SHLD		1.75	---	407	683	---	---	---	---	6,112	
					PAGE SUBTOTALS		0	38,116	9,458	2,317	31,607	26,745	0	166,014	

ASPHALTIC ITEMS - CONTINUED

STATION		TO STATION	ROADWAY	AREA	PAVEMENT SECTION	PAVEMENT AVG DEPTH IN	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	460.7223 HMA PAVEMENT 3 HT 58-28 S TON	460.7224 HMA PAVEMENT 4 HT 58-28 S TON	460.7424 HMA PAVEMENT 4 HT 58-28 H TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF	COMMENTS
PROJECT 1166-04-82															
CATEGORY 0010															
839+12	-	848+22	IH 39 NB	INSIDE SHLD	FULL DEPTH	8	---	108	---	155	60	60	---	910	
				LANES		8	---	437	---	628	244	244	---	---	
				OUTSIDE SHLD		4	---	123	235	---	---	---	---	910	
848+22	-	891+80	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	258	---	---	217	217	---	4,358	
				LANES		3.875	---	1,394	---	---	1,420	1,169	---	---	
				OUTSIDE SHLD		1.75	---	264	443	---	---	---	---	4,059	
894+10	-	1069+66	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	946	---	---	793	793	---	17,555	
				LANES		3.875	---	5,618	---	---	5,720	4,711	---	---	
				OUTSIDE SHLD		1.75	---	1,116	1,871	---	---	---	---	16,562	
1071+23	-	1158+81	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	476	---	---	400	400	---	8,758	
				LANES		3.875	---	2,803	---	---	2,854	2,351	---	---	
				OUTSIDE SHLD		1.75	---	507	850	---	---	---	---	7,556	
1160+41	-	1253+23	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	506	---	---	424	424	---	9,287	
				LANES		3.875	---	2,969	---	---	3,024	2,490	---	---	
				OUTSIDE SHLD		1.75	---	619	1,038	---	---	---	---	9,277	
1254+28	-	1258+35	IH 39 NB	INSIDE SHLD	OVERLAY	3.5	---	22	---	---	18	18	---	408	
				LANES		3.875	---	131	---	---	133	109	---	---	
				OUTSIDE SHLD		1.75	---	27	46	---	---	---	---	408	
196+97	-	212+66	RAMP AB	LANE / GORE	OVERLAY	1.75	---	81	---	---	---	136	---	---	
				SHOULDERS	REPLACEMENT	3.5	---	146	245	---	---	---	---	---	
212+75	-	232+84	RAMP AA	LANE / GORE	OVERLAY	1.75	---	158	---	---	---	265	---	---	
				SHOULDERS	REPLACEMENT	3.5	---	170	285	---	---	---	---	600	
418+33	-	431+18	RAMP BB	LANE / GORE	OVERLAY	1.75	---	107	---	---	---	179	---	---	
				SHOULDERS	REPLACEMENT	3.5	---	118	198	---	---	---	---	---	
527+85	-	546+97	RAMP CB	LANE / GORE	OVERLAY	1.75	---	88	---	---	---	148	---	---	
				SHOULDERS	REPLACEMENT	3.5	---	188	316	---	---	---	---	---	
549+95	-	569+40	RAMP CA	LANE / GORE	OVERLAY	1.75	---	141	---	---	---	236	---	---	
				SHOULDERS	REPLACEMENT	3.5	---	167	280	---	---	---	---	600	
875+31	-	892+33	RAMP DB	LANE / GORE	OVERLAY	3.5	---	140	---	---	117	117	---	---	
				SHOULDERS	REPLACEMENT	3.5	---	163	274	---	---	---	---	---	
893+20	-	907+84	RAMP DA	LANE / GORE	OVERLAY	3.5	---	191	---	---	160	160	---	---	
				SHOULDERS	REPLACEMENT	3.5	---	117	196	---	---	---	---	600	
1113+33	-	1121+50	RAMP EB	LANE / GORE	OVERLAY	1.75	---	77	---	---	---	129	---	---	
				SHOULDERS	REPLACEMENT	3.5	---	40	67	---	---	---	---	---	
1141+60	-	1152+49	RAMP EA	LANE / GORE	OVERLAY	1.75	---	94	---	---	---	157	---	---	
				SHOULDERS	REPLACEMENT	3.5	---	66	111	---	---	---	---	600	
302+91		319+85	S CROSSOVER	FULL ROADWAY	FULL DEPTH	5	---	275	---	---	---	---	660	---	
434+61		451+79	N CROSSOVER	FULL ROADWAY	FULL DEPTH	5	---	278	---	---	---	---	666	---	
UNDISTRIBUTED							12,600	---	---	---	---	---	---	---	
PAGE SUBTOTALS							12,600	21,129	6,455	783	15,584	14,514	1,327	82,448	
PROJECT TOTALS							12,600	59,245	15,913	3,099	47,191	41,259	1,327	248,462	

HMA MIXTURE ACCEPTANCE

STATION RANGES	ROADWAY	LOCATION		MIXTURE USE	UNDERLAYING SURFACE	BID ITEM	AVG LAYER DEPTH (IN)	TONNAGE	QMP TO BE USED FOR: MIXTURE ACCEPTANCE	QMP TO BE USED FOR: DENSITY ACCEPTANCE	COMMENT
PROJECT 1166-04-82											
CATEGORY 0010											
2049+30 - 394+10 403+02 - 428+58 437+66 - 759+92 769+04 - 775+00 778+00 - 839+12 848+22 - 1258+35	IH 39 NB	OVERLAY	INSIDE SHOULDER	UPPER	4 HT 58-28 S	4 HT 58-28 H	1.75	5,752	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE	INSIDE SHOULDER PAVED WITH INSIDE DRIVING LANE
				LOWER	EX HMA PAVT	4 HT 58-28 S	1.75	5,752			
			DRIVING LANES	UPPER	4 HT 58-28 S	4 HT 58-28 H	1.75	32,679		INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005	
				LOWER	EX CONC PAVT	4 HT 58-28 S	2.11	39,681		INCENTIVE DENSITY HMA PAVEMENT 460.2000	
			OUTSIDE SHOULDER	UPPER	EX HMA PAVT	4 LT 58-28 S	1.75	12,978	AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000	
394+10 - 403+02 428+58 - 437+66 759+92 - 769+04 839+12 - 848+22	IH 39 NB	FULL DEPTH	INSIDE SHOULDER	UPPER	4 HT 58-28 S	4 HT 58-28 H	1.75	234	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE	INSIDE SHOULDER PAVED WITH INSIDE DRIVING LANE
				UPPER	3 HT 58-28 S	4 HT 58-28 S	1.75	234			
				LOWER	3 HT 58-28 S	3 HT 58-28 S	2.25	300	AS PER SS 460		
				LOWER	EX BASE AGG	3 HT 58-28 S	2.25	300			
			DRIVING LANES	UPPER	4 HT 58-28 S	4 HT 58-28 H	1.75	972	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005	
				UPPER	3 HT 58-28 S	4 HT 58-28 S	1.75	972		INCENTIVE DENSITY HMA PAVEMENT 460.2000	
				LOWER	3 HT 58-28 S	3 HT 58-28 S	2.25	1,249	AS PER SS 460		
				LOWER	EX BASE AGG	3 HT 58-28 S	2.25	1,249			
			OUTSIDE SHOULDER	UPPER	4 LT 58-28 S	4 LT 58-28 S	2.00	465		INCENTIVE DENSITY HMA PAVEMENT 460.2000	
				LOWER	EX BASE AGG	4 LT 58-28 S	2.00	465			
775+00 - 778+00	IH 39 NB	DIP CORRECTION	INSIDE SHOULDER	UPPER	4 HT 58-28S	4 HT 58-28 H	1.75	14	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE	INSIDE SHOULDER PAVED WITH INSIDE DRIVING LANE
				LOWER	4 HT 58-28S	4 HT 58-28S	1.75	14			
				LOWER	EX HMA PAVT	4 HT 58-28S	2.00	16			
			DRIVING LANES	UPPER	4 HT 58-28S	4 HT 58-28 H	1.75	81		INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005	
				LOWER	4 HT 58-28S	4 HT 58-28 S	1.75	81		INCENTIVE DENSITY HMA PAVEMENT 460.2000	
				LOWER	EX HMA PAVT	4 HT 58-28 S	2.00	92			
			OUTSIDE SHOULDER	UPPER	4 HT 58-28S	4 LT 58-28 S	1.75	34	AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000	
				LOWER	4 HT 58-28S	4 HT 58-28 S	1.75	34	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010		
				LOWER	EX HMA PAVT	4 HT 58-28 S	2.00	38			
	RAMP AA, AB, BB, CA, CB, EA, EB		LANE / GORE	UPPER	EX HMA PAVT	4 HT 58-28 H	1.75	1,250		INCENTIVE DENSITY HMA PAVEMENT 460.2000	
			SHOULDERS	UPPER	4 LT 58-28 S	4 LT 58-28 S	1.75	751	AS PER SS 460	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE	
				LOWER	EX BASE AGG	4 LT 58-28 S	1.75	751			
	RAMP DA, DB (CTH J)		LANE / GORE	UPPER	4 HT 58-28 S	4 HT 58-28 H	1.75	278	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY HMA PAVEMENT 460.2000	
				LOWER	EX HMA PAVT	4 HT 58-28 S	1.75	278			
			SHOULDERS	UPPER	4 LT 58-28 S	4 LT 58-28 S	1.75	235	AS PER SS 460	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE	
				LOWER	EX BASE AGG	4 LT 58-28 S	1.75	235			

CONCRETE BARRIER & CONCRETE SLOPE PAVING

STATION TO STATION	DIR	LOCATION	204.0175 REMOVING CONCRETE SLOPE PAVING SY	603.1142 CONCRETE BARRIER TYPE S42 LF	604.0400 SLOPE PAVING CONCRETE SY
PROJECT 1166-04-82					
CATEGORY 0010					
432+75 - 433+30	RT	IH 39 NB	23	55	23
		PROJECT TOTAL	23	55	23

BASE PATCHING ASPHALTIC

	390.0201 TONS	COMMENTS
PROJECT 1166-04-82		
CATEGORY 0010		
UNDISTRIBUTED	860	ASSUMED 2' WIDTH/ 3" DEPTH
PROJECT TOTALS	860	

ASPHALTIC SURFACE

STATION	TO	STATION	ROADWAY	LOCATION	465.0105 ASPHLATIC SURFACE TON	465.0110 ASPHALTIC SURFACE PATCHING TON
PROJECT 1166-04-82						
CATEGORY 0010						
747+50	-	773+50	IH 39 NB	RT OUTSIDE RUMBLE STRIP	---	30
826+50	-	852+50	IH 39 NB	RT OUTSIDE RUMBLE STRIP	---	30
-	-	-	CTH E / CTH J EB	RAMP DB TERMINAL TRANS	10	---
-	-	-	CTH E / CTH J WB	RAMP DA TERMINAL TRANS	10	---
				PROJECT TOTAL	20	60

DRAINAGE

STATION	ROADWAY	DIR	CULVERT #	CULVERT SIZE	CULVERT LENGTH FT	520.8000* CONCRETE COLLARS FOR PIPE EACH	520.8700 CLEANING CULVERT PIPES EACH	522.0118 CULVERT PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	524.0118 CULVERT PIPE SALVAGED 18-INCH LF	524.0136 CULVERT PIPE SALVAGED 36-INCH LF	524.0618 APRON ENDWALL FOR CULVERT PIPE SALVAGED 18-INCH EA	524.0636 APRON ENDWALL FOR CULVERT PIPE SALVAGED 36-INCH EA	606.0200 RIPRAP MEDIUM CY	633.5200 MARKERS CULVERT END EA	645.0120 GEOTEXTILE TYPE HR SY	** JOINTS REQUIRING TIES	NOTES
PROJECT 1166-04-82																	
CATEGORY 0010																	
352+70	IH 39 NB	---	39039005228	18"	80	---	1	---	---	---	---	---	---	---	---	---	PIPE 80% FULL
354+96	IH 39 NB	---	39039005229	18"	75	---	1	---	---	---	---	---	---	---	---	---	PIPE 80% FULL
356+70	IH 39 NB	---	39039005230	18"	90	---	1	---	---	---	---	---	---	---	---	---	
358+43	IH 39 NB	RT	39039005231	18"	75	1	---	---	8	---	1	---	---	1	---	2	
366+18	IH 39 NB	---	39039005233	18"	75	---	1	---	---	---	---	---	---	---	---	---	
372+00	IH 39 NB	---	39039005234	18"	85	---	1	---	---	---	---	---	---	---	---	---	PIPE 80% FULL
379+42	IH 39 NB	---	39039005236	18"	65	---	1	---	---	---	---	---	---	1	---	---	PIPE 80% FULL
383+18	IH 39 NB	---	39039005237	18"	65	---	1	---	---	---	---	---	---	1	---	---	PIPE 80% FULL
387+20	IH 39 NB	---	39039005238	18"	---	---	1	---	---	---	---	---	---	1	---	---	
428+92	IH 39 NB	---	39039005244	18"	90	1	1	4	---	---	1	---	---	1	---	2	
451+25	IH 39 NB	RT	39039005246	36"	90	1	1	---	---	16	---	1	5	1	35	3	
505+97	IH 39 NB	RT	39039005249	18"	125	1	---	---	16	---	1	---	---	1	---	3	
568+95	IH 39 NB	RT	39039005252	18"	---	1	---	---	8	---	1	---	---	1	---	2	
568+95	IH 39 NB	LT	39039005252	18"	---	1	---	---	---	---	1	---	---	1	---	1	
588+94	IH 39 NB	RT	39039005254	18"	---	1	---	---	---	---	1	---	---	1	---	1	
588+94	IH 39 NB	LT	39039005254	18"	---	1	---	---	---	---	1	---	---	1	---	1	
607+93	IH 39 NB	RT	39039005257	18"	---	1	---	---	8	---	1	---	---	1	---	2	
PROJECT TOTALS						9	10	4	40	16	8	1	5	12	35		

** INSTALL JOINT TIES AT JOINTS EXPOSED DURING REMOVAL AND REPLACEMENT. DRILL HOLES FOR TIES IF NOT ALREADY PRESENT.

GUARDRAIL

STATION		TO STATION	DIR	ROADWAY	614.0215 STEEL THRIE BEAM STRUCTURE APPROACH RETROFIT SPAN EA	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EA	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EA	COMMENT
PROJECT 1166-04-82										
CATEGORY 0010										
3+09	-	6+39	LT	IH 39 NB	---	237.5	39.4	1	---	B-39-15, NEENAH CREEK
3+66	-	6+45	RT	IH 39 NB	---	187.5	39.4	1	---	
101+01	-	104+18	LT	IH 39 NB	1	225.0	39.4	1	---	B-39-17, CTH O
101+38	-	104+18	RT	IH 39 NB	1	187.5	39.4	1	---	
209+22	-	212+26	LT	IH 39 NB	1	212.5	39.4	1	---	B-39-19, STH 23 WEST
209+53	-	212+20	RT	IH 39 NB	1	175.0	39.4	1	---	
275+55	-	278+60	LT	IH 39 NB	---	212.5	39.4	1	---	B-39-21, CTH CX
275+75	-	278+42	RT	IH 39 NB	---	175.0	39.4	1	---	
337+03	-	340+57	LT	IH 39 NB	---	262.5	39.4	1	---	SOUTH END MEDIAN BARRIER
395+07	-	398+24	RT	IH 39 NB	---	225.0	39.4	1	---	UP RR OVERPASS
405+66	-	408+93	LT	IH 39 NB	---	287.5	39.4	---	1	NORTH END MEDIAN BARRIER
429+46	-	432+78	RT	IH 39 NB	---	237.5	39.4	1	---	CTH D OVERPASS
543+51	-	546+68	LT	IH 39 NB	---	225.0	39.4	1	---	B-39-26, STH 23 EAST
544+17	-	546+84	RT	IH 39 NB	---	175.0	39.4	1	---	
638+73	-	641+53	LT	IH 39 NB	---	187.5	39.4	1	---	B-39-27, FAWN CT
639+11	-	641+53	RT	IH 39 NB	---	150.0	39.4	1	---	
889+27	-	892+07	LT	IH 39 NB	---	187.5	39.4	1	---	B-39-30, CTH E
889+49	-	892+04	RT	IH 39 NB	---	162.5	39.4	1	---	
1066+87	-	1069+79	LT	IH 39 NB	---	200.0	39.4	1	---	B-39-32, DOVER CT
1067+41	-	1069+84	RT	IH 39 NB	---	150.0	39.4	1	---	
1156+14	-	1158+94	LT	IH 39 NB	---	187.5	39.4	1	---	B-39-34, CTH Z
1156+60	-	1159+02	RT	IH 39 NB	---	150.0	39.4	1	---	
1250+42	-	1253+47	LT	IH 39 NB	1	212.5	39.4	1	---	B-39-36, CHAFFEE CREEK
1250+93	-	1253+47	RT	IH 39 NB	1	162.5	39.4	1	---	
				PROJECT TOTALS	6	4775.0	945.6	23	1	

TEMPORARY GUARDRAIL

LOCATION	DIR	ROADWAY	614.0380 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL TEMPORARY EA	614.0925 SALVAGED GUARDRAIL END TREATMENTS EA	614.0115 ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2 EA	COMMENT
PROJECT 1166-04-82						
CATEGORY 0010						
CTH D	LT	IH 39 SB	1	1	1	FOR TEMPORARY EAT INSTALLATION AT END OF EXISTING GUARDRAIL BENEATH CTH D OVERPASS
		PROJECT TOTALS	1	1	1	

CONCRETE BARRIER TEMPORARY

		603.8000	603.8125	603.8500
STAGE	LOCATION	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST LF
PROJECT 1166-04-82				
CATEGOREY 0010				
1	STA 310+00 - STA 445+00	0	0	0
1A	STA 2049+30 - STA 2062+30; STA 0+00 - STA 310+00; STA 445+00 - STA 759+92; STA 796+04 - STA 839+12 STA 848+22 - STA 1258+35	0	0	0
1B		0	0	0
1C		0	0	0
1D		0	0	0
1	RAMP GORES	0	0	0
2	STA 310+00 - STA 445+00	550	550	0
3 PREP	STA 720+00 - STA 860+00	0	0	0
3A		2700	2700	1820
3B		0	2700	1820
3C		0	0	0
END 3C		0	0	0
3	STH 23/CTH P OFF RAMP CLOSURE	0	0	0
3	CTH E/CTH J OFF RAMP CLOSURE	0	0	0
3	STA 310+00 - STA 445+00	0	0	0
	PROJECT TOTALS	3,250	5,950	3,640

TRAFFIC CONTROL PCMS

		643.1050	643.1051
STAGE	SITE	TRAFFIC CONTROL SIGNS PCMS EACH	TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS EACH
PROJECT 1166-04-82			
CATEGORY 0010			
2	SITE 2A	0	17
2	SITE 2B	0	17
2	SITE 2C	0	17
2	SITE 2D	7	0
3	SITE 3A	0	26
3	SITE 3B	7	0
3	SITE 3C	7	0
3	SITE 3D	7	0
3	SITE 3E	7	0
3	SITE 3F	10	0
1-3	LANE CLOSURE	0	224
	PROJECT TOTALS	45	301

TRAFFIC CONTROL

STAGE	LOCATION	ESTIMATED SERVICE PERIOD SEGMENTS	DAYS PER SEGMENT	643.5000 TRAFFIC CONTROL EACH	633.1100 DELINEATORS TEMPORARY EACH	643.0300 TRAFFIC CONTROL DRUMS NO	643.0300 TRAFFIC CONTROL DRUMS DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III NO	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A NO	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C NO	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAYS	643.0800 TRAFFIC CONTROL ARROW BOARDS NO	643.0800 TRAFFIC CONTROL ARROW BOARDS DAYS	643.0900 TRAFFIC CONTROL SIGNS NO	643.0900 TRAFFIC CONTROL SIGNS DAYS	643.0910 COVERING SIGNS TYPE I TYPE I CYCLES	643.0910 COVERING SIGNS TYPE I # EACH	643.0920 COVERING SIGNS TYPE II TYPE II CYCLES	643.0920 COVERING SIGNS TYPE II # EACH
PROJECT 1166-04-82																							
CATEGORY 0010																							
	PROJECT	1	135	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4	RESTRICTED WIDTH SIGNING	1	224		0	0	0	0	0	0	0	0	0	0	0	0	0	60	13,440	0	0	0	1	0	0
1 PREP	STA 310+00- STA 445+00	1	5		0	135	675	5	25	0	0	10	50	15	75	2	10	22	110	0	0	0	1	0	0
1	STA 310+00- STA 445+00	1	25		0	363	9,075	24	600	0	0	48	1,200	38	950	4	100	55	1,375	0	0	0	1	0	0
1A	STA 2049+30 - STA 2062+30; STA 0+00 - STA 310+00; STA 445+00 - STA 759+92; STA 796+04 - STA 839+12 STA 848+22 - STA 1258+35	13	2		0	105	2,730	11	286	0	0	22	572	15	390	2	52	25	650	0	0	0	2	5	10
1B		13	4		0	105	5,460	11	572	0	0	22	1,144	15	780	2	104	25	1,300	0	0	0	1	0	0
1C		13	4		0	105	5,460	11	572	0	0	22	1,144	15	780	2	104	25	1,300	0	0	0	1	0	0
1D		13	2		0	105	2,730	11	286	0	0	22	572	15	390	2	52	25	650	0	0	0	1	0	0
1	STA 310+00- STA 445+00 (CROSSOVER CONSTRUCTED)	1	80		64	0	0	0	0	104	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	RAMP GORES	5	10		0	33	1,650	0	0	0	0	0	0	18	900	0	0	6	300	1	0	0	1	0	0
2	STA 310+00- STA 445+00	1	30		68	121	3,630	6	180	257	257	12	360	48	1,440	4	120	50	1,500	1	2	2	1	0	0
WINTER	CROSSOVER CLOSURE				64	0	0	0	0	104	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	STA 310+00- STA 445+00 (CROSSOVERS REMOVAL)	1	12		0	363	4,356	24	288	0	0	48	576	38	456	4	48	55	660	0	0	0	1	0	0
3 PREP	STA 720+00-STA 860+00 (UNDERPASS RECOONSTRUCTION)	1	2		0	176	352	12	24	0	0	24	48	15	30	2	4	26	52	0	0	0	1	0	0
3A		1	10		0	181	1,810	16	160	0	0	32	320	25	250	2	20	36	360	0	0	0	1	0	0
3B		1	10		0	181	1,810	16	160	0	0	32	320	25	250	2	20	36	360	0	0	0	1	0	0
3C		1	3		0	176	528	12	36	0	0	24	72	15	45	2	6	26	78	0	0	0	1	0	0
END 3C		1	1		0	176	176	11	11	0	0	22	22	15	15	2	2	25	25	0	0	0	1	0	0
3	STH 23/CTH P OFF RAMP CLOSURE	1	7		0	18	126	4	28	0	0	8	56	0	0	0	0	22	154	1	1	1	1	1	1
3	STH 23/CTH P ON RAMP CLOSURE	1	7		0	20	140	5	35	0	0	10	70	0	0	0	0	17	119	0	0	0	1	5	5
3	STH 23 EB DETOUR	1	7		0	0	0	0	0	0	0	0	0	0	0	0	0	81	567	0	0	0	1	6	6
3	STH 23 WB DETOUR	1	7		0	0	0	0	0	0	0	0	0	0	0	0	0	28	196	0	0	0	0	0	0
3	CTH E/CTH J OFF RAMP CLOSURE	1	7		0	18	126	4	28	0	0	8	56	0	0	0	0	8	56	1	1	1	1	1	1
3	CTH E/CTH J ON RAMP CLOSURE	1	7		0	29	203	5	35	0	0	10	70	0	0	0	0	13	91	0	0	0	1	5	5
	FINAL GROOVED PAVEMENT MARKING INSTALLATION (UNDISTRIBUTED)	1	12		0	150	1,800	11	132	0	0	22	264	15	180	2	24	25	300	1	0	0	1	0	0
	PROJECT TOTALS			1	196	42,837		3,458		465	465	6,916		6,931		666		23,643		4		28			

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TRAFFIC CONTROL PAVEMENT MARKING

STAGE	LOCATION	646.9000	649.0105		649.0150		649.0250	649.0960
		MARKING REMOVAL LINE 4-INCH	TEMPORARY MARKING LINE PAINT 4-INCH		TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH		TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
			(WHITE)	(YELLOW)	(WHITE)	(YELLOW)	(WHITE)	(WHITE)
		LF	LF	LF	LF	LF	LF	LF
PROJECT 1166-04-85								
1	STA 310+00- STA 445+00	0	0	0	0	1,440	0	360
1A	STA 2049+30 - STA 2062+30; STA 0+00 - STA 310+00; STA 445+00 - STA 759+92; STA 796+04 - STA 839+12 STA 848+22 - STA 1258+35	0	0	0	9,360	0	0	2,340
1B		0	130,000	104,000	0	9,360	0	0
1C		0	104,000	0	9,360	0	0	0
1D		0	26,000	104,000	0	9,360	0	0
1	RAMP GORES	0	0	0	7,000	1,500	3,000	1,500
1	UNDISTRIBUTED-EXTENDED DURATION LANE CLOSURES	75000	150,000	75,000	0	0	0	0
2	STA 310+00- STA 445+00	1762	0	0	16,370	29,530	0	360
3	STA 310+00- STA 445+00	0	0	1,762	0	1,440	0	0
3 PREP	STA 720+00-STA 860+00 (UNDERPASS RECONSTRUCTION)	0	0	0	720	0	0	180
3A		5215	5,215	5,215	0	720	0	0
3B		0	5,215	15,080	720	0	0	0
3C		0	15,100	0	0	720	0	0
END 3C		0	3,775	15,100	720	0	0	0
3	STH 23/CTH P OFF RAMP CLOSURE	0	0	0	600	0	0	0
3	CTH E/CTH J OFF RAMP CLOSURE	0	0	0	600	0	0	0
	SUBTOTALS		439,305	320,157	45,450	54,070		
		81,977	759,462		99,520		3,000	4,740

BARRIER SYSTEM GRADING SHAPING FINISHING

STATION TO STATION	DIR	ROADWAY	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING EA	FOR INFORMATION ONLY							
				CONSTRUCTION STAKING SLOPE STAKES LF	EXCAVATION COMMON CY	BORROW CY	SEED WATER MGAL	TOPSOIL SY	EROSION MAT CLASS I TYPE A SY	FERTILIZER TYPE B CWT	SEEDING MIXTURE #30 LB
PROJECT 1166-04-82											
CATEGORY 0010											
1+89 - 6+39	LT	IH 39 NB	1	450	SCRATCH GRADING		7	310	310	0.2	6
2+46 - 6+45	RT	IH 39 NB	1	399	SCRATCH GRADING		8	380	380	0.2	7
99+81 - 104+18	LT	IH 39 NB	1	437	SCRATCH GRADING		6	280	280	0.2	5
100+18 - 104+18	RT	IH 39 NB	1	400	SCRATCH GRADING		7	330	330	0.2	6
208+01 - 212+26	LT	IH 39 NB	1	425	SCRATCH GRADING		6	260	260	0.2	5
208+33 - 212+20	RT	IH 39 NB	1	387	SCRATCH GRADING		6	290	290	0.2	5
274+35 - 278+60	LT	IH 39 NB	1	425	SCRATCH GRADING		7	310	310	0.2	6
274+55 - 278+42	RT	IH 39 NB	1	387	---	30	10	440	440	0.3	8
335+83 - 340+57	LT	IH 39 NB	1	474	---	20	11	500	500	0.3	9
393+87 - 398+24	RT	IH 39 NB	1	437	SCRATCH GRADING		8	380	380	0.2	7
405+66 - 409+13	LT	IH 39 NB	1	347	SCRATCH GRADING		5	230	230	0.1	4
429+46 - 432+78	RT	IH 39 NB	1	332	SCRATCH GRADING		9	390	390	0.2	7
542+31 - 546+68	LT	IH 39 NB	1	437	---	10	9	390	390	0.2	7
542+97 - 546+84	RT	IH 39 NB	1	387	---	10	7	320	320	0.2	6
637+53 - 641+53	LT	IH 39 NB	1	400	SCRATCH GRADING		7	310	310	0.2	6
637+91 - 641+53	RT	IH 39 NB	1	362	---	10	6	280	280	0.2	5
888+07 - 892+07	LT	IH 39 NB	1	400	SCRATCH GRADING		8	370	370	0.2	7
888+29 - 892+04	RT	IH 39 NB	1	375	---	20	8	350	350	0.2	6
1065+67 - 1069+79	LT	IH 39 NB	1	412	SCRATCH GRADING		7	320	320	0.2	6
1066+21 - 1069+84	RT	IH 39 NB	1	363	SCRATCH GRADING		6	280	280	0.2	5
1154+94 - 1158+94	LT	IH 39 NB	1	400	SCRATCH GRADING		8	370	370	0.2	7
1155+40 - 1159+02	RT	IH 39 NB	1	362	---	20	8	370	370	0.2	7
1249+22 - 1253+47	LT	IH 39 NB	1	425	---	20	12	520	520	0.3	9
1249+73 - 1253+47	RT	IH 39 NB	1	374	SCRATCH GRADING		7	290	290	0.2	5
PROJECT TOTALS			24								

NOTE: TOPSOIL, SEED, WATER, FERTILIZER, AND E-MAT ITEMS FOR RESTORATION OF DISTURBED AREAS ADJACENT TO BEAM GUARD AND EAT APPROACHES PAID UNDER "BARRIER SYSTEM GRADING SHAPING FINISHING" ITEM.

CRASH CUSHIONS TEMPORARY

LOCATION	ROADWAY	614.0905 CRASH CUSHIONS TEMPORARY ** EACH	BACK WIDTH FT	OBJECT MARKING PATTERN	CRASH TEST LEVEL	TRAFFIC DIRECTION	TRAFFIC LOCATION	CRASH CUSHION SHIELDS
PROJECT 1166-04-82								
CATEGORY 0010								
RR OVERPASS	IH 39 SB	1	2	OM-3L	TL-3	BIDIRECTIONAL	RT	CONCRETE BARRIER ALONG OUTSIDE SHOULDER UNDER RR OVERPASS
X-OVER STA 439	IH 39 SB	1	2	OM-3C	TL-3	BIDIRECTIONAL	BOTH SIDES	TEMPORARY BARRIER BETWEEN BIDIRECTIONAL TRAFFIC AT X-OVER
PROJECT TOTAL		2						

** CRASH CUSHION DESIGN PARAMETERS
AREA REQUIREMENTS L = 26', W = 4'

EROSION CONTROL

LOCATION	ROADWAY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EA	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EA	628.7005 INLET PROTECTION TYPE A EA	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EA	628.7570 ROCK BAGS EA
PROJECT 1166-04-82									
CATEGORY 0010									
B-39-15, NEENAH CREEK	IH 39 NB	900	900	---	---	---	---	4	---
B-39-17, CTH O	IH 39 NB	830	830	---	---	---	---	---	---
B-39-19, STH 23	IH 39 NB	820	820	---	---	---	---	---	---
B-39-21, CTH CX	IH 39 NB	830	830	---	---	1	---	---	---
SOUTH CROSSOVER	IH 39 NB	140	140	---	---	---	100	---	---
S END MEDIAN BARRIER	IH 39 NB	470	470	---	---	1	---	---	---
RR OVERPASS	IH 39 NB	440	440	---	---	---	---	---	---
N END MEDIAN BARRIER	IH 39 NB	180	180	---	---	---	---	---	---
CTH D OVERPASS	IH 39 NB	500	500	---	---	---	---	---	---
NORTH CROSSOVER	IH 39 NB	400	400	---	---	2	100	---	---
CULV 3903905246, STA 451+25 RT	IH 39 NB	90	90	---	---	---	---	---	---
B-36-26, STH 23 / 82	IH 39 NB	880	880	---	---	---	---	---	---
B-39-27, FAWN CT	IH 39 NB	770	770	---	---	---	---	---	---
STA 777+00 PROFILE CORRECT	IH 39 NB	620	620	---	---	1	---	---	---
B-39-30, CTH E/J	IH 39 NB	800	800	---	---	1	---	---	---
B-39-32, DOVER CT	IH 39 NB	830	830	---	---	---	---	---	---
B-39-34, CTH Z	IH 39 NB	800	800	---	---	1	---	---	---
B-39-36, CHAFFEE CREEK	IH 39 NB	900	900	---	---	---	---	---	---
303+00 - 319+80 (CROSSOVER REMOVAL)	IH 39 NB	180	180	1	1	---	75	---	---
434+64 - 451+79 (CROSSOVER REMOVAL)	IH 39 NB	320	320	---	---	2	25	---	---
UNDISTRIBUTED		2,800	2,800	2	4	3	50	6	50
PROJECT TOTALS		14,500	14,500	3	5	12	350	10	50

RESTORATION

STATION		TO STATION	DIR	ROADWAY	630.0500 SEED WATER MGAL	625.0100 TOPSOIL SY	628.2002 EROSION MAT CLASS I TYPE A SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE #30 LB
PROJECT 1166-04-82									
CATEGORY 0010									
394+10	-	403+02	LT/RT	IH 39 NB	22	990	990	0.6	18
428+58	-	437+66	LT/RT	IH 39 NB	23	1,010	1,010	0.6	18
759+92	-	769+04	LT/RT	IH 39 NB	23	1,010	1,010	0.6	18
775+00	-	778+00	LT/RT	IH 39 NB	11	480	480	0.3	9
839+12	-	848+22	LT/RT	IH 39 NB	23	1,010	1,010	0.6	18
302+91	-	319+85	LT/RT	S CROSSOVER	92	4,100	4,100	2.6	74
434+63	-	451+79	LT/RT	N CROSSOVER	74	3,290	3,290	2.1	59
303+00	-	319+80	LT	IH 39 NB (CROSSOVER REMOVAL)	155	6,940	6,940	4.4	125
434+64	-	451+79	LT	IH 39 NB (CROSSOVER REMOVAL)	131	5,850	5,850	3.7	105
PROJECT TOTALS					554	24,680	24,680	7	214

PAVEMENT MARKING

STATION TO STATION			LOCATION	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW) LF	646.1555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) LF	646.3020 MARKING LINE EPOXY 8-INCH (WHITE) LF	646.3040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (WHITE) LF	646.5420 MARKING AERIAL ENFORCEMENT BAR EPOXY (WHITE) EACH	646.6120 MARKING STOP LINE 18-INCH EPOXY (WHITE) LF	646.7220 MARKING CHEVRON EPOXY 24-INCH (WHITE) LF
PROJECT 1166-04-82											
2049+30	-	2062+30	IH 39 NB	1,300	1,300	325	0	0	0	0	0
0+00	-	196+33	IH 39 NB	19,633	19,633	4,908	0	0	10	0	0
196+33	-	235+22	IH 39 NB (CTH P)	1,959	3,889	972	0	0	0	0	0
196+33	-	212+66	CTH P EXIT AB	1,674	1,081	0	71	731	0	33	228
212+75	-	235+22	CTH P ENTR AA	2,247	863	0	0	1,325	0	0	0
235+22	-	417+67	IH 39 NB	18,245	18,245	4,561	0	0	0	0	0
417+67	-	423+17	IH 39 NB (CTH D)	0	550	138	0	0	0	0	0
423+17	-	431+64	CTH D EXIT BB	1,402	860	0	63	707	0	53	205
423+17	-	527+23	IH 39 NB	10,406	10,406	2,602	0	0	10	0	0
527+23	-	571+77	IH 39 NB (STH 23)	2,648	4,454	1,114	0	0	0	0	0
527+23	-	546+97	STH 23 EXIT CB	2,216	1,581	0	141	635	0	65	169
549+95	-	571+77	STH 23 ENTR CA	2,261	989	0	0	1,188	0	0	0
571+77	-	874+68	IH 39 NB	30,291	30,291	7,573	0	0	10	0	0
874+68	-	909+49	IH 39 NB (CTH J)	1,926	3,481	870	0	0	0	0	0
874+68	-	892+33	CTH J EXIT DB	1,781	1,269	0	83	643	0	34	168
893+13	-	909+49	CTH J ENTR DA	1,636	591	0	0	1,056	0	0	0
909+49	-	1112+73	IH 39 NB	20,324	20,324	5,081	0	0	0	0	0
1112+73	-	1154+33	IH 39 NB (REST)	2,654	4,160	1,040	0	0	0	0	0
1112+73	-	1118+69	REST AREA EXIT EB	641	56	0	0	723	0	0	237
1143+55	-	1154+33	REST AREA ENTR EA	1,078	108	0	0	840	0	0	0
1154+33	-	1258+36	IH 39 NB	10,403	10,403	2,601	0	0	0	0	0
313+00	-	441+61	IH 39 SB	0	12,861	0	0	0	0	0	0
			SUBTOTALS	134,725	147,395						
			PROJECT TOTALS	282,120		31,784	358	7,848	30	185	1,007

COLD WEATHER MARKING EPOXY

STATION TO STATION	LOCATION	646.6464 4-INCH LF
PROJECT 1166-04-82		
CATEGORY 0010		
UNDISTRIBUTED	IH 39 NB	36,000
	PROJECT TOTAL	36,000

3

CONSTRUCTION STAKING

STATION TO STATION			LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
PROJECT 1166-04-82								
CATEGORY 0010								
2049+30	-	1258+36	IH 39 NB	---	---	125,706	1	---
394+10	-	403+02	IH 39 NB	892	892	---	---	---
428+58	-	437+66	IH 39 NB	908	908	---	---	---
759+92	-	769+04	IH 39 NB	912	912	---	---	---
775+00	-	778+00	IH 39 NB	---	---	---	---	300
839+12	-	848+22	IH 39 NB	910	910	---	---	---
196+97	-	212+66	RAMP AB	---	---	1,569	---	---
212+75	-	232+84	RAMP AA	---	---	2,009	---	---
418+33	-	431+18	RAMP BB	---	---	1,285	---	---
527+85	-	546+97	RAMP CB	---	---	1,912	---	---
549+95	-	569+40	RAMP CA	---	---	1,945	---	---
875+31	-	892+33	RAMP DB	---	---	1,702	---	---
893+20	-	907+84	RAMP DA	---	---	1,464	---	---
1113+33	-	1118+69	RAMP EB	---	---	536	---	---
1143+55	-	1152+49	RAMP EA	---	---	894	---	---
302+91	-	319+85	S CROSSOVER	1,694	1,694	---	---	1,694
434+63	-	451+79	N CROSSOVER	1,716	1,716	---	---	1,716
303+00	-	319+80	IH 39 NB (XO REM)	---	---	---	---	1,680
434+64	-	451+79	IH 39 NB (XO REM)	---	---	---	---	1,715
			PROJECT TOTALS	7,032	7,032	139,022	1	7,105

SAWING

STATION TO STATION			ROADWAY	690.0150 SAWING ASPHALT LF
PROJECT 1166-04-82				
CATEGORY 0010				
2039+40			IH-39 BEGIN PROJECT	38
1258+35			IH-39 END PROJECT	38
202+86			RAMP AB	15
218+48			RAMP AA	15
427+10			RAMP BB	15
535+13			RAMP CB	15
556+24			RAMP CA	15
880+83			RAMP DB	15
899+18			RAMP DA	15
302+91	-	307+09	S CROSSOVER	420
313+01	-	319+82	S CROSSOVER	685
434+61	-	441+58	N CROSSOVER	700
447+62	-	451+79	N CROSSOVER	425
302+90	-	319+80	IH-39 (CROSSOVER REMOVAL)	1,100
434+64	-	451+79	IH-39 (CROSSOVER REMOVAL)	1,115
			PROJECT TOTAL	4,626

DOWEL BAR REPAIRS

LOCATION	ROADWAY	SPV.0060.04 DOWEL BAR SLOT REPAIR EA	SPV.0060.05 DOWEL BAR SPALL REPAIR EA
PROJECT 1166-04-82			
CATEGORY 0010			
UNDISTRIBUTED	IH 39 NB	14,885	400
PROJECT TOTALS		14,885	400

INLET COVERS & BARRIER

STATION	INLET/CULVERT #	LOCATION	DIR	SPV.0060.02 REPLACE INLET ADJUSTMENT RINGS EACH	SPV.0060.01 REHABILITATE INLET EACH	SPV.0090.01 REMOVE & REPLACE CONCRETE BARRIER LF
PROJECT 1166-04-82						
CATEGORY 0010						
354+94	39039005229	IH 39 NB	LT	1	---	7
363+19	39039005232	IH 39 NB	LT	---	1	---
376+68	39039005235	IH 39 NB	LT	1	---	7
379+43	39039005236	IH 39 NB	LT	1	---	7
383+19	39039005237	IH 39 NB	LT	1	---	7
391+28	39039005239	IH 39 NB	LT	1	---	7
		PROJECT TOTALS		5	1	35

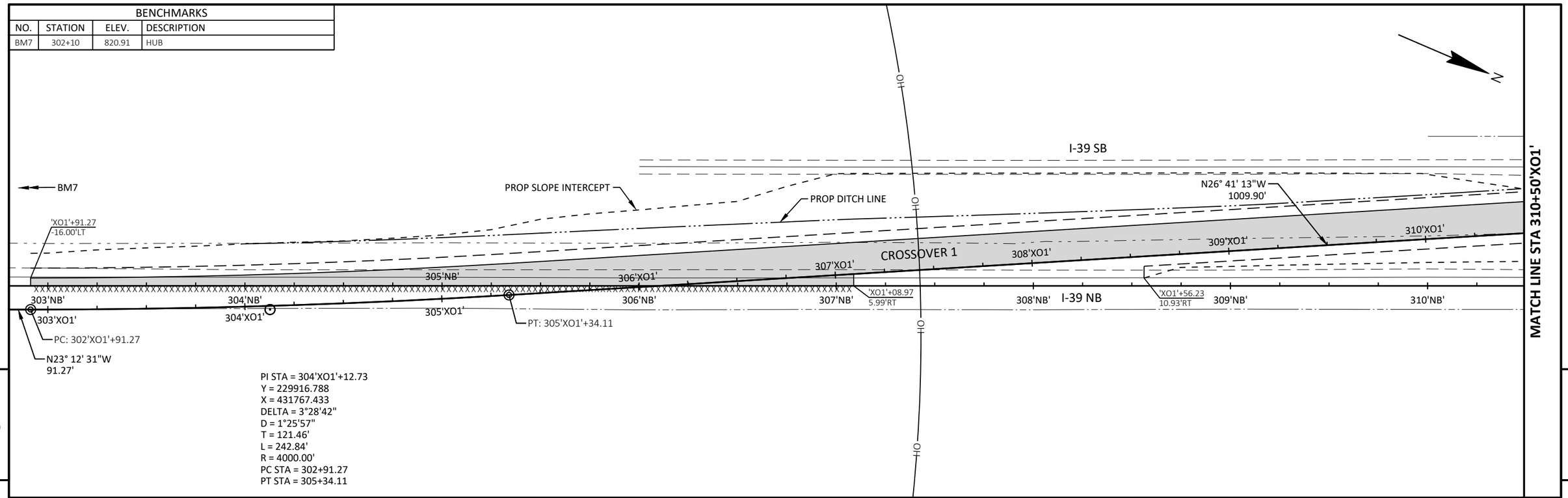
REMOVE AND RESET CABLE GUARD

LOCATION	ROADWAY	SPV.0090.02 LF
PROJECT 1166-04-82		
CATEGORY 0010		
STA 775+25 - 777+75	IH 39 NB	250
PROJECT TOTAL		250

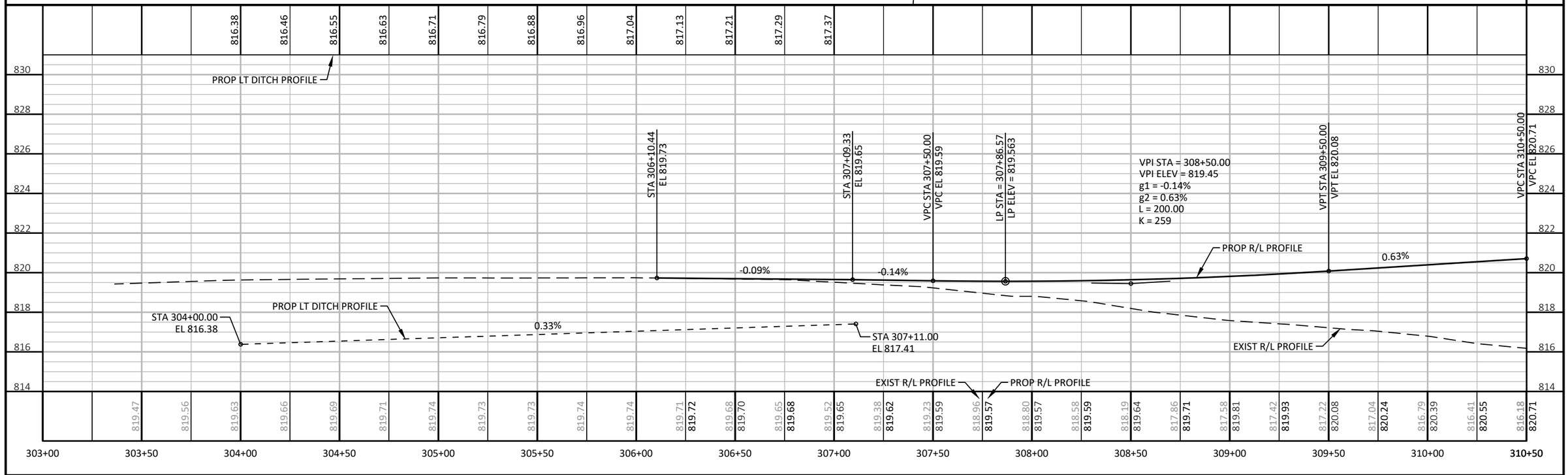
DITCH CLEANING

STATION	LOCATION	DIR	SPV.0090.03 LF	COMMENT
PROJECT 1166-04-82				
CATEGORY 0010				
428+92	IH 39 NB	RT	25	25' TO RAMP CULVERT
PROJECT TOTAL			25	

BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM7	302+10	820.91	HUB



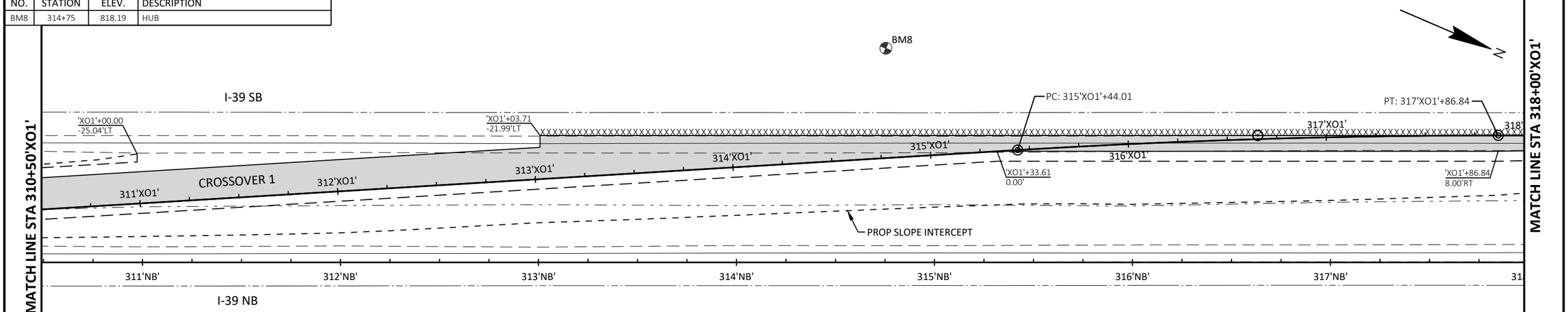
PI STA = 304'XO1'+12.73
Y = 229916.788
X = 431767.433
DELTA = 3°28'42"
D = 1°25'57"
T = 121.46'
L = 242.84'
R = 4000.00'
PC STA = 302+91.27
PT STA = 305+34.11



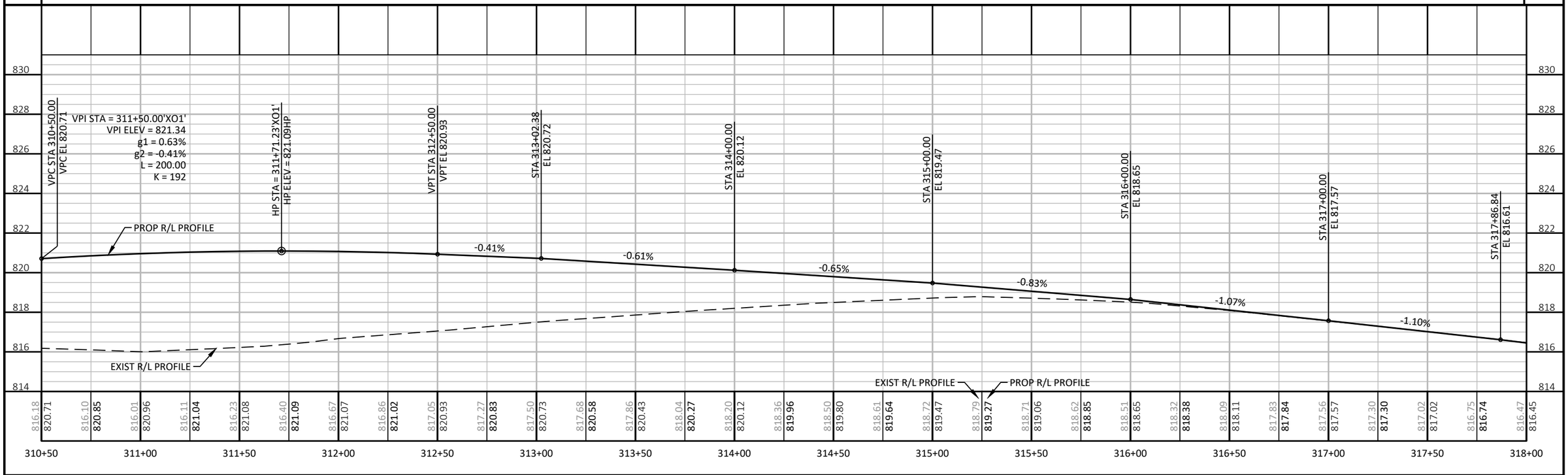
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN AND PROFILE: CROSSOVER 1	SHEET 98	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050101-PP.DWG
LAYOUT NAME - 11660482-050103-pp
PLOT DATE : 7/26/2021 11:00 AM PLOT BY : CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:50 FT
11660482-050103-pp
WISDOT/CADDS SHEET 44

BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM8	314+75	818.19	HUB

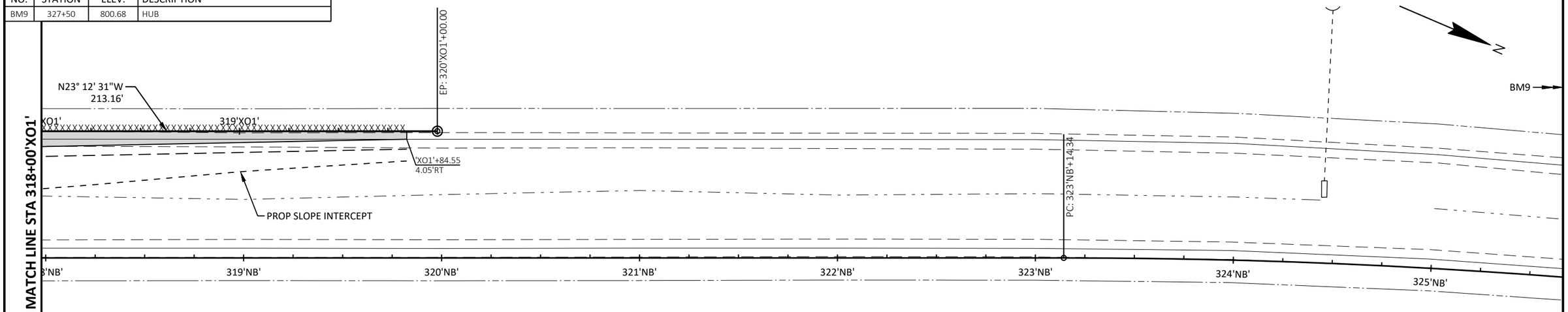


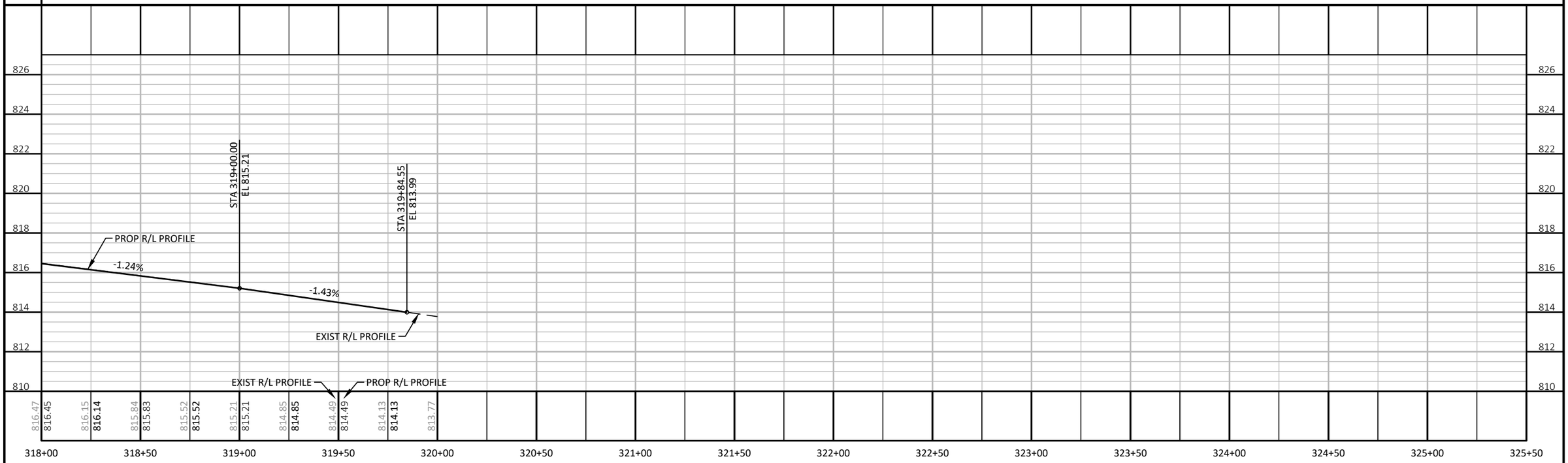
PI STA = 316'XO1'+65.46
Y = 231036.141
X = 431204.778
DELTA = 3°28'42"
D = 1°25'57"
T = 121.46'
L = 242.84'
R = 4000.00'
PC STA = 315+44.01
PT STA = 317+86.84



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN AND PROFILE: CROSSOVER 1	SHEET 99 E

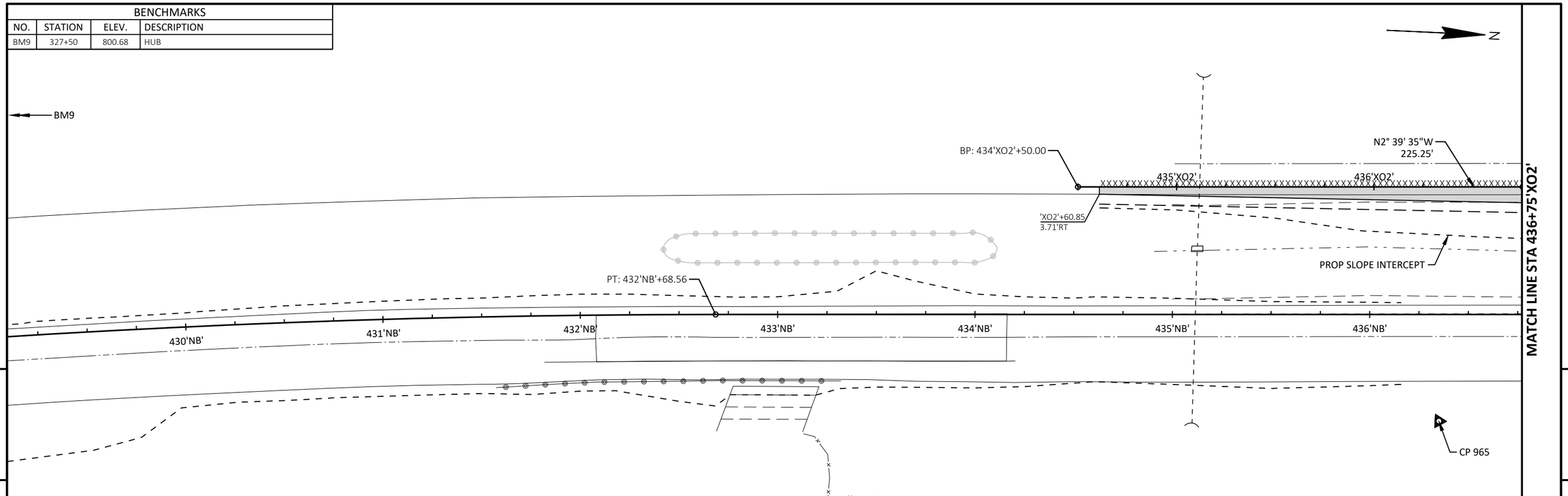
BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM9	327+50	800.68	HUB

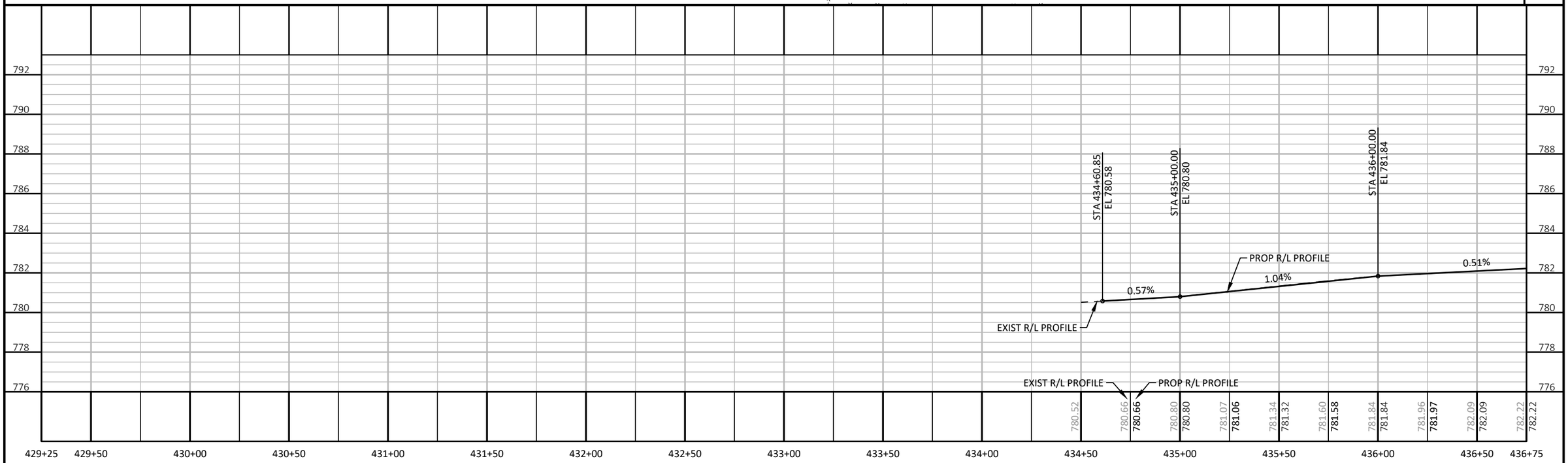




PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN AND PROFILE: CROSSOVER 1	SHEET 100	E

BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM9	327+50	800.68	HUB





PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN AND PROFILE: CROSSOVER 2	SHEET 101	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050101-PP.DWG
LAYOUT NAME - 11660482-050106-pp
PLOT DATE : 7/26/2021 11:01 AM
PLOT BY : CRAIG KNUTH
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44
11660482-050106-pp

BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM4	437+31	783.89	PK NAIL IN POWER POLE

PI STA = 437'XO2'+96.81
Y = 242980.093
X = 430859.108
DELTA = 3°28'53"
D = 1°25'57"
T = 121.56'
L = 243.05'
R = 4000.00'
PC STA = 436+75.25
PT STA = 439+18.30

N

PC: 436'XO2'+75.25
PT: 439'XO2'+18.30
MATCH LINE STA 436+75'XO2'
MATCH LINE STA 444+25'XO2'
437'XO2'
438'XO2'
439'XO2'
440'XO2'
441'XO2'
442'XO2'
443'XO2'
444'XO2'
'XO2'+75.25
8.00'RT
'XO2'+28.47
0.00'
'XO2'+58.17
-21.99'LT
'XO2'+75.21
-27.77'LT
I-39 SB
CROSSOVER 2
PROP SLOPE INTERCEPT
N0° 49' 19"E
1018.06'
437'NB'
438'NB'
439'NB'
440'NB'
441'NB'
442'NB'
I-39 NB
443'NB'
444'NB'

5

BM4

STA 437+00.00 EL 782.35
STA 438+00.00 EL 782.65
STA 439+00.00 EL 782.93
STA 440+00.00 EL 783.11
STA 441+00.00 EL 783.26
VPC STA 442+00.00 VPC EL 783.40
VPT STA 444+00.00 VPT EL 783.57
VPI STA = 443+00.00'XO2'
VPI ELEV = 783.55
g1 = 0.14%
g2 = 0.02%
L = 200.00
K = 1680
0.30%
0.28%
0.18%
0.15%
0.14%
PROP R/L PROFILE
PROP LT DITCH PROFILE
STA 444+00.00 EL 782.94
EXIST R/L PROFILE
EXIST R/L PROFILE
PROP R/L PROFILE
PROP LT DITCH PROFILE

792 790 788 786 784 782 780 778 776

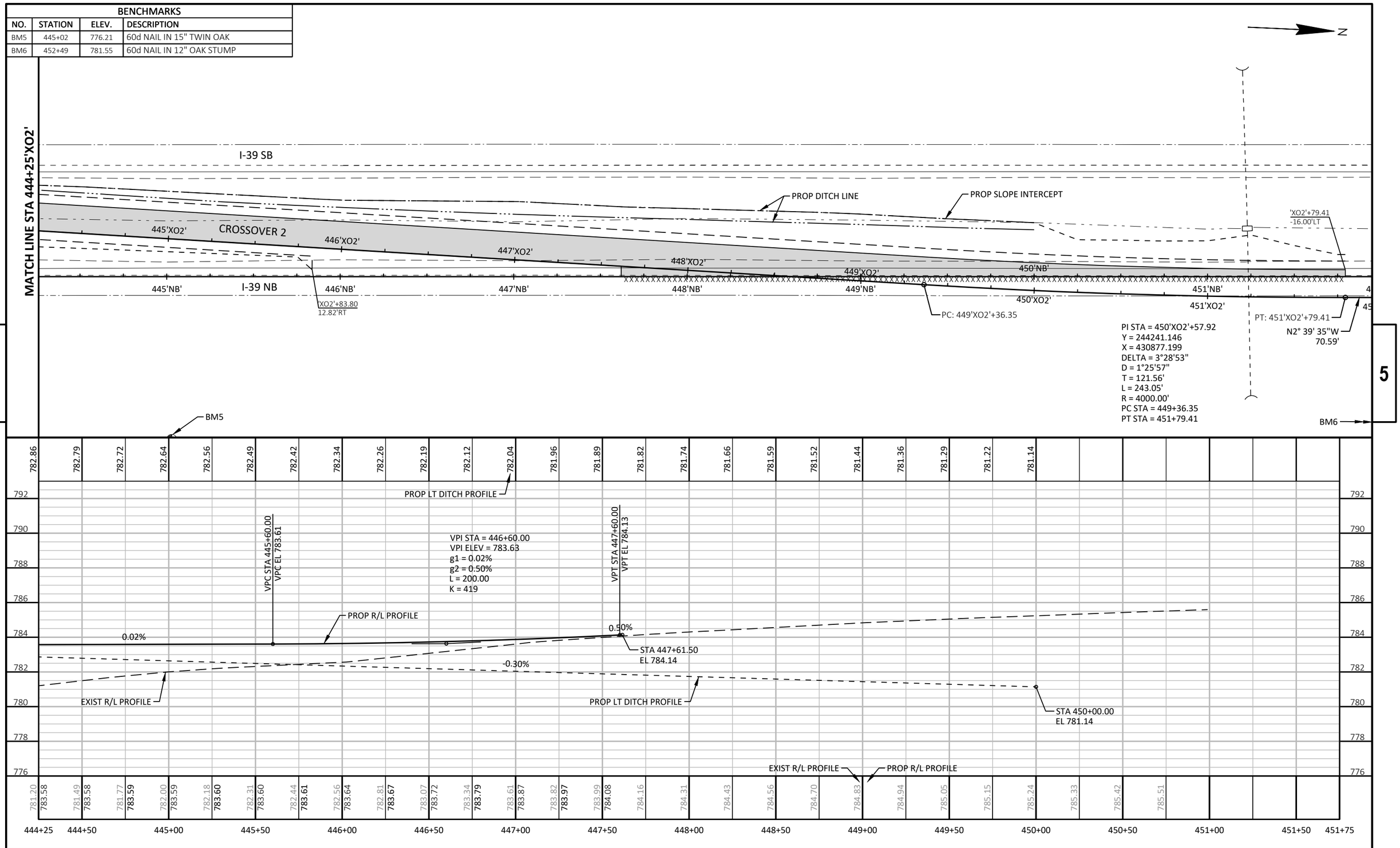
782.22 782.22 | 782.35 782.35 | 782.43 782.43 | 782.51 782.50 | 782.58 782.58 | 782.65 782.65 | 782.72 782.72 | 782.79 782.79 | 782.75 782.86 | 782.66 782.93 | 782.55 782.98 | 782.20 783.02 | 781.86 783.07 | 781.52 783.11 | 781.19 783.15 | 781.01 783.19 | 780.82 783.22 | 780.65 783.26 | 780.58 783.30 | 780.51 783.33 | 780.45 783.37 | 780.40 783.40 | 780.31 783.44 | 780.23 783.47 | 780.19 783.49 | 780.14 783.52 | 780.26 783.54 | 780.45 783.55 | 780.64 783.56 | 780.91 783.57 | 781.20 783.58

436+75 437+00 437+50 438+00 438+50 439+00 439+50 440+00 440+50 441+00 441+50 442+00 442+50 443+00 443+50 444+00 444+25

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN AND PROFILE: CROSSOVER 2	SHEET 102	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050101-PP.DWG
LAYOUT NAME - 11660482-050107-pp
PLOT DATE : 7/26/2021 11:01 AM PLOT BY : CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:50 FT
11660482-050107-pp
WISDOT/CADDS SHEET 44

BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM5	445+02	776.21	60d NAIL IN 15" TWIN OAK
BM6	452+49	781.55	60d NAIL IN 12" OAK STUMP



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN AND PROFILE: CROSSOVER 2	SHEET 103	E

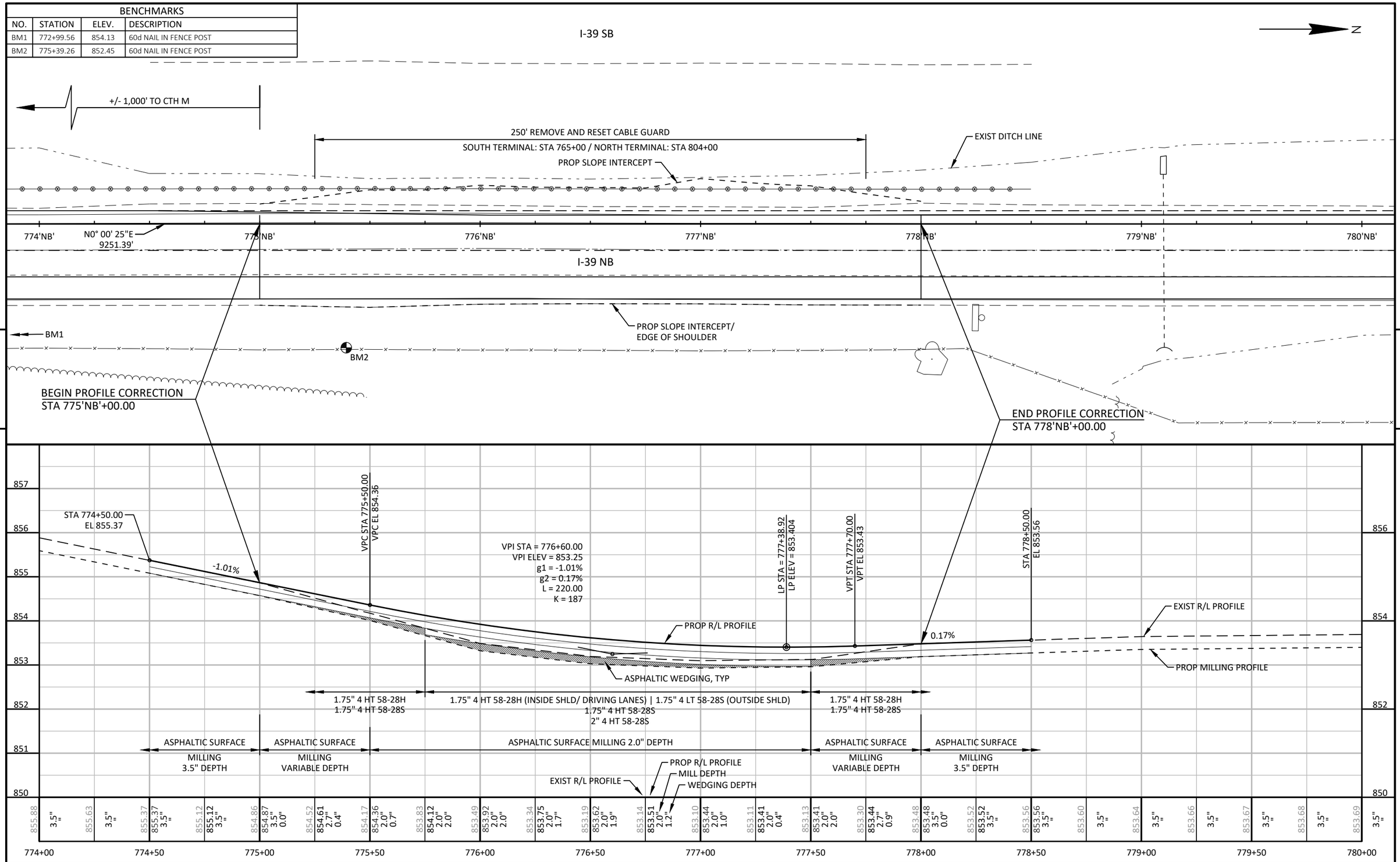
FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050101-PP.DWG
LAYOUT NAME - 11660482-050108-pp

11660482-050108-pp

PLOT DATE : 7/26/2021 11:01 AM PLOT BY : CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM1	772+99.56	854.13	60d NAIL IN FENCE POST
BM2	775+39.26	852.45	60d NAIL IN FENCE POST



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN AND PROFILE: STA 777+00 PROFILE CORRECTION	SHEET 104 E

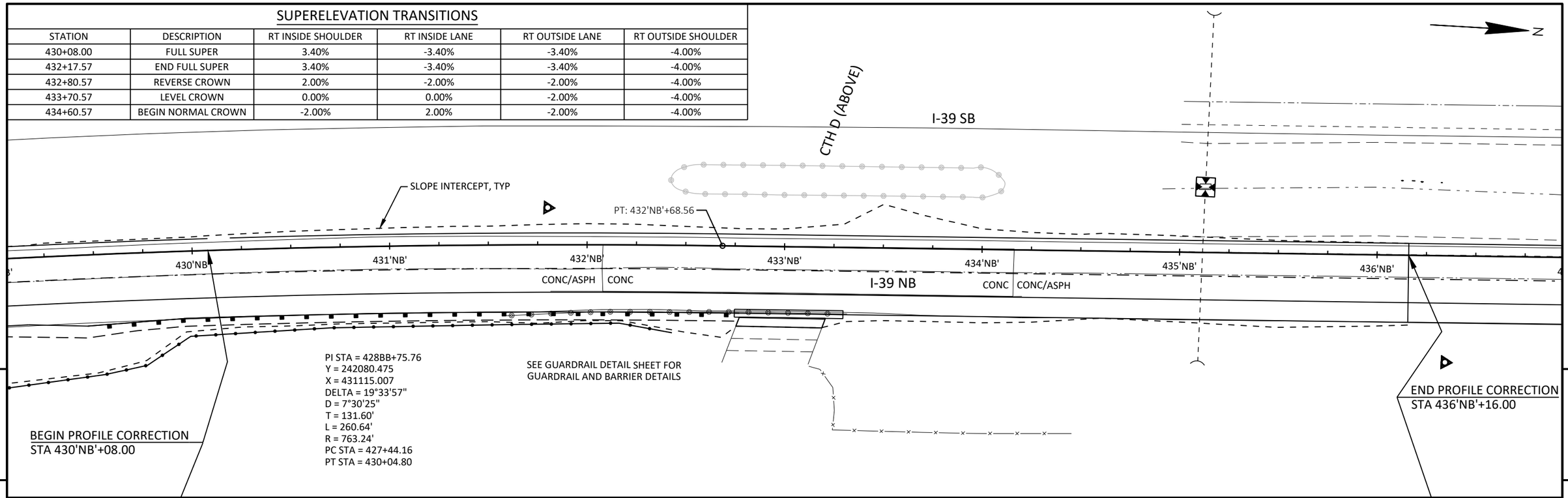
FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050101-PP.DWG
LAYOUT NAME - 11660482-050110-pp

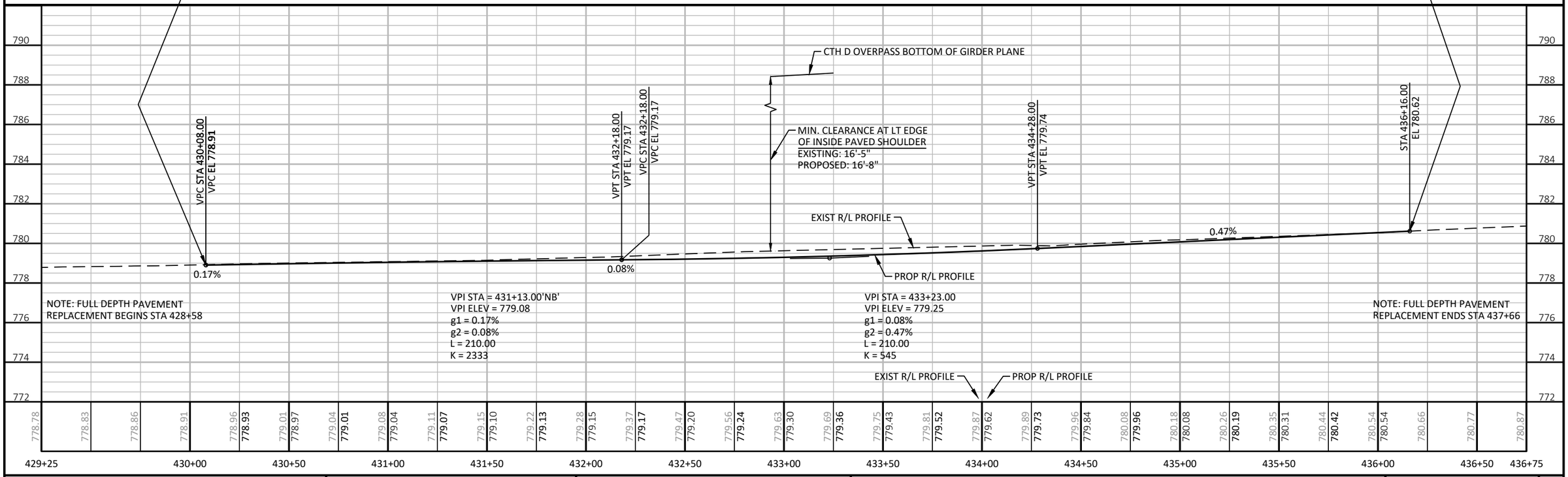
PLOT DATE : 6/25/2021 10:55 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

SUPERELEVATION TRANSITIONS

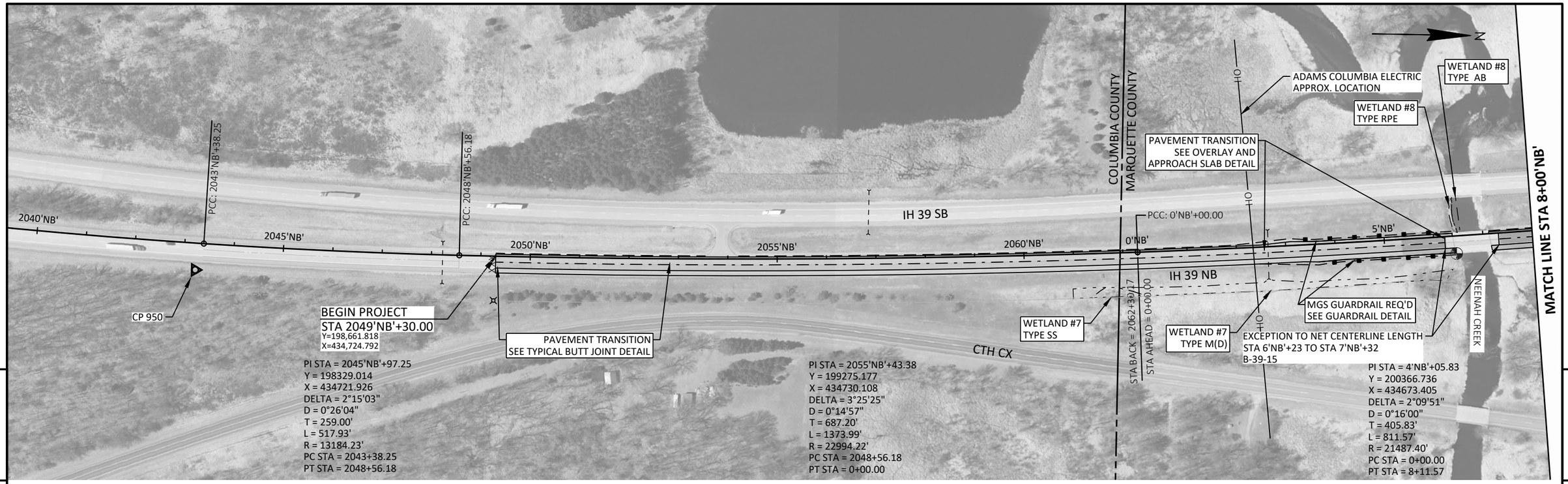
STATION	DESCRIPTION	RT INSIDE SHOULDER	RT INSIDE LANE	RT OUTSIDE LANE	RT OUTSIDE SHOULDER
430+08.00	FULL SUPER	3.40%	-3.40%	-3.40%	-4.00%
432+17.57	END FULL SUPER	3.40%	-3.40%	-3.40%	-4.00%
432+80.57	REVERSE CROWN	2.00%	-2.00%	-2.00%	-4.00%
433+70.57	LEVEL CROWN	0.00%	0.00%	-2.00%	-4.00%
434+60.57	BEGIN NORMAL CROWN	-2.00%	2.00%	-2.00%	-4.00%

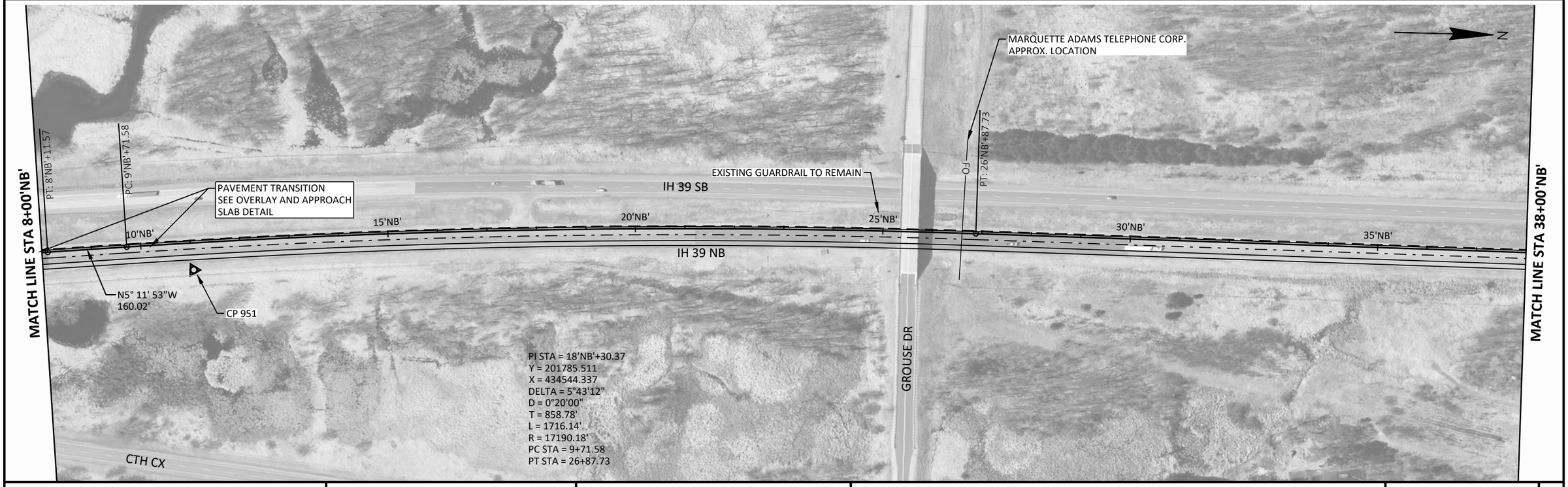




PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN AND PROFILE: CTH D PROFILE CORRECTION	SHEET 105 E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050111-PP.DWG
LAYOUT NAME - 11660482-050111-pp
PLOT DATE : 4/21/2021 2:18 PM
PLOT BY : ANDY WESTBROOK
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44





PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 106	E

MATCH LINE STA 38+00'NB'

ADAMS COLUMBIA ELECTRIC
APPROX. LOCATION

IH 39 SB

40'NB' 45'NB' 50'NB' 55'NB' 60'NB' 65'NB'

IH 39 NB

MATCH LINE STA 68+00'NB'

5

5

MATCH LINE STA 68+00'NB'

UNNAMED TRIBUTARY TO
GOOD EARTH CREEK

IH 39 SB

70'NB' 75'NB' 80'NB' 85'NB' 90'NB' 95'NB'

IH 39 NB

POTENTIALLY
EXEMPT
WETLAND #5

CP 952

POTENTIALLY
EXEMPT
WETLAND #4

MATCH LINE STA 98+00'NB'

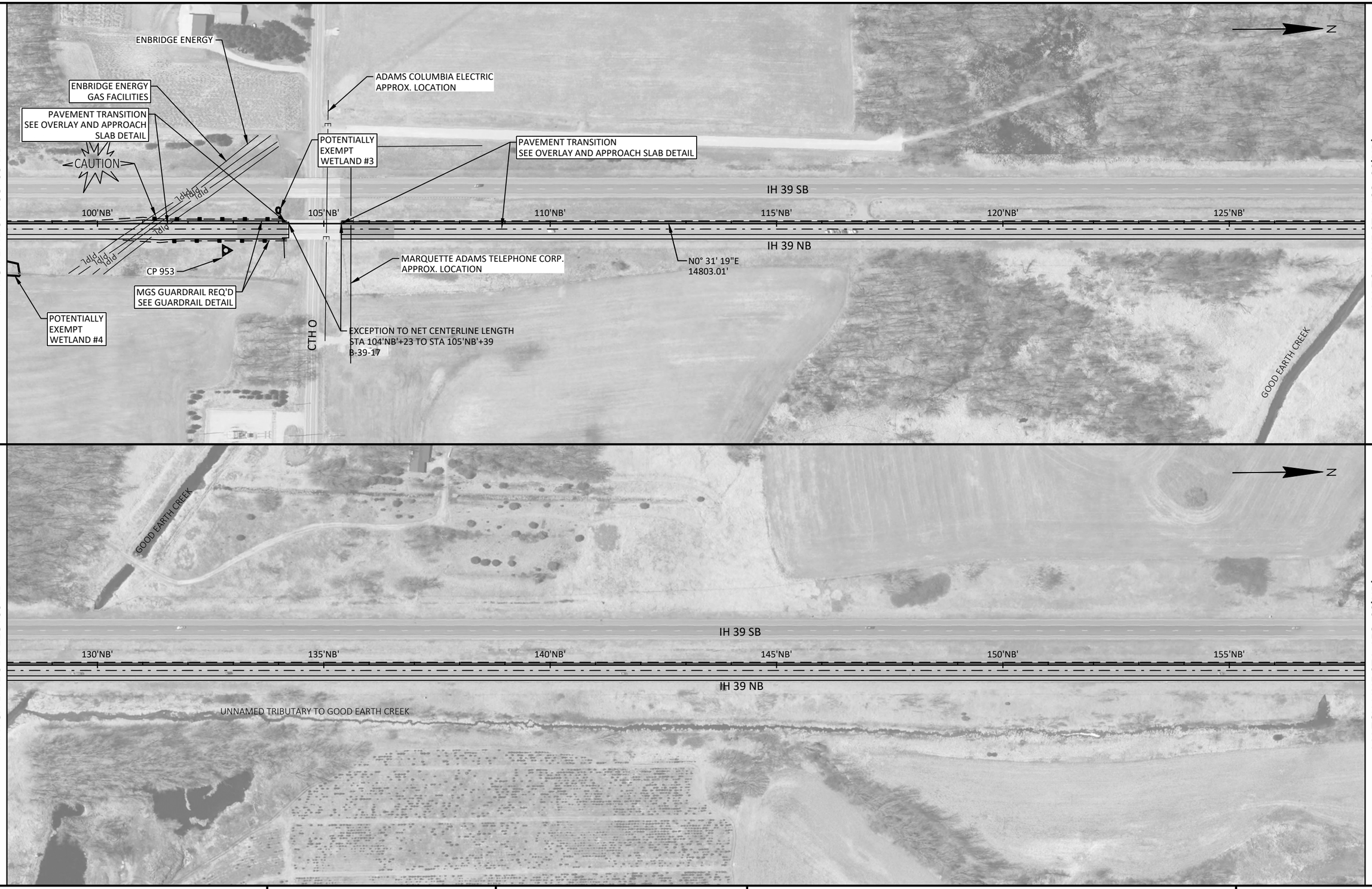
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 107	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050202-pn

11660482-050202-pn

PLOT DATE : 7/26/2021 12:56 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 108	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050203-pn
PLOT DATE : 7/26/2021 12:56 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT
11660482-050203-pn
WISDOT/CADDS SHEET 44

MATCH LINE STA 158+00'NB'

MATCH LINE STA 188+00'NB'

UNNAMED TRIBUTARY TO GOOD EARTH CREEK

PC: 174'NB'+90.74

IH 39 SB

160'NB'

165'NB'

170'NB'

175'NB'

180'NB'

185'NB'

IH 39 NB

UNNAMED TRIBUTARY TO GOOD EARTH CREEK

PI STA = 183'NB'+19.92
Y = 218275.803
X = 434694.590
DELTA = 8°16'36"
D = 0°30'00"
T = 829.18'
L = 1655.47'
R = 11460.16'
PC STA = 174+90.74
PT STA = 191+46.21

5

5

MATCH LINE STA 188+00'NB'

MATCH LINE STA 218+00'NB'

PT: 191'NB'+46.21

PAVEMENT TRANSITION
SEE TYPICAL BUTT JOINT DETAIL

N7° 45' 17"W
5208.99'

MARQUETTE ADAMS TELEPHONE CORP.
APPROX. LOCATION

MGS GUARDRAIL REQ'D
SEE GUARDRAIL DETAIL

CTH P / STH 23

PAVEMENT TRANSITION
SEE OVERLAY AND APPROACH
SLAB DETAIL

POTENTIALLY
EXEMPT
WETLAND #1

CP 955

IH 39 SB

190'NB'

195'NB'

200'NB'

205'NB'

210'NB'

215'NB'

IH 39 NB

REMOVE EXIST GUARDRAIL

BP: 196AB+33.35

N3° 13' 04"W
634.45'

200AB

PC: 202AB+67.80

205AB

CP 954

PAVEMENT TRANSITION
SEE OVERLAY AND APPROACH
SLAB DETAIL

EXCEPTION TO NET CENTERLINE LENGTH
STA 212'NB'+35 TO STA 214'NB'+14
B-39-19

PT: 206AB+28.70

RAMP AB

RAMP AA

STOP RAMP TRAVEL LANE
CONSTRUCTION

PI STA = 204AB+49.21
Y = 220397.890
X = 434494.963
DELTA = 14°26'09"
D = 4°00'00"
T = 181.41'
L = 360.90'
R = 1432.39'
PC STA = 202+67.80
PT STA = 206+28.70

POTENTIALLY
EXEMPT
WETLAND #2

210AB

N11° 13' 05"E
656.11'

SEE RAMP REPAIR
PLAN FOR DETAILS

215AA

N27° 50' 53"W
673.27'

STOP RAMP SHOULDER
CONSTRUCTION

START RAMP SHOULDER
CONSTRUCTION

EP: 212AB+84.81

BP: 212AA+21.53

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 109 E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050204-pn

PLOT DATE : 7/26/2021 12:57 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050204-pn

WISDOT/CADDS SHEET 44

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 110 E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050205-pn

PLOT DATE : 7/26/2021 12:57 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050205-pn

WISDOT/CADDS SHEET 44

MATCH LINE STA 278+00'NB'

MATCH LINE STA 308+00'NB'

C'TH CX

UTILITY OWNER
UNKNOWN

MGS GUARDRAIL REQ'D
SEE GUARDRAIL DETAIL

PC

IH 39 SB

280'NB'

285'NB'

290'NB'

295'NB'

300'NB'

305'NB'

CROSSOVER #1

ALIANT ENERGY
APPROX. LOCATION

OH

IH 39 NB

PAVEMENT TRANSITION
SEE OVERLAY AND APPROACH SLAB DETAIL

N23° 12' 31"W
5898.44'

EXCEPTION TO NET CENTERLINE LENGTH
STA 278'NB'+63 TO STA 279'NB'+92
B-39-21

S 7TH AVE

N

5

5

MATCH LINE STA 308+00'NB'

MATCH LINE STA 338+00'NB'

CROSSOVER #1

315'NB'

320'NB'

PC: 323'NB'+14.34

IH 39 SB

325'NB'

330'NB'

335'NB'

WE ENERGIES

IH 39 NB

310'NB'

CAUTION

CP 958

7TH RD

PI STA = 336'NB'+50.51
Y = 232887.833
X = 430480.463
DELTA = 44°23'55"
D = 1°45'00"
T = 1336.17'
L = 2537.26'
R = 3274.30'
PC STA = 323+14.34
PT STA = 348+51.60

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 111	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050206-pn

PLOT DATE : 7/26/2021 12:57 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050206-pn

WISDOT/CADDS SHEET 44

MATCH LINE STA 338+00'NB'

MGS GUARDRAIL REQ'D
SEE GUARDRAIL DETAIL

BEGINNING EXISTING
CONCRETE BARRIER

EXISTING CONCRETE BARRIER
(TO REMAIN)

340'NB'

345'NB'

CP 959

CHAPMAN CREEK

PT: 348'NB'+51.60

350'NB'

N21° 11' 24"E
281.65'

PC: 351'NB'+33.25

CULVERT 39039005228
EXISTING MEDIAN INLET LT
EXISTING PRECAST APRON ENDWALL RT
CLEAN CULVERT PIPE

PI STA = 358'NB'+02.97
Y = 235020.698
X = 431307.324
DELTA = 19°53'14"
D = 1°29'59"
T = 669.71'
L = 1325.95'
R = 3820.09'
PC STA = 351+33.25
PT STA = 364+59.21

CULVERT 39039005230
EXISTING MEDIAN INLET LT
EXISTING PRECAST ENDWALL RT
CLEAN CULVERT PIPE

355'NB'

IH 39 SB

IH 39 NB

360'NB'

CULVERT 39039005233
EXISTING MEDIAN INLET LT
EXISTING PRECAST ENDWALL RT
CLEAN CULVERT PIPE

PT: 364'NB'+59.21

365'NB'

MATCH LINE STA 368+00'NB'

REMOVE & REPLACE
WOVEN WIRE FENCE

CULVERT 39039005229
EXISTING MEDIAN INLET LT
EXISTING PRECAST ENDWALL RT
CLEAN CULVERT PIPE
REPLACE INLET ADJUSTMENT RINGS

CULVERT 39039005231
EXISTING MEDIAN INLET LT
EXISTING PRECAST APRON ENDWALL RT
SALVAGE 8 LF 18" PIPE & APRON ENDWALL RT
JOINT TIES & CONCREE COLLAR REQ'D.

CULVERT 39039005232
REHABILITATE INLET
SEE DETAIL

5

5

MATCH LINE STA 368+00'NB'

EXISTING CONCRETE BARRIER
(TO REMAIN)

370'NB'

375'NB'

CULVERT 39039005234
EXISTING MEDIAN INLET LT
EXISTING PRECAST ENDWALL RT
CLEAN CULVERT PIPE

CULVERT 39039005235
REPLACE INLET ADJUSTMENT RINGS

CULVERT 39039005236
REPLACE INLET ADJUSTMENT RINGS
CLEAN CULVERT PIPE

380'NB'

IH 39 SB

IH 39 NB

REMOVE & REPLACE
WOVEN WIRE FENCE

N1° 18' 10"E
3869.80'

385'NB'

CULVERT 39039005237
REPLACE INLET ADJUSTMENT RINGS
CLEAN CULVERT PIPE

CULVERT 39039005238
EXISTING MEDIAN INLET LT
EXISTING PRECAST ENDWALL RT
CLEAN CULVERT PIPE

390'NB'

CULVERT 39039005239
REPLACE INLET ADJUSTMENT RINGS

STA 394'NB'+10.00
BEGIN FULL RECONSTRUCTION

395'NB'

CP 960

MGS GUARDRAIL REQ'D
SEE GUARDRAIL DETAIL

UNION PACIFIC R.R.

MATCH LINE STA 398+00'NB'

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 112	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050207-pn

PLOT DATE : 7/26/2021 12:57 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050207-pn

MATCH LINE STA 398+00'NB'

UTILITY OWNER UNKNOWN

UNION PACIFIC R.R.

TEMPORARY CRASH CUSHION REQ'D

OH

ALLEN CREEK TRIBUTARY

PC: 403'NB'+29.00

EXISTING CONCRETE BARRIER (TO REMAIN)

END EXISTING CONCRETE BARRIER

MGS GUARDRAIL REQ'D SEE GUARDRAIL DETAIL

MARQUETTE ADAMS TELEPHONE CORP.

CTH CX

PT: 413'NB'+29.02

FO

G

400'NB'

405'NB'

410'NB'

415'NB'

IH 39 SB

IH 39 NB

CP 961

STA 403'NB'+02.00
END FULL RECONSTRUCTION

CP 962

WE ENERGIES

PI STA = 408'NB'+31.89
Y = 240061.788
X = 431421.967
DELTA = 14°59'57"
D = 1°30'00"
T = 502.88'
L = 1000.02'
R = 3820.04'
PC STA = 403+29.00
PT STA = 413+29.02

7TH DR

ALLEN CREEK

7TH CT

PI STA = 427'NB'+18.41
Y = 241900.253
X = 430973.925
DELTA = 11°02'12"
D = 1°00'00"
T = 553.58'
L = 1103.73'
R = 5729.92'
PC STA = 421+64.83
PT STA = 432+68.56

PC: 421'NB'+64.83

STA 421'NB'+58.00
END SHOULDER TAPER

STA 423'NB'+08.00
BEGIN SHOULDER TAPER
425'NB'

STOP RAMP TRAVEL LANE CONSTRUCTION

420'NB'

425BB

RAMP BB

PC: 424BB+02.74

BP: 417BB+67.10

420BB

CP 963

N13° 41' 47"W
835.81'

N9° 18' 13"W
635.64'

PAVEMENT TRANSITION
SEE TYPICAL BUTT JOINT DETAIL

PCC: 427BB+44.16

MATCH LINE STA 428+00'NB'

PI STA = 425BB+74.26
Y = 241778.229
X = 431091.998
DELTA = 13°39'24"
D = 4°00'00"
T = 171.52'
L = 341.42'
R = 1432.39'
PC STA = 424+02.74
PT STA = 427+44.16

5

5

CULVERT 39039005244
EXISTING MEDIAN INLET LT
EXISTING PRECAST APRON ENDWALL RT
CLEAN CULVERT PIPE
CLEAN 25' OF DITCH TO RAMP CULVERT
(4) LF CPRC CLASS III 18-INCH
SALVAGE APRON ENDWALL RT
JOINT TIES & CONCRETE COLLAR REQ'D

CTH D

STA 428'NB'+58.00
BEGIN FULL RECONSTRUCTION

MGS GUARDRAIL REQ'D
SEE GUARDRAIL DETAIL

WETLAND #6
TYPE M(D)

TEMPORARY GUARDRAIL REQ'D
SEE GUARDRAIL DETAIL

STA 437'NB'+66.00
END FULL RECONSTRUCTION

STA 441'NB'+66.00
BEGIN SHOULDER TAPER

CROSSOVER #2

IH 39 SB

PT: 432'NB'+68.56

430'NB'

435'NB'

440'NB'

445'NB'

450'NB'

455'NB'

IH 39 NB

PC: 453'NB'+75.95

STA 440'NB'+16.00
END SHOULDER TAPER

EXISTING GUARDRAIL TO REMAIN

CP 964

WETLAND #5
TYPE M(D)

STOP RAMP SHOULDER CONSTRUCTION

CP 965

WETLAND #4
TYPE M(D)

N2° 39' 35"W
2107.39'

SILT FENCE W/TURN-AROUNDS REQD

CULVERT 39039005246
EXISTING MEDIAN INLET LT
EXISTING PRECAST APRON ENDWALL RT
SALVAGE 16 LF 36" PIPE & APRON ENDWALL RT.
JOINT TIES & CONCRETE COLLAR REQ'D.
INSTALL 8'X25'X1.5' RIPRAP MEDIUM &
GEOTEXTILE TYPE HR PER CONSTRUCTION DETAIL; RT SIDE.
CLEAN CULVERT PIPE

RAMP BB

430BB

EP: 431BB+89.48

PT: 430BB+04.80

N23° 55' 08"E
184.68'

SEE RAMP REPAIR PLAN FOR DETAILS

ALLEN CREEK

PI STA = 428BB+75.76
Y = 242080.475
X = 431115.007
DELTA = 19°33'57"
D = 7°30'25"
T = 131.60'
L = 260.64'
R = 763.24'
PC STA = 427+44.16
PT STA = 430+04.80

MATCH LINE STA 458+00'NB'

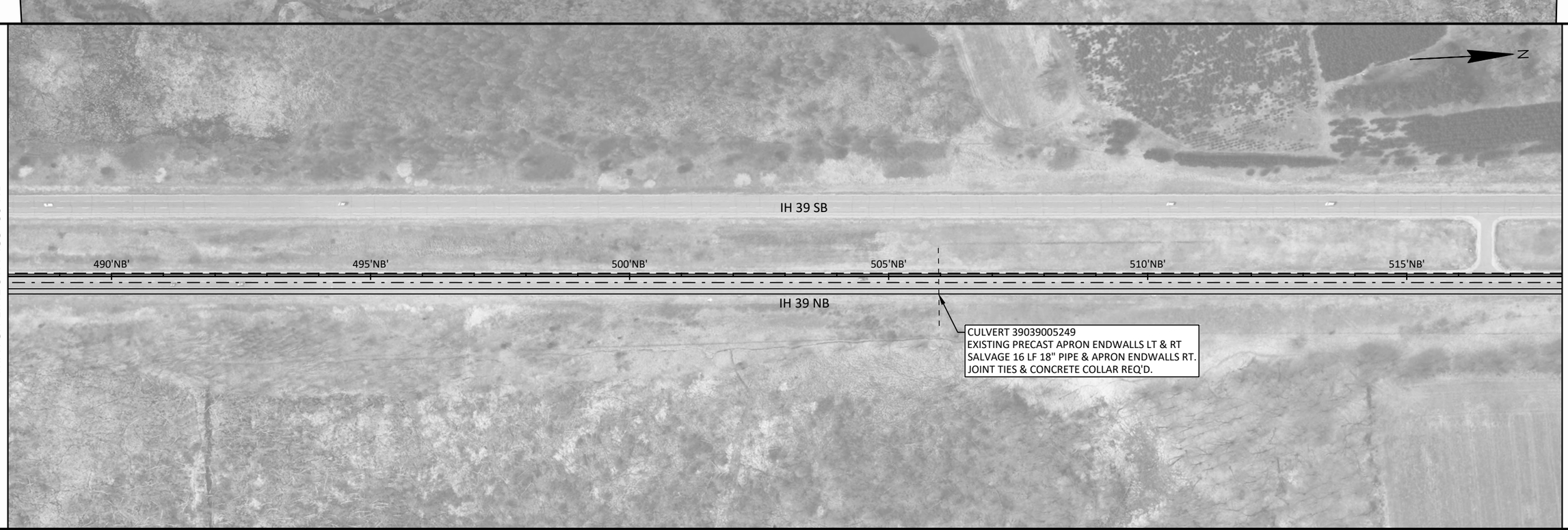
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 113	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050208-pn

PLOT DATE : 7/26/2021 12:57 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050208-pn

WISDOT/CADDS SHEET 44



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 114 E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050209-pn

PLOT DATE : 7/26/2021 12:58 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050209-pn

WISDOT/CADDS SHEET 44

MATCH LINE STA 518+00'NB'

MATCH LINE STA 548+00'NB'

IH 39 SB

IH 39 NB

520'NB' 525'NB' 530'NB' 535'NB' 540'NB' 545'NB'

N2° 56' 25"E
11241.76'

WISDOT RWIS WEATHER STATION TOWER AND uNDERGROUND FACILITIES (APPROXIMATE LOCATION). 3 NEW IN-PAVEMENT SENSORS REQUIRED. SUPPLIED AND INSTALLED BY WISDOT RWIS CONTRACTOR. COORDINATION WITH WISDOT BY CONTRACTOR IS REQUIRED. SEE "WORK BY OTHERS"

PAVEMENT TRANSITION
SEE TYPICAL BUTT JOINT DETAIL

ADAMS COLUMBIA ELECTRIC
APPROX. LOCATION

EXCEPTION TO NET CENTERLINE LENGTH
STA 546'NB'+90 TO STA 548'NB'+26
B-39-26

PAVEMENT TRANSITION
SEE OVERLAY AND APPROACH SLAB DETAIL

MGS GUARDRAIL REQ'D
SEE GUARDRAIL DETAIL

STH 82

BP: 527CB+22.72

530CB

N7° 35' 09"E
632.03'

PT: 535CB+03.86

535CB

CP 966

CP 967

RAMP CB

540CB

545CB

N13° 33' 01"E
1409.63'

PC: 533CB+54.75

PI STA = 534CB+29.37
Y = 252596.739
X = 431235.146
DELTA = 5°57'52"
D = 4°00'00"
T = 74.62'
L = 149.11'
R = 1432.39'
PC STA = 533+54.75
PT STA = 535+03.86

STOP RAMP TRAVEL LANE
CONSTRUCTION

STOP RAMP SHOULDER
CONSTRUCTION

FISH AVE

STH 29

5

5

CROSSROADS CLINIC RD

MATCH LINE STA 548+00'NB'

MATCH LINE STA 578+00'NB'

IH 39 SB

IH 39 NB

550'NB' 555'NB' 560'NB' 565'NB' 570'NB' 575'NB'

EXCEPTION TO NET CENTERLINE LENGTH
STA 546'NB'+90 TO STA 548'NB'+26
B-39-26

WE ENERGIES
APPROX. LOCATION

PAVEMENT TRANSITION
SEE OVERLAY AND APPROACH SLAB DETAIL

MARQUETTE ADAMS TELEPHONE
CORP. APPROX. LOCATION (3-2" DUCTS)

START RAMP SHOULDER
CONSTRUCTION

RAMP CA

550CA

555CA

560CA

565CA

570CA

PT: 560CA+96.40

N13° 41' 01"W
867.41'

N1° 43' 52"E
1080.50'

EP: 571CA+76.90

PC: 557CA+11.03

PAVEMENT TRANSITION
SEE TYPICAL BUTT JOINT DETAIL

START RAMP TRAVEL LANE
CONSTRUCTION

BP: 548CA+43.62

EP: 549CB+13.49

UNNAMED TRIBUTARY
TO OX CREEK

PI STA = 559CA+04.88
Y = 255070.816
X = 431331.850
DELTA = 15°24'53"
D = 4°00'00"
T = 193.85'
L = 385.36'
R = 1432.39'
PC STA = 557+11.03
PT STA = 560+96.40

CULVERT 39039005252
EXISTING PRECAST APRON ENDWALLS LT & RT
SALVAGE 8 LF 18" PIPE & APRON ENDWALL RT SIDE.
SALVAGE APRON ENDWALL LT SIDE.
JOINT TIES & CONCRETE COLLAR REQ'D.

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 115	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050210-pn

PLOT DATE : 7/26/2021 12:58 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050210-pn

WISDOT/CADDS SHEET 44

MATCH LINE STA 578+00'NB'

MATCH LINE STA 608+00'NB'

IH 39 SB

IH 39 NB

580'NB' 585'NB' 590'NB' 595'NB' 600'NB' 605'NB'

PC: 588'NB'+57.82

PT: 598'NB'+71.84

N

CULVERT 39039005254
EXISTING PRECAST APRON ENDWALLS LT & RT.
SALVAGE 18" APRON ENDWALLS LT & RT.
JOINT TIES & CONCRETE COLLAR REQ'D.

PI STA = 593'NB'+64.92
Y = 258530.962
X = 431458.616
DELTA = 2°43'18"
D = 0°16'06"
T = 507.10'
L = 1014.02'
R = 21346.87'
PC STA = 588+57.82
PT STA = 598+71.84

CULVERT 39039005257
EXISTING MEDIAN INLET LT
EXISTING PRECAST APRON ENDWALL RT
SALVAGE 8 LF 18" PIPE & APRON ENDWALL RT
JOINT TIES & CONCRETE COLLAR REQ'D.

5

5

MATCH LINE STA 608+00'NB'

MATCH LINE STA 638+00'NB'

IH 39 SB

IH 39 NB

610'NB' 615'NB' 620'NB' 625'NB' 630'NB' 635'NB'

N

N0° 13' 07"E
7325.22'

ATC

CP 968

OH

WETLAND #3
TYPE AB

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 116	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050211-pn
PLOT DATE : 7/26/2021 12:58 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT
11660482-050211-pn
WISDOT/CADDS SHEET 44

MATCH LINE STA 638+00'NB'

MATCH LINE STA 668+00'NB'

5

ADAMS COLUMBIA ELECTRIC
APPROX. LOCATION

WE ENERGIES
APPROX. LOCATION

EXCEPTION TO NET CENTERLINE LENGTH
STA 641'NB'+58 TO STA 642'NB'+66
B-39-27

ADAMS COLUMBIA ELECTRIC
APPROX. LOCATION

N

6TH DR

MGS GUARDRAIL REQ'D
SEE GUARDRAIL DETAIL

IH 39 SB

640'NB' 645'NB' 650'NB' 655'NB' 660'NB' 665'NB'

IH 39 NB

CP 969

PAVEMENT TRANSITION
SEE TYPICAL BUTT JOINT DETAIL

PAVEMENT TRANSITION
SEE TYPICAL BUTT JOINT DETAIL

FAWN CT

MARQUETTE ADAMS TELEPHONE CORP.
APPROX. LOCATION

CTH M

FRONTIER COMM.
APPROX. LOCATION

N

MATCH LINE STA 668+00'NB'

MATCH LINE STA 698+00'NB'

5

ATC APPROX. LOCATION

PI: 671'NB'+97.06

IH 39 SB

N0° 12' 41"E
5145.27'

HIO

670'NB' 675'NB' 680'NB' 685'NB' 690'NB' 695'NB'

IH 39 NB

CTH M

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 117	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050212-pn
11660482-050212-pn
PLOT DATE : 7/26/2021 12:58 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

5

5

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 118	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050213-pn

PLOT DATE : 7/26/2021 12:58 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050213-pn

WISDOT/CADDS SHEET 44

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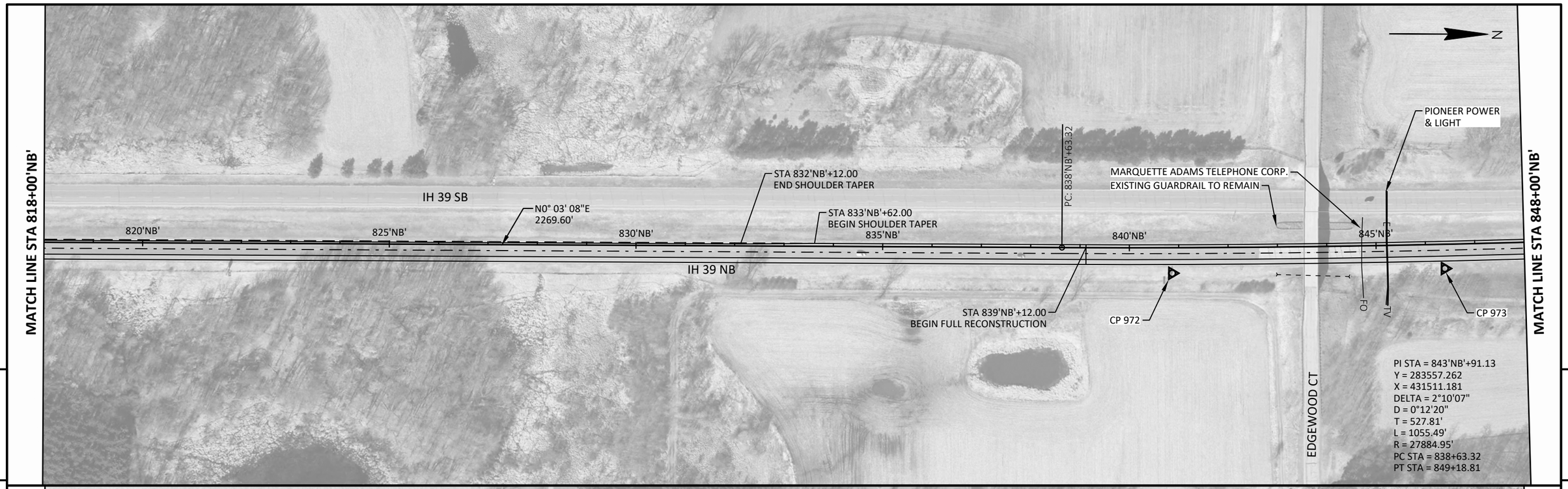
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 119	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050214-pn

PLOT DATE : 7/26/2021 12:59 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050214-pn

WISDOT/CADDS SHEET 44



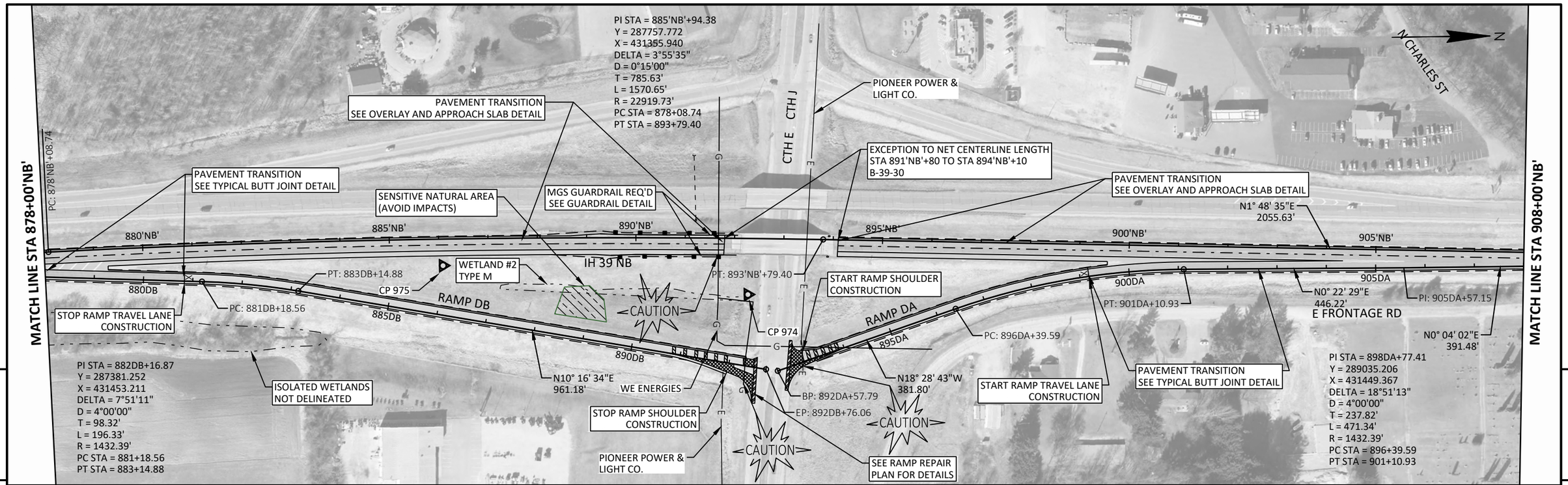
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 120 E

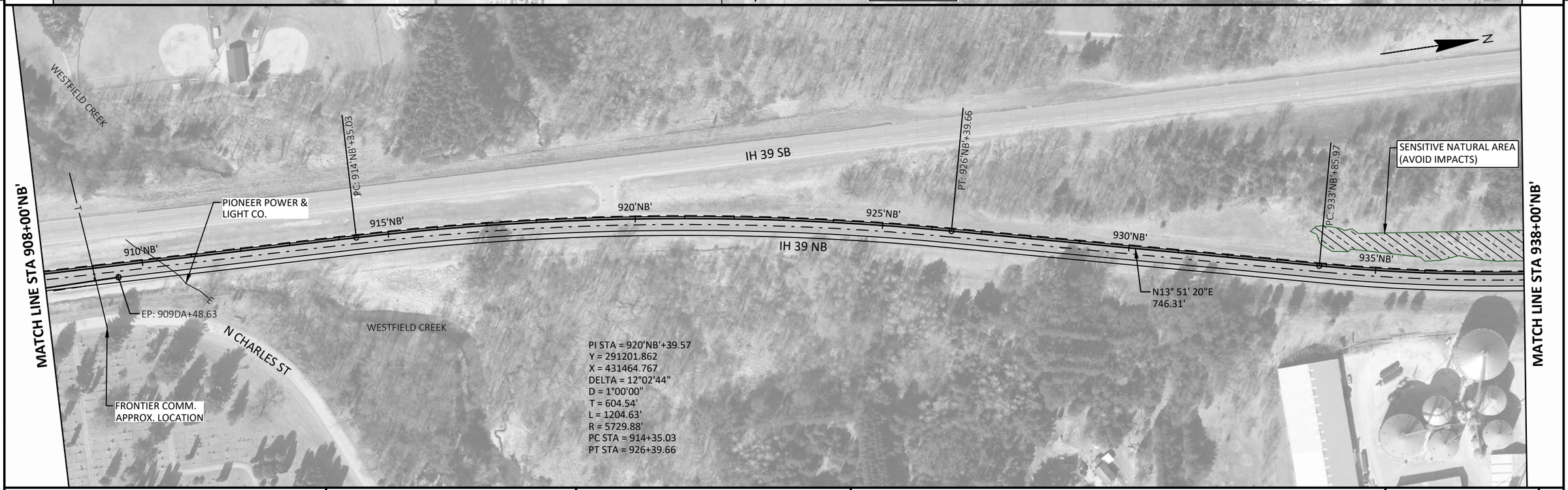
FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050215-pn

PLOT DATE : 7/26/2021 12:59 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050215-pn

WISDOT/CADDS SHEET 44





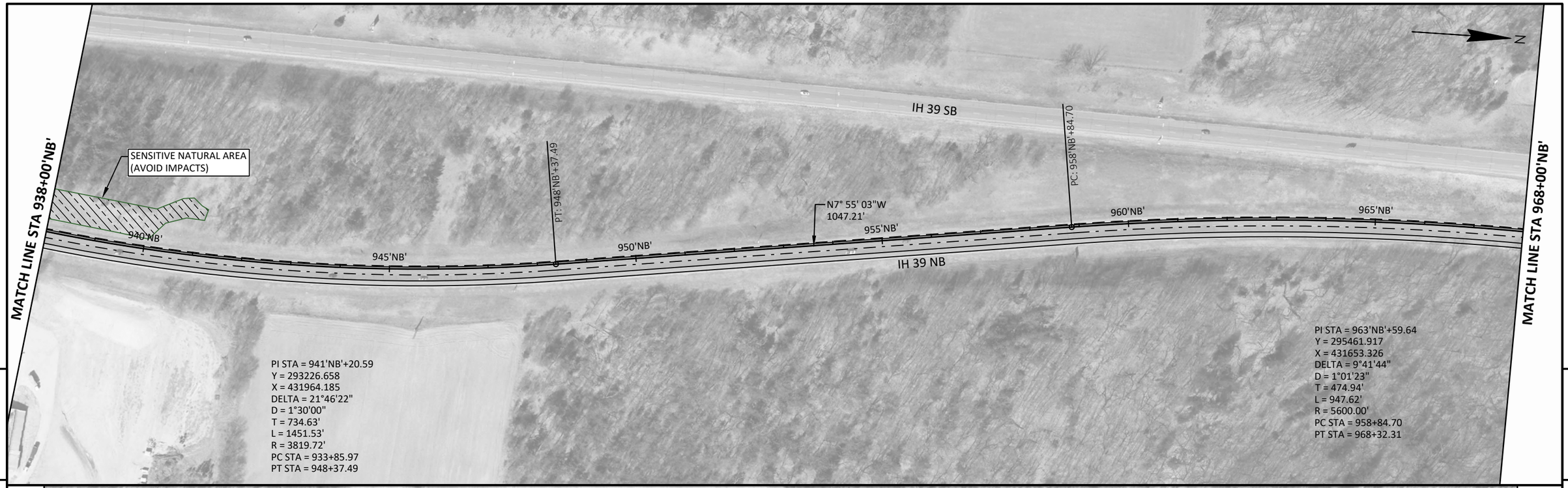
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 121	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050216-pn

PLOT DATE : 7/26/2021 12:59 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050216-pn

WISDOT/CADDS SHEET 44



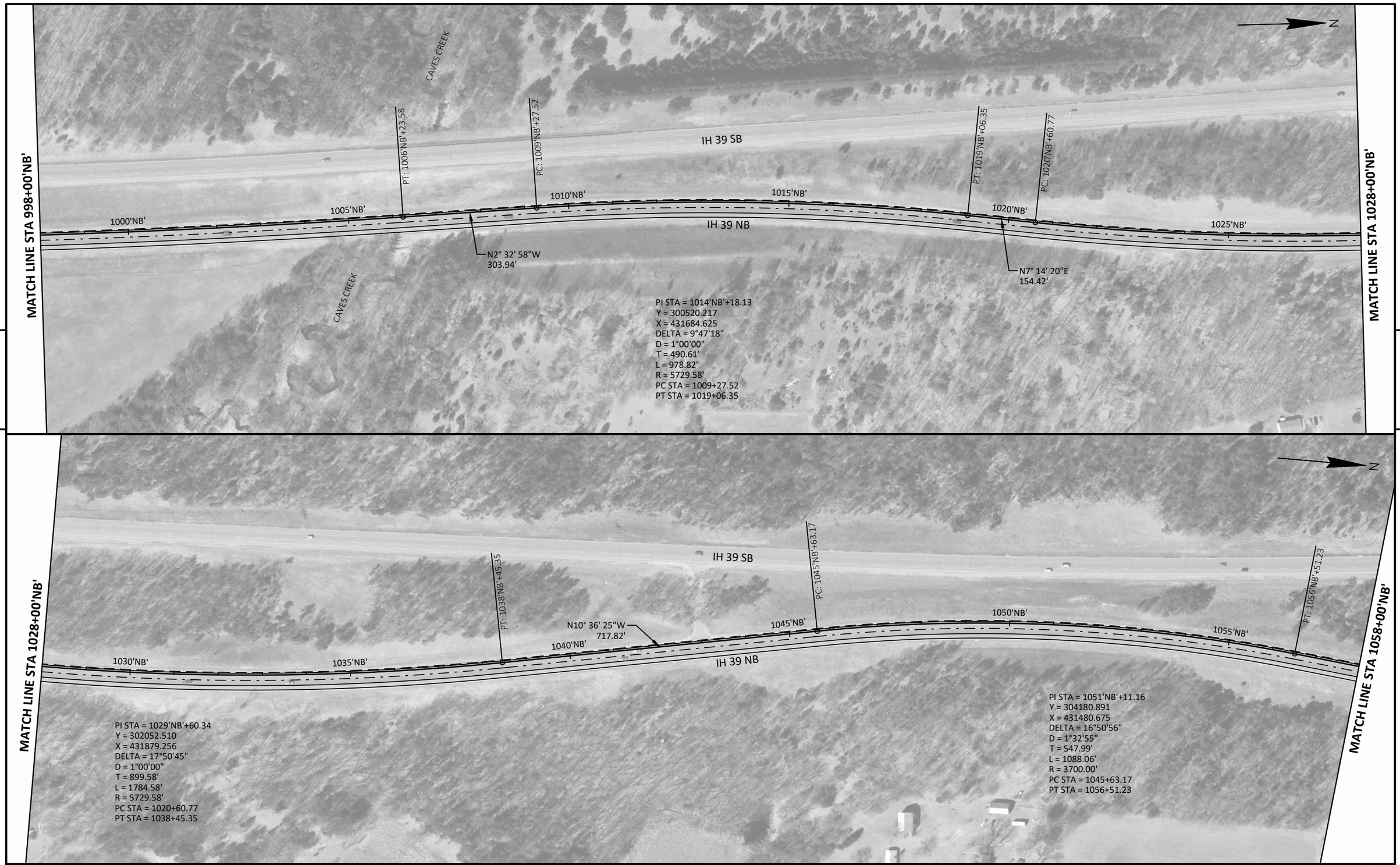
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 122	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050217-pn

PLOT DATE : 7/26/2021 12:59 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050217-pn

WISDOT/CADDS SHEET 44



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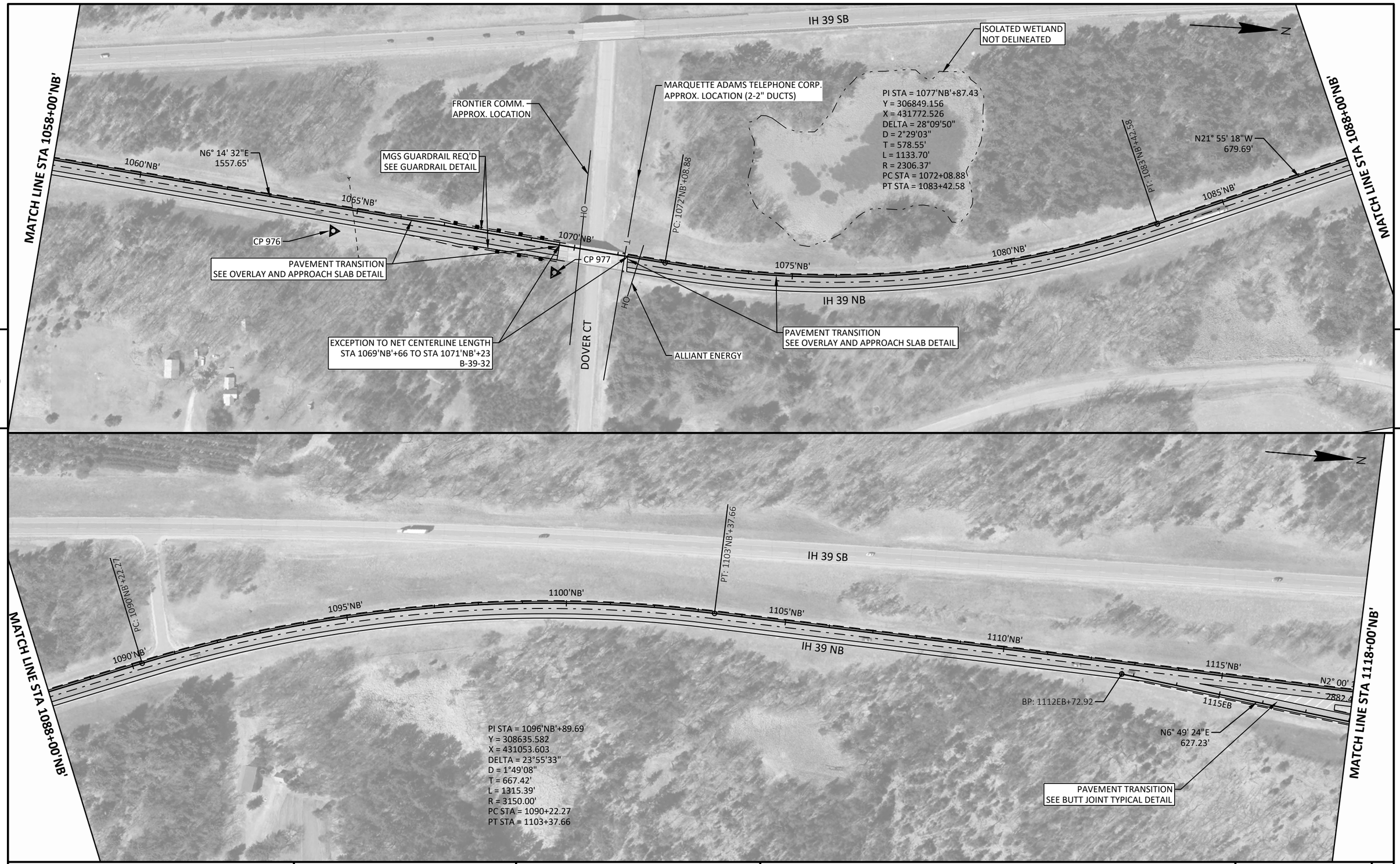
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 123	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050218-pn

11660482-050218-pn

PLOT DATE : 7/26/2021 12:59 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44



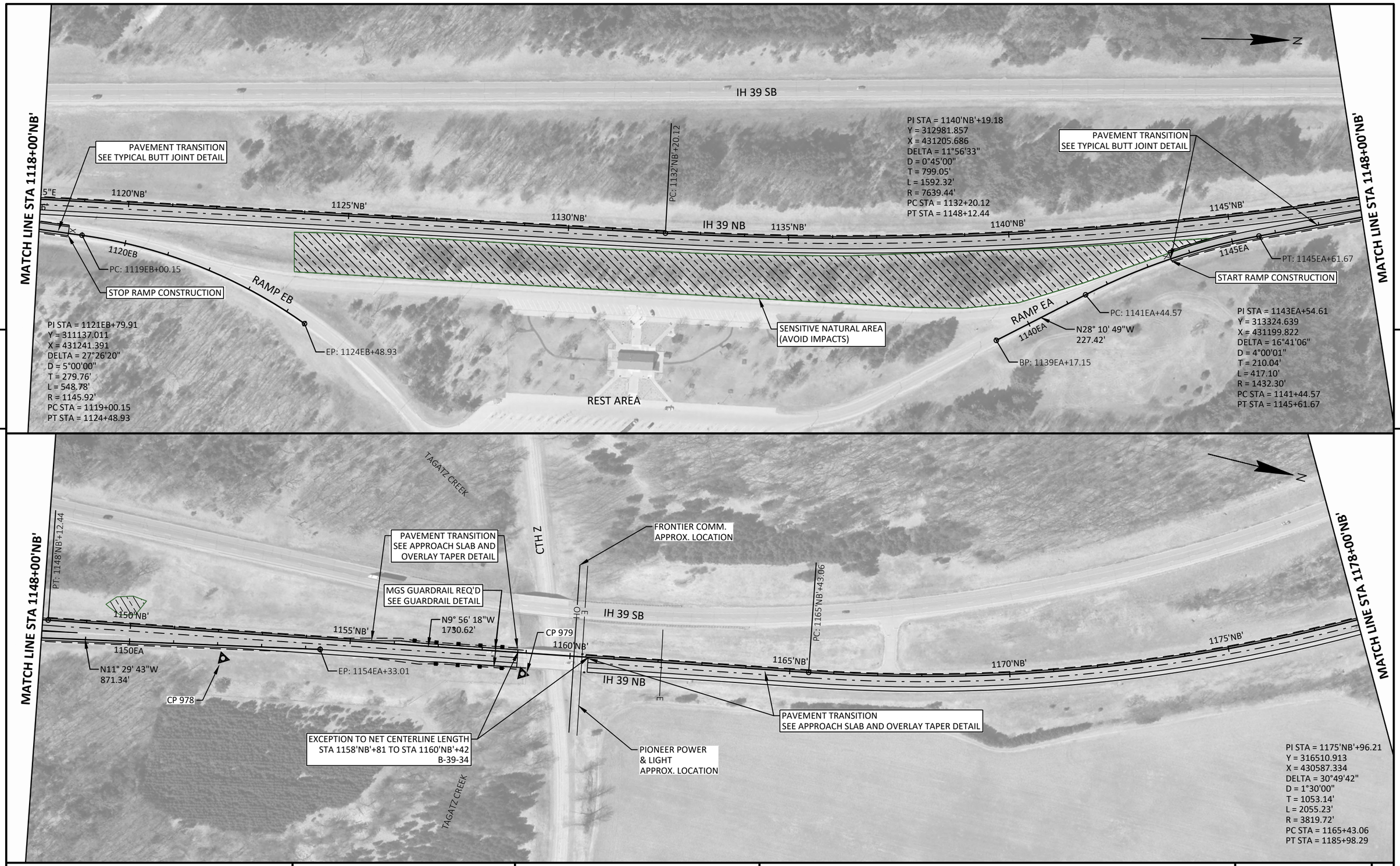
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 124	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050219-pn

PLOT DATE : 7/26/2021 1:00 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050219-pn

WISDOT/CADDS SHEET 44



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 125	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050220-pn
PLOT DATE : 7/26/2021 1:00 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050220-pn

WISDOT/CADDS SHEET 44

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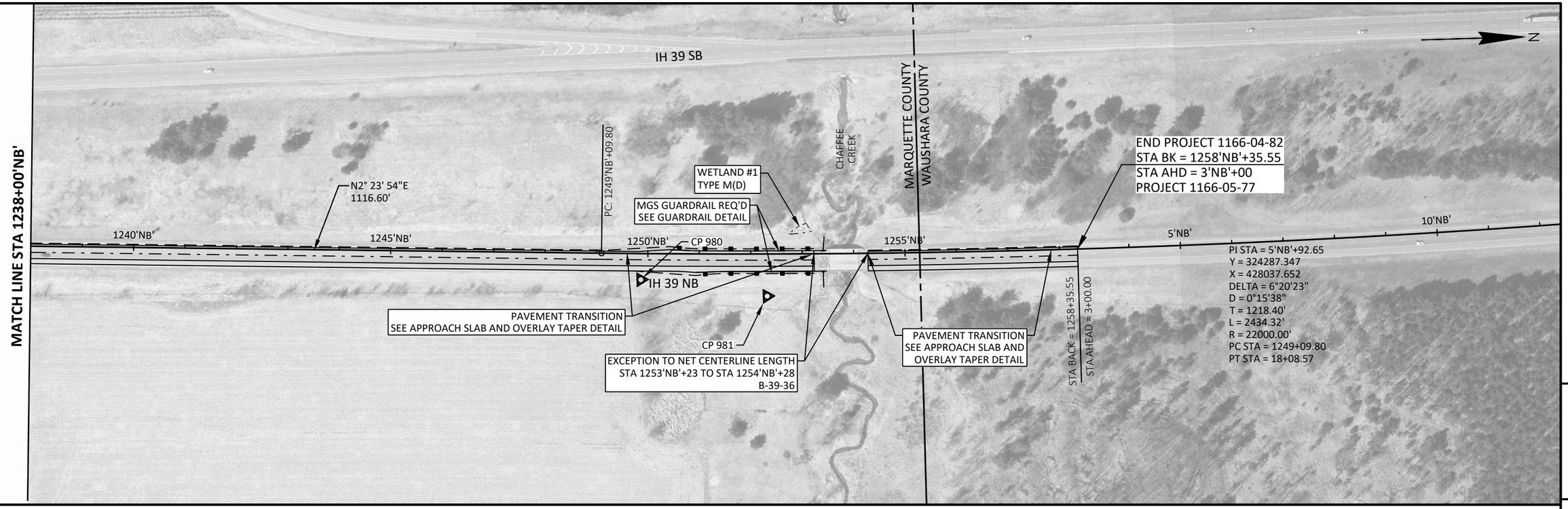
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 126	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050201-PN.DWG
LAYOUT NAME - 11660482-050221-pn

PLOT DATE : 7/26/2021 1:00 PM PLOT BY : OMNNI ASSOCIATES - CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

11660482-050221-pn

WISDOT/CADDS SHEET 44



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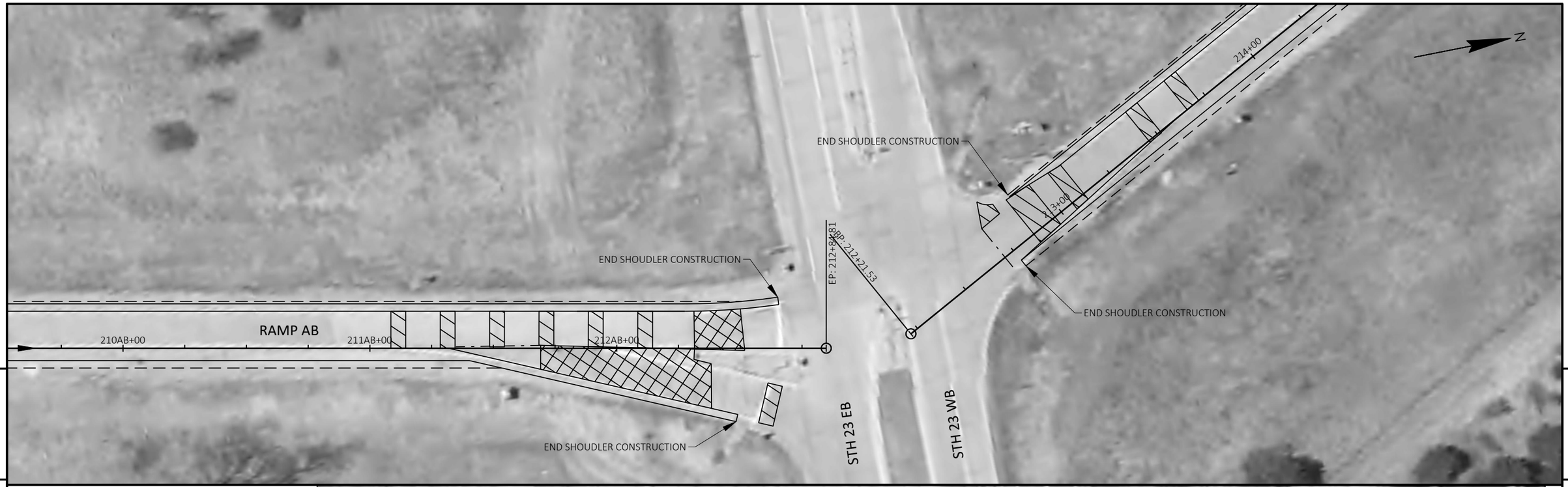
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET 127	E



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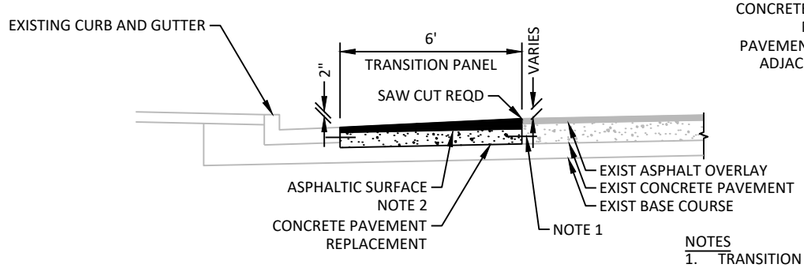
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	RAMP REPAIR PLAN	SHEET 128 E

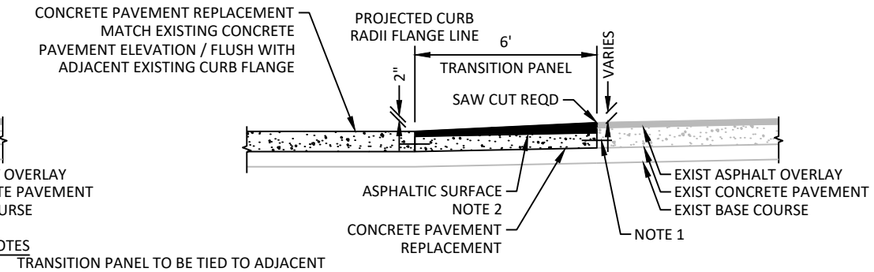
FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050230-PN.DWG
LAYOUT NAME - 11660482-050230-pn

PLOT DATE : 4/22/2021 7:43 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



SECTION A-A



SECTION B-B

NOTES
1. TRANSITION PANEL TO BE TIED TO ADJACENT CONCRETE PAVEMENT BY TIE RODS ONLY.
2. SHAPE ASPHALTIC SURFACE TO MAINTAIN POSITIVE DRAINAGE

CONCRETE PAVEMENT REPLACEMENT TRANSITION DETAIL

CTH J / CTH E

5

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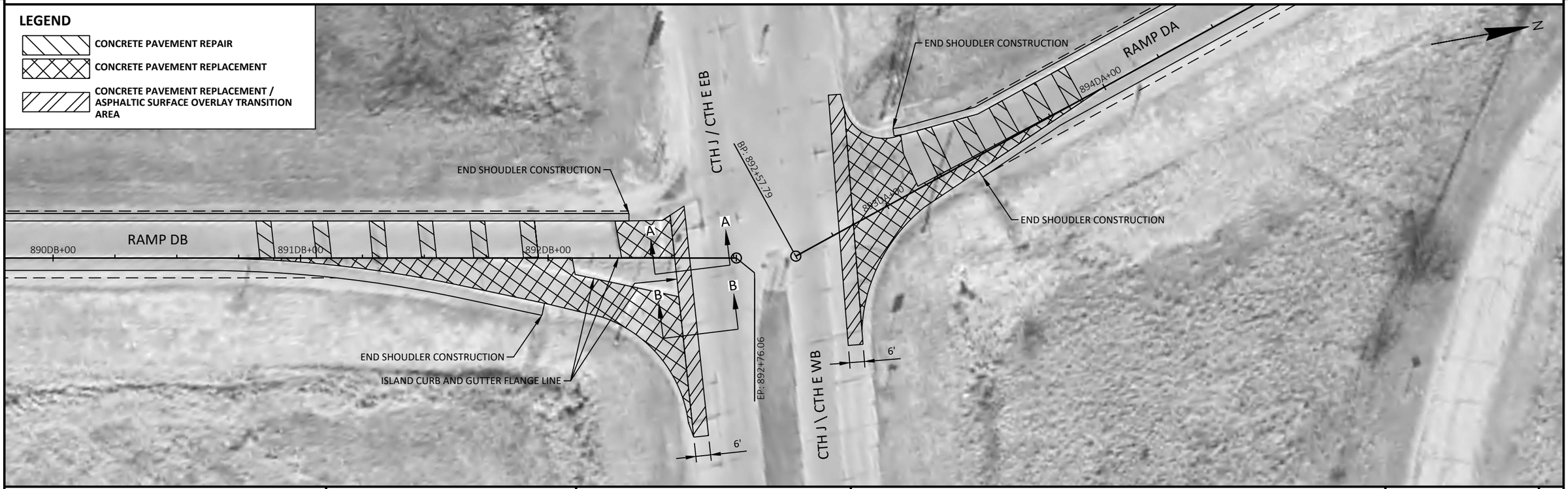
LEGEND

- CONCRETE PAVEMENT REPAIR
- CONCRETE PAVEMENT REPLACEMENT
- CONCRETE PAVEMENT REPLACEMENT / ASPHALTIC SURFACE OVERLAY TRANSITION AREA



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	RAMP REPAIR PLAN	SHEET 129	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-050230-PN.DWG
LAYOUT NAME - 11660482-050231-pn

PLOT DATE : 6/28/2021 10:26 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

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
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13C08-02	CONCRETE PAVEMENT PARTIAL DEPTH REPAIR
13C09-15A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C19-03	HMA LONGITUDINAL JOINTS
14B07-15A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B16-04A	ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
14B16-04B	ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
14B20-11H	STEEL THRIE BEAM STRUCTURE APPROACH, SINGLE SLOPE ATTACHMENT
14B24-09A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B32-08A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-08B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-08C	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-08D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-08E	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-08F	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B33-02G	CONCRETE BARRIER SINGLE SLOPE 42" THRIE BEAM ANCHOR
14B33-02H	CONCRETE BARRIER SINGLE SLOPE 42" THRIE BEAM ANCHOR
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)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-03A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-03B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-03C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-03D	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-03E	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-03F	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-03G	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B50-01A	THRIE BEAM APPROACH RETROFIT INSTALLATION OF MISSING POST
14B50-01B	THRIE BEAM APPROACH RETROFIT INSTALLATION OF MISSING POST
14B50-01C	THRIE BEAM APPROACH RETROFIT INSTALLATION OF MISSING POST
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15B01-08A	FENCE WOVEN WIRE
15B01-08B	FENCE WOVEN WIRE
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES

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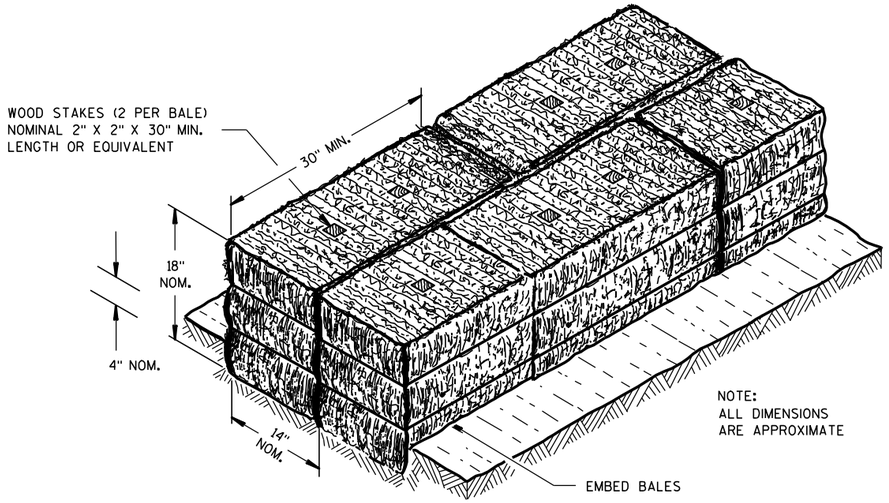
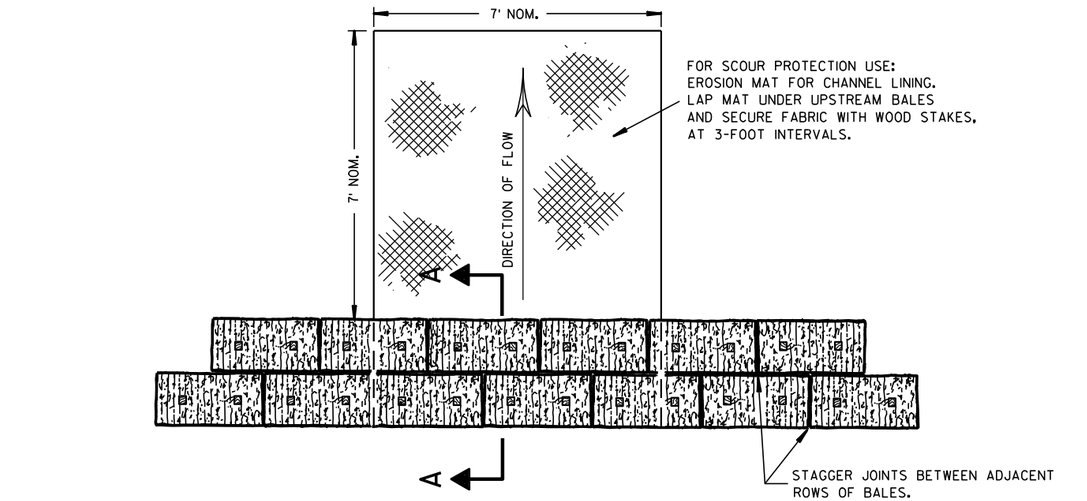
Standard Detail Drawing List

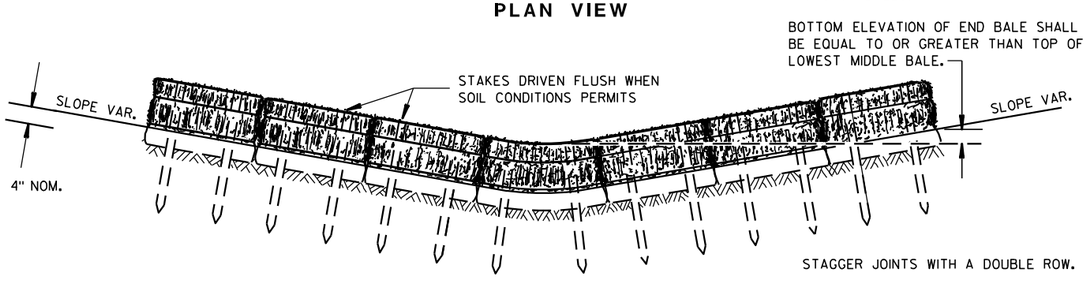
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-08D	ON RAMP LANE CLOSURE
15C02-08E	OFF RAMP LANE CLOSURE
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C14-04	AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS
15C18-05C	PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT
15C19-06C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C31-04A	PAVEMENT MARKING (RAMPS AND GORES)
15C31-04C	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15D04-01	TRAFFIC CONTROL, RAMP CONSTRUCTION STAGING
15D05-04	TRAFFIC CONTROL, SINGLE LANE CROSSOVER ENTRANCE WITH BARRIER
15D06-04	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D09-05	TRAFFIC CONTROL, SINGLE LANE CROSSOVER EXIT
15D11-07	TRAFFIC CONTROL, SINGLE LANE CROSSOVER
15D12-09B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D15-05C	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05D	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-04	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D40-02B	TRAFFIC CONTROL, FULL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER
15D40-02D	TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES



SECTION A-A



PLAN VIEW



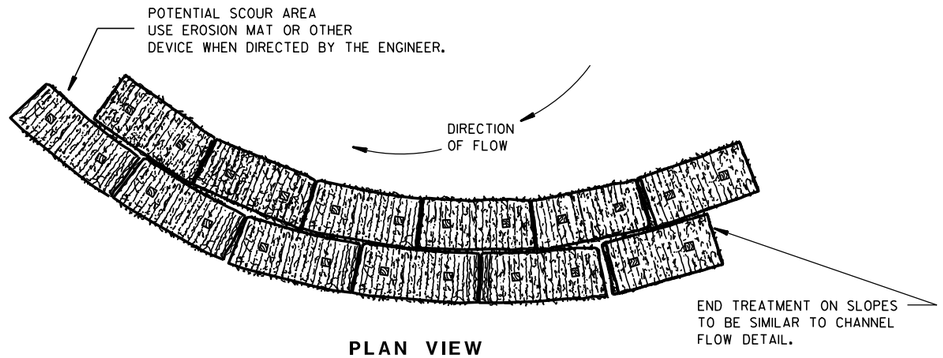
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

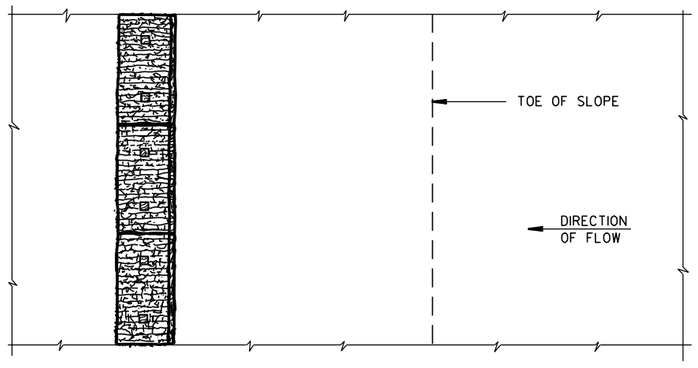
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

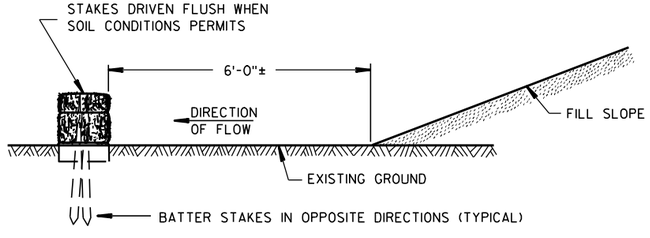


PLAN VIEW

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

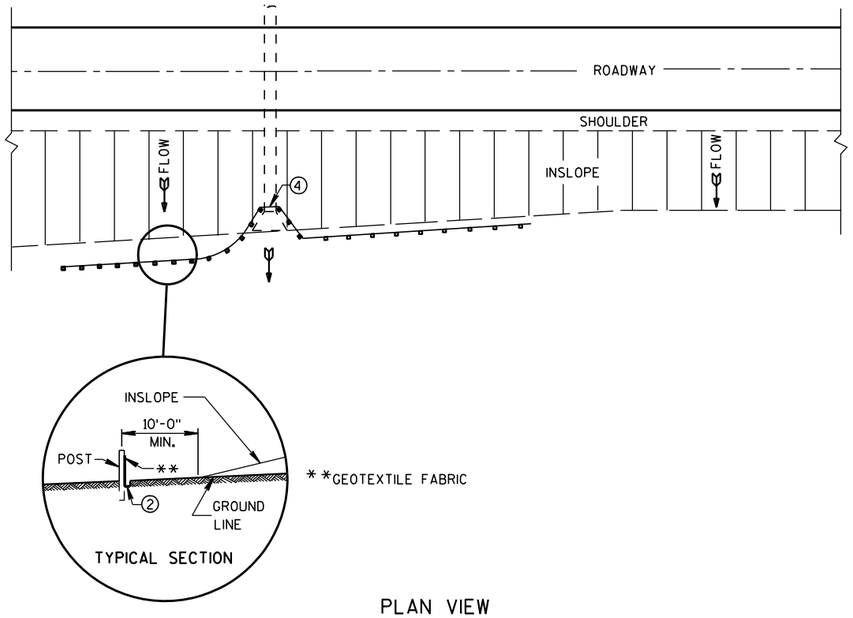
6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

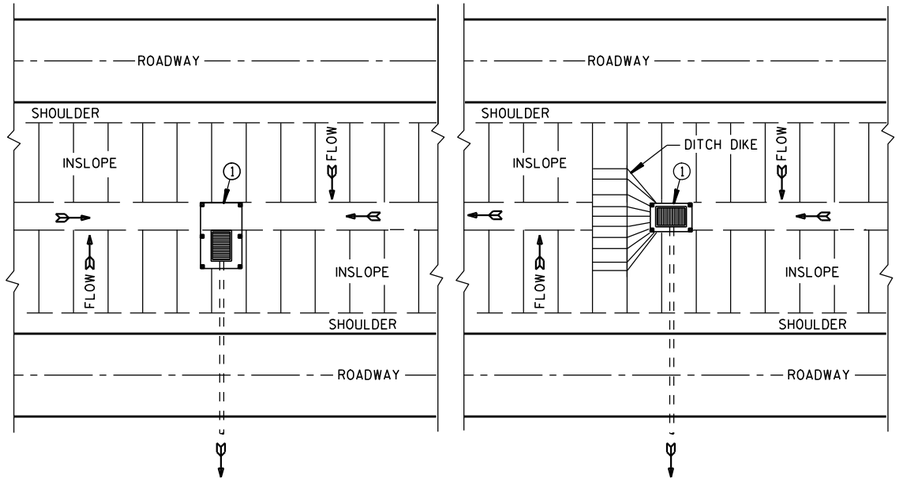
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



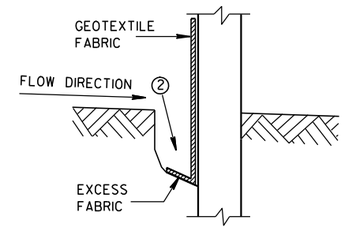
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

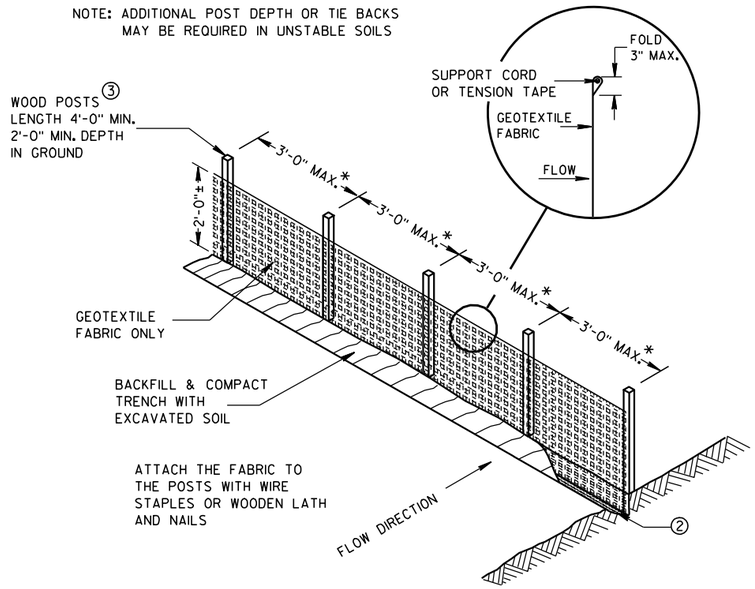
GENERAL NOTES

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.

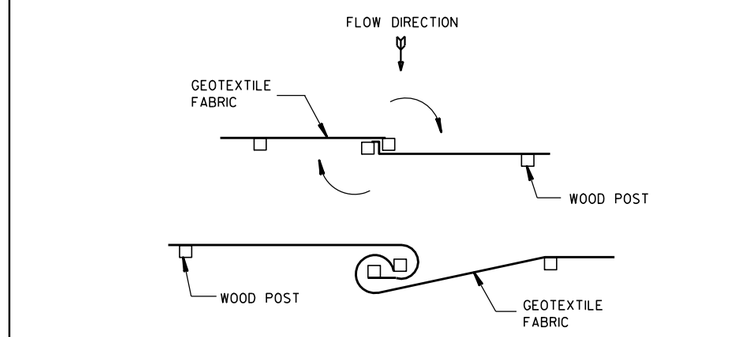


TRENCH DETAIL

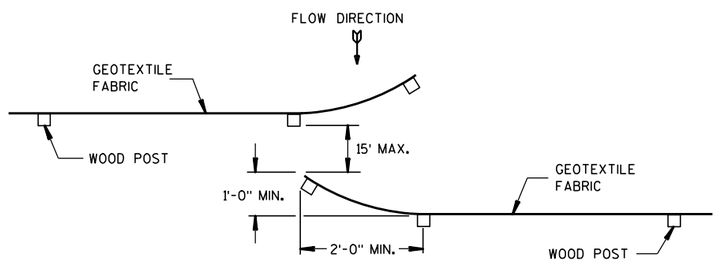


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

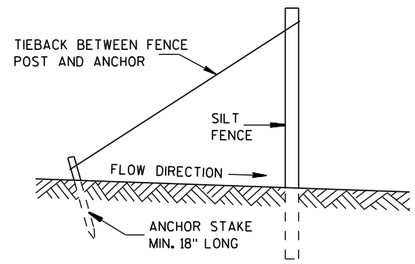


TWIST METHOD



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

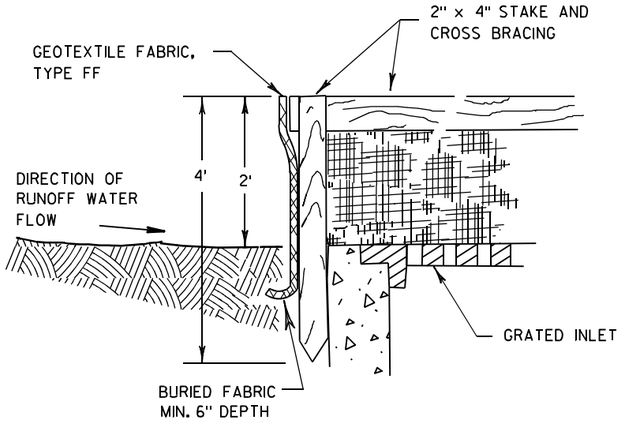
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

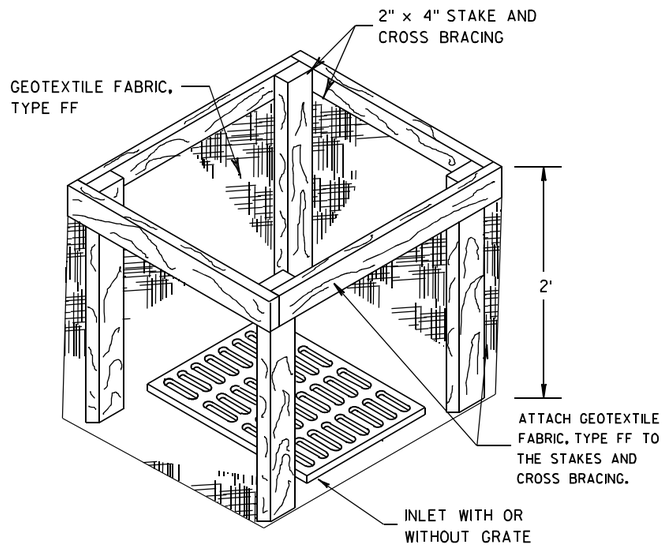
6

S.D.D. 8 E 9-6

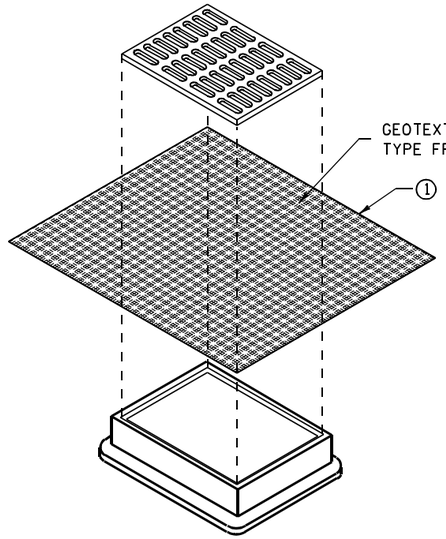
6

S.D.D. 8 E 9-6



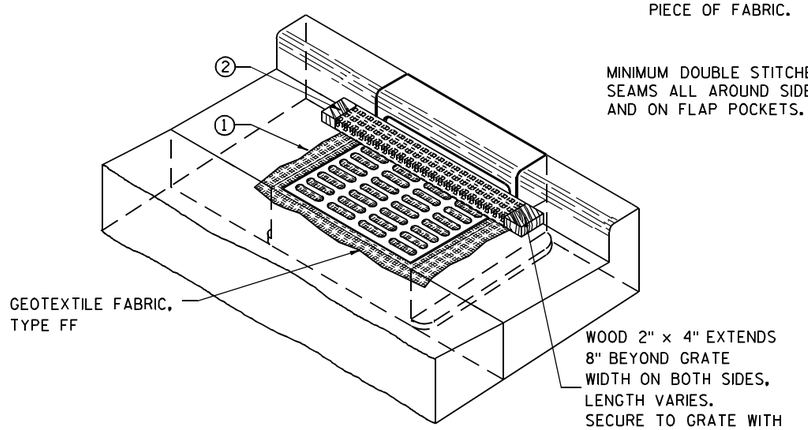


INLET PROTECTION, TYPE A

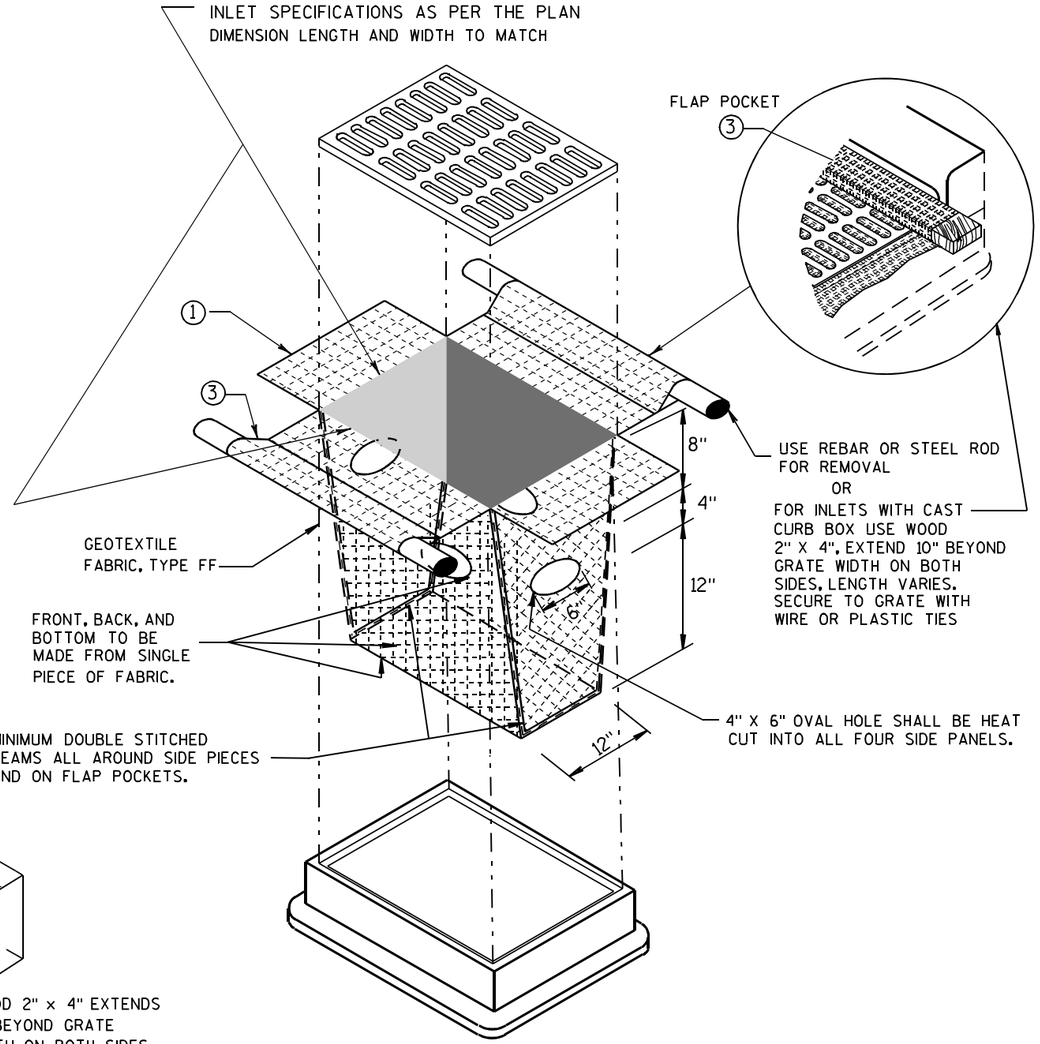


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

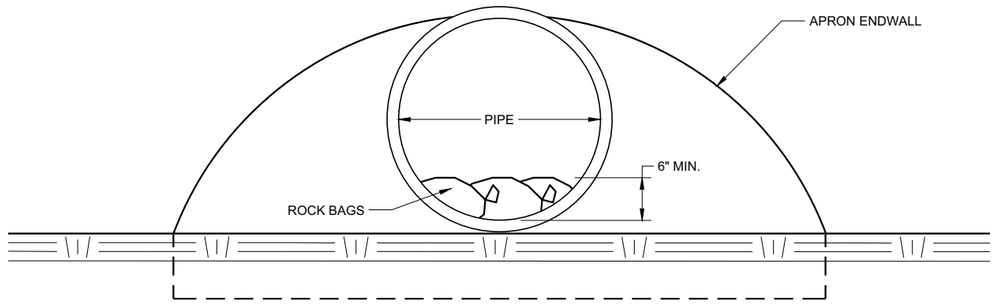
APPROVED

10/16/02
DATE

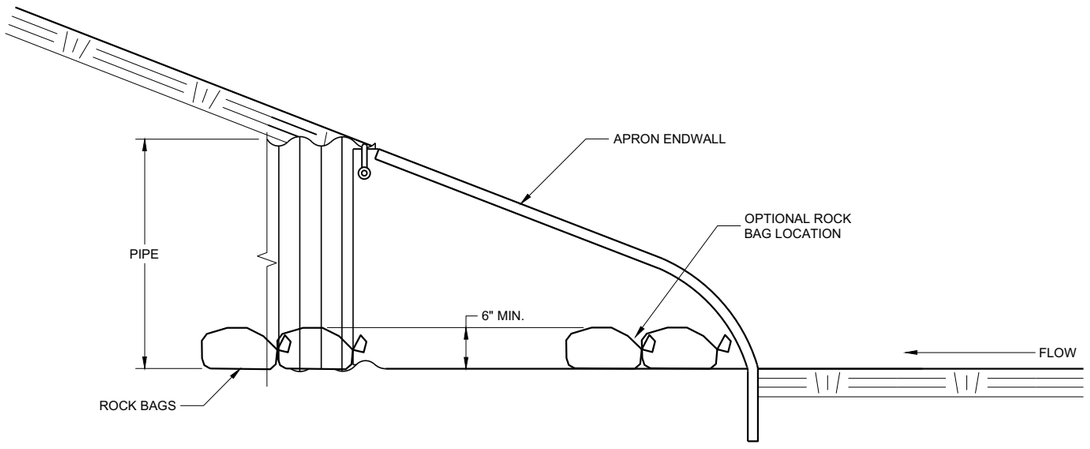
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

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	

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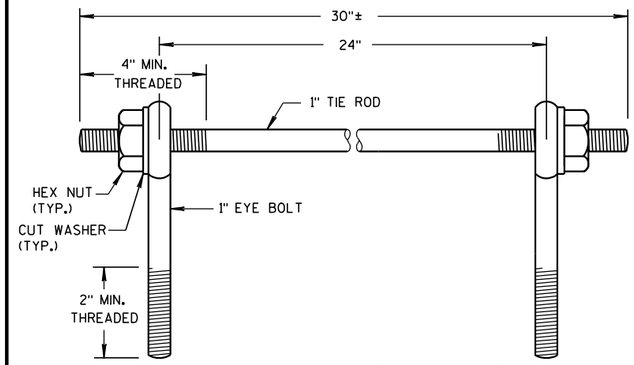
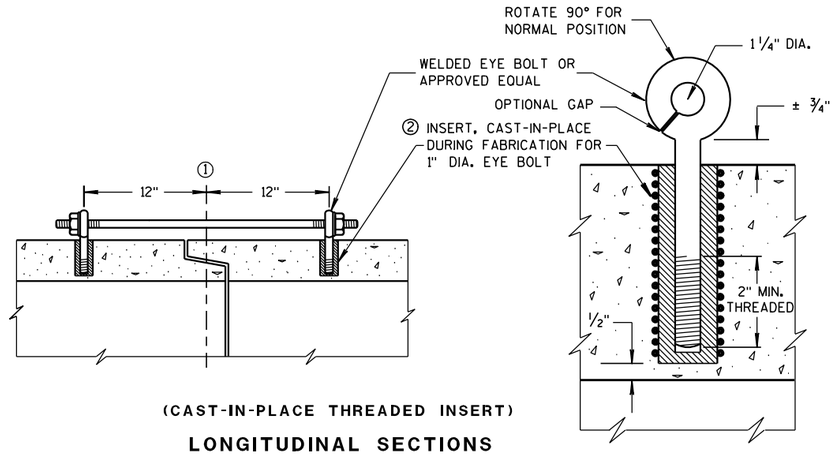
SDD 08E15 - 01



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 ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

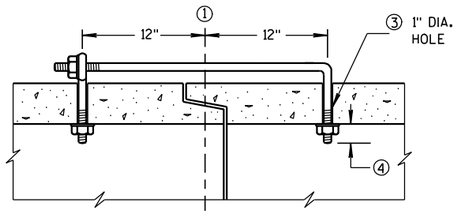
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

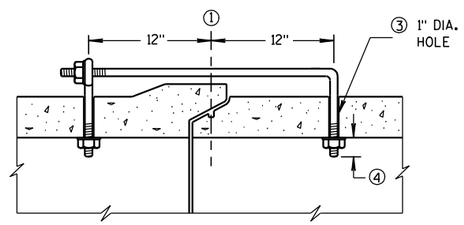
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

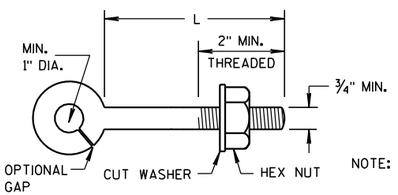


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

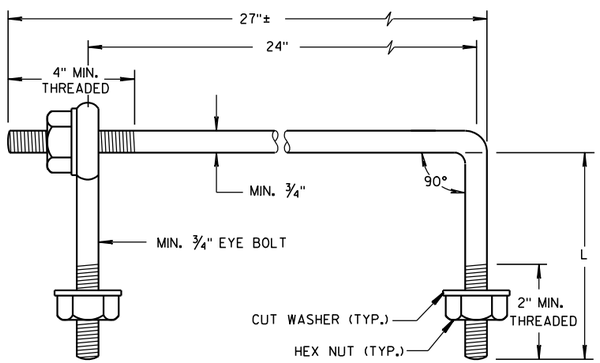
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

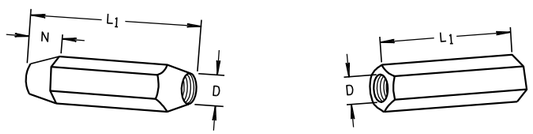
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

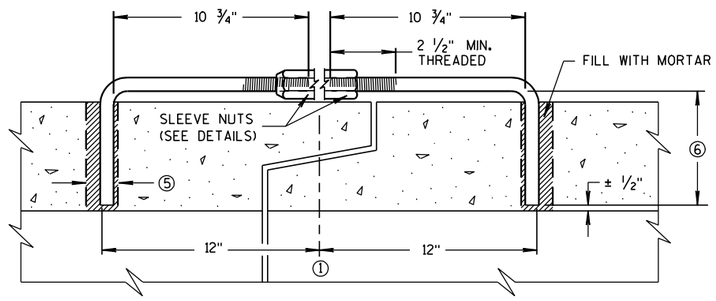
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

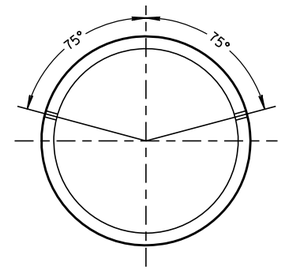
SLEEVE NUTS



LONGITUDINAL SECTION

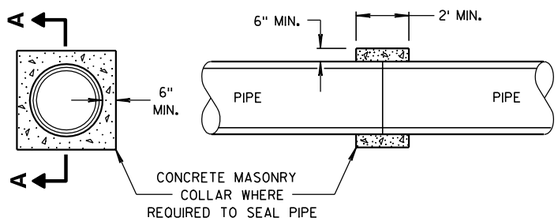
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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
6/5/2012 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 F 4-7

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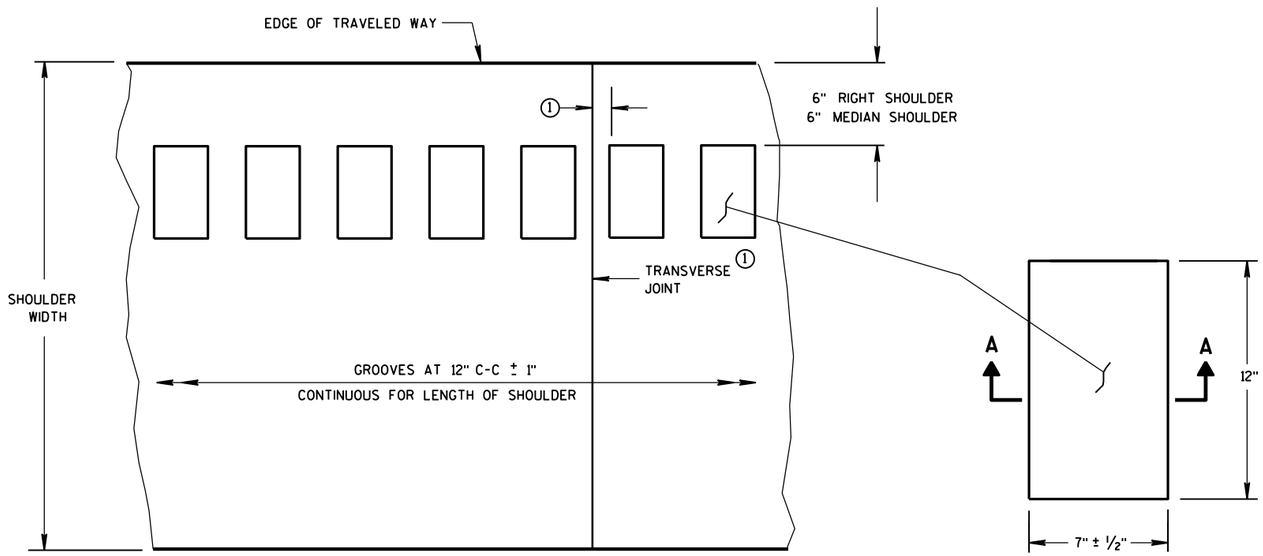
S.D.D. 8 F 4-7



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

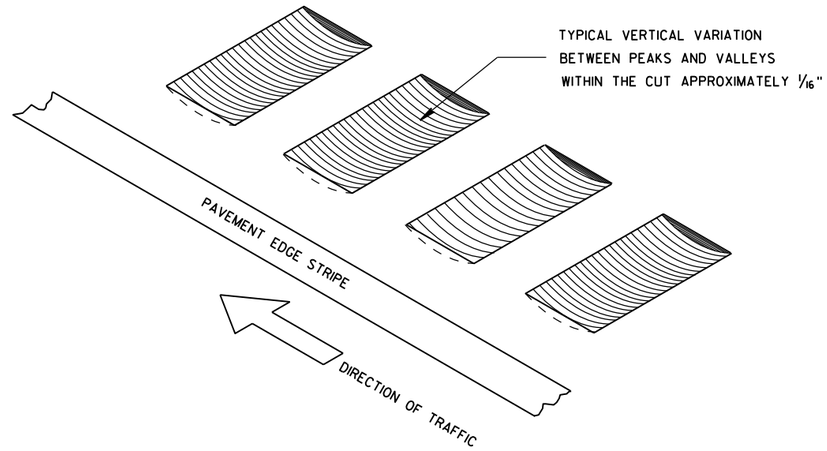
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



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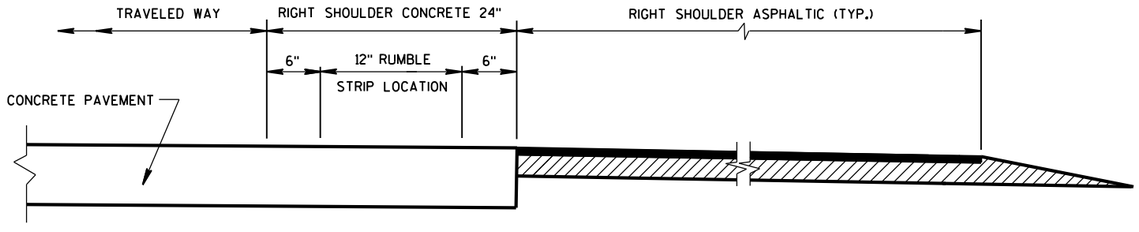
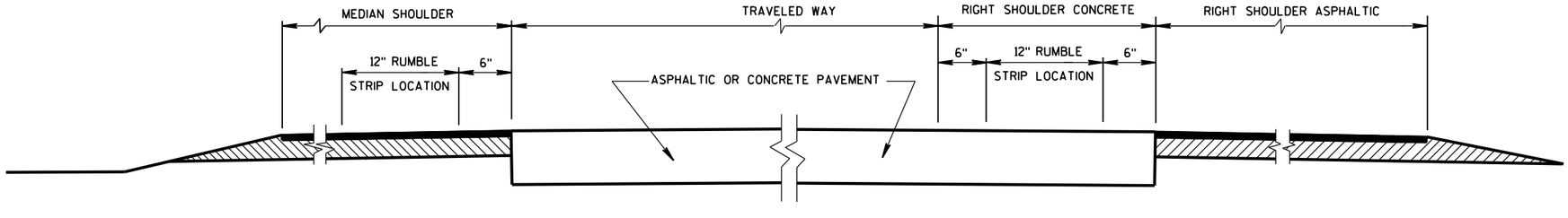


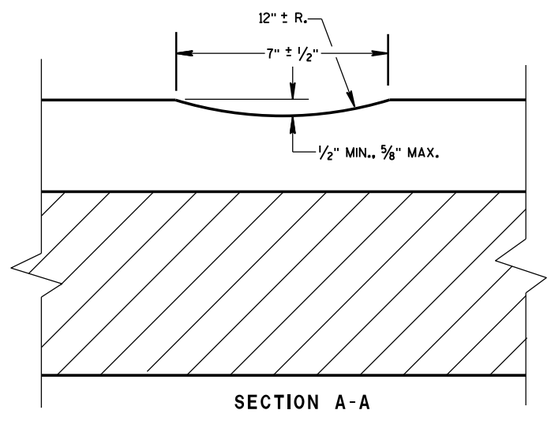
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 A 5-5a

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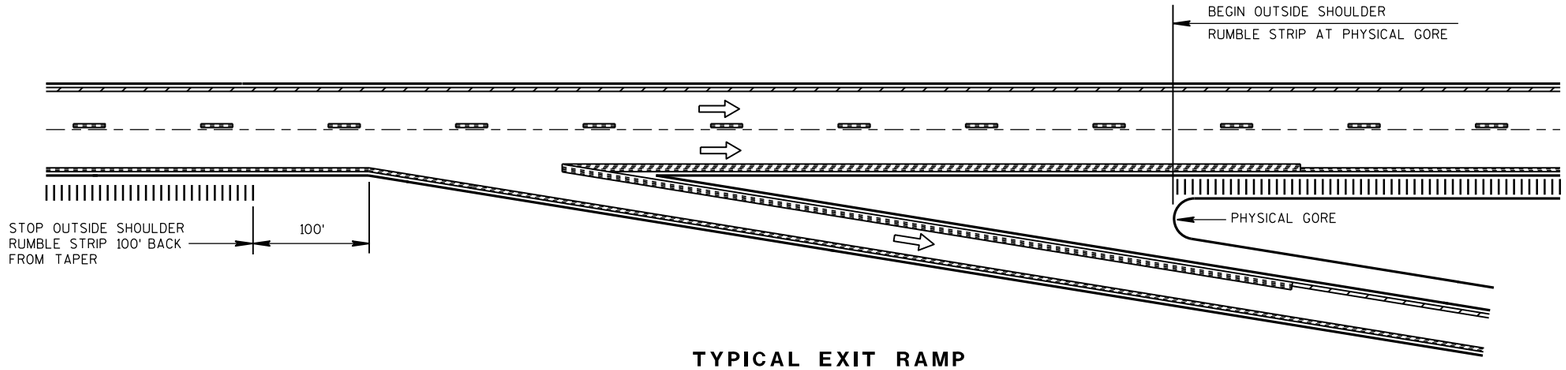
S.D.D. 13 A 5-5a



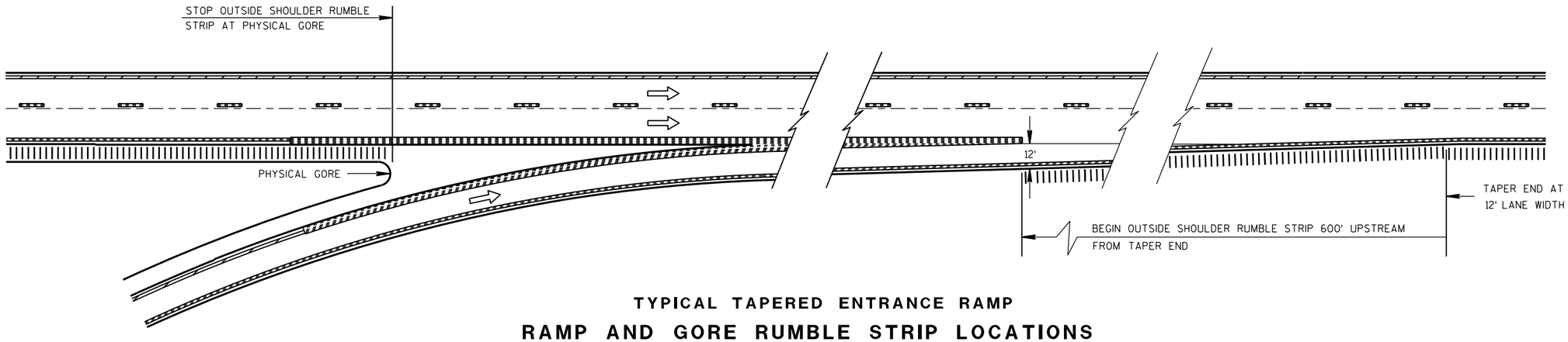
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

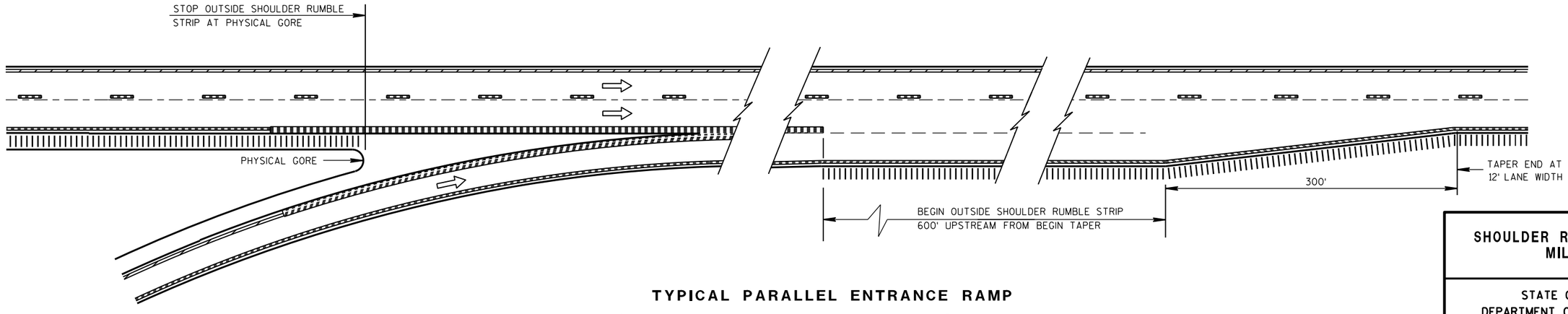
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

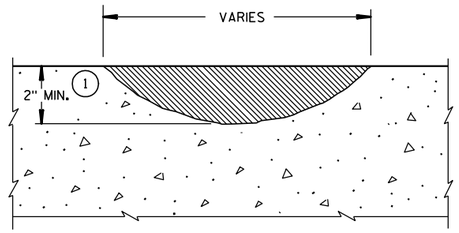
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

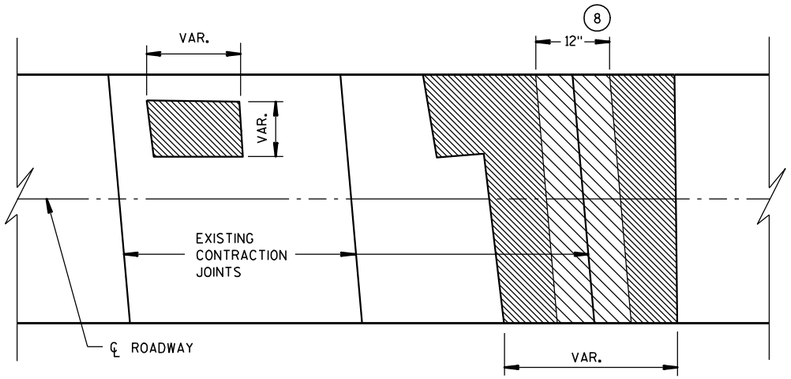
APPROVED
12/17/2012 — DATE
/S/ Jerry H. Zoga — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 13 A 5-5b

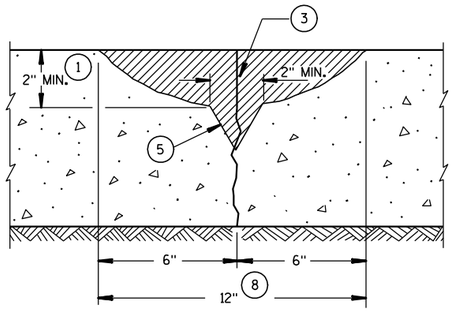


PROFILE VIEW

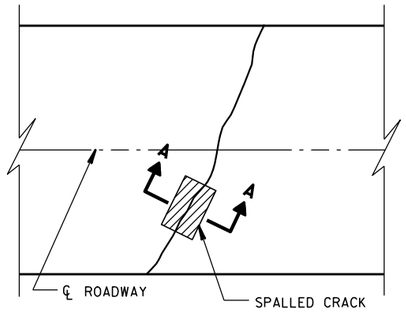


PLAN VIEW

SURFACE REPAIR



SECTION A-A

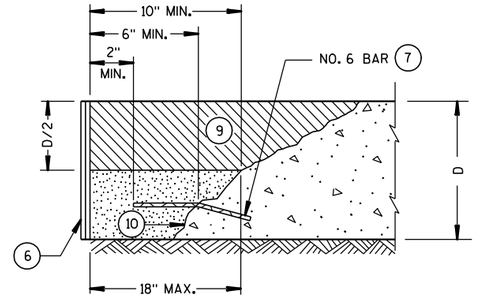


PLAN VIEW

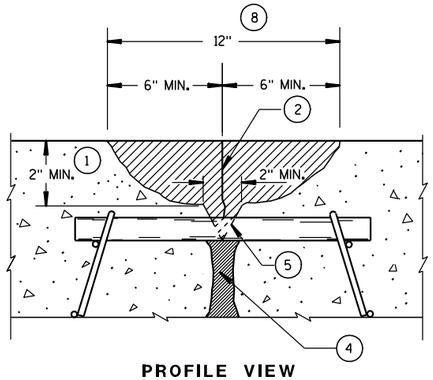
CRACK REPAIR

GENERAL NOTES

1. REMOVE ALL CONCRETE, TO LIMITS SHOWN, TO A MAXIMUM OF ½ THE PAVEMENT DEPTH OR TOP OF DOWELS.
2. IF REPAIR IS DEEPER THAN ANTICIPATED SAWCUT, COMPRESSION RELIEF MATERIAL MUST BE USED. THE THICKNESS OF COMPRESSION RELIEF MATERIAL MUST BE EQUAL TO OR GREATER THAN THE WIDTH OF THE JOINT OR CRACK (1/4"). THIS MATERIAL SHOULD EXTEND FULL DEPTH OF THE REPAIR.
3. COMPRESSION RELIEF MATERIAL MUST BE USED. THE THICKNESS OF COMPRESSION RELIEF MATERIAL MUST BE EQUAL TO OR GREATER THAN THE WIDTH OF THE JOINT OR CRACK (1/4"). THIS MATERIAL SHOULD EXTEND FULL DEPTH OF THE REPAIR.
4. CLEAN, DRY SAND WHEN NECESSARY.
5. REMOVE UNSOUND MATERIAL BY CHIPPING AT 1:1 SLOPE.
6. ¼" MINIMUM PREFORMED JOINT FILLER IF ADJACENT TO CONCRETE. EDGING REQUIRED. FULLY FORMED EDGE IF ADJACENT TO SHOULDER.
7. PAVEMENT TIES AS SHOWN. ALL EMBEDMENTS 6" MINIMUM AND INSTALLED WITH GROUT.
8. OVER 12" (NOMINAL WIDTH) WILL BE PAID AS SURFACE REPAIR.
9. PAID AS JOINT OR CRACK REPAIR.
10. FULL-DEPTH ADJUSTMENT SHALL BE CHIPPED TO BOTTOM OF PCC PAVEMENT AT 1:1 SLOPE.
11. BEYOND 18" WILL BE PAID AS SURFACE REPAIR.

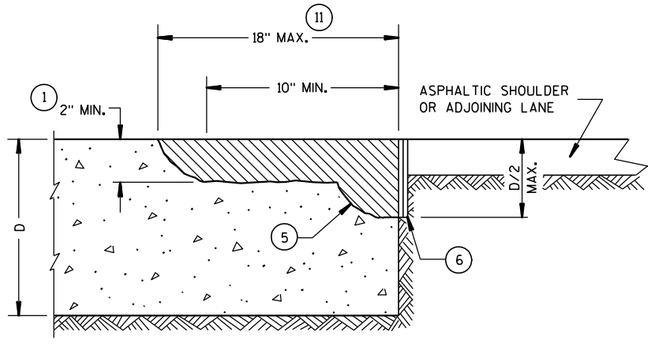


PROFILE VIEW

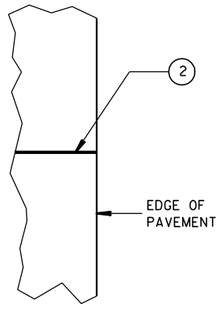


PROFILE VIEW

JOINT REPAIR

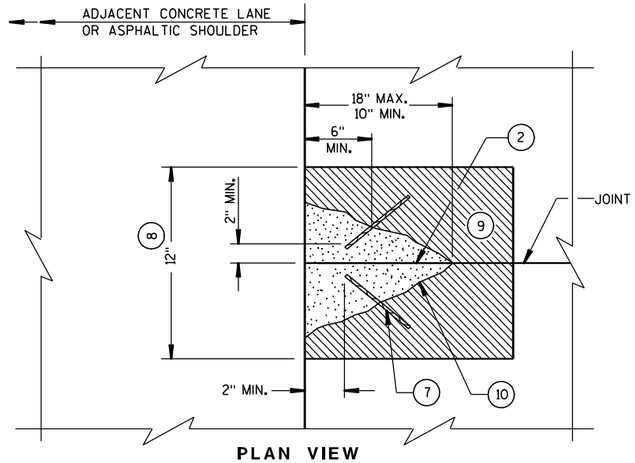


PROFILE VIEW



PLAN VIEW

EDGE REPAIR



PLAN VIEW

FULL DEPTH REPAIR ADJUSTMENT

CONCRETE PAVEMENT PARTIAL DEPTH REPAIR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/21/03 DATE
/S/ Bill Ducker PAVEMENT ENGR
FHWA

6

S.D.D. 13 C 8-2

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S.D.D. 13 C 8-2

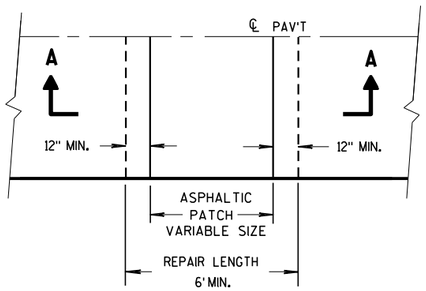
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

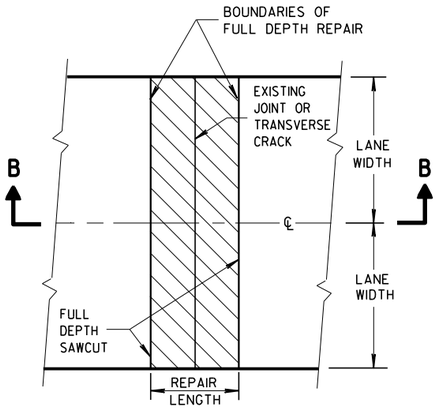
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

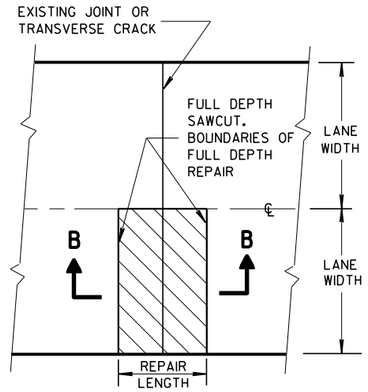
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

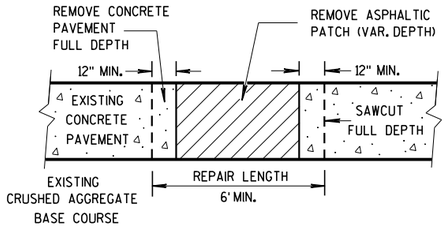


PLAN VIEW
(DOUBLE LANE REPAIR)



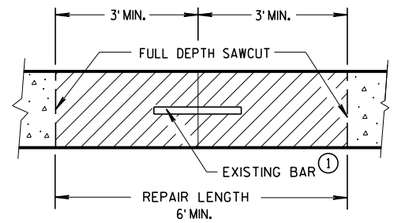
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

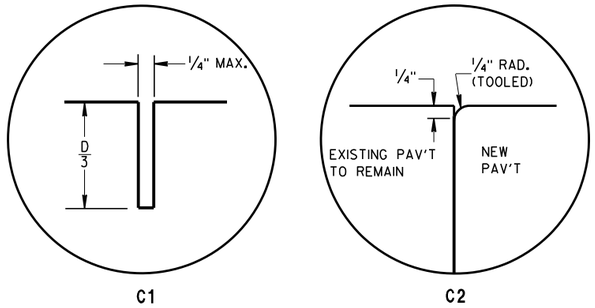
CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 9-15a



C1 C2

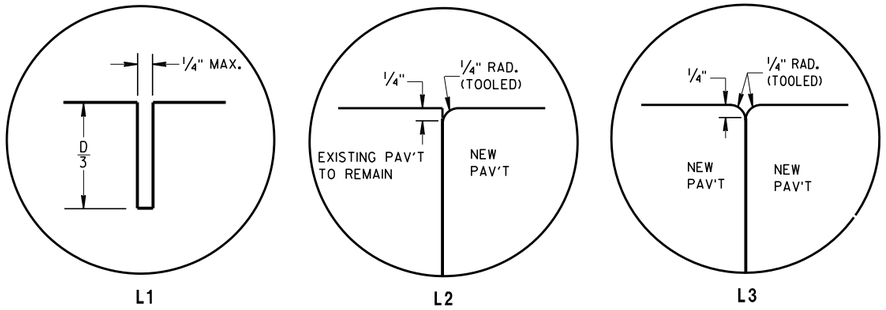
TRANSVERSE JOINTS

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

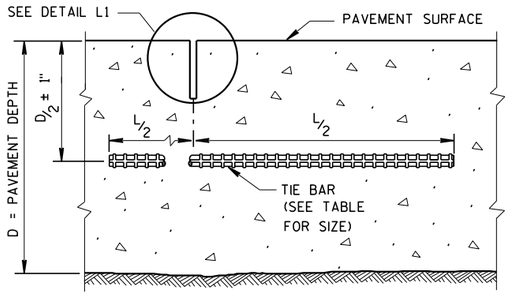
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



L1 L2 L3

LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

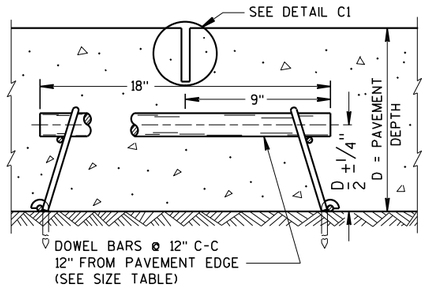
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

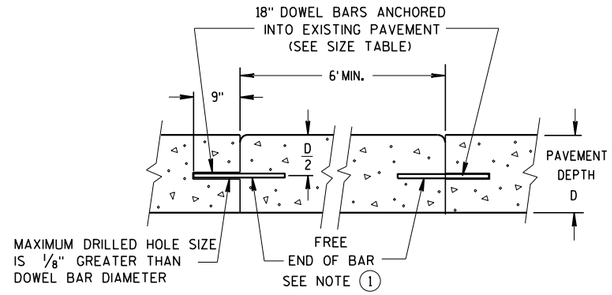
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

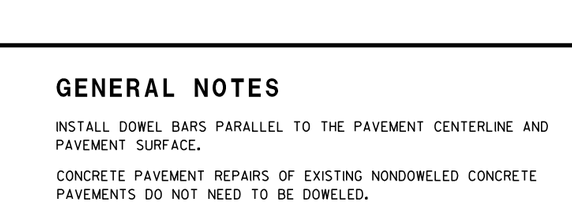


SECTION F-F

CONTRACTION JOINT



SECTION D-D

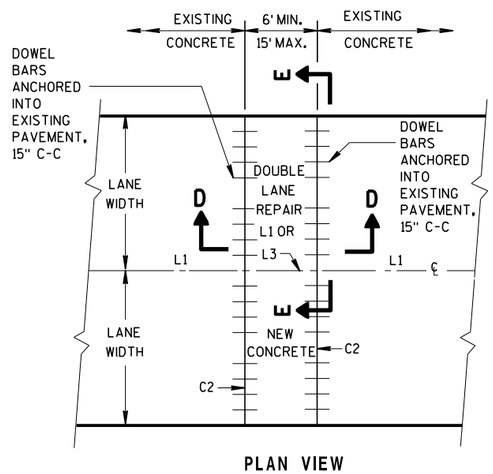


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

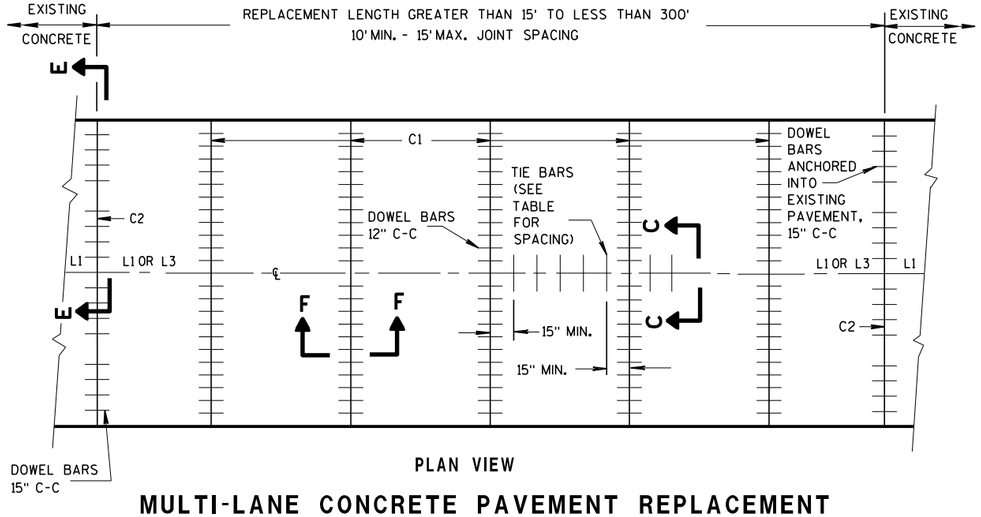
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	NONE	12'
7", 7 1/2"	1"	1"	14'
8", 8 1/2"	1 1/4"	1 1/4"	15'
9", 9 1/2"	1 1/4"	1 1/4"	15'
10" & ABOVE	1 1/2"	1 1/4"	15'



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR

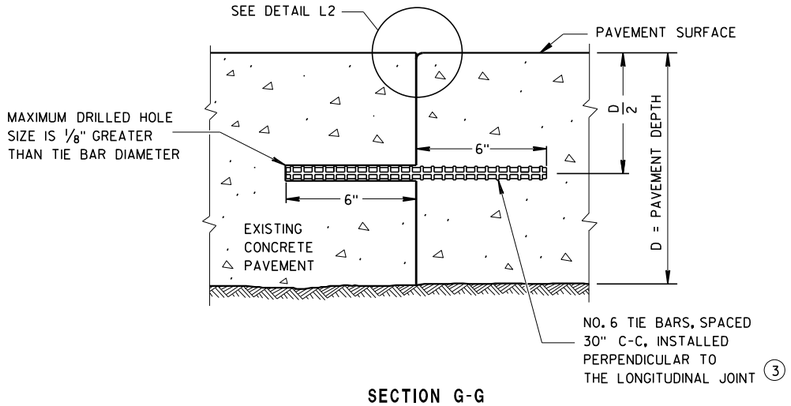


PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

6
S.D.D. 13 C 9-15b



SECTION G-G

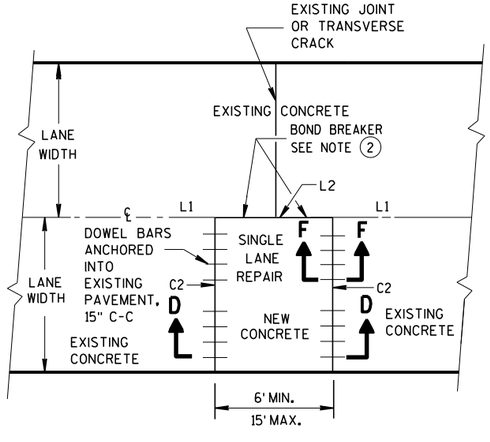
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

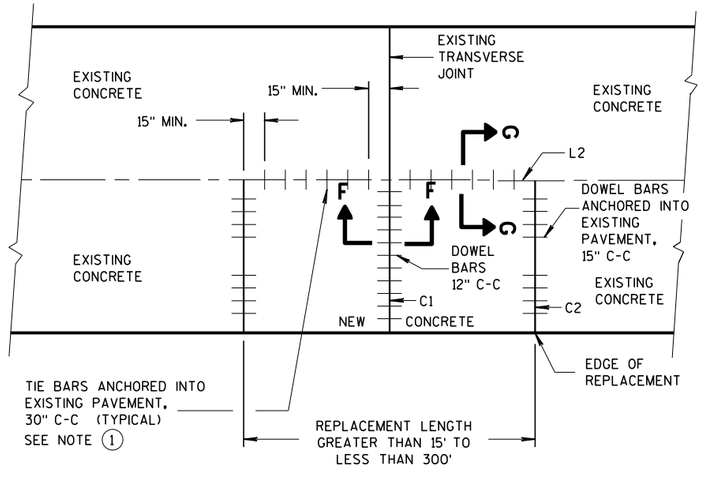
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

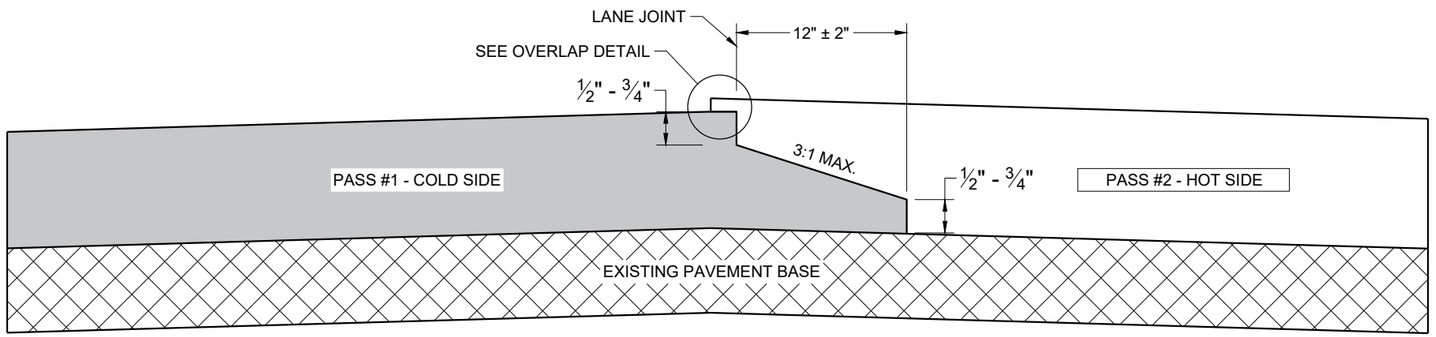
SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

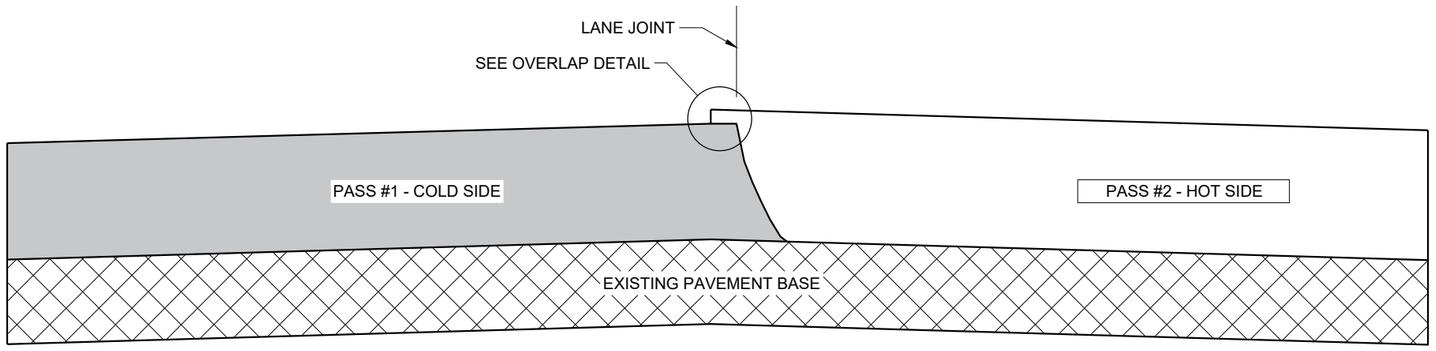
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Ken... — PAVEMENT SUPE...
FHWA

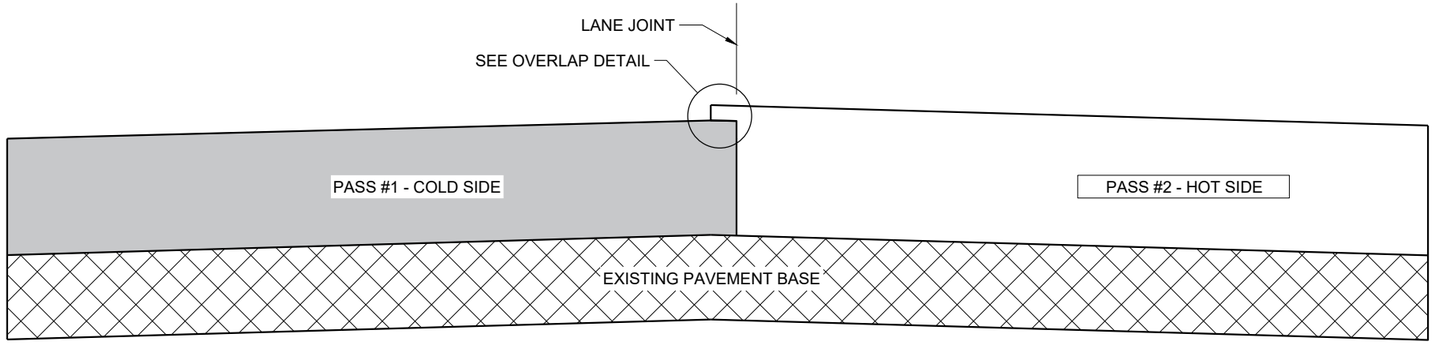
6
S.D.D. 13 C 9-15c



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

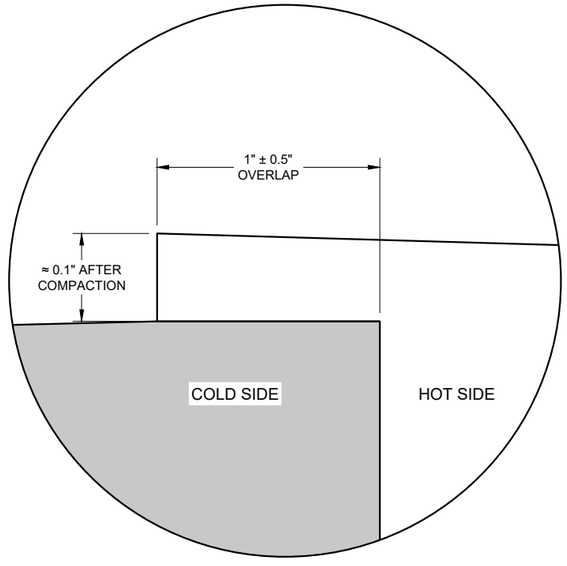
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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)

HMA LONGITUDINAL JOINTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2020 DATE	/S/ Steven Hefel HMA PAVEMENT ENGIN

FHWA

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SDD 13C19 - 03

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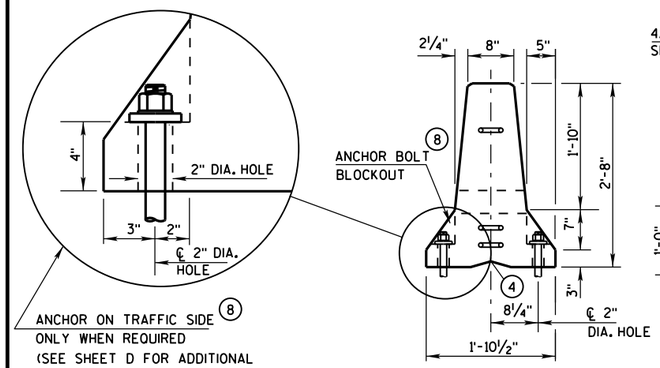
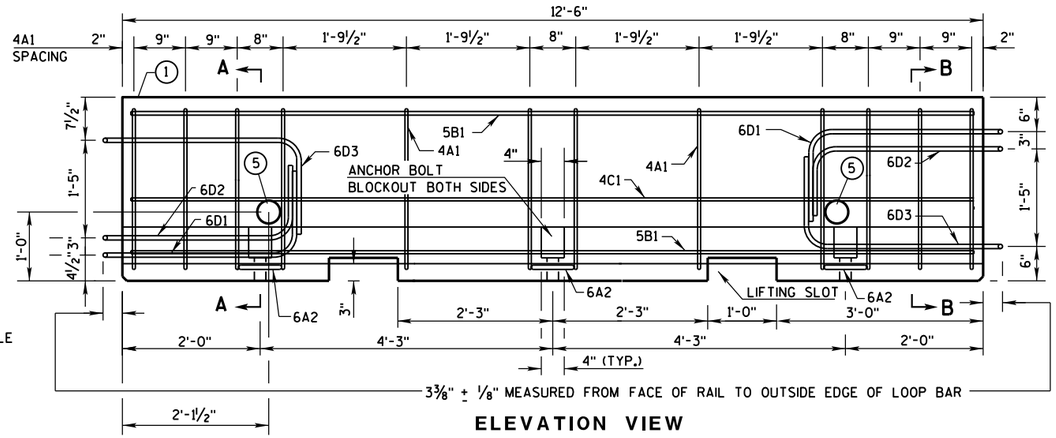
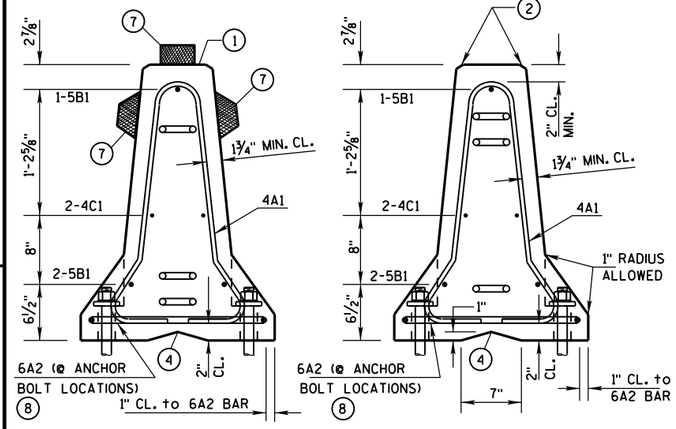
SDD 13C19 - 03



END VIEW

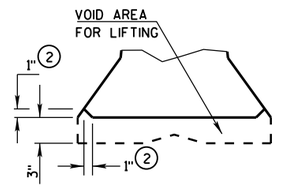


ELEVATION VIEW

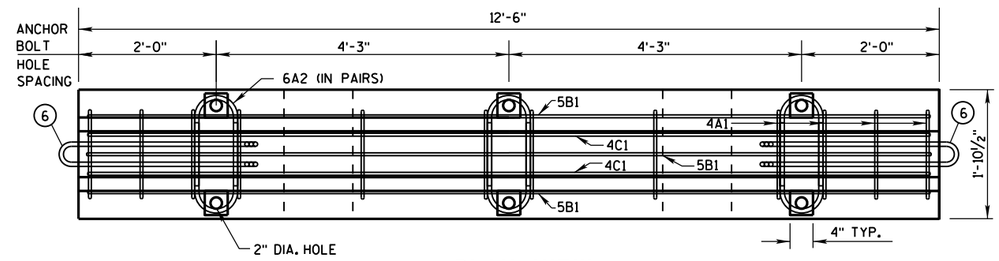


SECTION A-A
(STIRRUP PLACEMENT)

SECTION B-B
(STIRRUP PLACEMENT)

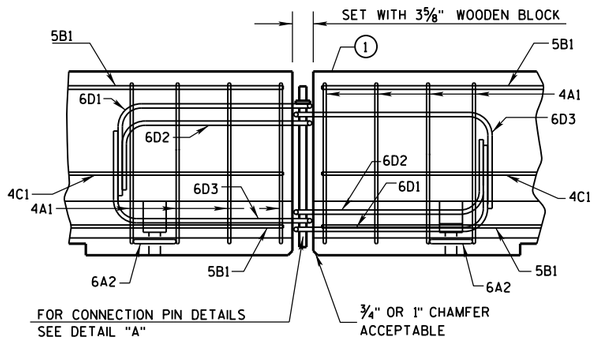


DETAIL "B"
LIFTING SLOT DETAIL

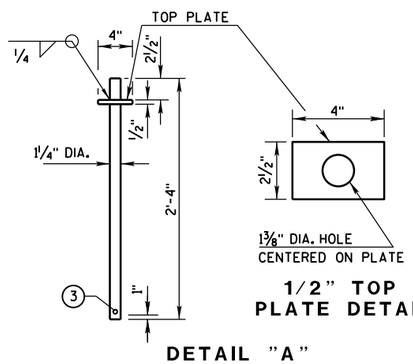


PLAN VIEW

DETAILS OF BARRIER SECTION

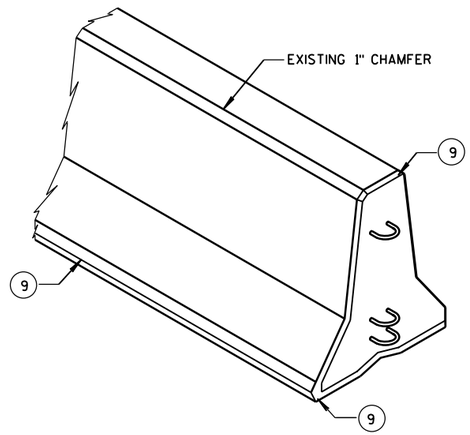


DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-15(a) THRU 14B7-15(i).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

(8) SEE SHEET D FOR HOW TO ANCHOR BARRIER. SEE SHEET E FOR WHEN TO ANCHOR BARRIER.

(9) 1" CHAMFER OPTIONAL.

f'c = 4,000 psi

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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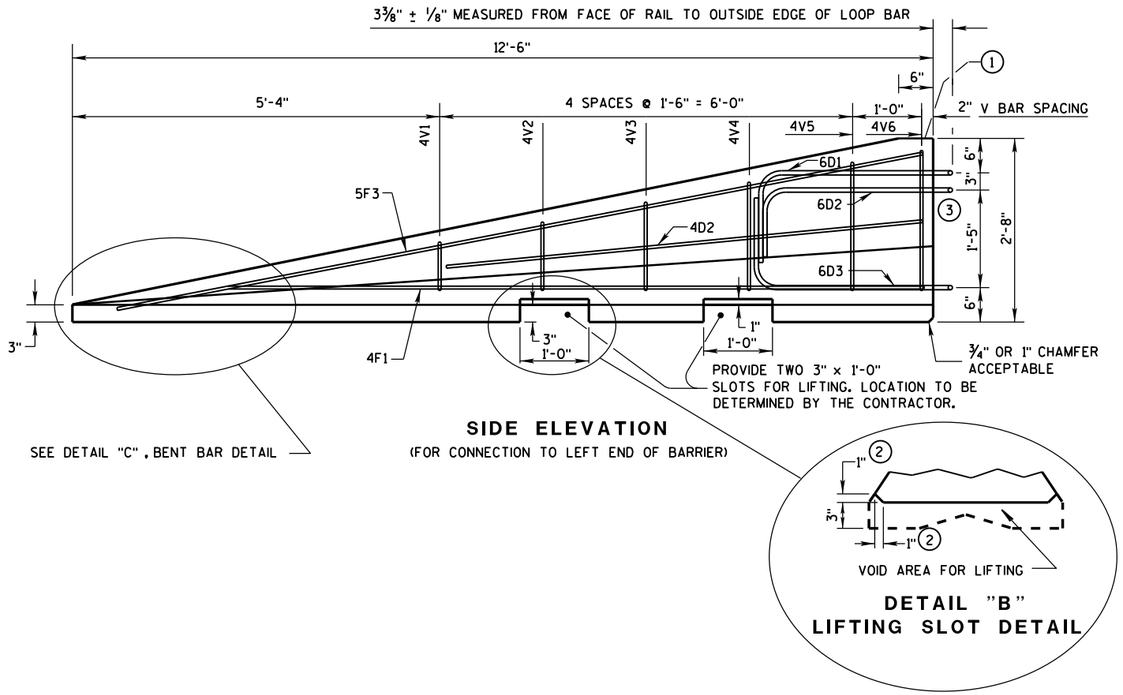
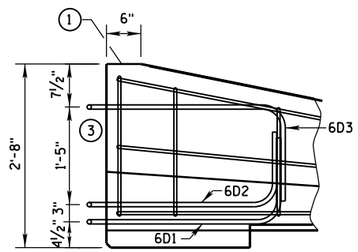
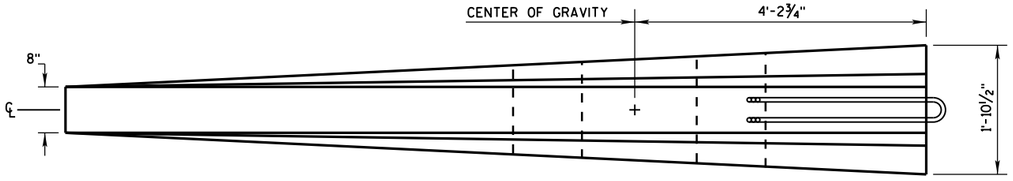
S.D.D. 14 B 7-15a

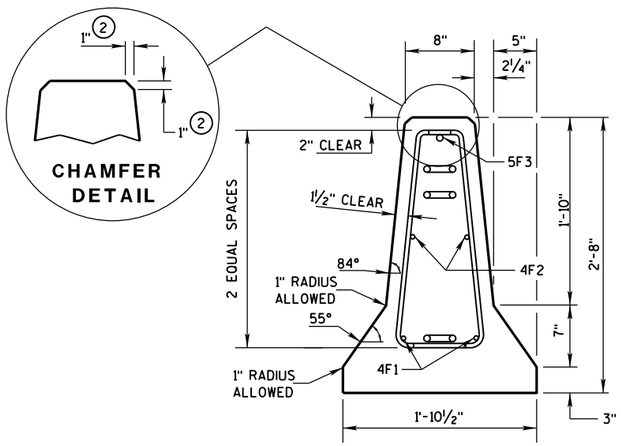


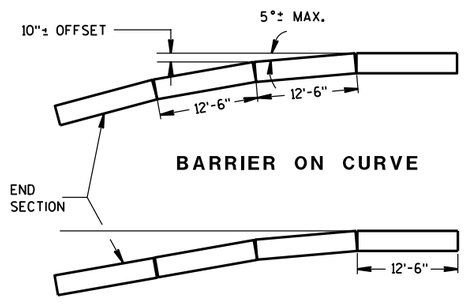


GENERAL NOTES

1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.







POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

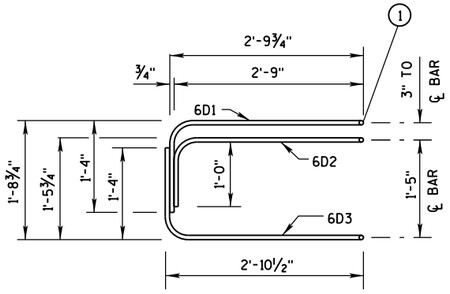
6

S.D.D. 14 B 7-15b

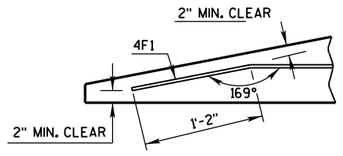
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

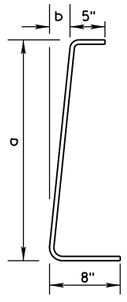
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

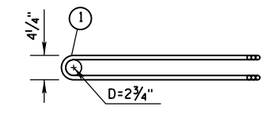
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

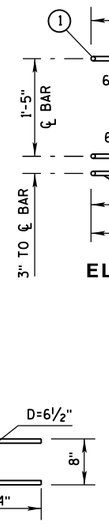
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

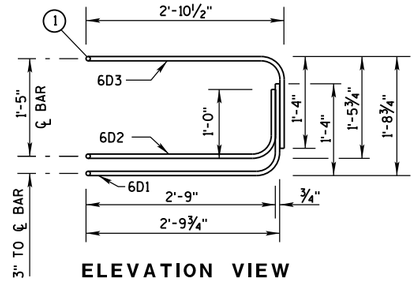
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



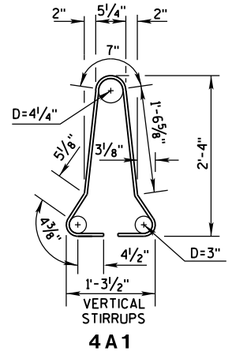
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



ELEVATION VIEW



4A1

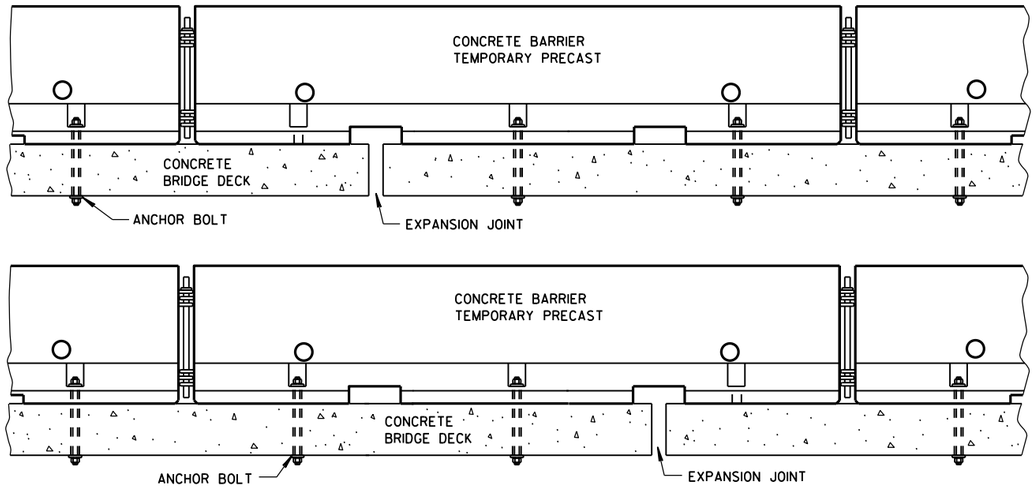
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 7-15c



TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)

GENERAL NOTES

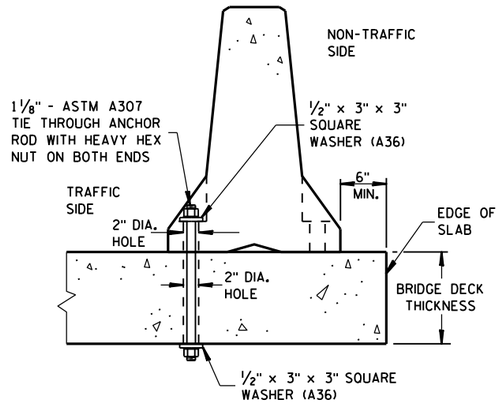
SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERICAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

(1) 1⅛" DIAMENTER A307 THREADED ROD. ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL. ASTM A563A HEAVY HEX NUT.

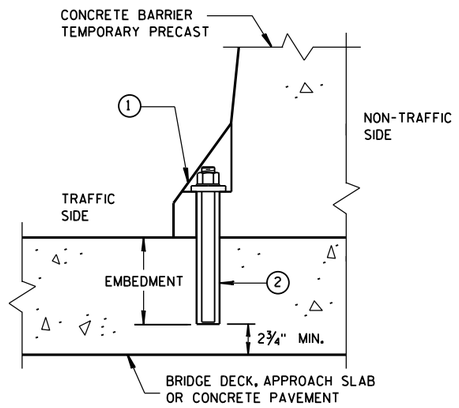
(2) ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

(3) ASPHALT SURFACE SHOWN. CONTRACTOR MAY DRILL THROUGH CONCRETE PAVEMENT AND THAN DRIVE ASPHALT ANCHOR PIN.



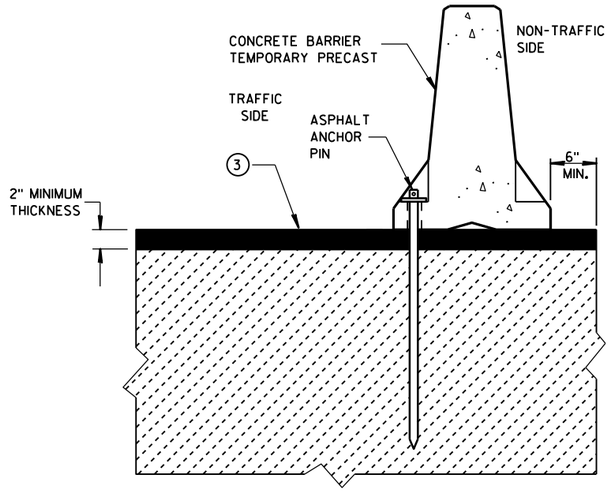
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)

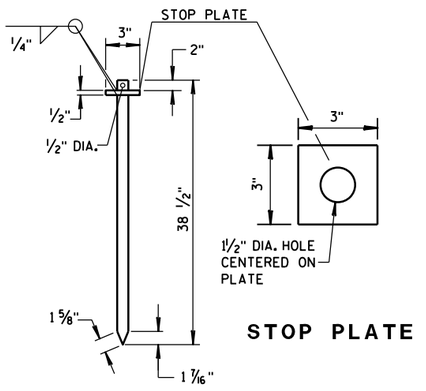


REMOVABLE ADHESIVE ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



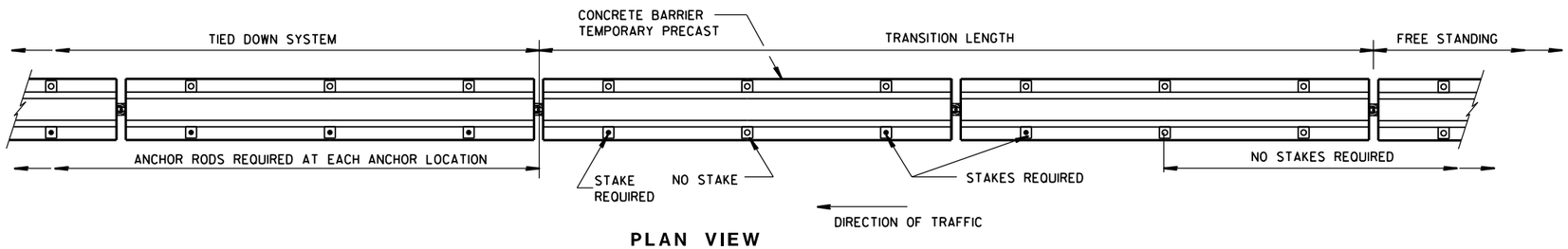
STAKE DOWN INSTALLATION FOR ASPHALTIC SURFACE



STOP PLATE

ASPHALT ANCHOR PIN

(ASTM A36 STEEL)



PLAN VIEW

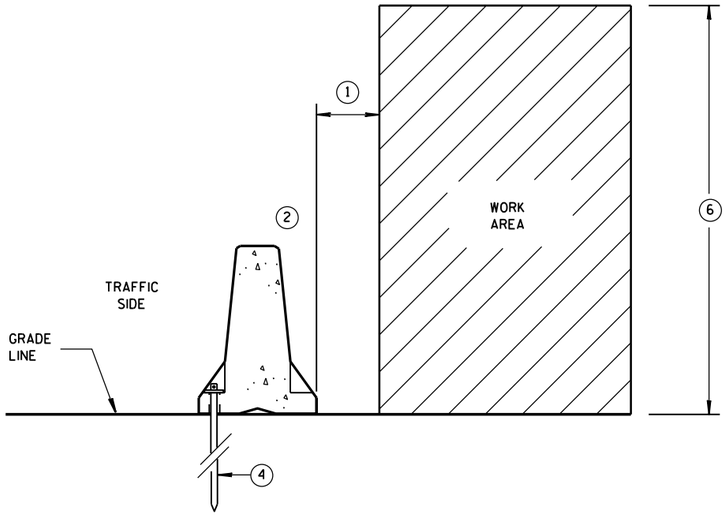
FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

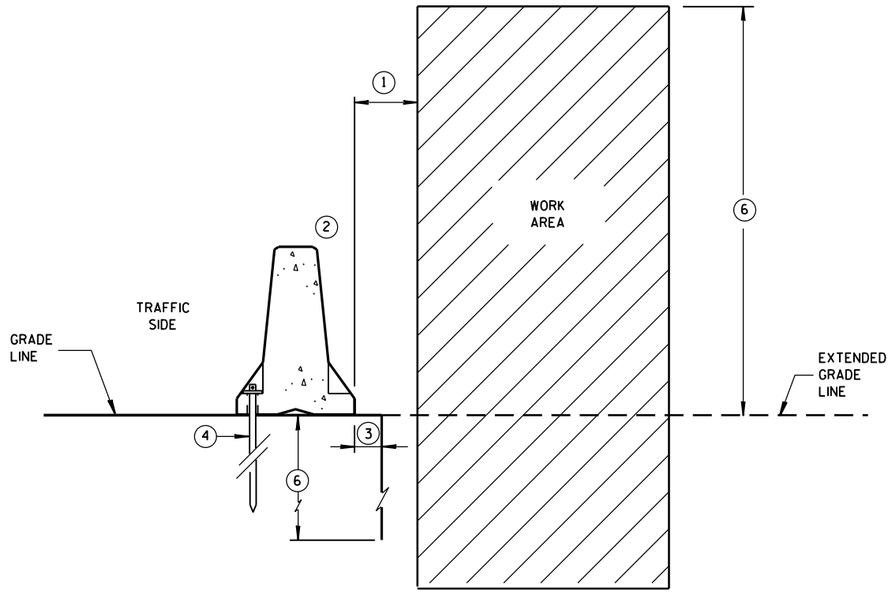
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-15d



ANCHORED BARRIER SPACE REQUIREMENTS FOR HAZARDS EXTENDED ABOVE THE GRADE LINE

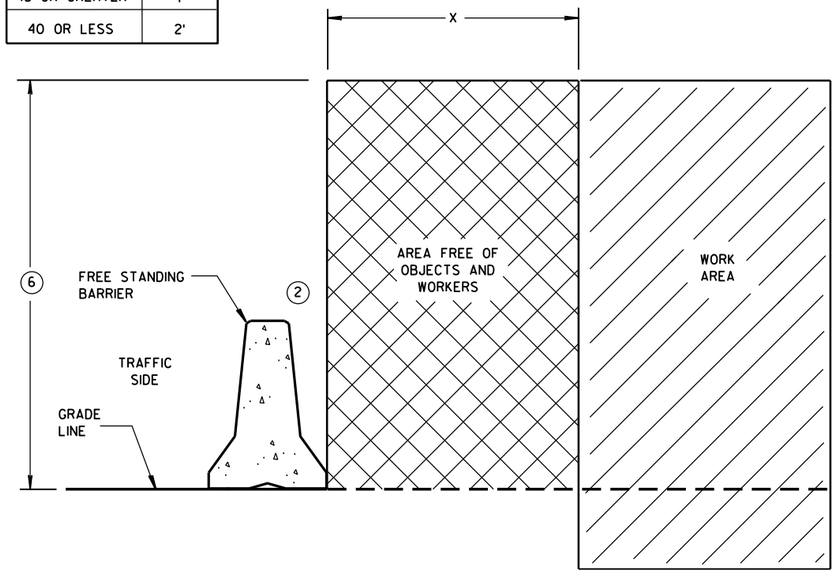


ANCHORED BARRIER SPACE REQUIREMENTS ON VERTICAL DROP OFFS

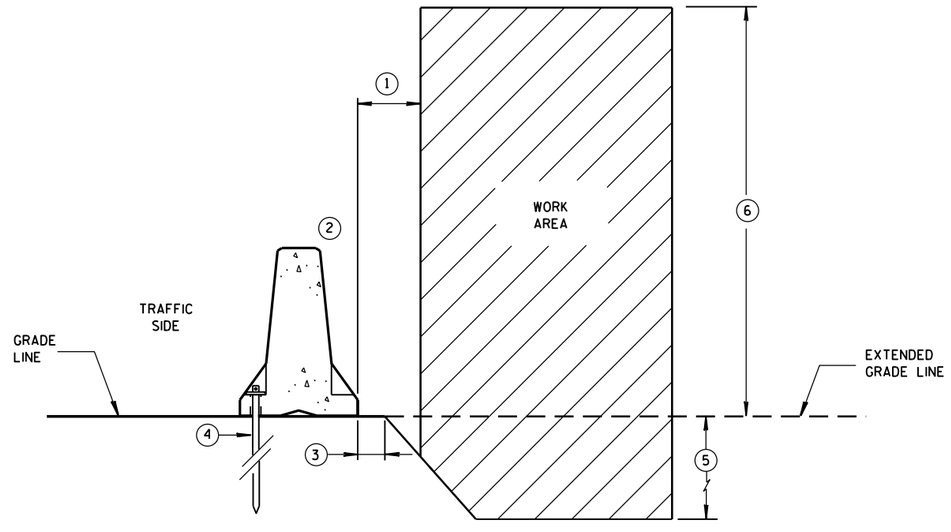
GENERAL NOTES

1. WHEN OBJECTS EXTEND ABOVE THE GRADE, A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT. SEE OTHER DETAILS FOR FOR THE MINIMUM OFFSET FROM BACK OF BARRIER TO SLOPES OR VERTICAL DROPS.
2. OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR LEANED AGAINST THE BARRIER WITHOUT PERMISSION OF THE PROJECT ENGINEER.
3. SEE OTHER DETAIL ON SHEET "D" FOR SPACE REQUIREMENTS.
4. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR A STAKE DOWN FOR ASPHALTIC SURFACE TREATMENT DETAILS. ASPHALTIC ANCHOR SHOWN.
5. DEPTH OF 3 FEET OR MORE.
6. Y = 6'-6".

POSTED SPEED MPH	X
45 OR GREATER	4'
40 OR LESS	2'



FREE STANDING BARRIER SPACE REQUIREMENTS



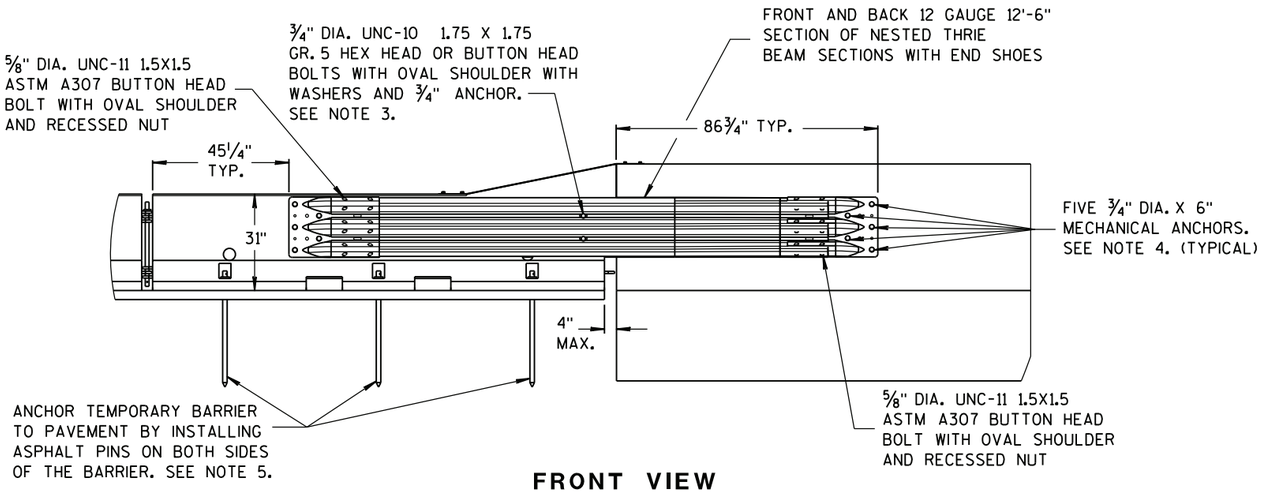
ANCHORED BARRIER SPACE REQUIREMENTS ON SLOPES

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

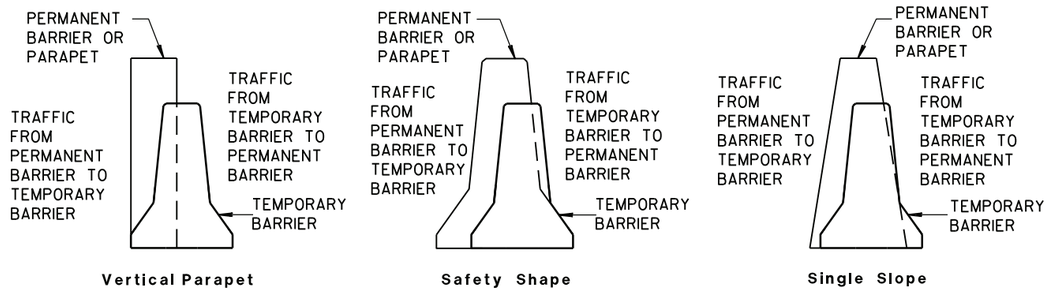
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 7-15e



FRONT VIEW

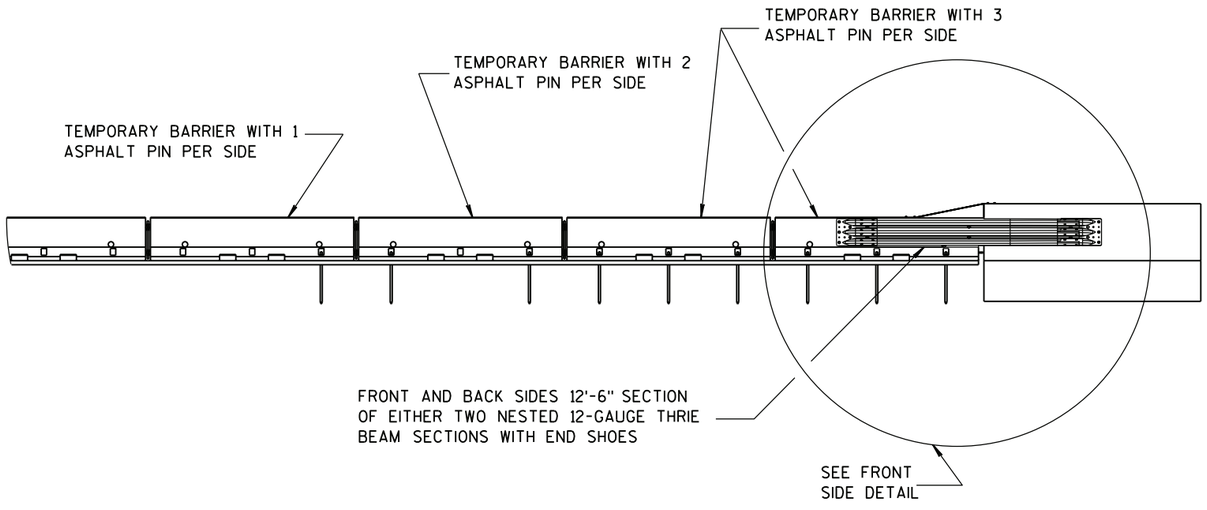


TEMPORARY BARRIER PLACEMENT FOR TRANSITION TO TIED DOWN SYSTEM

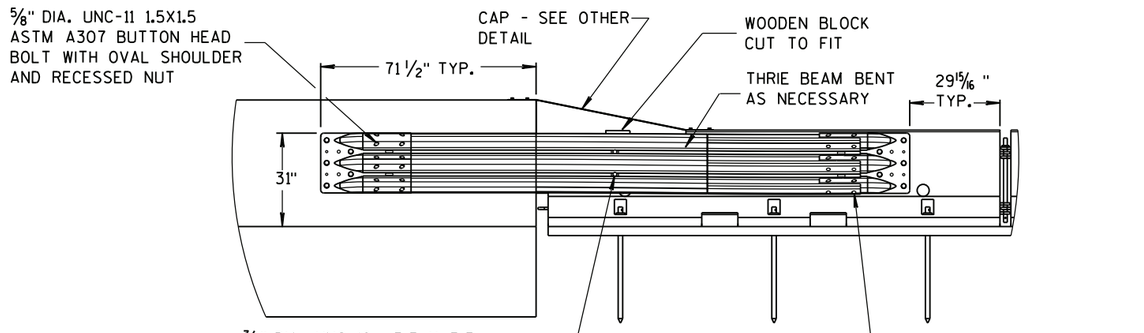
NOTES

NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS REGARDLESS OF TRAFFIC.

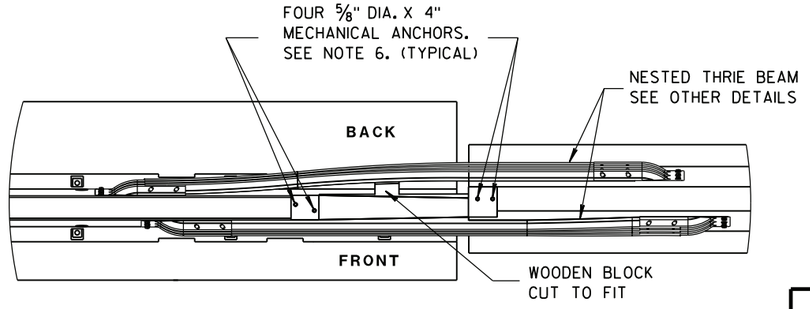
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



FRONT VIEW



BACK VIEW



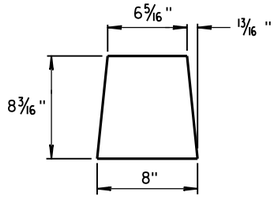
PLAN VIEW

TRANSITION TO TIED DOWN SYSTEM

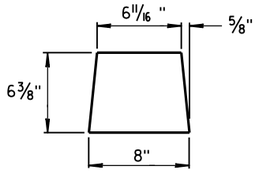
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

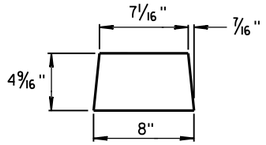
6
S.D.D. 14 B 7-15f



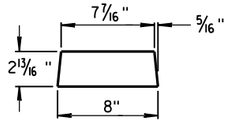
GUSSET 1



GUSSET 2

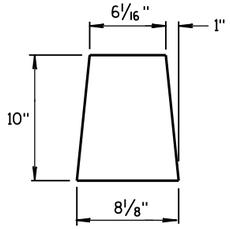


GUSSET 3

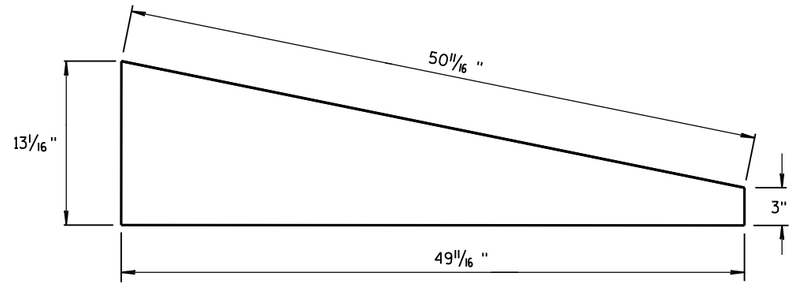


GUSSET 4

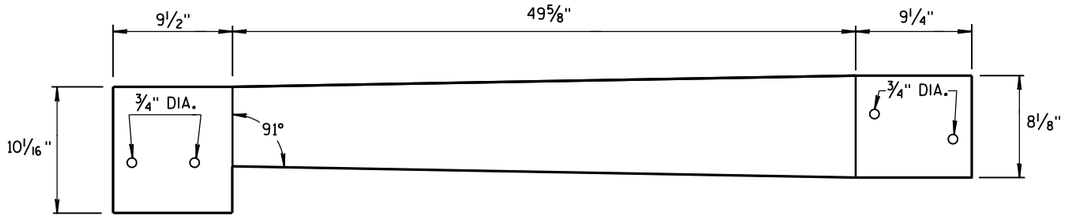
GUSSETS

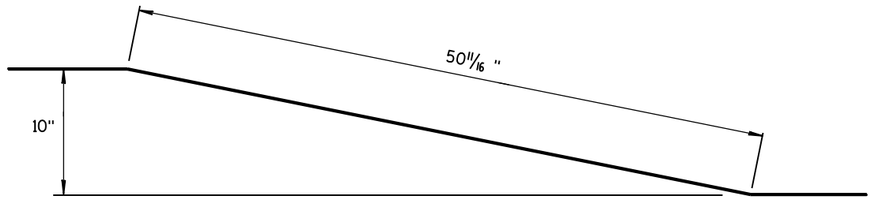


END PLATE



SIDE PLATE

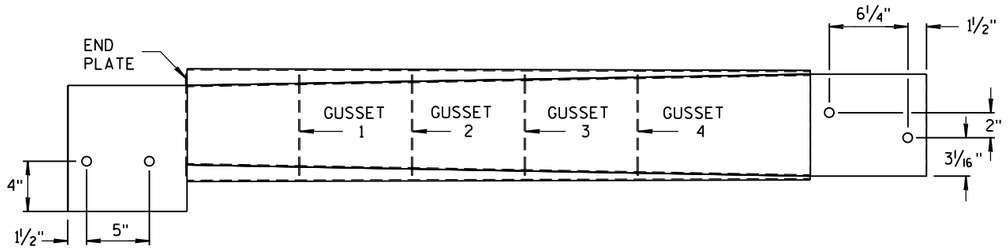


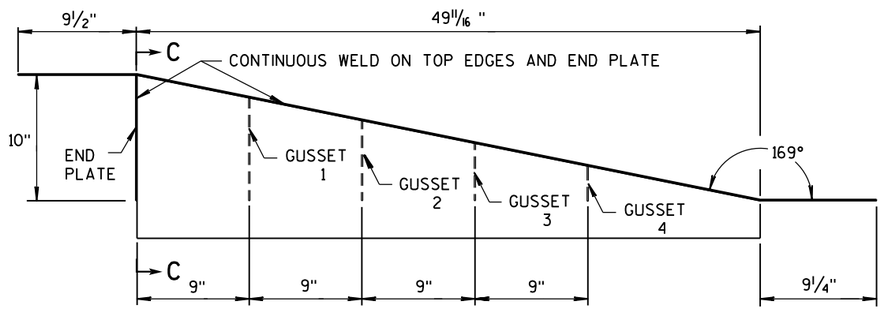


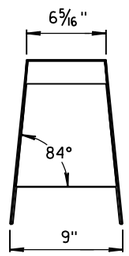
TOP PLATE

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.







SECTION C-C

NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

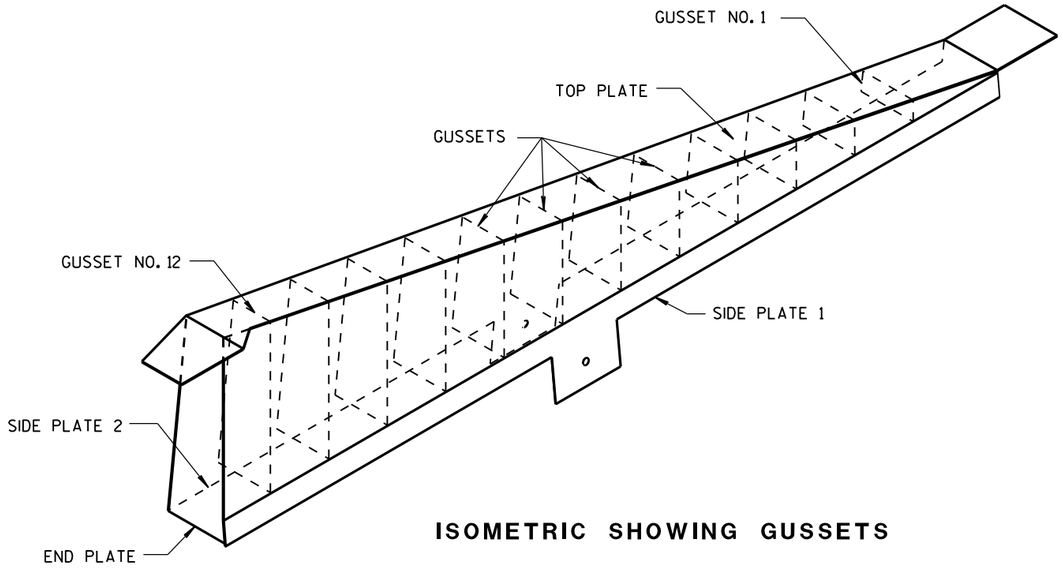
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

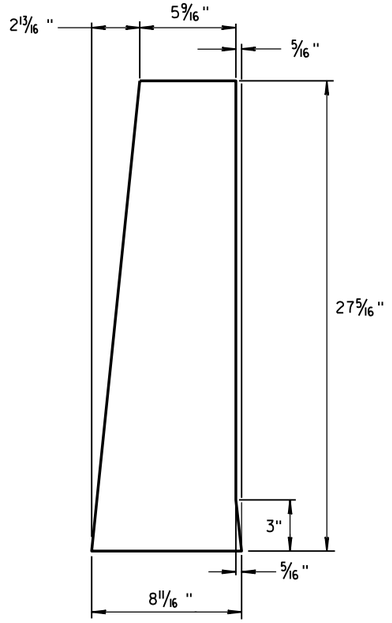
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 7-15g

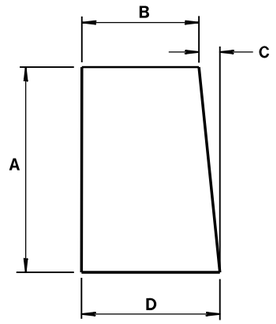


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



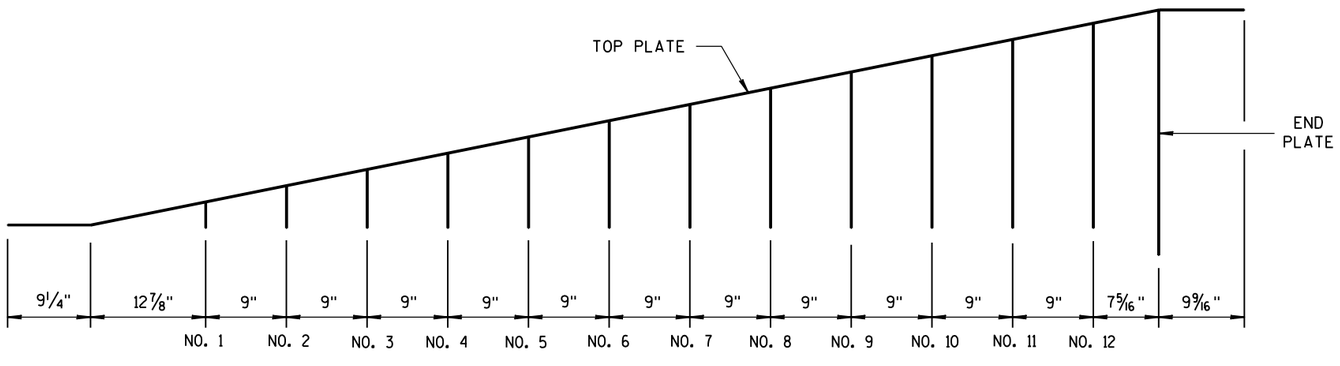
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



GUSSET LOCATION

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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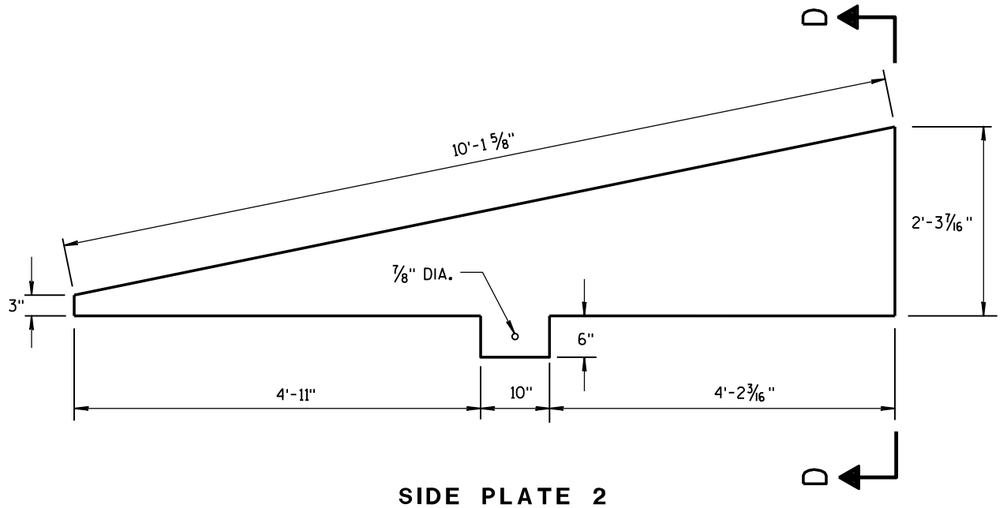
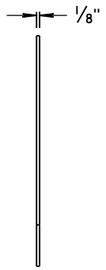
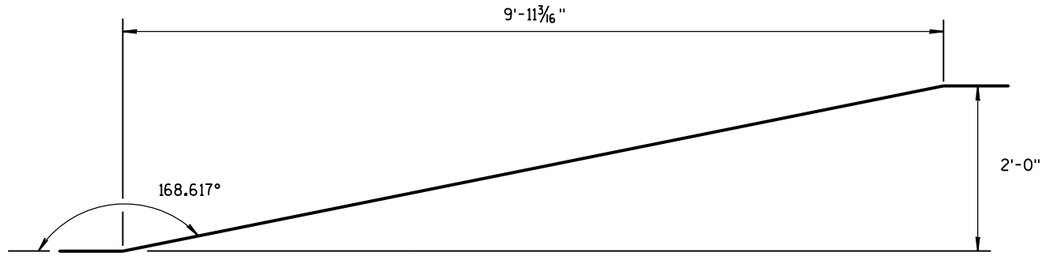
S.D.D. 14 B 7-15h



SIDE PLATE 2

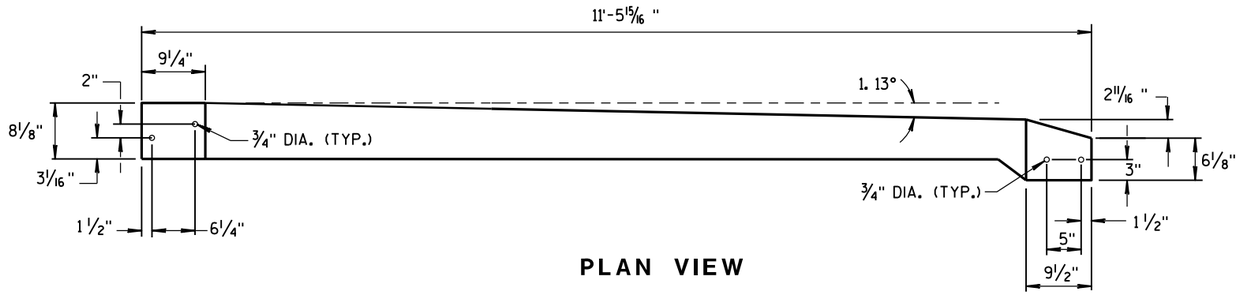


END VIEW



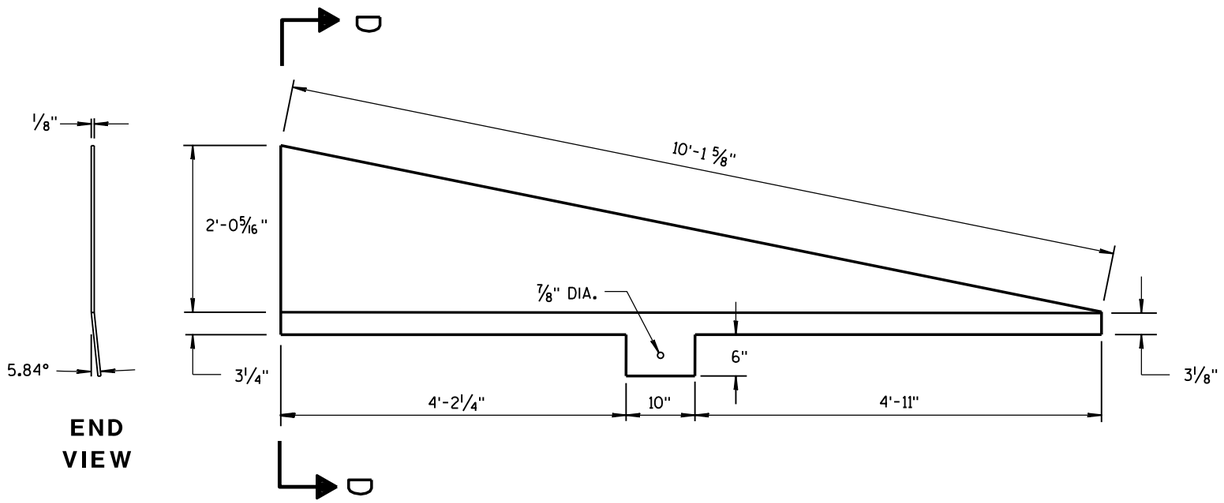
SIDE VIEW

TOP PLATE



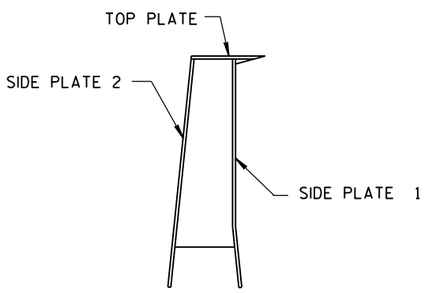
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERV

FHWA

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S.D.D. 14 B 7-15i

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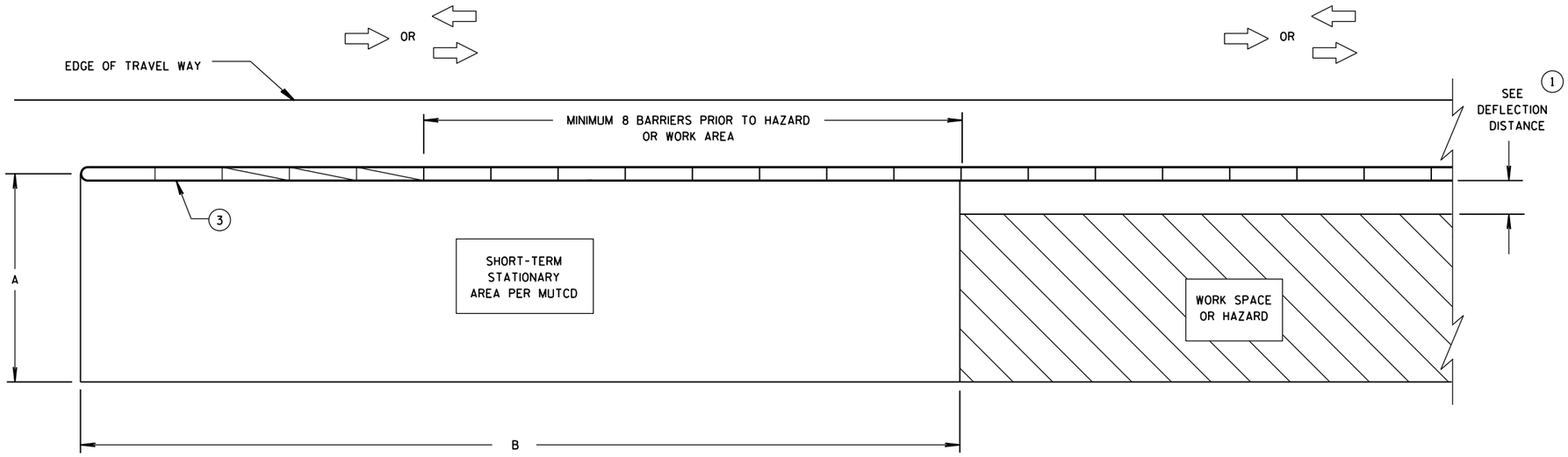
S.D.D. 14 B 7-15i



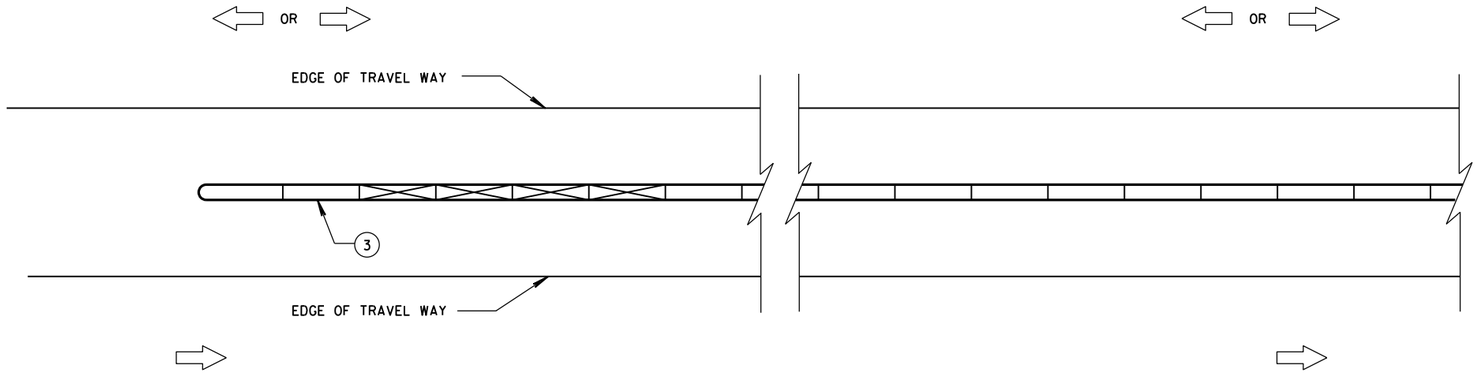
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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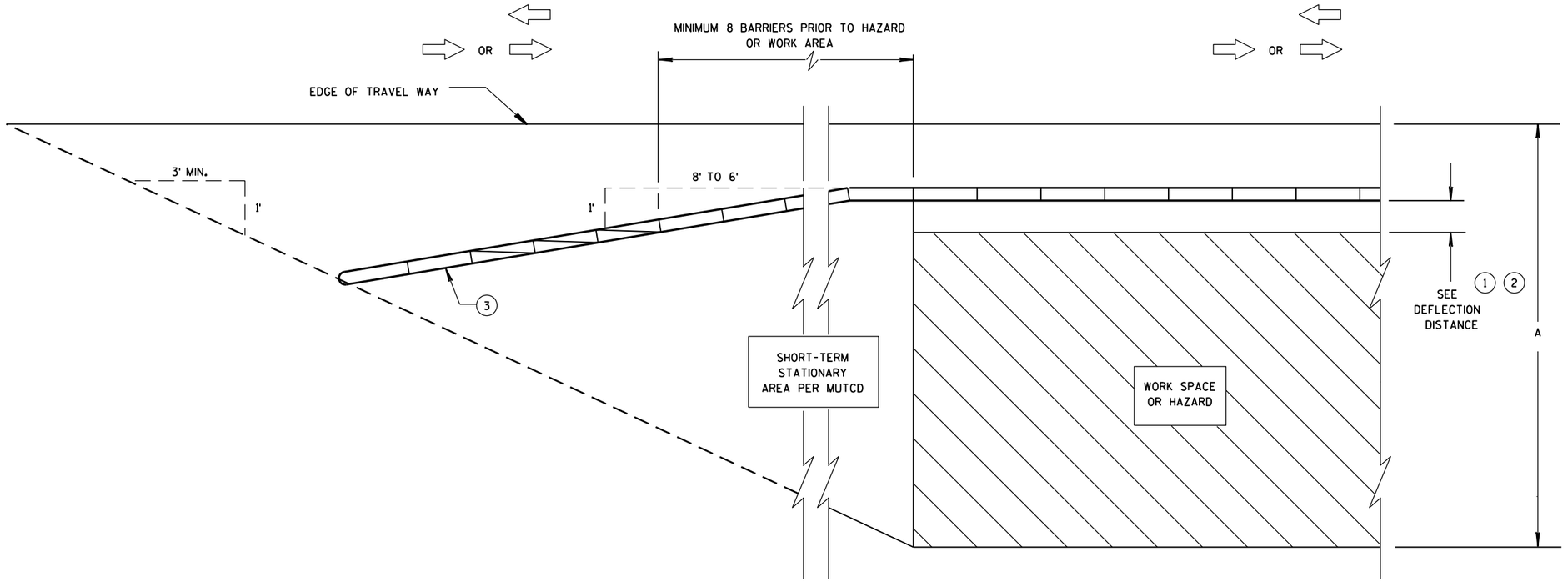
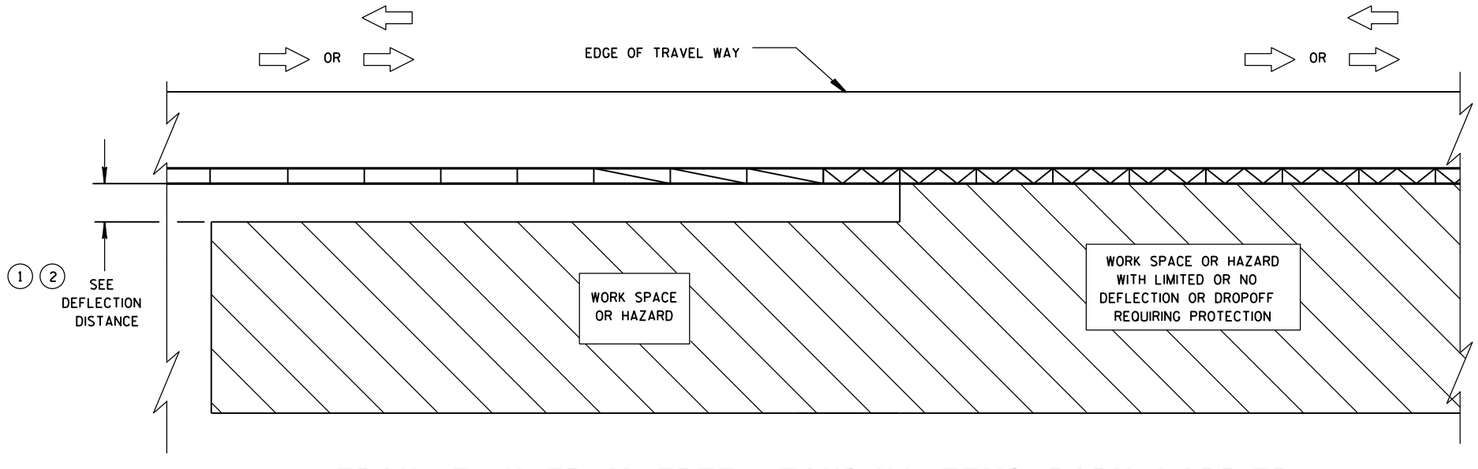
S.D.D. 14 B 8-2a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 8-2b

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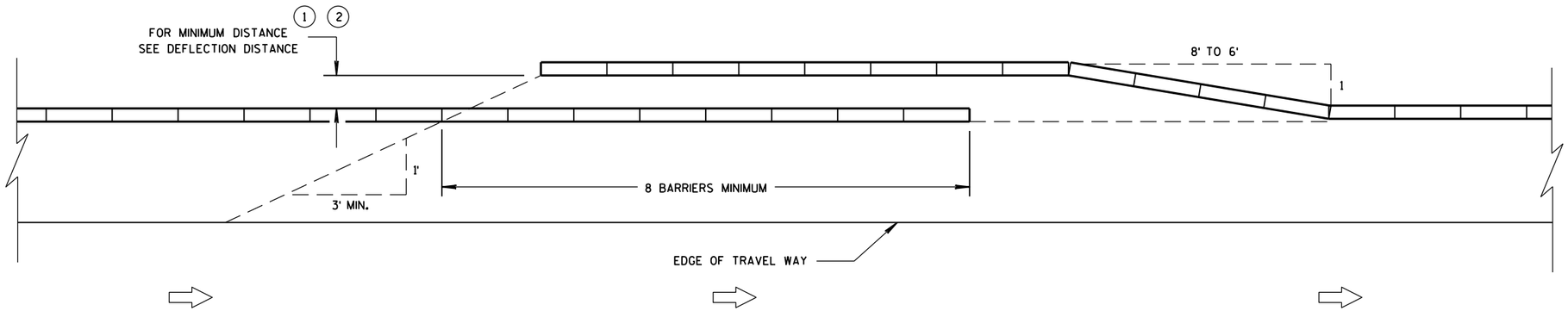
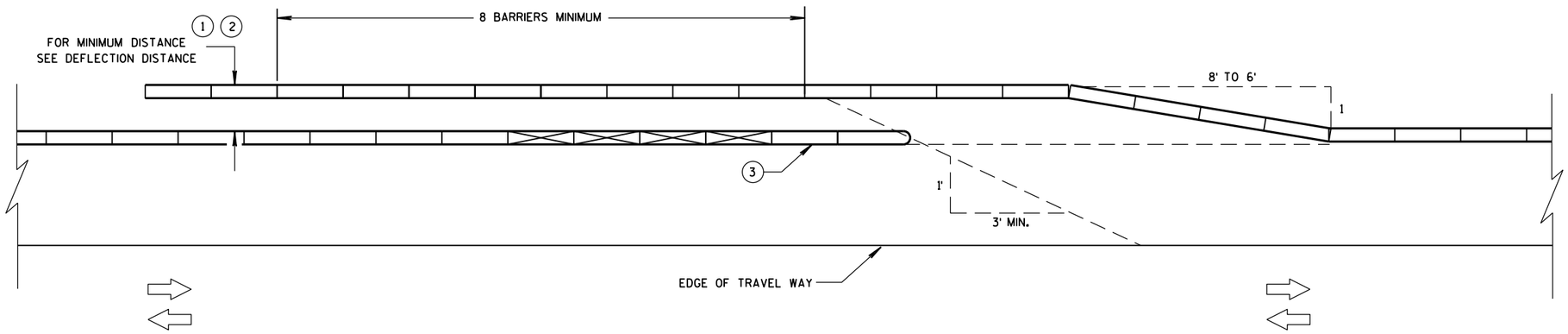
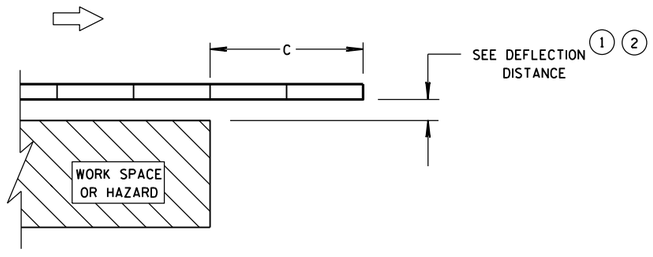
S.D.D. 14 B 8-2b



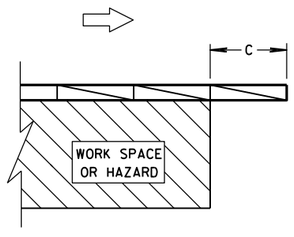
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

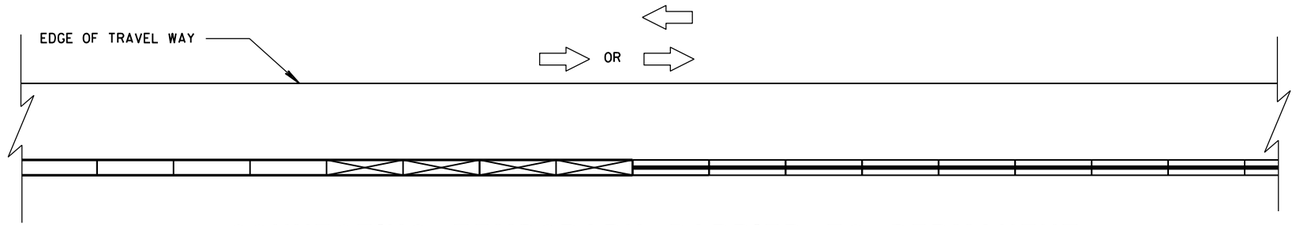
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

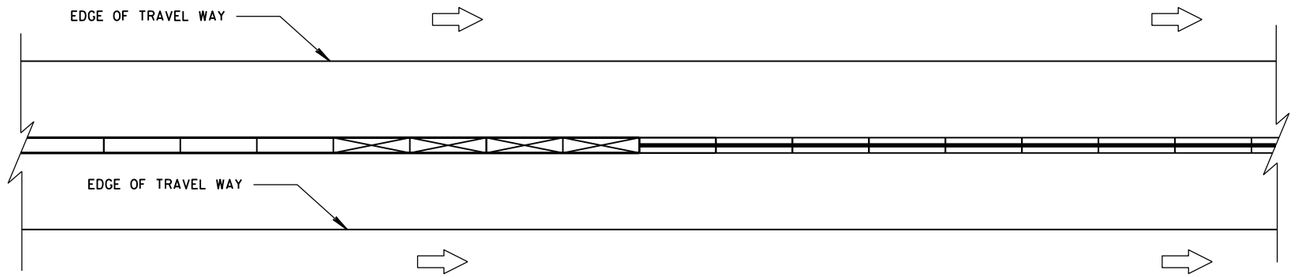
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 8-2c



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR
SAND BARREL ARRAY

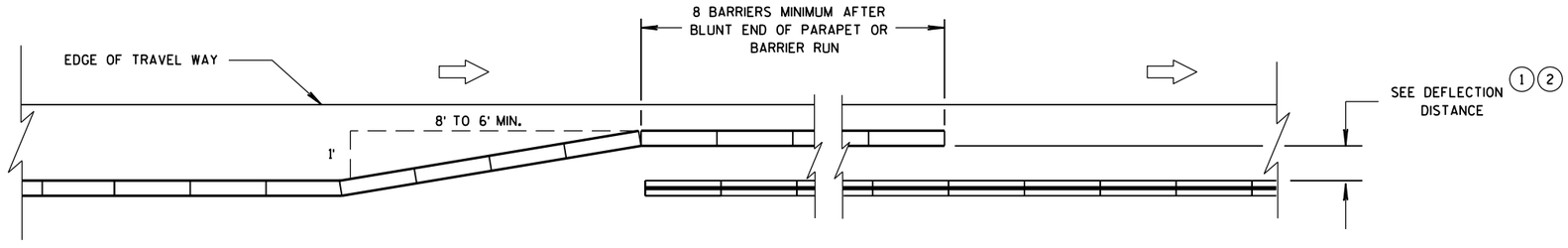
SEE FREE STANDING TRANSITION
TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION
TO TIED-DOWN SYSTEM DETAILS

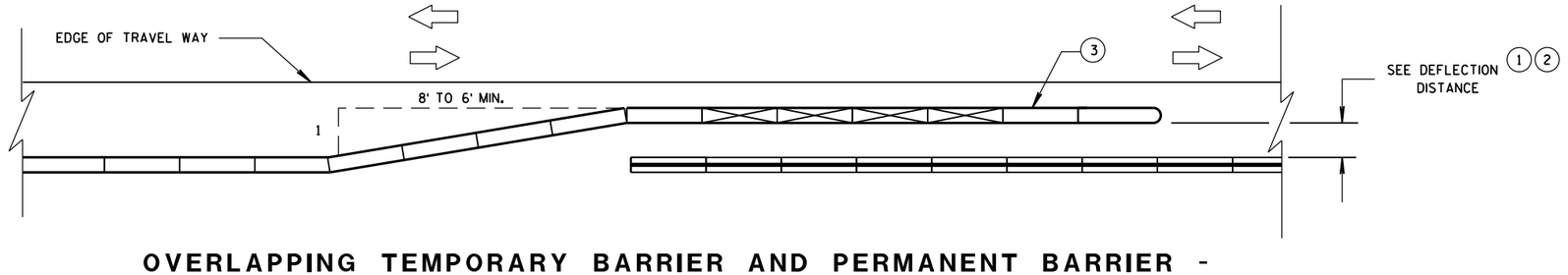
3 PINS PLACED ON
TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER
OR CONCRETE PARAPET

FREE STANDING TEMPORARY
BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 8-2d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

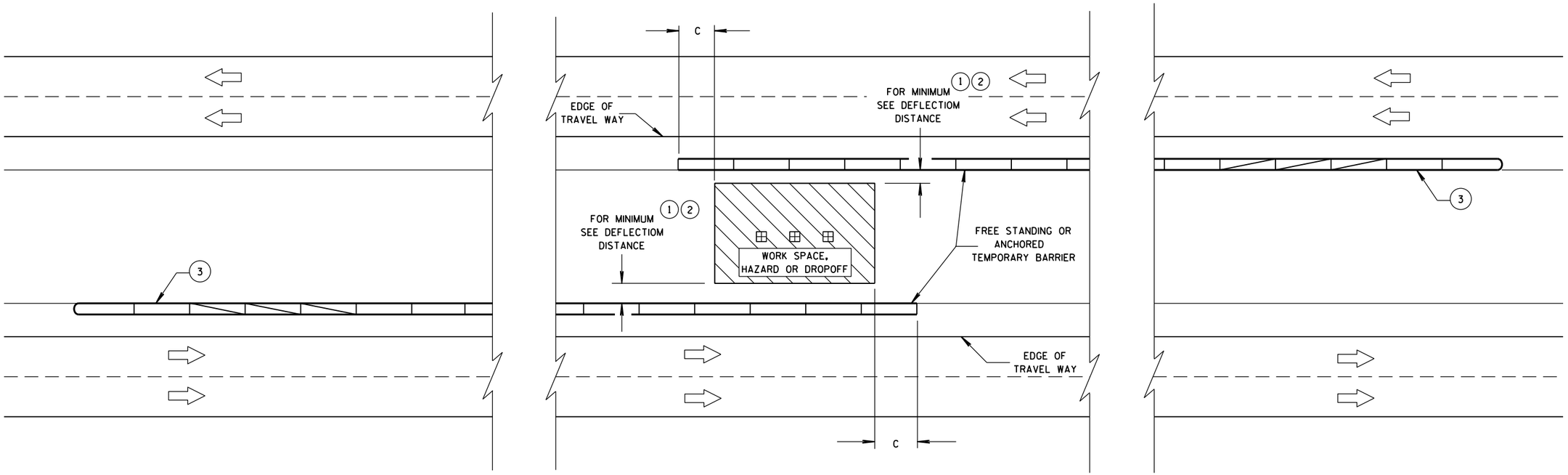
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER
FHWA

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S.D.D. 14 B 8-2e

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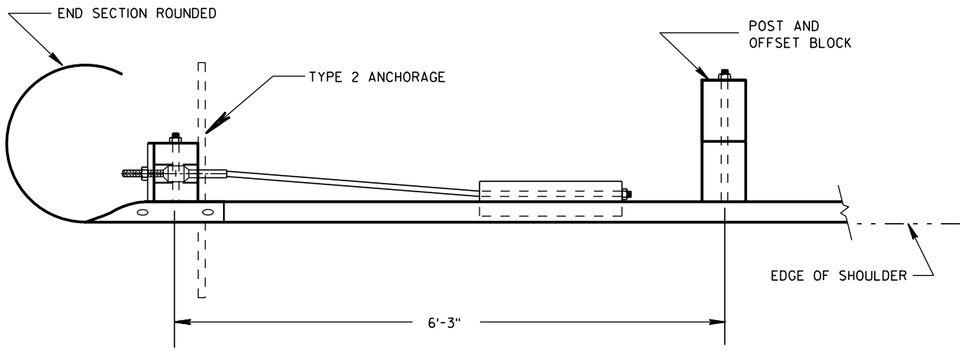
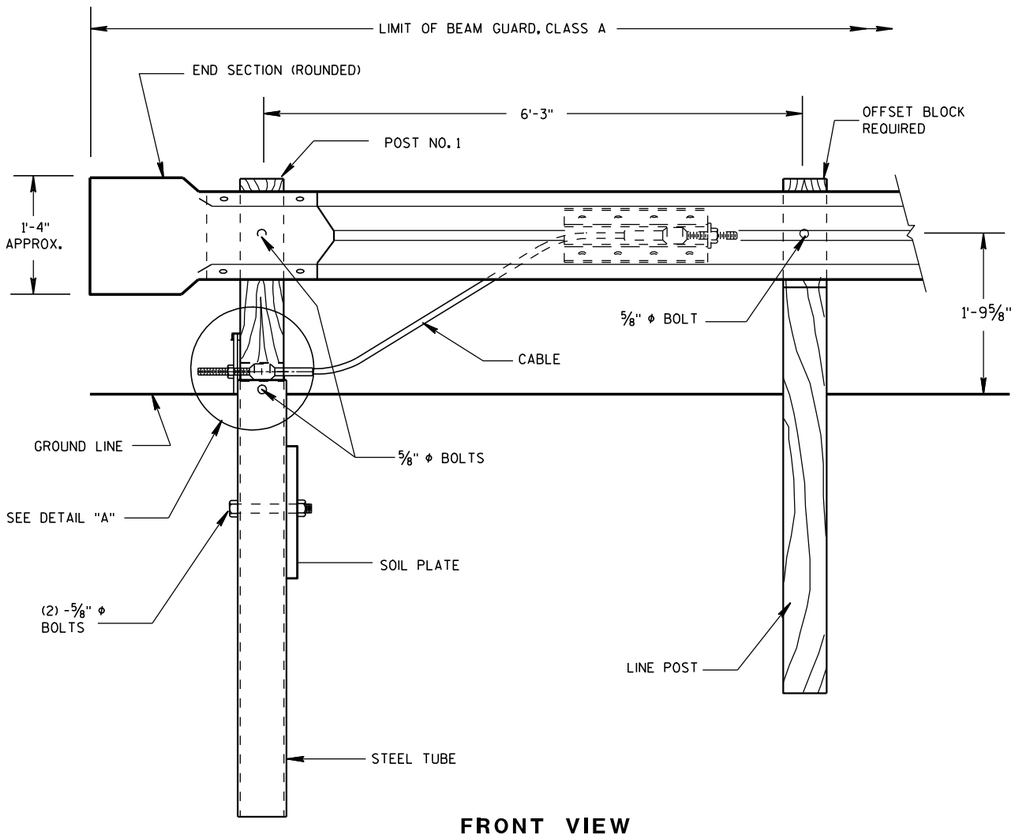
S.D.D. 14 B 8-2e



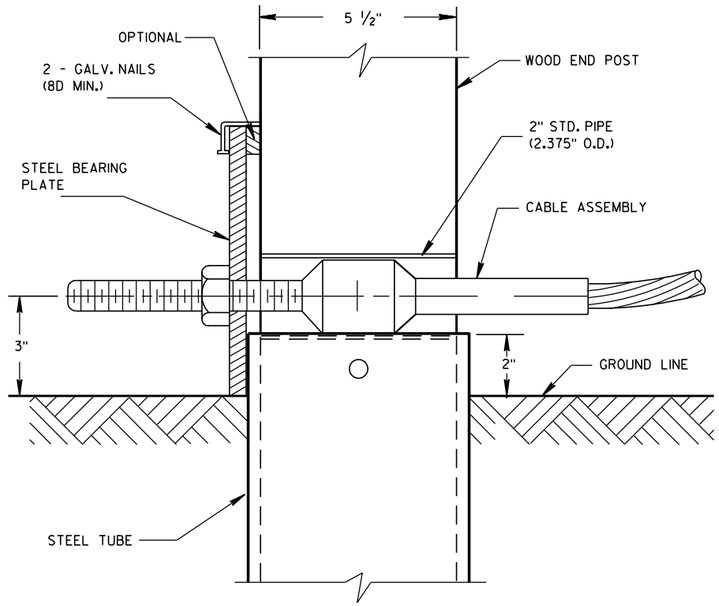
PLAN VIEW



FRONT VIEW

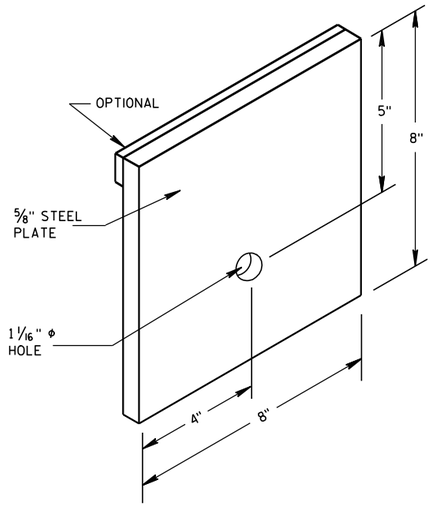
END TREATMENT WITH TYPE 2 ANCHORAGE

(USE ON ONE-WAY ROADWAYS ONLY - DEPARTING END)



DETAIL "A"

POST NO. 1



STEEL BEARING PLATE

ANCHORAGE FOR STEEL
PLATE BEAM GUARD
TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....T

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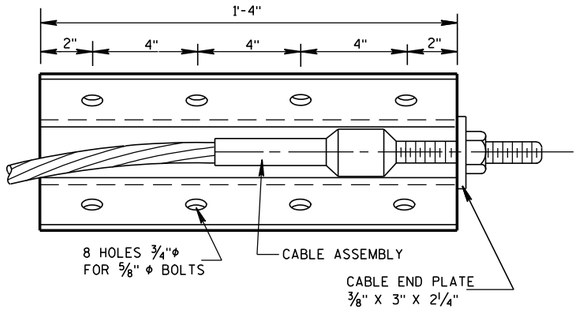
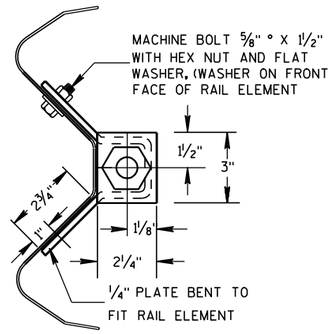
S.D.D. 14 B 16-4a

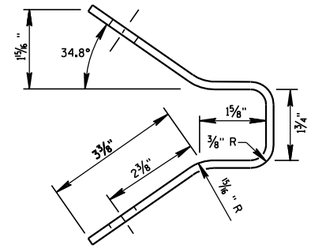


FRONT VIEW

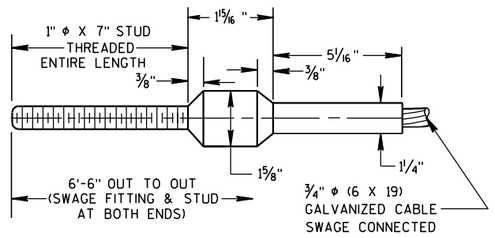


END VIEW

ANCHOR PLATE DETAIL



END VIEW OF BRACKET



CABLE ASSEMBLY

CABLE, SWAGE FITTING, STUD AND NUT SHALL DEVELOP
A MINIMUM BREAKING STRENGTH OF 40,000 LB
(TIGHTEN UNTIL TAUT)

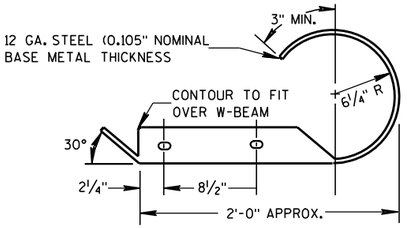
GENERAL NOTES

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

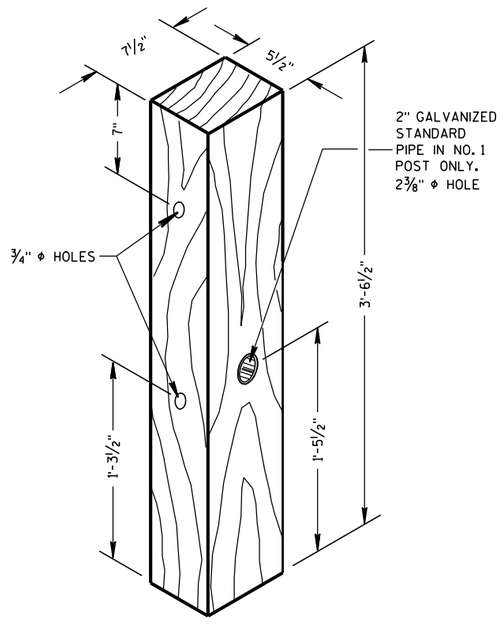
STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-500 GRADE B OR ASTM A-501.

POST NO. 1 SHALL BE WOOD BREAKAWAY POST INSERTED AND BOLTED INTO STEEL TUBE.

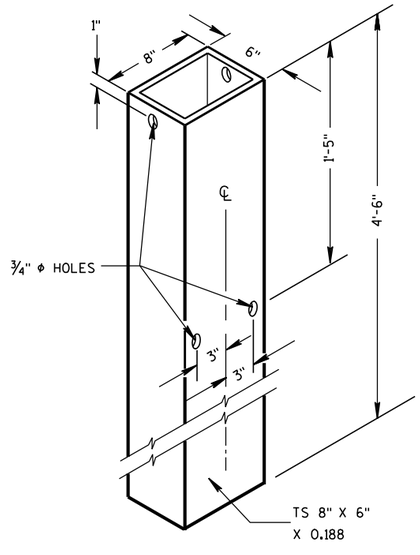
TYPE 2 ANCHORAGE SHALL CONSIST OF A STEEL TUBE, SOIL PLATE WOOD BREAKAWAY POST, BEARING PLATE, ANCHOR PLATE, CABLE ASSEMBLY AND ALL ASSOCIATED HARDWARE, ALL STEEL PARTS SHALL BE GALVANIZED.



PLAN VIEW

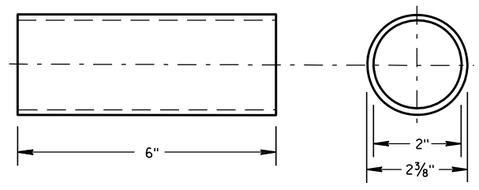


WOOD BREAKAWAY POST



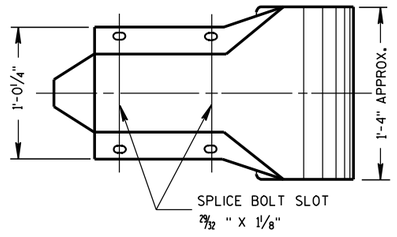
STEEL TUBE

STEEL TUBE SHALL CONFORM TO
REQUIREMENTS OF ASTM A500

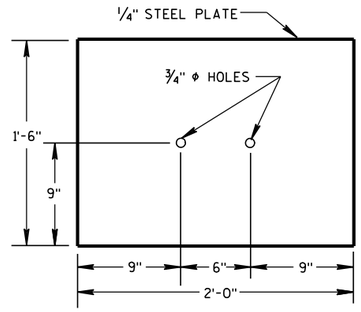


BREAKAWAY TERMINAL POST SLEEVE

GALVANIZED STANDARD STRENGTH STEEL PIPE, ASTM 53 GRADE "B"



FRONT VIEW
W BEAM END SECTION ROUNDED



SOIL PLATE

ANCHORAGE FOR STEEL
PLATE BEAM GUARD
TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/21/2007
DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
159
FHWA

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S.D.D. 14 B 16-4b

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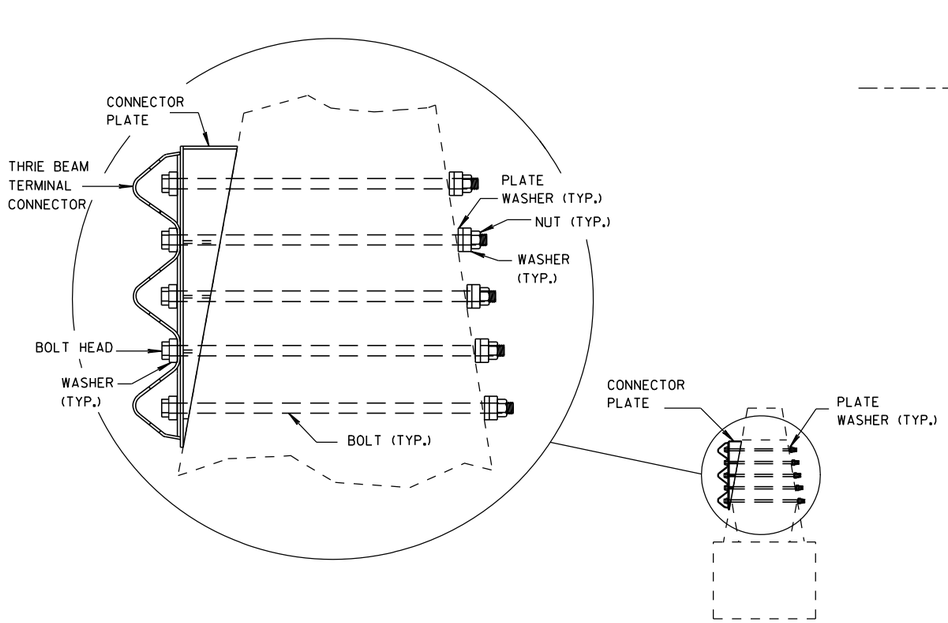
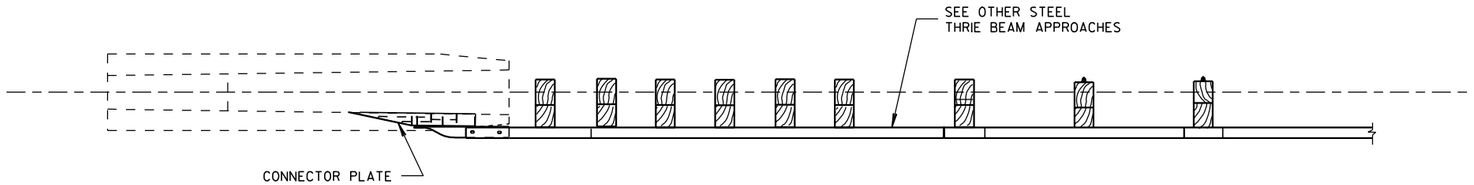
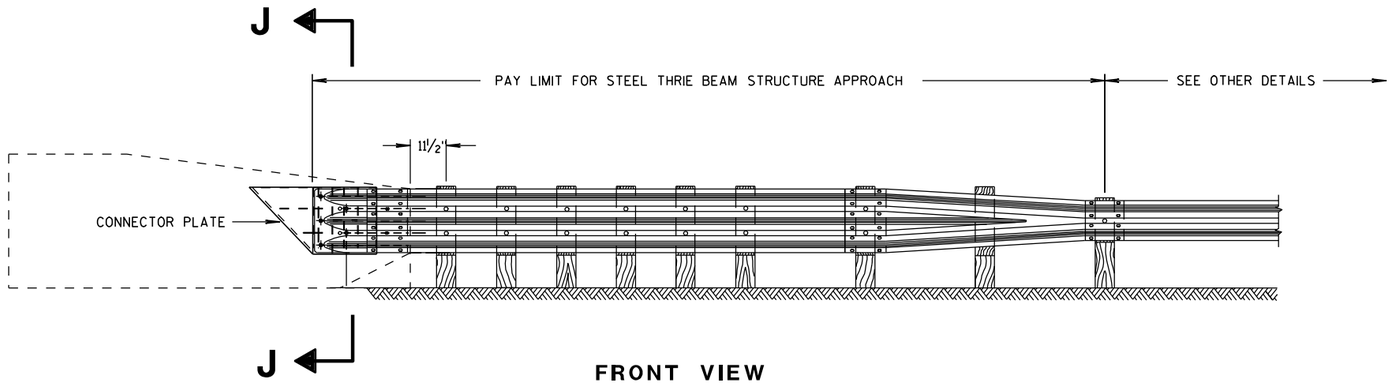
S.D.D. 14 B 16-4b



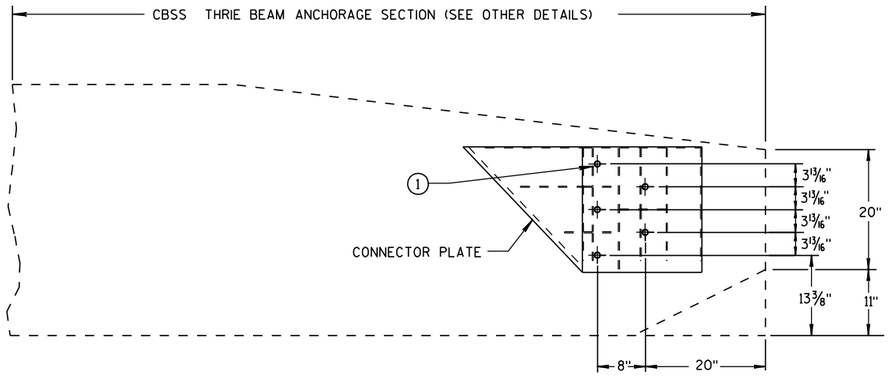
SECTION J-J



PLAN VIEW



FRONT VIEW



CONNECTOR PLATE LOCATION

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 614.

CONNECTOR PLATE, DRILLING HOLES THROUGH PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(1) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

STEEL THRIE BEAM STRUCTURE APPROACH

STEEL THRIE BEAM STRUCTURE APPROACH, SINGLE SLOPE ATTACHMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

6

S.D.D. 14 B 20-11h

BILL OF MATERIALS

NOTE NO.	DESCRIPTION
①	WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9"
②	STEEL TUBE TS 8" X 6" X 0.188", 6'-0"
④	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE
⑦	BEARING PLATE
⑧	BCT CABLE ASSEMBLY
⑨	CABLE ANCHOR BOX
⑩	STRUT & YOKE
⑪	STEEL PLATE BEAM, END PANEL 12 GA.
⑫	STEEL PLATE BEAM: 12 GA. 13'-6½"
⑬	IMPACT HEAD
⑭	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS.

(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.

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 AND 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

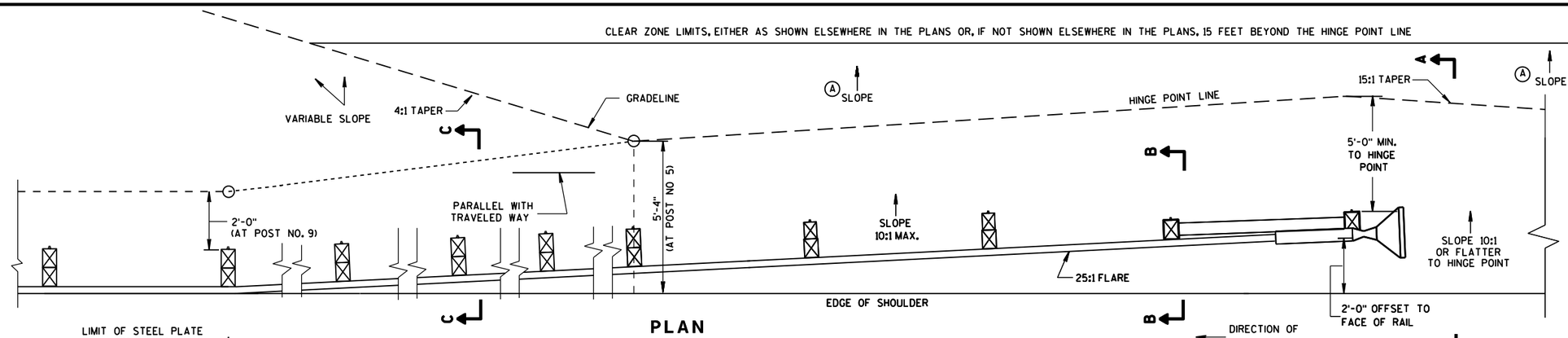
(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 3 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

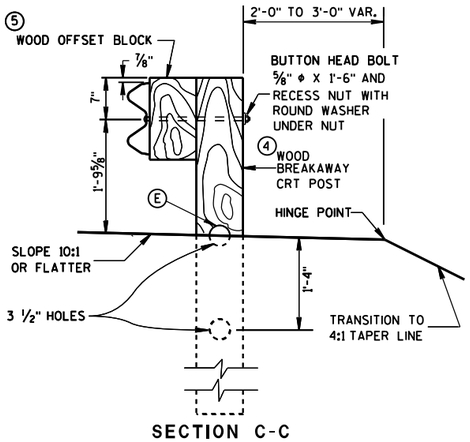
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

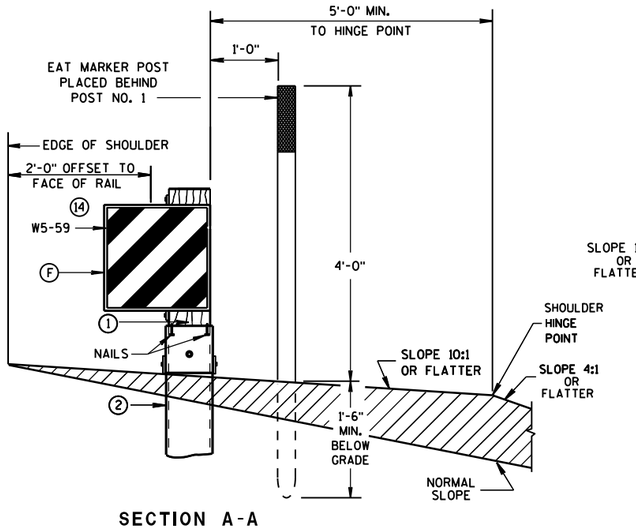
STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

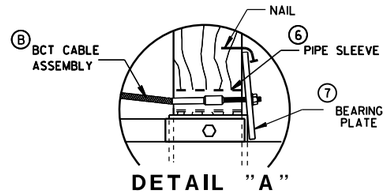
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

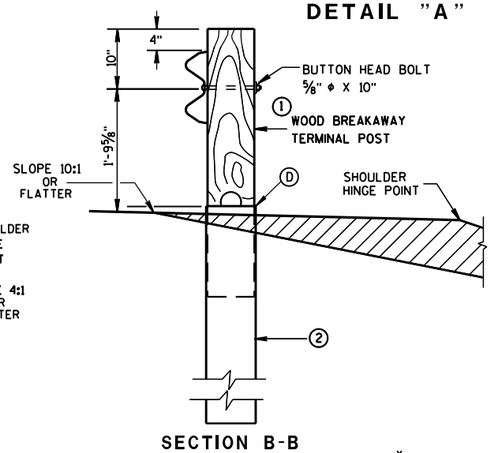
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

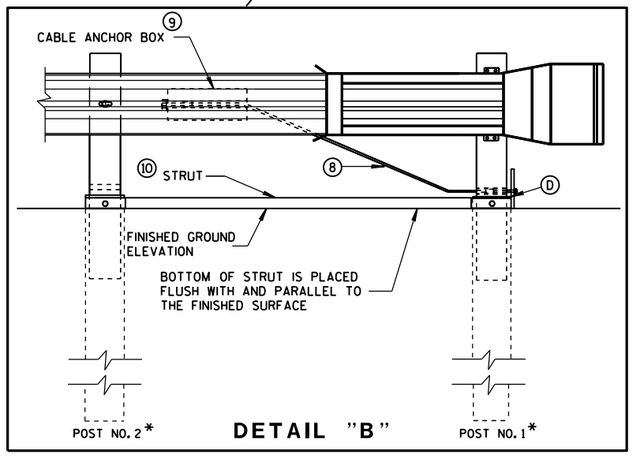












STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

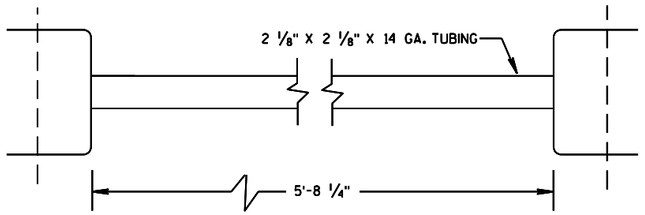
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

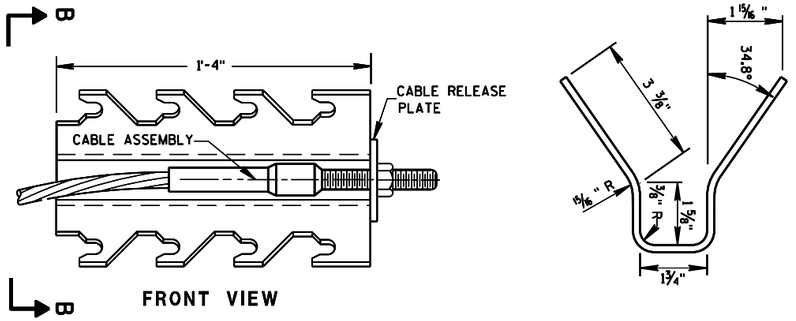
S.D.D. 14 B 24-9a

6

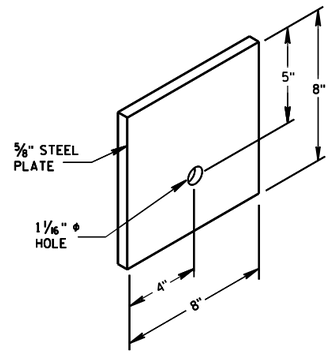
S.D.D. 14 B 24-9a



⑩ STRUT DETAIL



⑨ CABLE ANCHOR BOX



⑦ STEEL BEARING PLATE

6

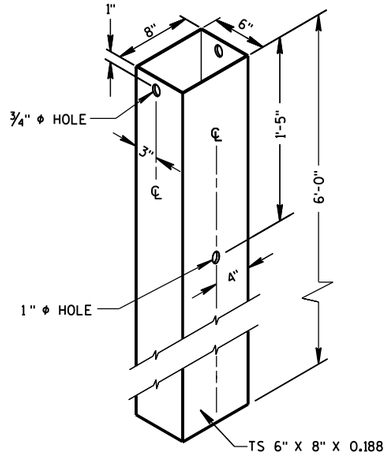
6

S.D.D. 14 B 24-9b

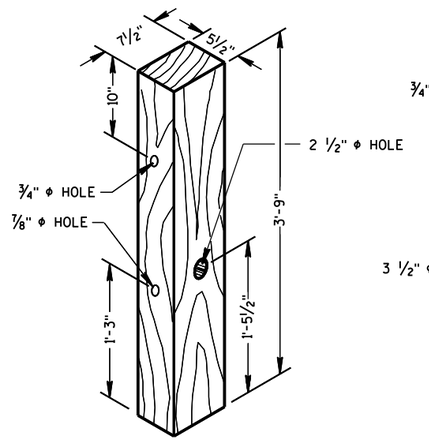
S.D.D. 14 B 24-9b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

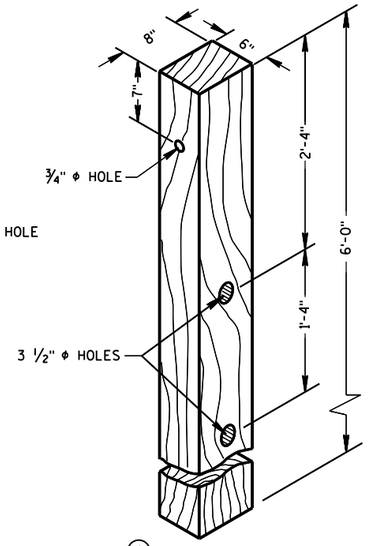
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



② 72" STEEL TUBE
(POSTS NO. 1-2



① TERMINAL POST

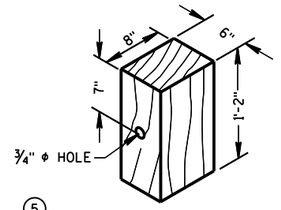


④ CRT POST
(POSTS NO'S 5-8

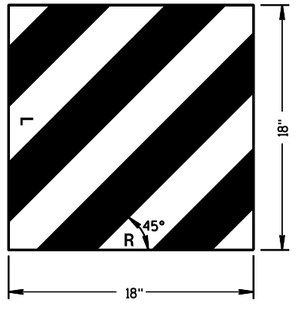
WOOD BREAKAWAY POSTS

GENERAL NOTES

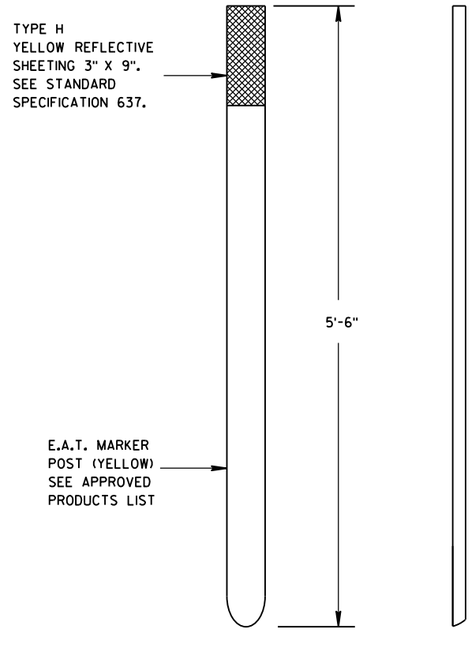
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.



⑤ WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



⑭ REFLECTIVE SHEETING DETAILS



E.A.T. MARKER POST

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERV...

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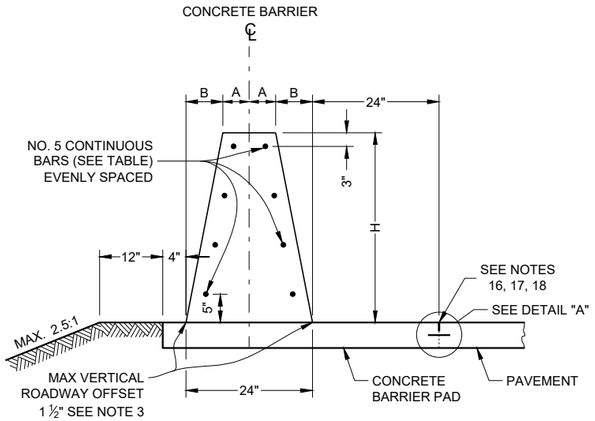
6

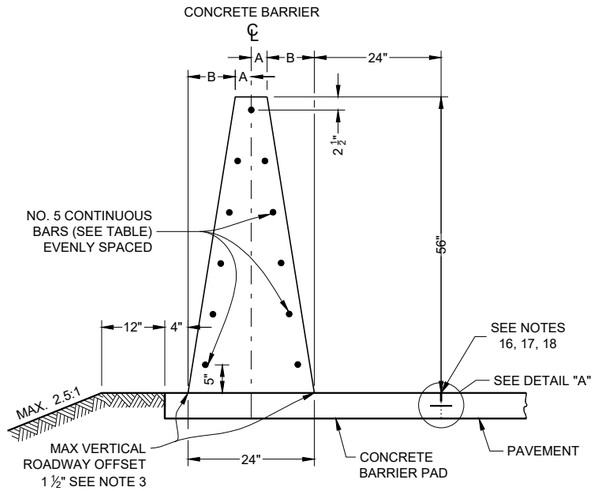
S.D.D. 14 B 24-9c

6

S.D.D. 14 B 24-9c



32 - INCH, 36 - INCH OR 42 - INCH SINGLE SLOPE CONCRETE BARRIER
(TYPE S32, TYPE S36, TYPE S42)



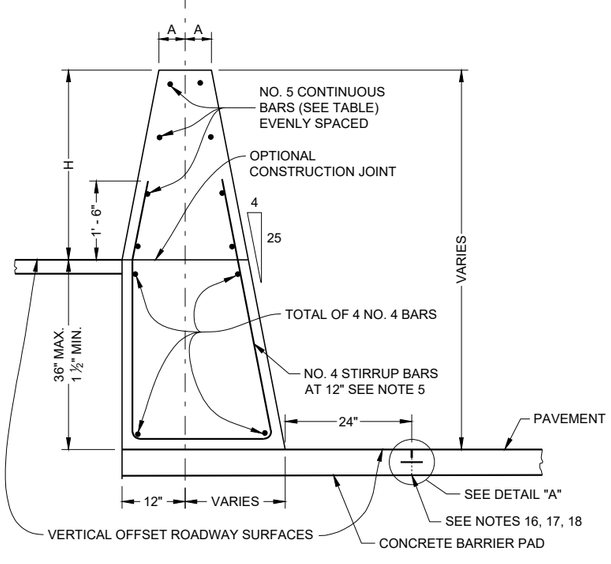
56 - INCH SINGLE SLOPE CONCRETE BARRIER
(TYPE S56)

GENERAL NOTES

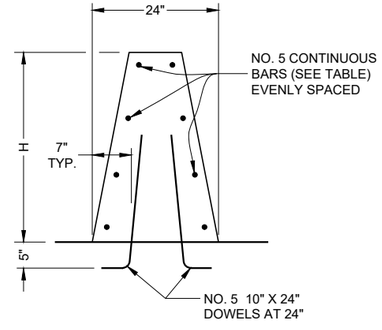
1. WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.
2. EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OF ½" MINIMUM.
3. WHERE VERTICAL ROADWAY OFFSET IS GREATER THAT 1", USE TYPE A.
4. PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.
5. EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRRUP NOT REQUIRED FOR ROADWAY OFFSETS LESS THAN 1' - 0".
6. FOR TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 MONOLITHIC FOOTING OR DOWELED FOOTING 2 - #8 X 8" @ 2'- 0".
7. STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL 2 FEET. BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.
8. 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.
9. WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PLACE OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP FORMING CUT-OFF POINT. EXPOSED STEEL INTO NEXT POURS REINFORCEMENT. LAPS TO BE FIRMLY TIED.
10. USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
11. 2" CLEAR COVER TYPICAL
12. COLD-JOINTS MAY BE USED BETWEEN ANCHOR INSTALLATIONS. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED. LAPS TO BE FIRMLY TIED.
13. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 NO ADDITIONAL VERTICAL STEEL IS NEEDED. IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A REQUIRES VERTICAL STEEL. SEE OTHER DETAIL.
14. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 DEPTH OF FOOTING 10", IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A MATCH TOTAL HEIGHT OF SINGLE SLOPE BARRIER RETAINING WALL.
15. FOR ALL BARRIER TYPES SHOWN, ANCHOR IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN ON DRAWING OR DETAILS SHOWN ON SDD 14B33. ANCHORS INCIDENTAL TO CBSS.
16. CONCRETE BARRIER PAD UNDER CBSS MAY BE PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED ⅓ DEPTH. CONCRETE BARRIER PAD AND SAWING OF CONCRETE SHOULDER IS INCIDENTAL TO CONCRETE BARRIER BID ITEM. CONCRETE BARRIER PAD MINIMUM DEPTH IS 6 INCHES, OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.
17. CONSTRUCTION JOINTS MAY BE ELIMINATED WHEN CONCRETE SHOULDER IS LESS THAN 10'.
18. SEE SDD 13C1 FOR DETAILS TYING CONCRETE BARRIER PAD TO ADJACENT CONCRETE.
19. PROVIDE A 1" DEEP CONTRACTION JOINT IN BARRIER PAD AND BARRIER. JOINT IS TO MATCH ADJACENT CONCRETE JOINTS. NO DOWEL BARS ARE REQUIRED FOR BARRIER PAD. IF ADJACENT TO ASPHALT, CONTRACTION JOINT IS REQUIRED EVERY 15'.

ADDENDUM 8/4/2021: DELETE GENERAL NOTES 13 AND 14

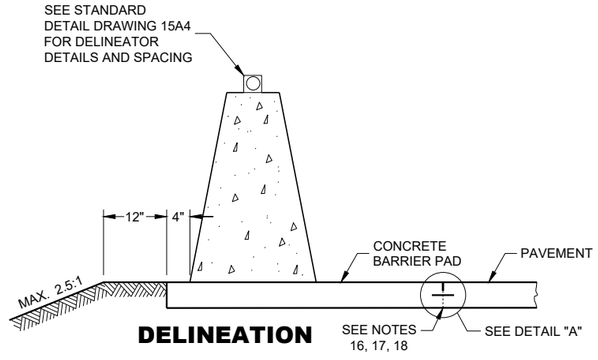
BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6 ¼	5 ¾	8
42	5 ¼	6 ¾	10
56	3	9	11



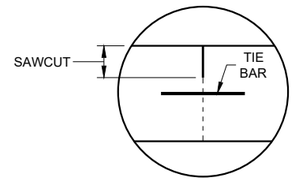
SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)
(BETWEEN ADJACENT ROADWAYS)



SINGLE SLOPE CONCRETE BARRIER ON BRIDGE
(NON OUTER PARAPET APPLICATION)



DELINEATION



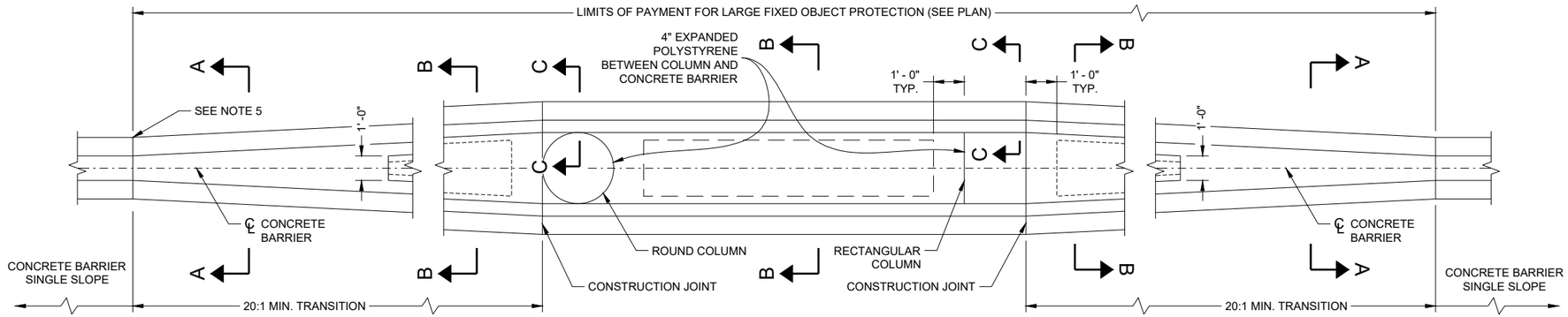
DETAIL "A"

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

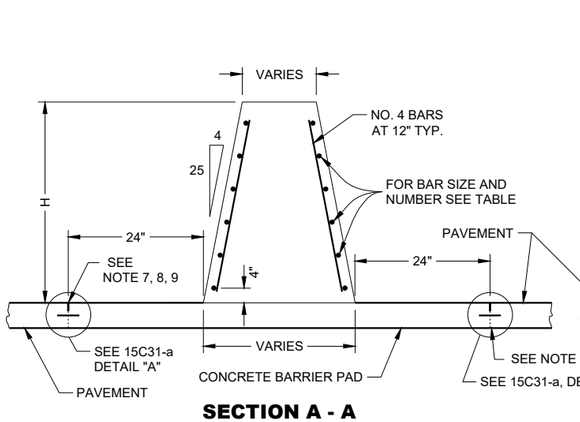
6

SDD 14B32 - 08a

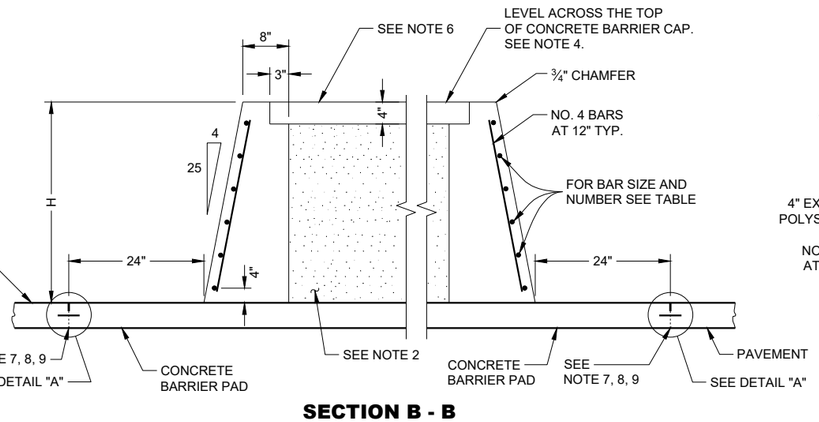


BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF BARS EACH
32	4	6
36	4	6
42	5	6
56	5	6

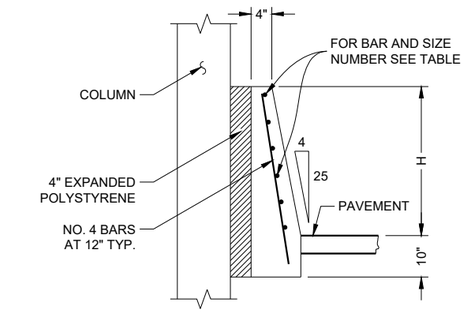
LARGE FIXED OBJECTS PROTECTION
(TYPE S32, TYPE S36, TYPE S42, TYPE S56)



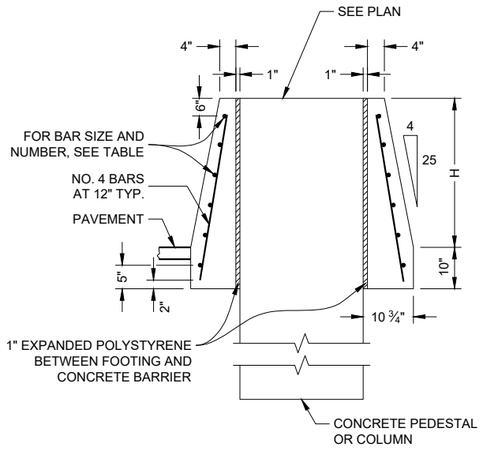
SECTION A - A



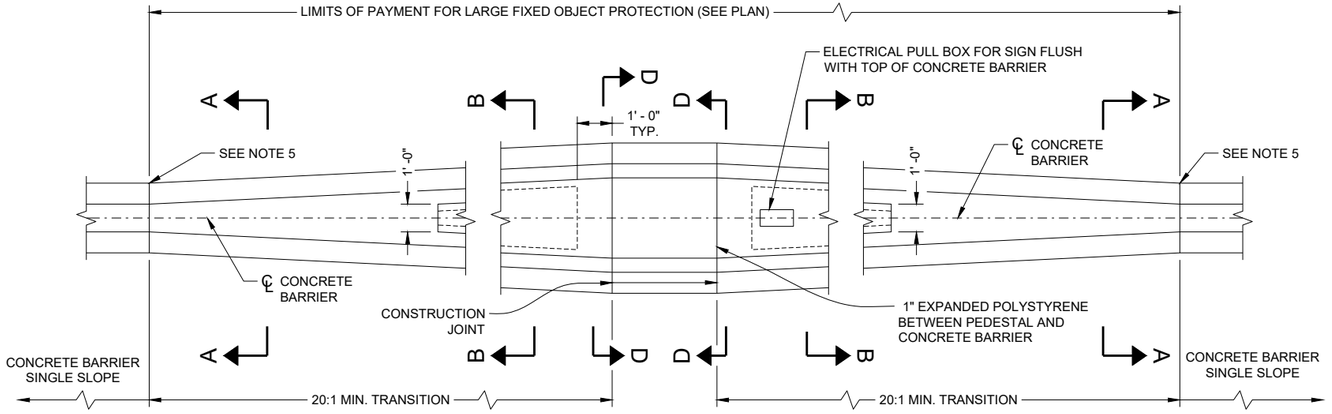
SECTION B - B



SECTION C - C



SECTION D - D



SMALL FIXED OBJECTS PROTECTION
(TYPE S32, TYPE S36, TYPE S42, TYPE S56)

GENERAL NOTES

1. INSTALL 1 INCH DIAMETER DRAIN PIPE EVERY 20 FEET OF CROSS SECTION B -B. MINIMUM ONE DRAIN CAVITY.
2. BETWEEN CONCRETE BARRIER WALLS FILL WITH FOUNDATION BACKFILL.
3. REINFORCING STEEL SHALL EXTEND CONTINUOUS THROUGH CONSTRUCTION JOINTS.
4. ADJUST HEIGHT OF CONCRETE BARRIER WALL ON LOW SIDE OF OFFSET OR SUPERELEVATED ROADWAYS TO PROVIDE LEVEL GRADE ACROSS TOP OF CONCRETE CAP.
5. IF FIXED OBJECT PROTECTION IS INSTALLED FIRST, USE COLD JOINTS. IF CBSS PLACED FIRST, USE EXPANSION JOINT.
6. USE NO. 3 BAR SPACED 12 INCHES CENTER TO CENTER (PLACED IN EACH DIRECTION) OR EQUIVALENT WIRE MESH.
7. CONCRETE BARRIER PAD UNDER CBSS MAY BE PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED ⅓ DEPTH. CONCRETE BARRIER PAD AND SAWING OF CONCRETE SHOULDER IS INCIDENTAL TO CONCRETE BARRIER BID ITEM. CONCRETE BARRIER PAD MINIMUM DEPTH IS 6 INCHES, OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.
8. CONSTRUCTION JOINTS MAY BE ELIMINATED WHEN CONCRETE SHOULDER IS LESS THAN 10',
9. SEE SDD 13C1 FOR DETAILS TYING CONCRETE BARRIER PAD TO ADJACENT CONCRETE.

CONCRETE BARRIER SINGLE SLOPE (CBSS)

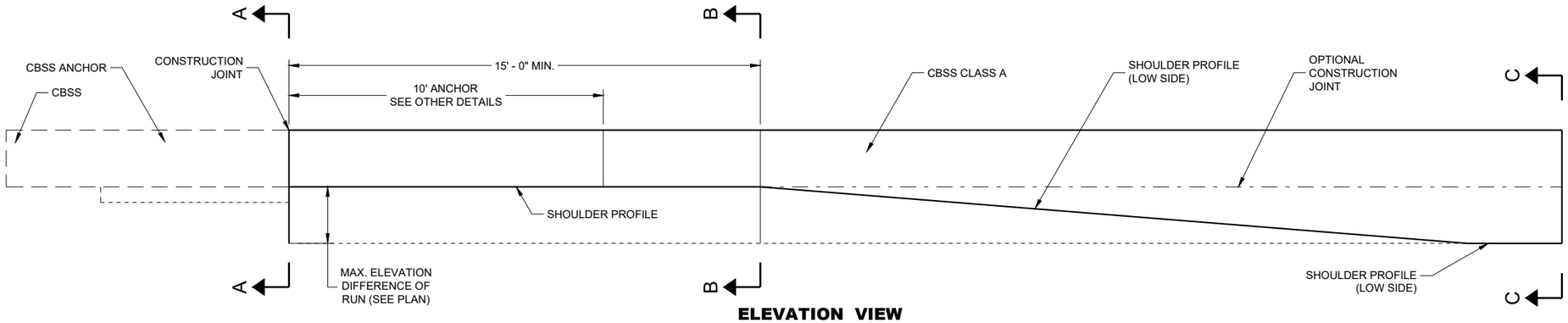
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

SDD 14B32 - 08b

SDD 14B32 - 08b

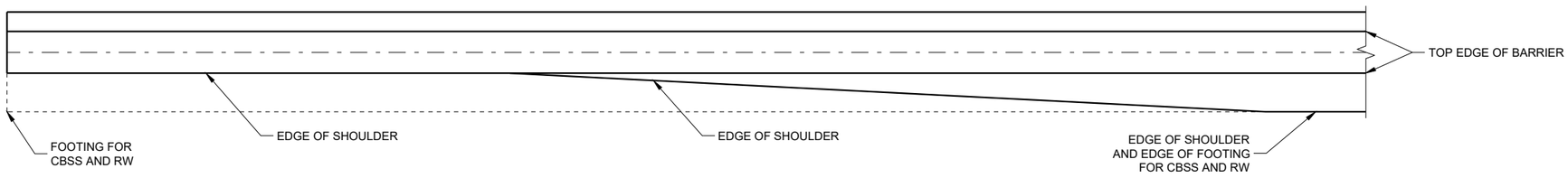
GENERAL NOTES

1. SAWING OF CONCRETE SHOULDER IS INCIDENTAL TO CONCRETE BARRIER BID ITEM. SEE SDD 13C18 FOR JOINT DEPTH AND WIDTH. CONCRETE PAD MINIMUM DEPTH IS 6 INCHES, OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.
2. CONSTRUCTION JOINTS MAY BE ELIMINATED WHEN CONCRETE SHOULDER IS LESS THAN 10',
3. SEE SDD 13C1 FOR DETAILS TYING BARRIER FOOTING TO ADJACENT CONCRETE.



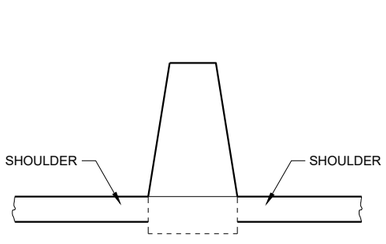
ELEVATION VIEW

TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)

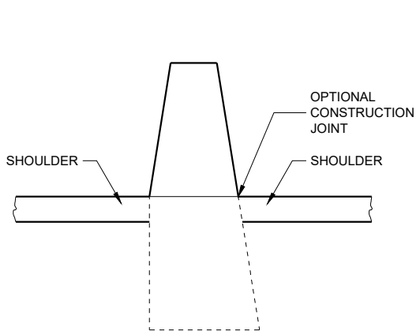


PLAN VIEW

TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



SECTION A - A



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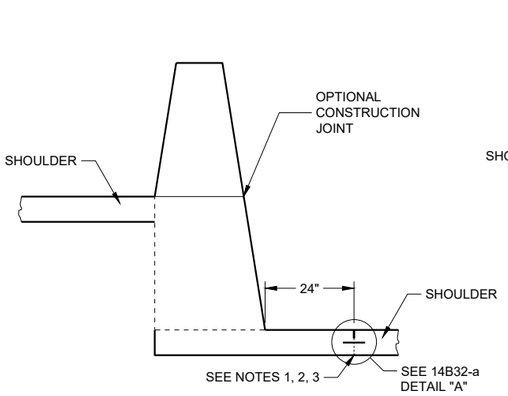
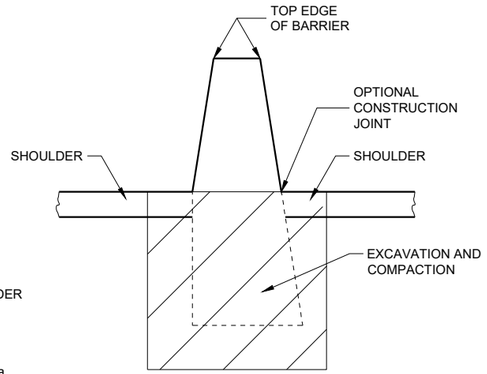


SECTION C - C



CONCRETE BARRIER SINGLE SLOPE (CBSS)

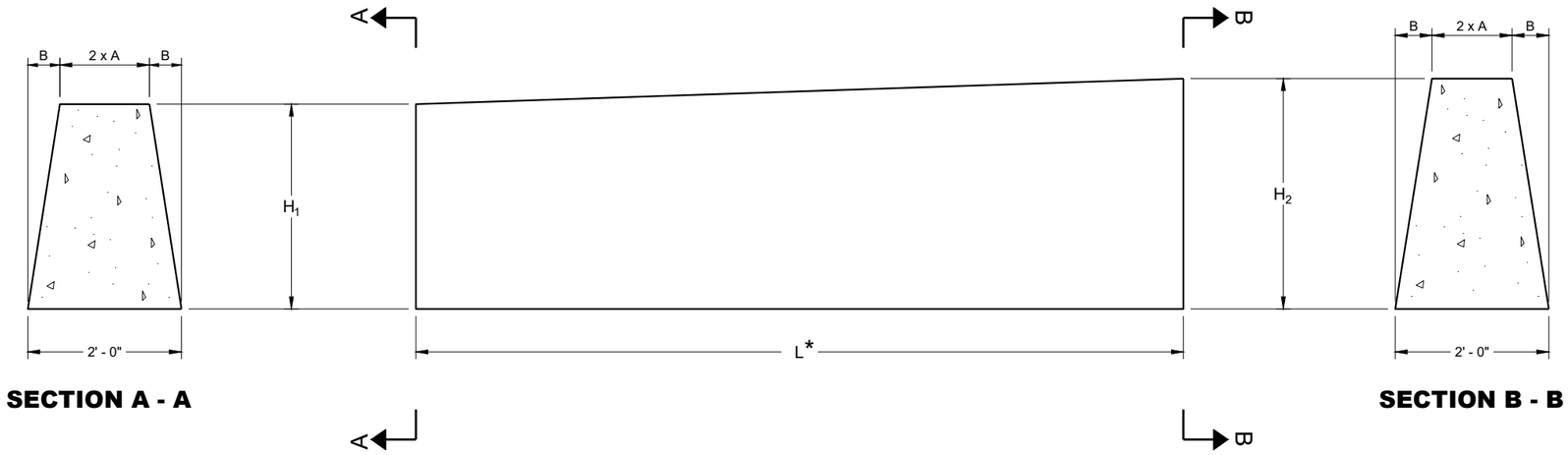
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B32 - 08c

6

SDD 14B32 - 08c



SECTION A - A

SECTION B - B

DOUBLE COLD JOINT HEIGHT TRANSITION

BARRIER DIMENSIONS

BARRIER HEIGHT INCHES	A INCHES	B INCHES
32	7	5
36	6 ¼	5 ¾
42	5 ¼	6 ¾
56	3	9

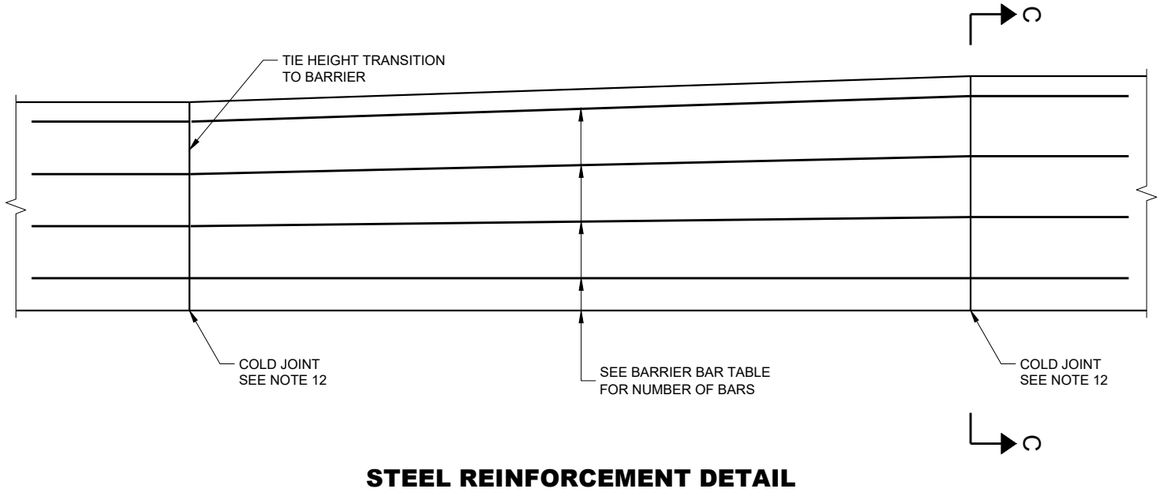
MULTIPLE HEIGHT TRANSITIONS MAY BE USED IN SEQUENCE TO GET TO APPROPRIATE HEIGHT.

USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

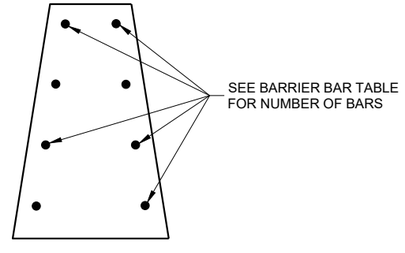
BARRIER BARS

H_1	H_2	L *	NUMBER OF NO. 5 BARS
32"	36"	10' - 0"	8
36"	42"	10' - 6"	10
42"	56"	24' - 6"	11

* LENGTH OF DOUBLE COLD JOINT INCLUDED IN THE TOTAL LENGTH OF CBSS.



STEEL REINFORCEMENT DETAIL



SECTION C-C

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

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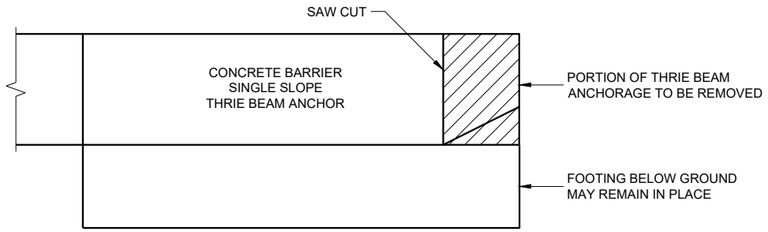
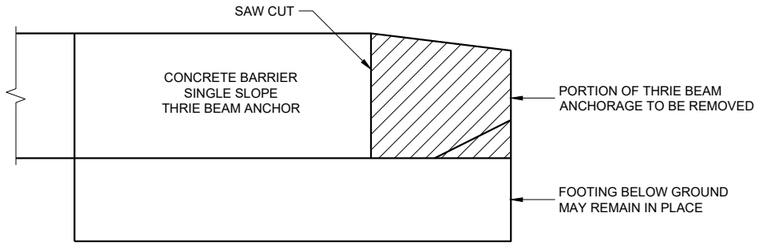
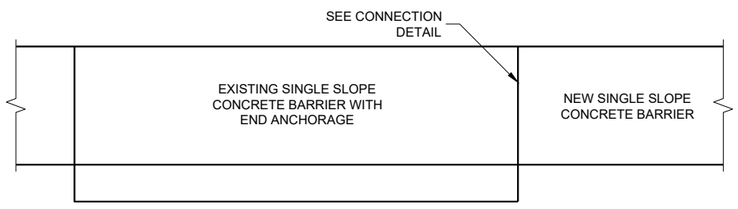


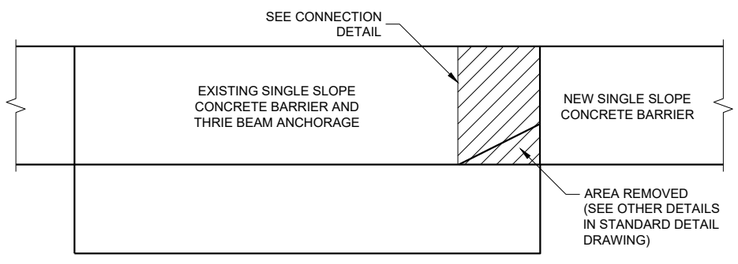
REMOVAL AREA OF
32" CONCRETE THRIE BEAM ANCHORAGE



REMOVAL AREA OF CONCRETE THRIE BEAM
ANCHORAGE WITH HEIGHT GREATER THAN 32"



ELEVATION VIEW OF CONCRETE
BARRIER EXTENSION NEAR END ANCHORAGE



ELEVATION VIEW OF CONCRETE
BARRIER EXTENSION NEAR THRIE BEAM TERMINAL

GENERAL NOTES

1 THE NUMBER OF DRILL HOLES IS EQUAL TO THE NUMBER OF REBAR IN BARRIER (SEE OTHER DETAILS).

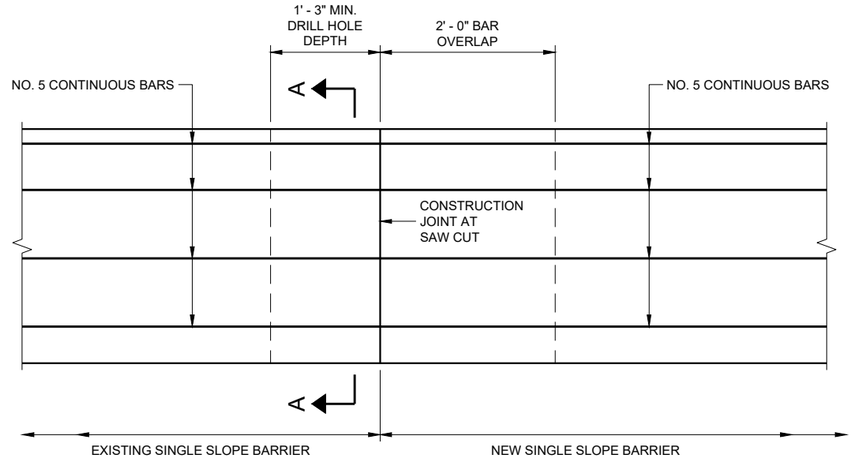
2. MINIMUM DEPTH OF DRILL HOLES IS 1' - 3".

3. DRILL HOLES TO BE A MINIMUM OF 4 INCHES FROM THE EDGE OF CONCRETE

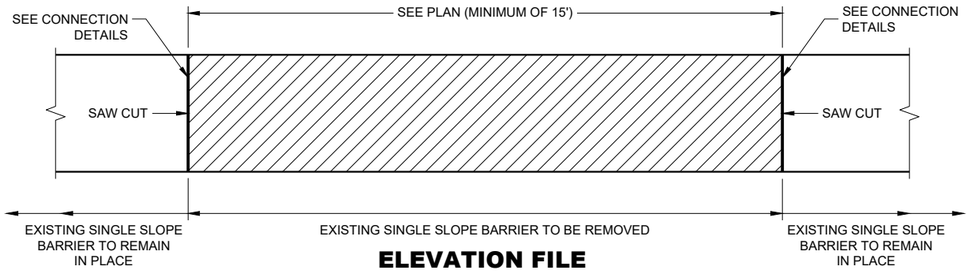
4. INSTALL EPOXY COATED NO. 5 BARS IN DRILL HOLES.

5. END ANCHORAGE MAY OR MAY NOT BE PRESENT ON EXISTING BARRIERS.

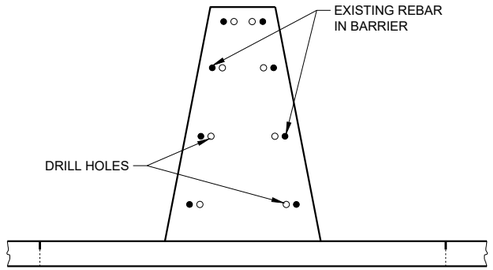
6. REMOVE THRIE BEAM ANCHORAGE AS SHOWN.



CONNECTION OF EXISTING SINGLE SLOPE CONCRETE BARRIER TO
NEW SINGLE SLOPE CONCRETE BARRIER



ELEVATION FILE
BARRIER REMOVAL AND REPLACEMENT



SECTION A-A

RETROFIT OR REPAIR SINGLE SLOPE CONCRETE BARRIER

CONCRETE BARRIER
SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
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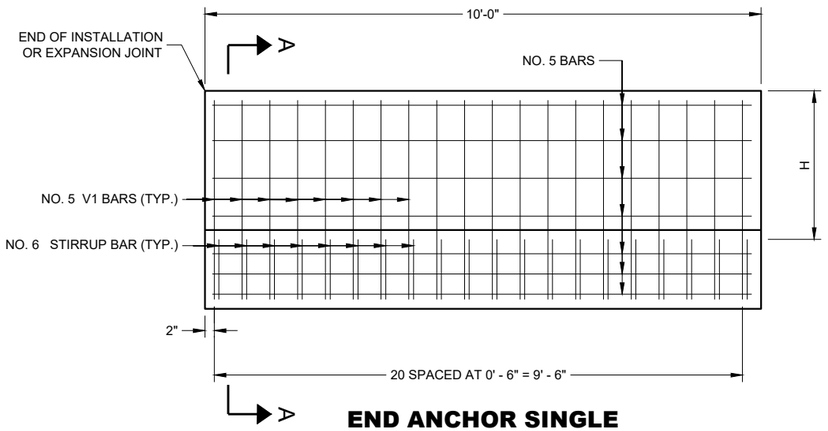
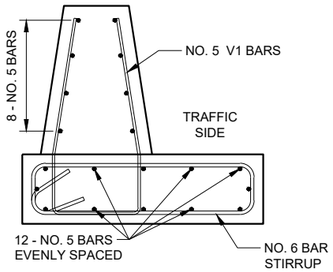
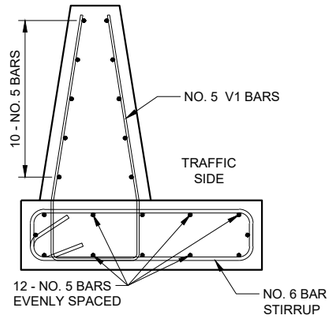


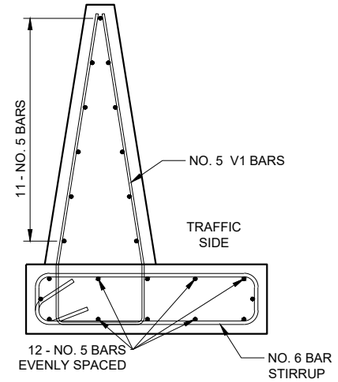
END ANCHOR SINGLE SLOPE CONCRETE BARRIER



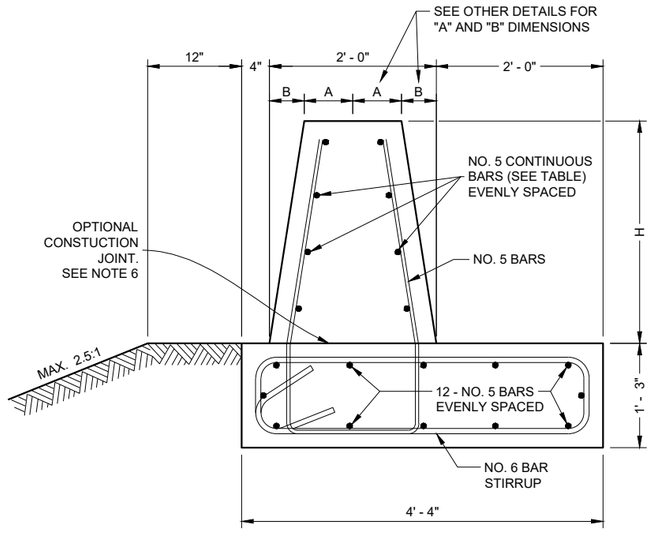
32" AND 36" CBSS



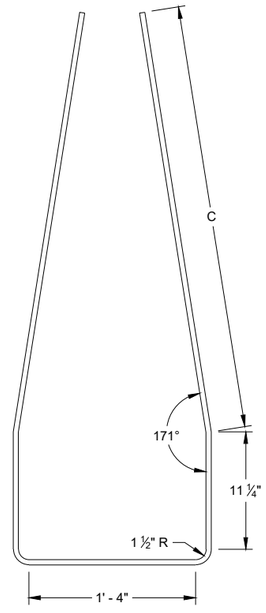
42" CBSS



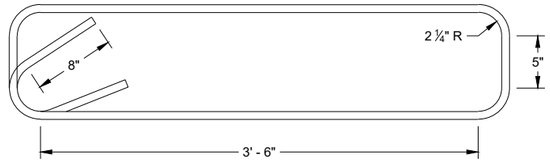
56" CBSS



SECTION A - A



V1 BAR BENDING DETAIL



STIRRUP BAR BENDING DETAIL

BARRIER HEIGHT H INCHES	C INCHES
32	2' - 6"
36	2' - 11"
42	3' - 4"
56	4' - 6 ½"

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

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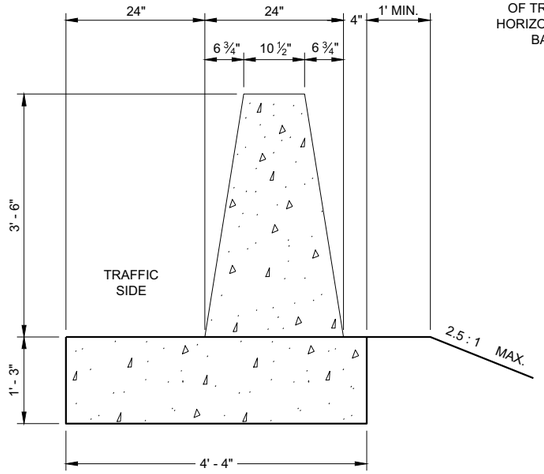
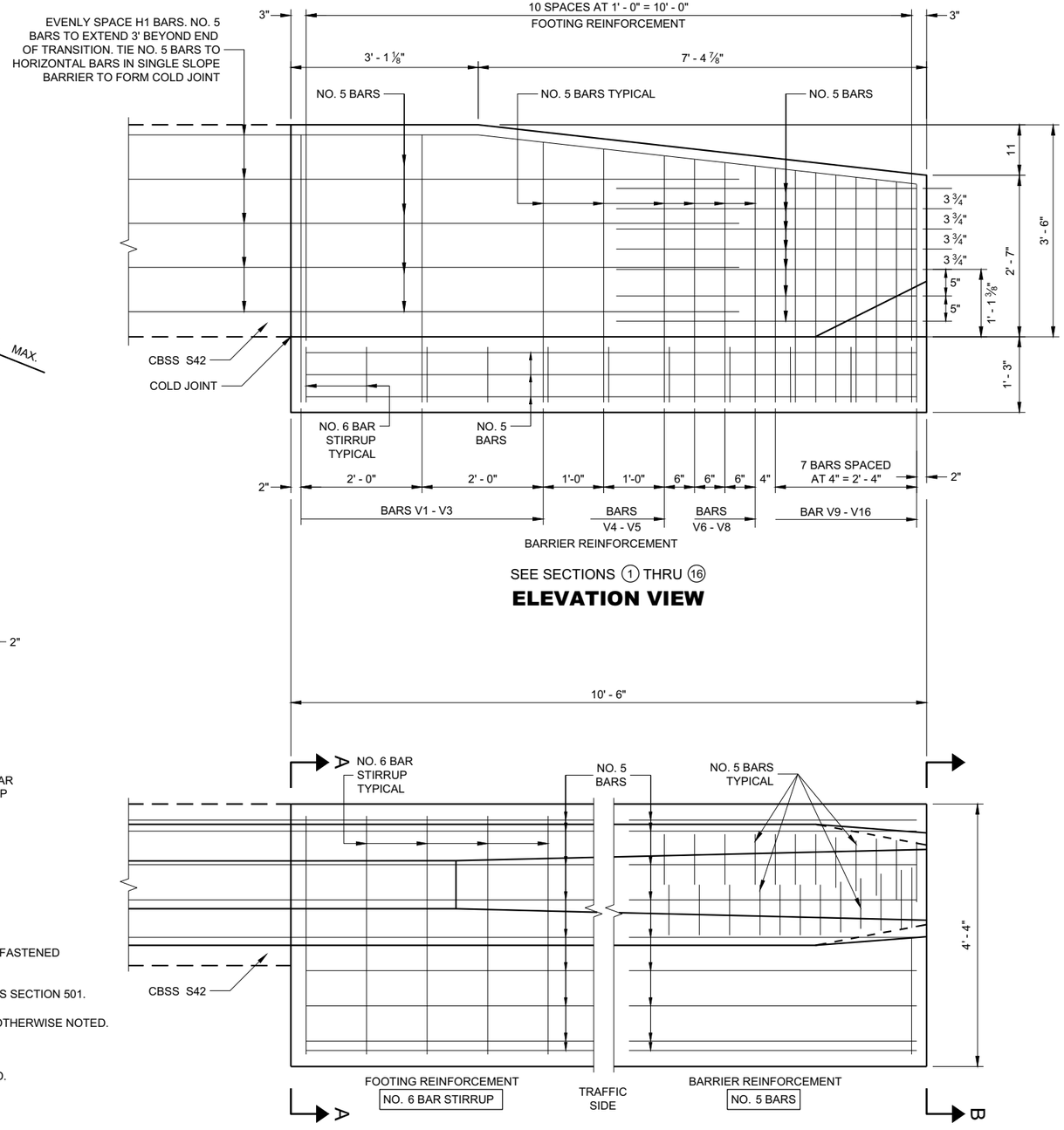
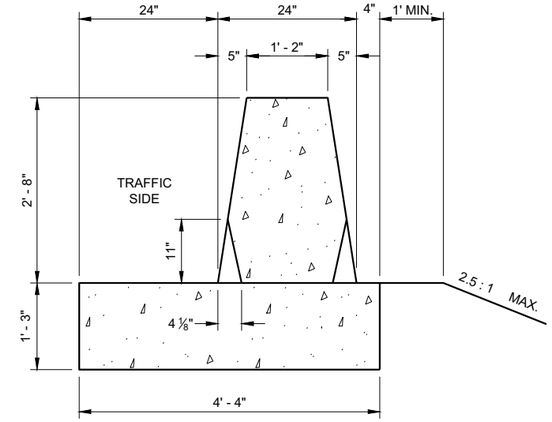


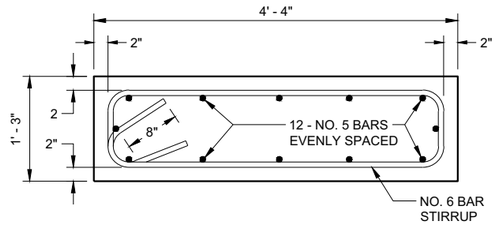
SECTION A - A



ELEVATION VIEW

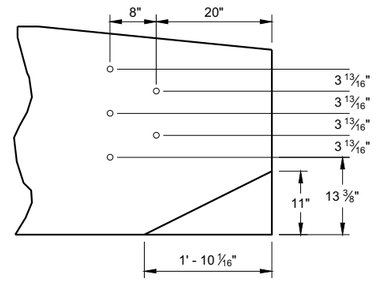


SECTION B - B



TYPICAL FOOTING

PLAN VIEW



PVC PIPE LOCATIONS

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

THRIE BEAM ANCHOR INCIDENTAL TO CONCRETE BARRIER ITEM.

INSTALL SCHEDULE 40 PVC PIPE 1" DIAMETER AT LOCATIONS INDICATED.

EXTEND PVC PIPE COMPLETELY THROUGH BARRIER.

CUT ENDS OF PVC PIPE FLUSH WITH FINISHED FACE OF BARRIER.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

CONCRETE BARRIER
SINGLE SLOPE 42"
THRIE BEAM ANCHOR

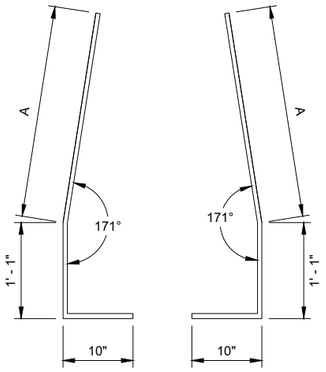
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B33 - 02g

SDD 14B33 - 02g

BAR CHART
BAR POSITIONS
1 - 11

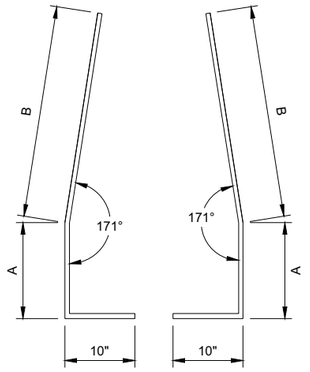
BAR	A
V1	3' - 4 ½"
V2	3' - 4 ½"
V3	3' - 2 ½"
V4	3' - 1"
V5	2' - 11 ½"
V6	2' - 11"
V7	2' - 10 ½"
V8	2' - 9 ½"
V9	2' - 9"
V10	2' - 8 ½"
V11	2' - 8"



BAR BENDING DETAIL
SECTIONS V1 - V4

BAR CHART
BAR POSITIONS
12 - 13

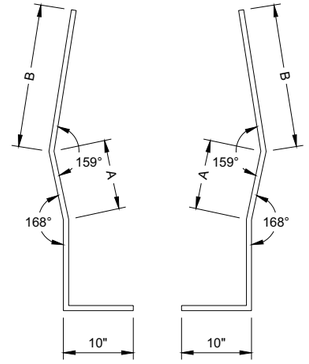
BAR	A	B
V12	1' - 3"	2' - 6"
V13	1' - 8"	2' - 1 ½"



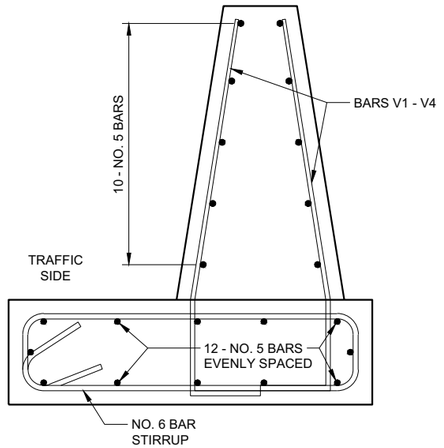
BAR BENDING DETAIL
SECTIONS V12 - V13

BAR CHART
BAR POSITIONS
14 - 16

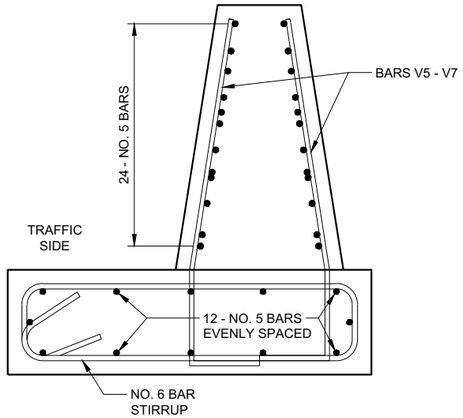
BAR	A	B
V14	6"	2' - 1"
V15	8"	1' - 11"
V16	10"	1' - 8 ½"



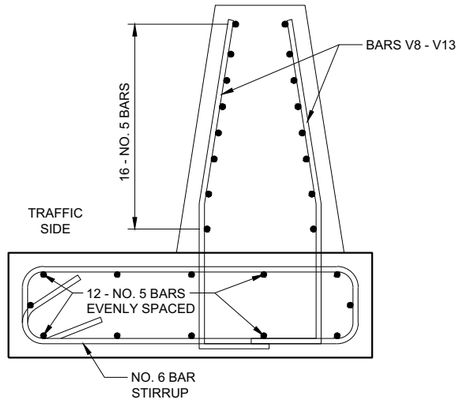
BAR BENDING DETAIL
SECTIONS V14 - V16



BAR DETAIL
SECTIONS 1 - 4

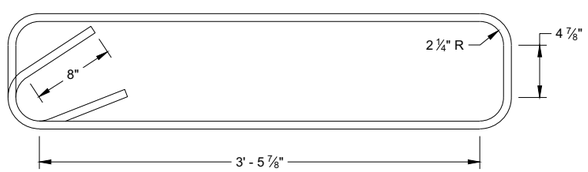


BAR DETAIL
SECTIONS 5 - 7



BAR DETAIL
SECTIONS 8 - 13

BAR DETAIL
SECTIONS 14 - 16



STIRRUP BAR
BENDING DETAIL

CONCRETE BARRIER
SINGLE SLOPE 42"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
ENGINEER

FHWA

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SDD 14B33 - 02h

(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.

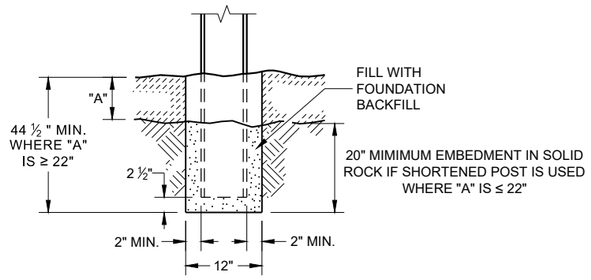
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL 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).

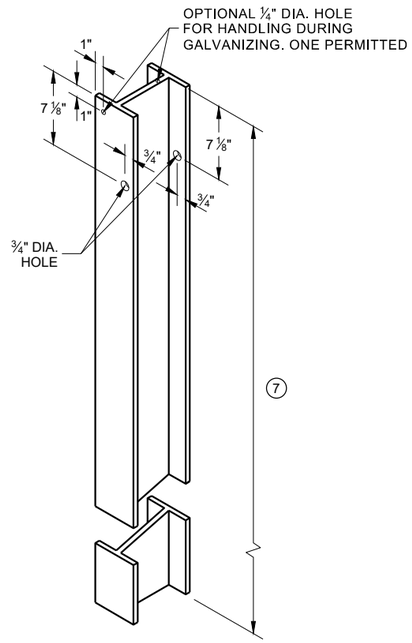
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

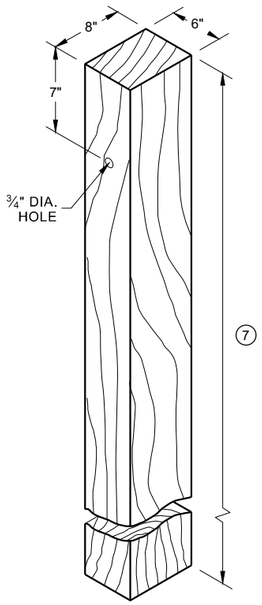
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



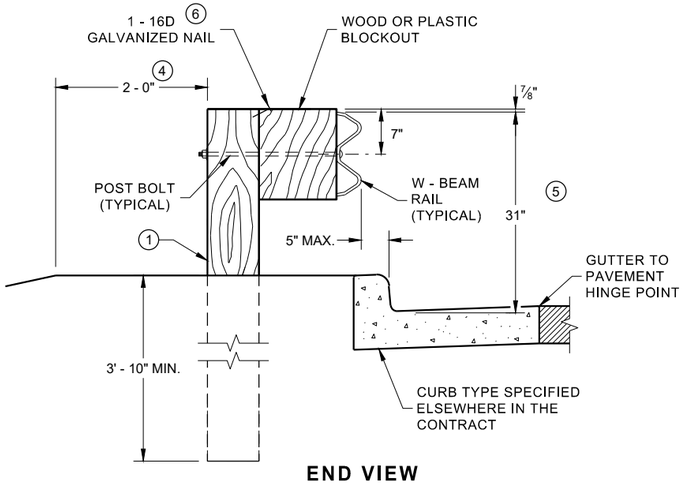
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



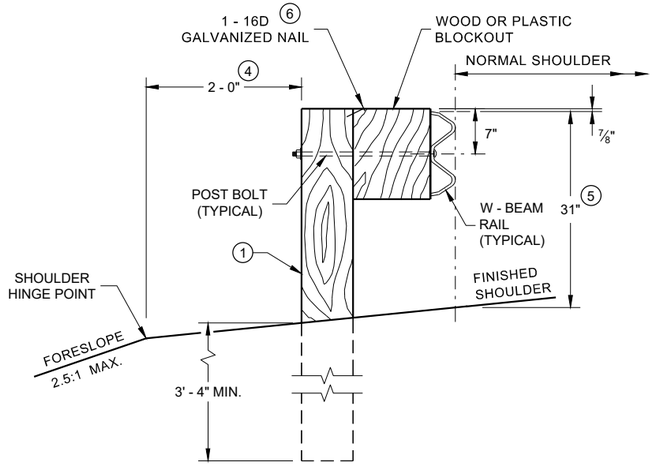
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



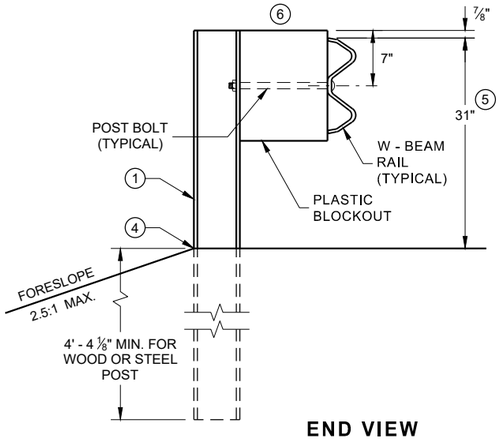
WOOD POST (6" X 8") NOMINAL (1)



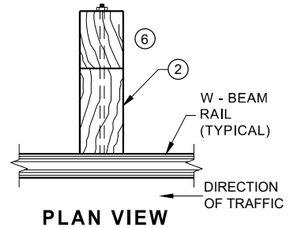
END VIEW
LOCATED ALONG A CURBED ROADWAY



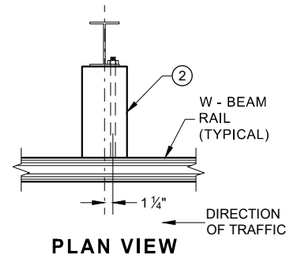
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



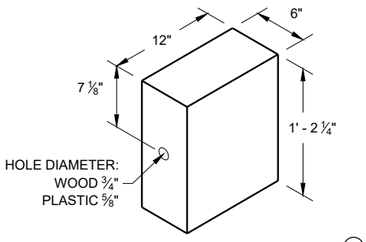
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



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

SDD 14B42 - 07a

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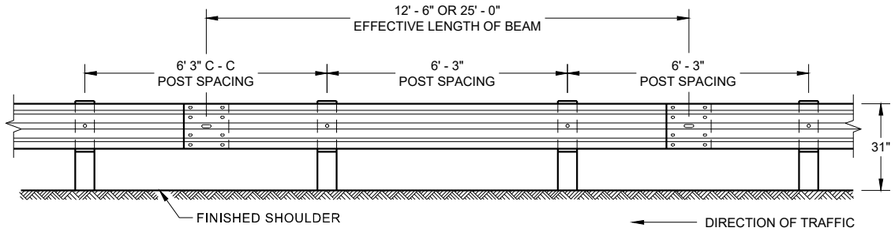
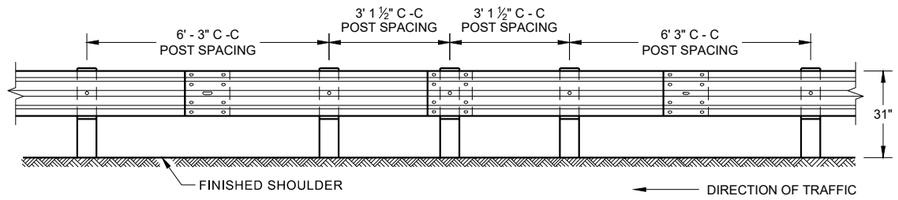
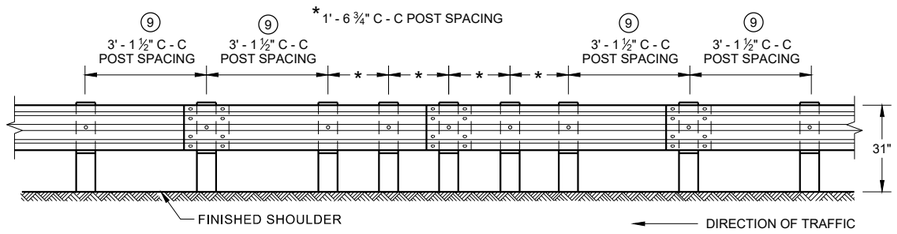


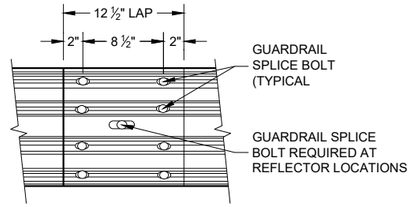
FRONT VIEW
POST SPACING STANDARD INSTALLATION



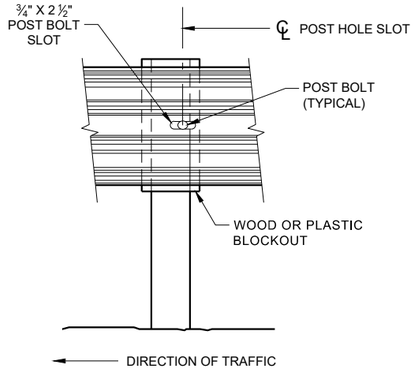
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



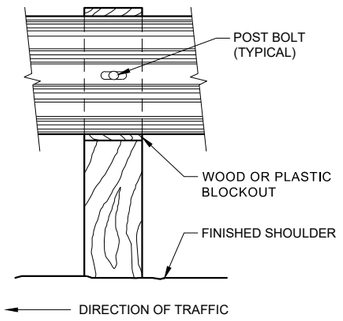
FRONT VIEW
QUARTER POST SPACING (QS)



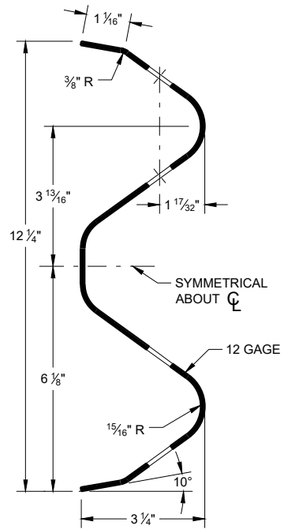
FRONT VIEW
MID-SPAN BEAM SPLICE



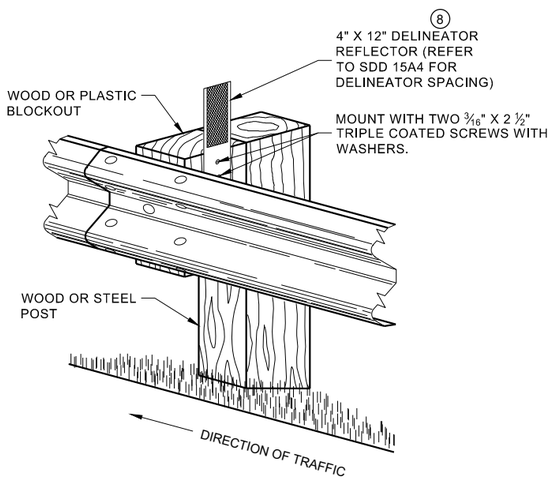
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

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.

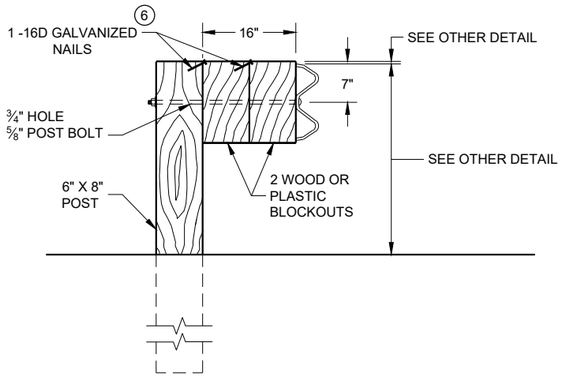
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b
SDD 14B42 - 07b

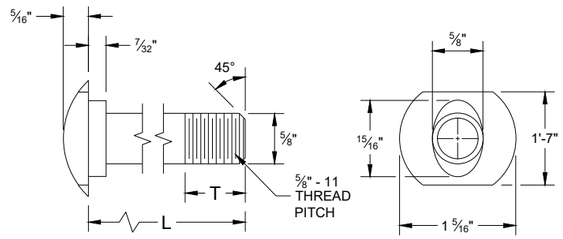


DETAIL FOR 16" BLOCKOUT DEPTH

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.

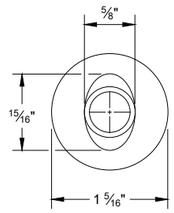
NOTE:

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.

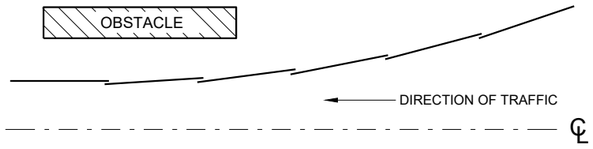


POST BOLT TABLE

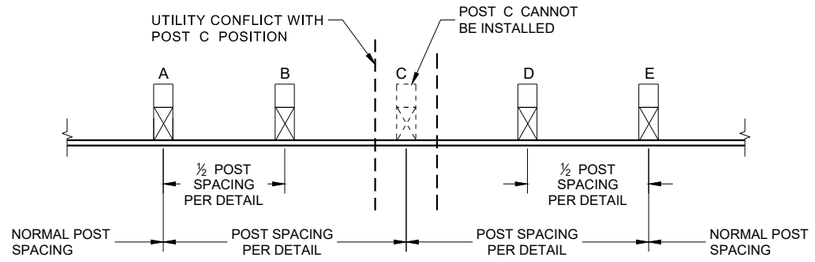
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



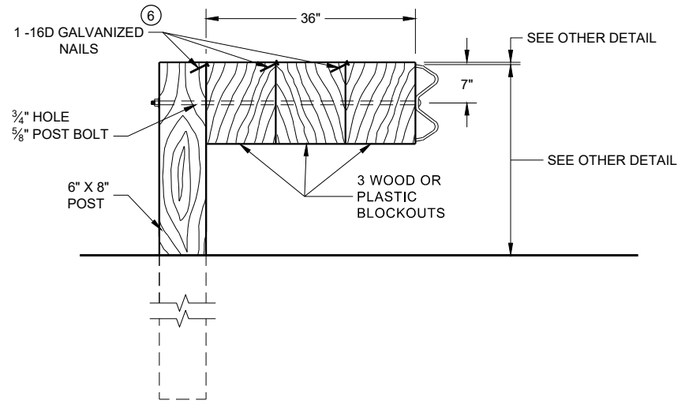
ALTERNATE BOLT HEAD



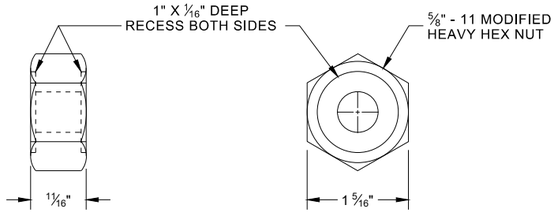
PLAN VIEW
BEAM LAPPING DETAIL



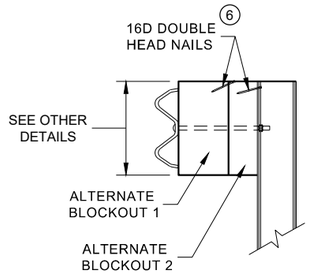
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



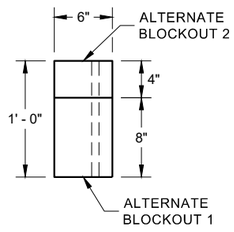
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

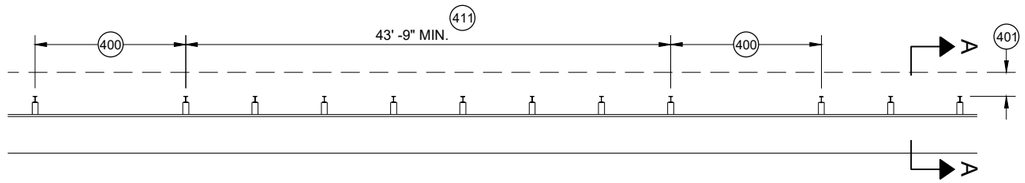
ALTERNATE WOOD BLOCKOUT DETAIL

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.

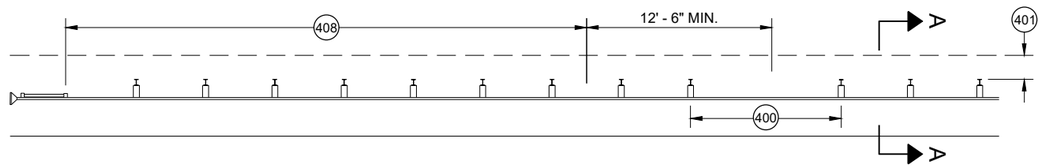
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(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.

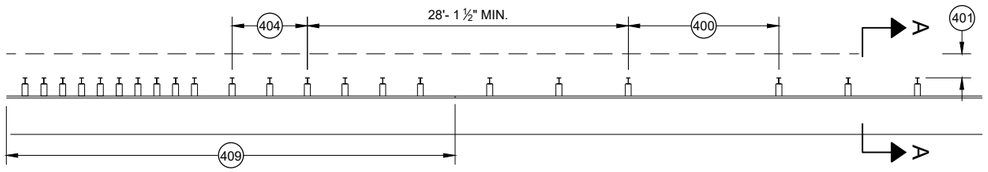
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



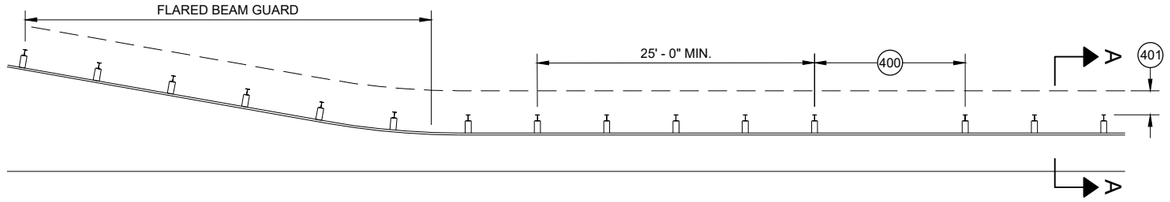
MISSING POST IN MGS GUARDRAIL



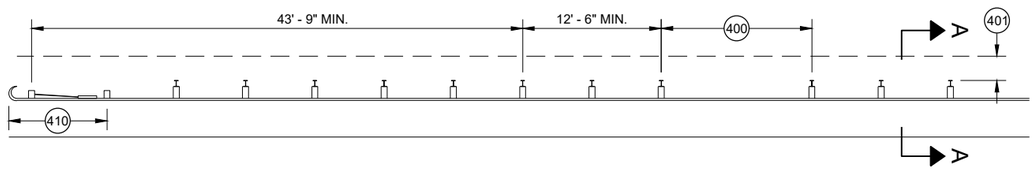
MISSING POST IN MGS GUARDRAIL NEAR EAT



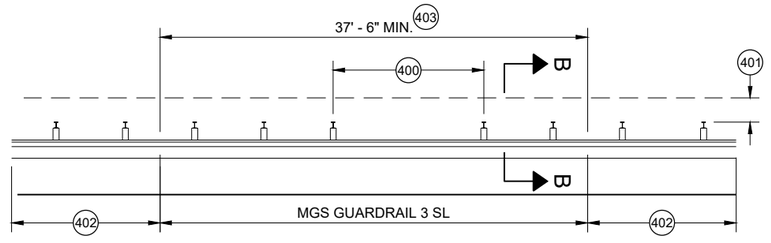
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

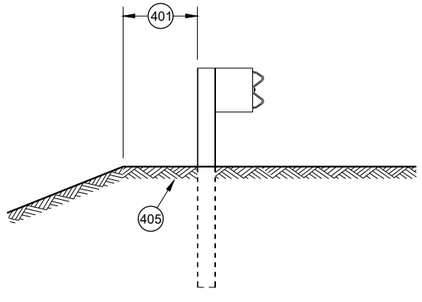


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

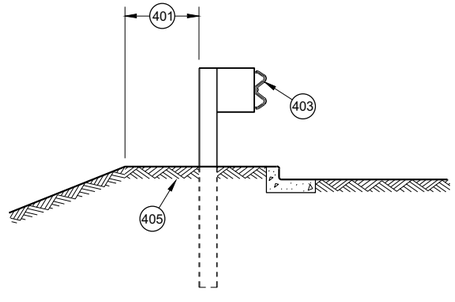


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(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.

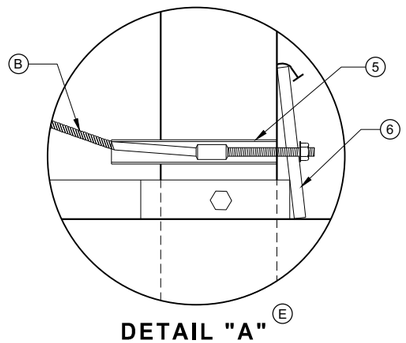
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

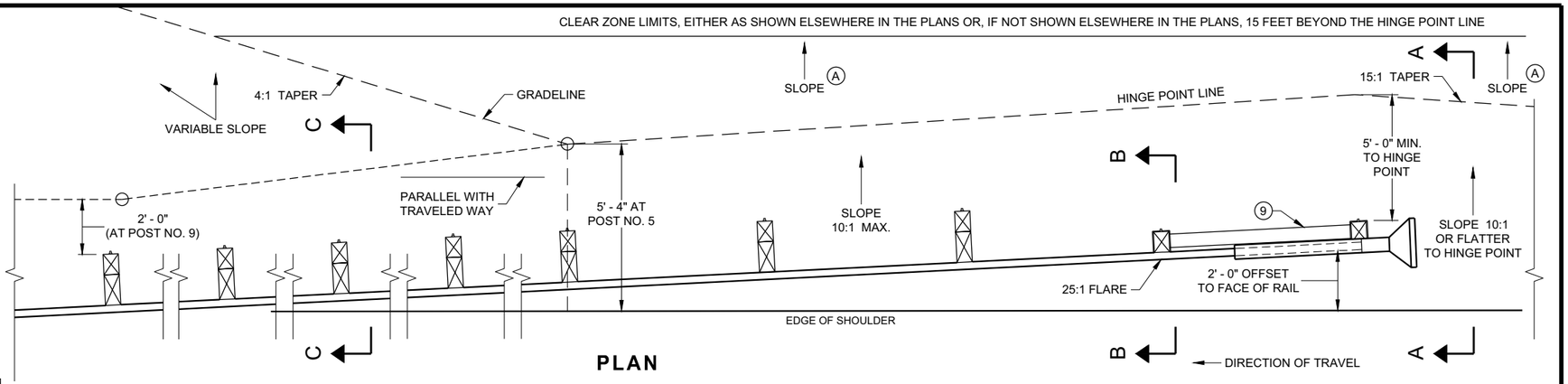
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

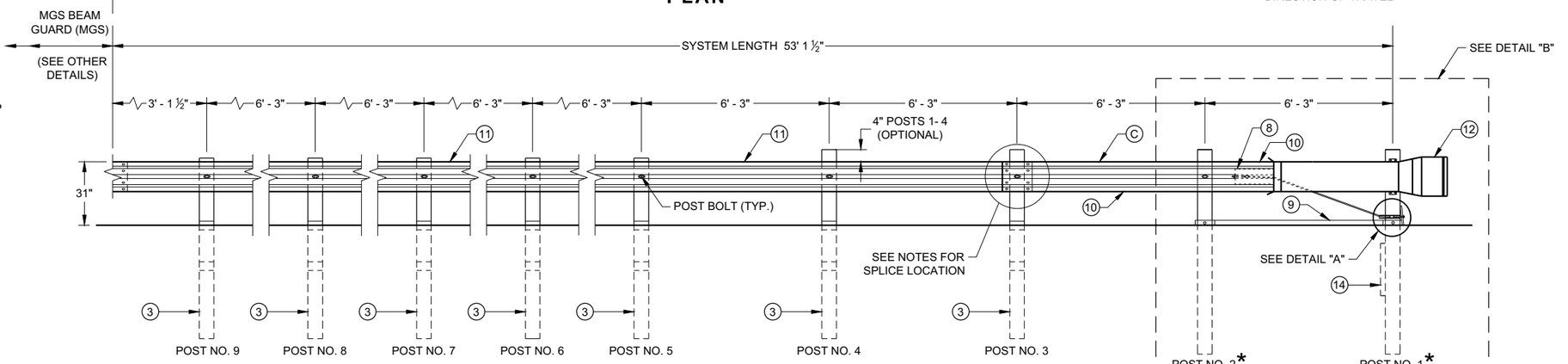
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



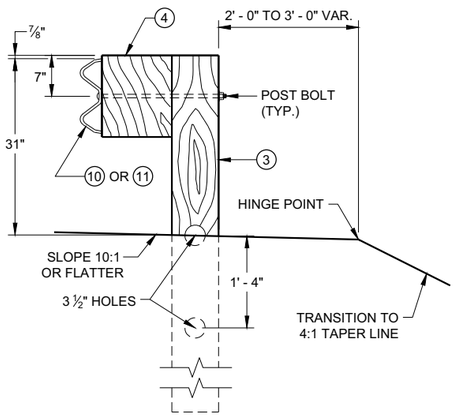
DETAIL "A" (E)



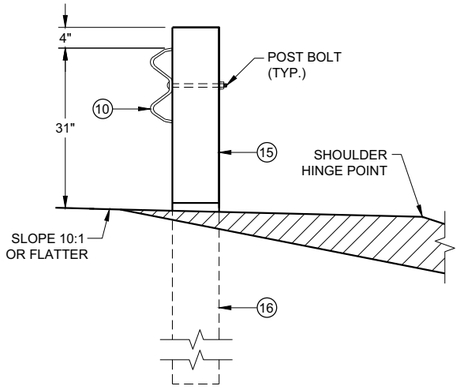
PLAN



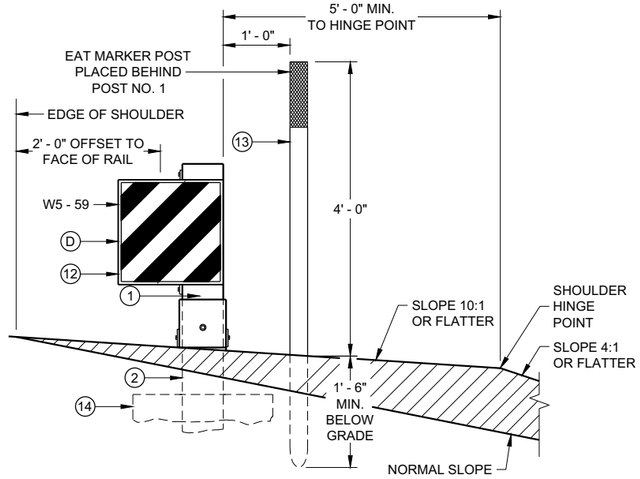
ELEVATION



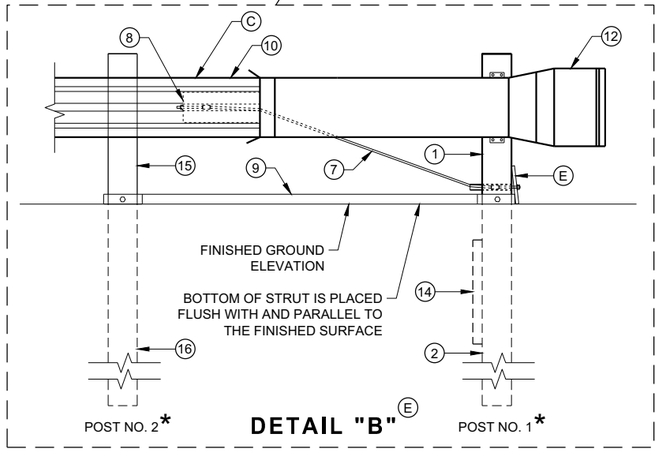
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



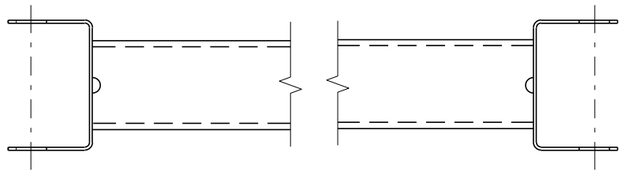
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

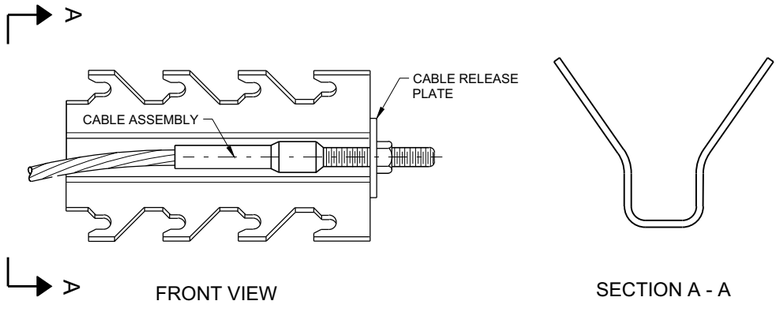
SDD 14B44 - 04a



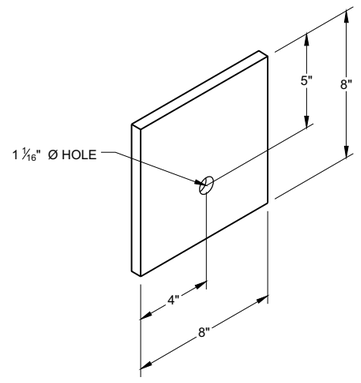
GENERIC GROUND STRUT ⑨ Ⓔ

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 ⑧ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

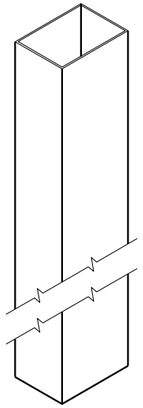
6

SDD 14B44 - 04b

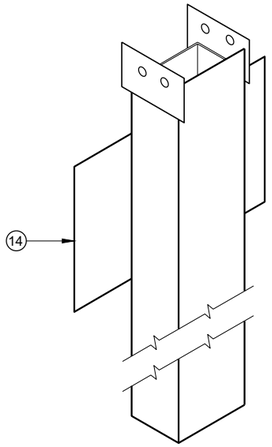
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

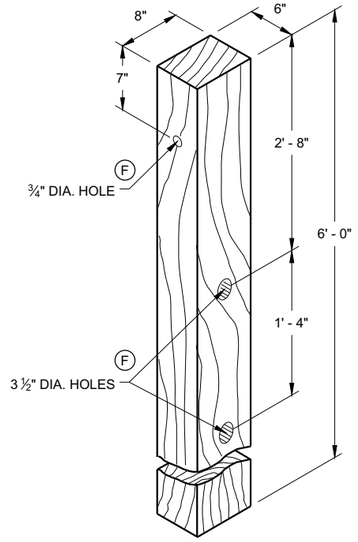
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



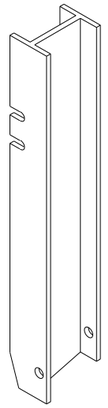
UPPER POST NO. 1 (1) (E)



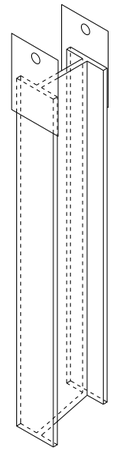
LOWER POST NO. 1 (2) (E)



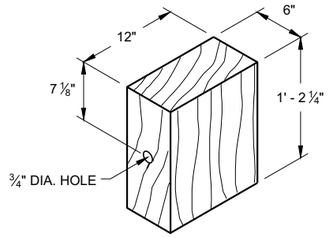
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



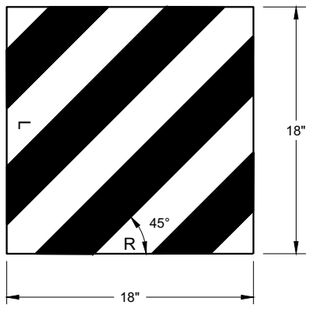
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

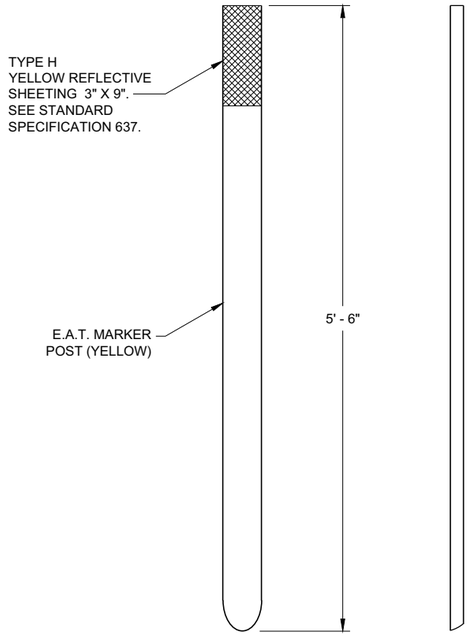


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2

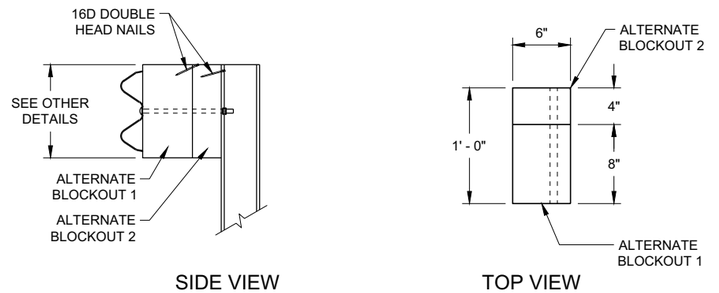


W5 - 59

REFLECTIVE SHEETING DETAIL (E)



E.A.T. MARKER POST (13)



ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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7/2018
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UNIT SUPERVISOR

FHWA

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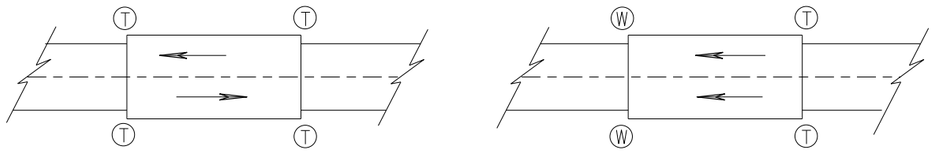


TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

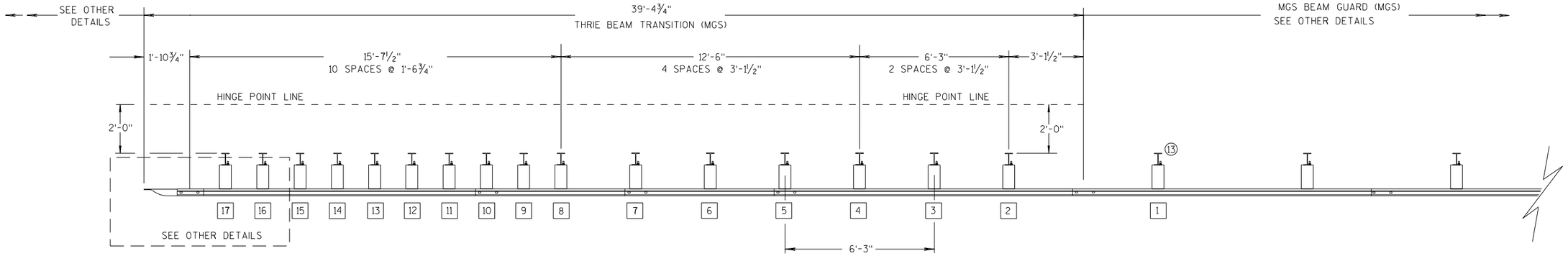
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

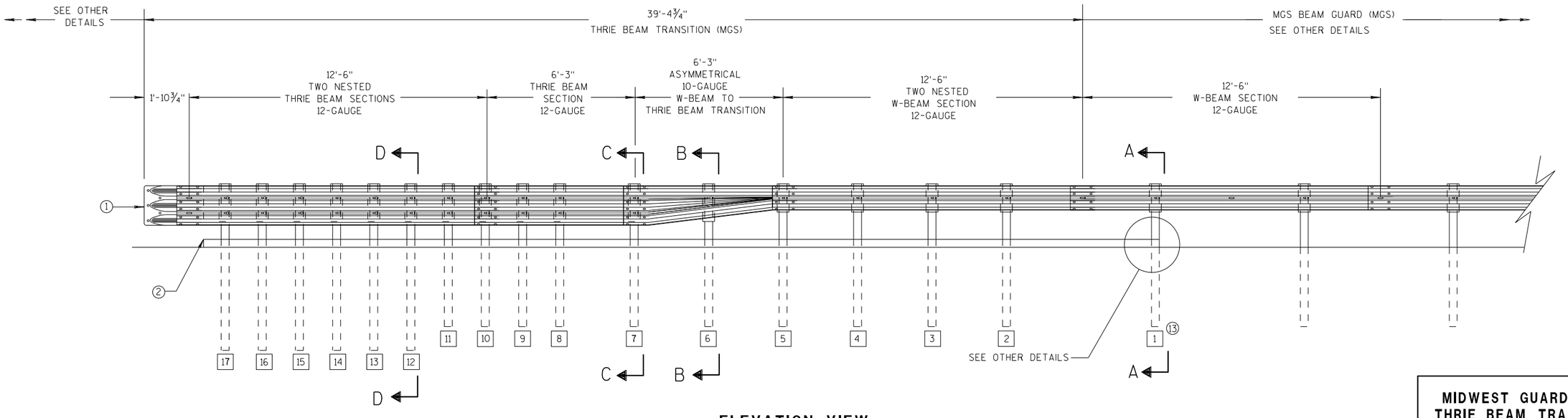
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5a

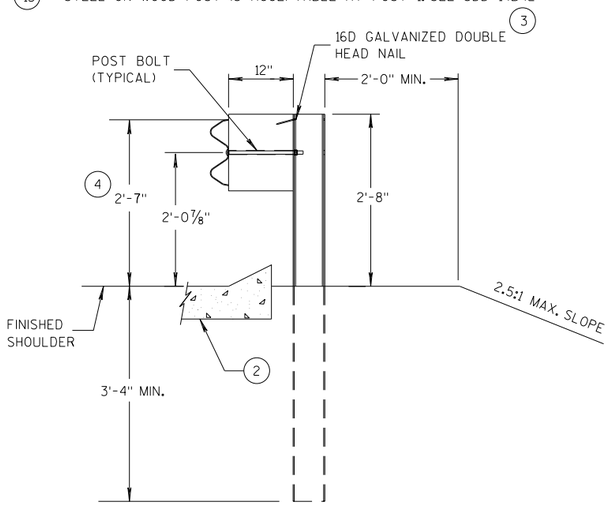
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

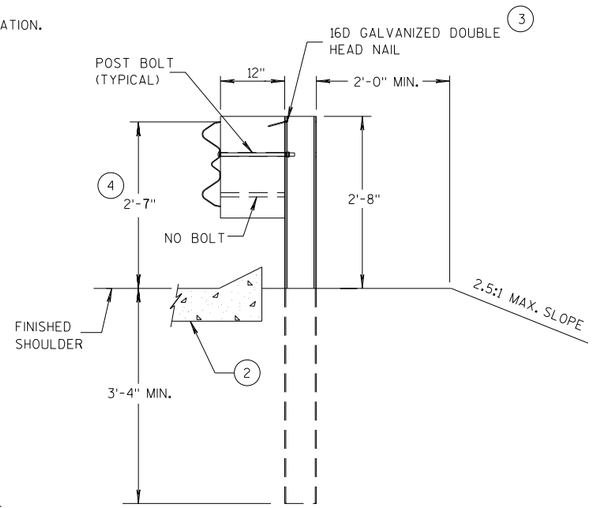
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



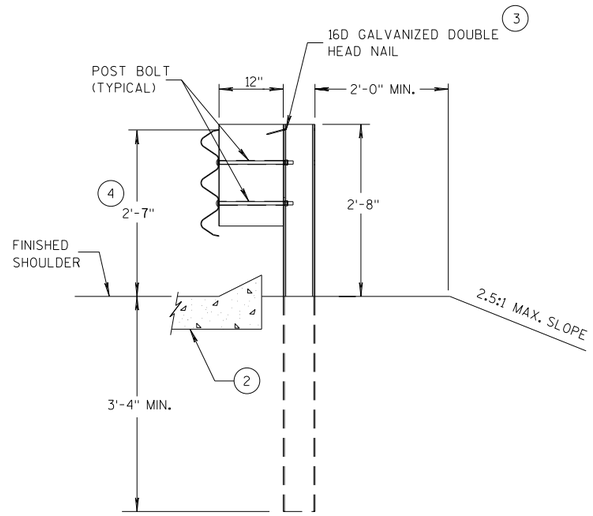
SECTION A-A (13)

POSTS 1-5



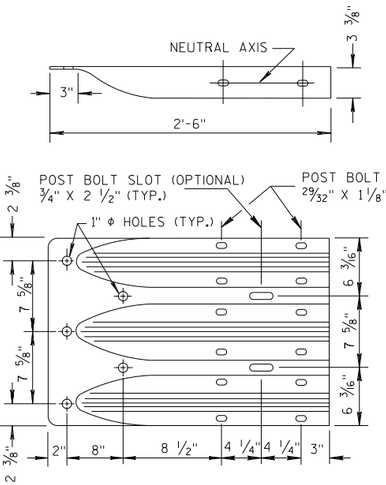
SECTION B-B

POST 6

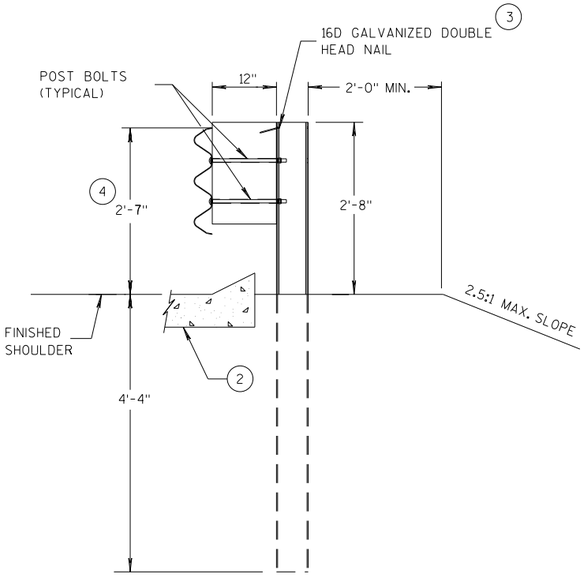


SECTION C-C

POSTS 7-11

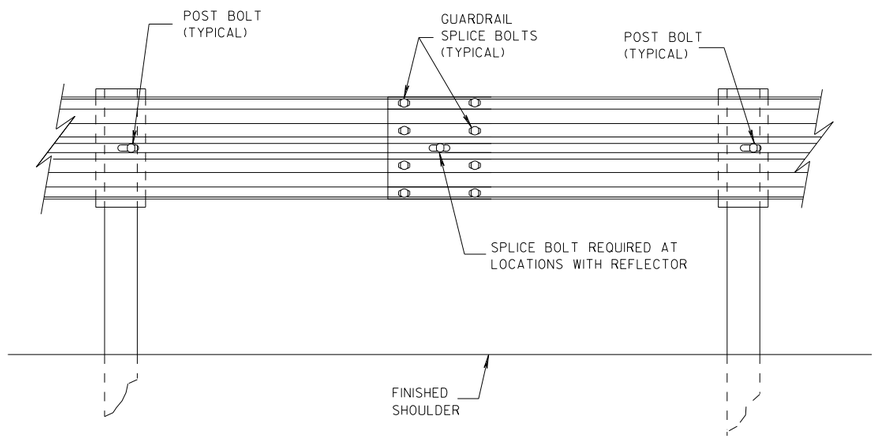


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

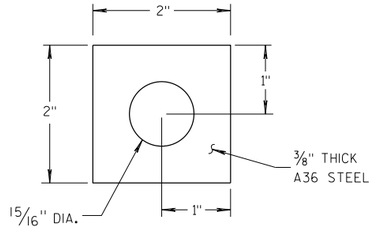
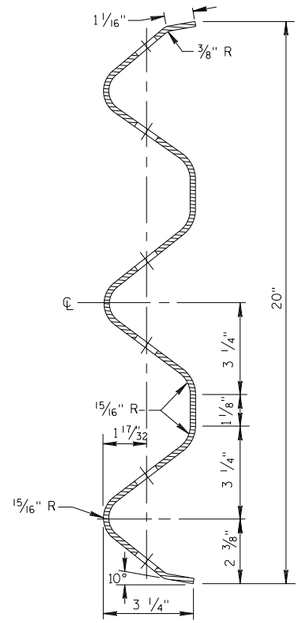


PLATE WASHER DETAIL



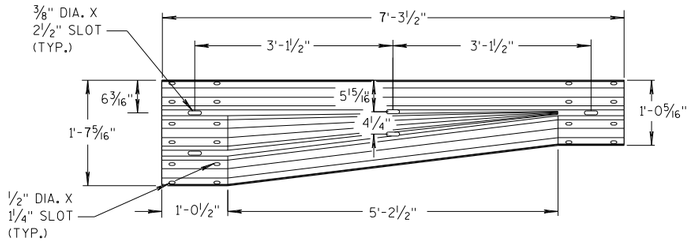
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

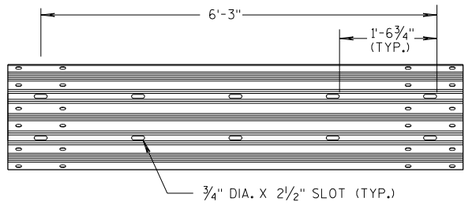
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

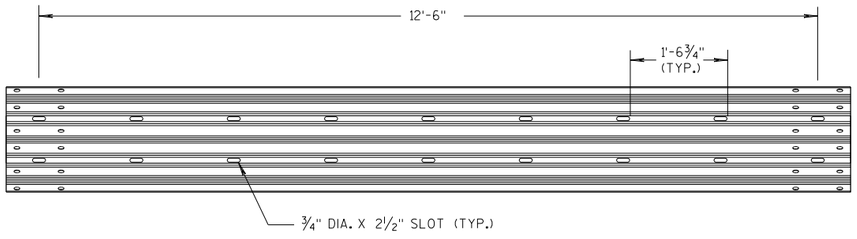
S.D.D. 14 B 45-5b



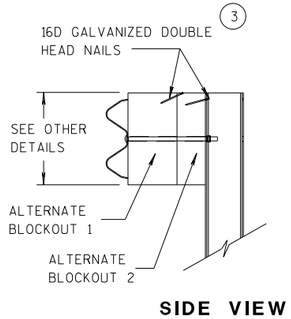
W-BEAM TO THRIE BEAM TRANSITION SECTION



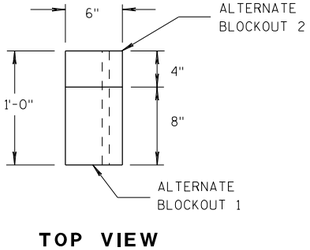
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

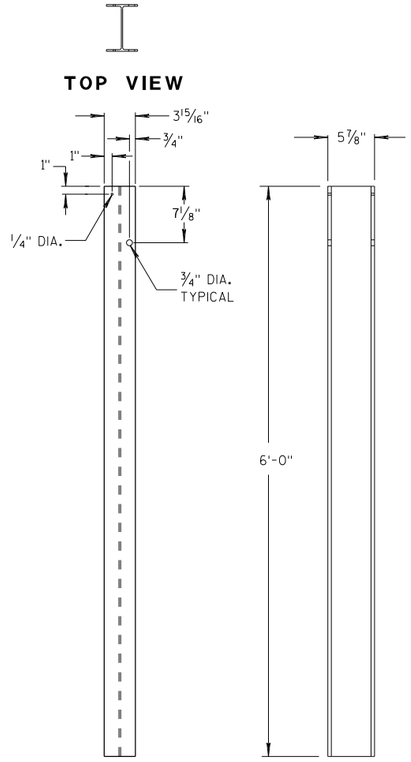


SIDE VIEW



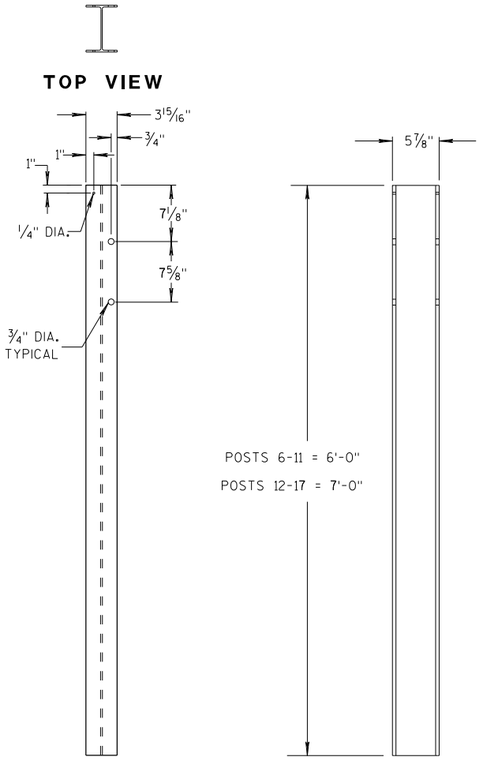
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



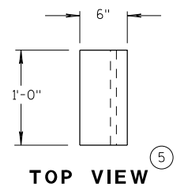
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

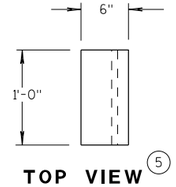


FRONT VIEW SIDE VIEW

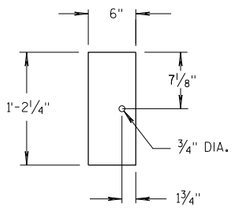
STEEL POSTS 6-17



TOP VIEW (5)

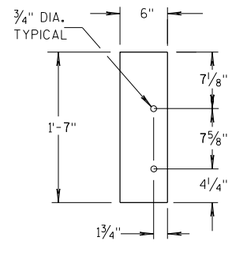


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS 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.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

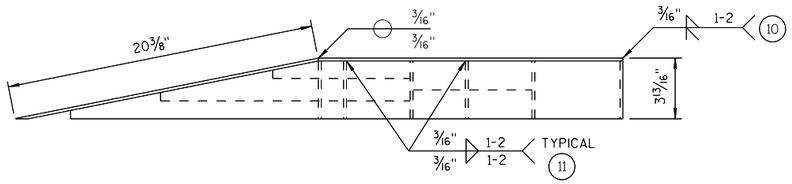
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

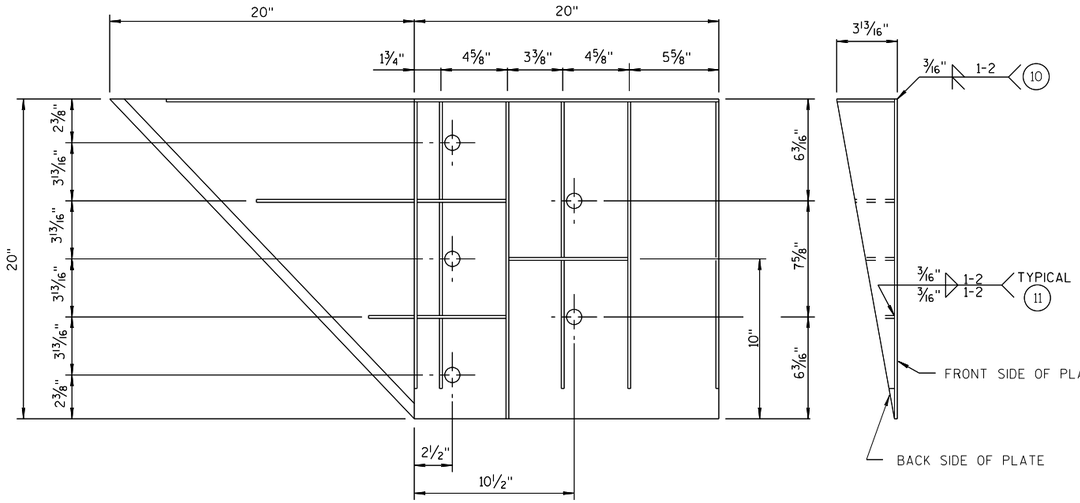
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

S.D.D. 14 B 45-5c





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

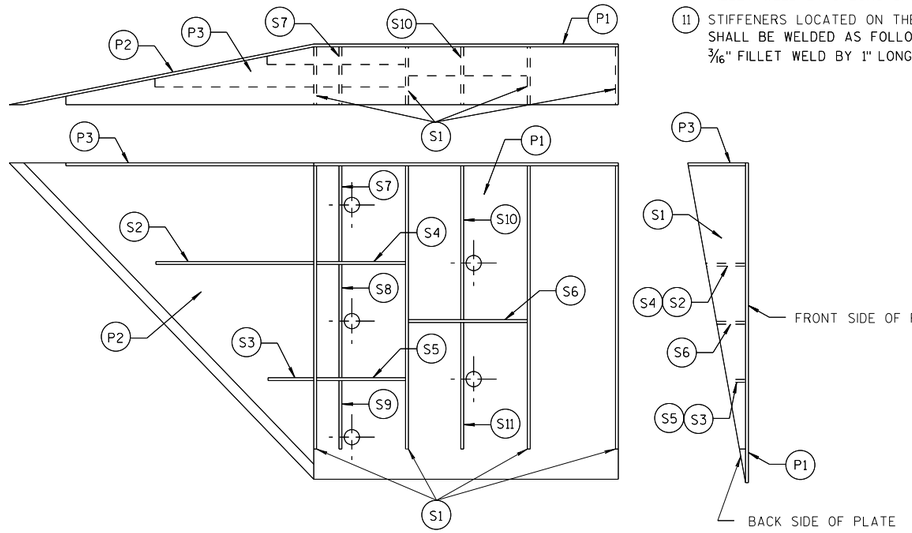


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS I
UNIT SUPERVI

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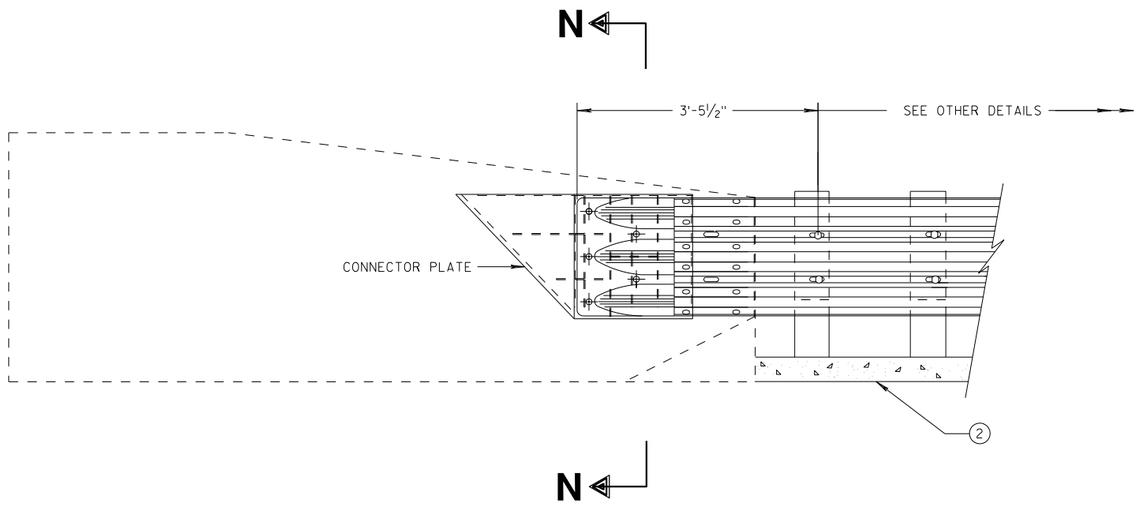
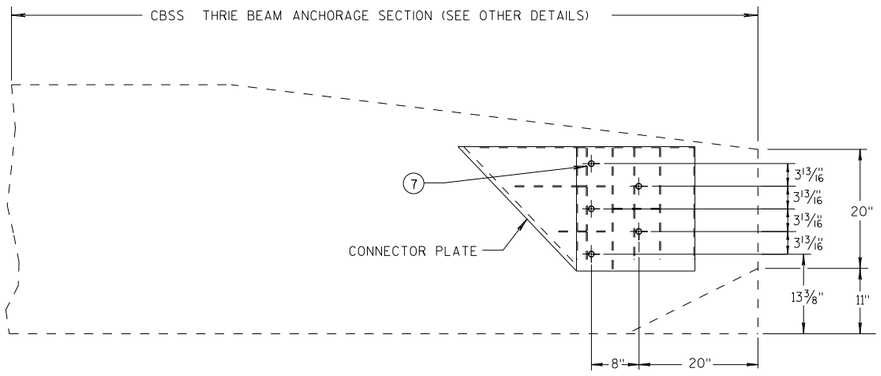
S.D.D. 14 B 45-5i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



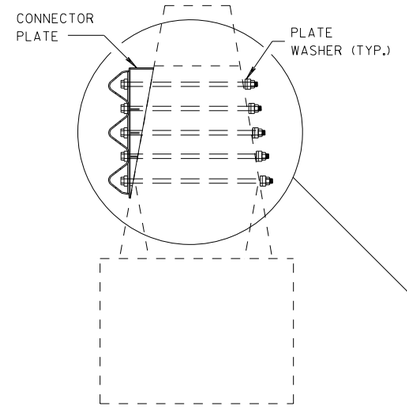
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

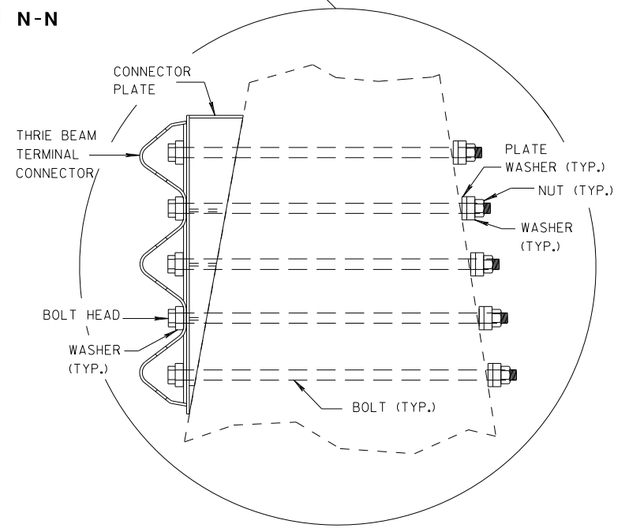
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DI
UNIT SUPERVIS

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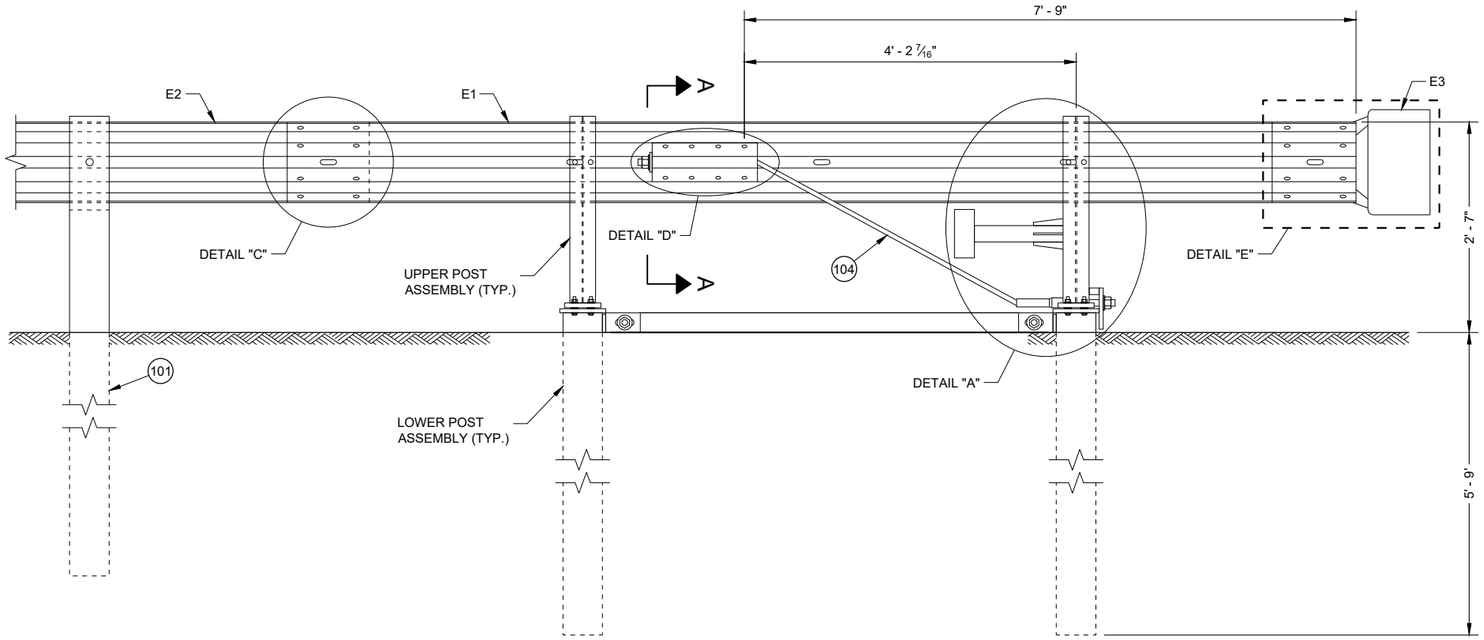
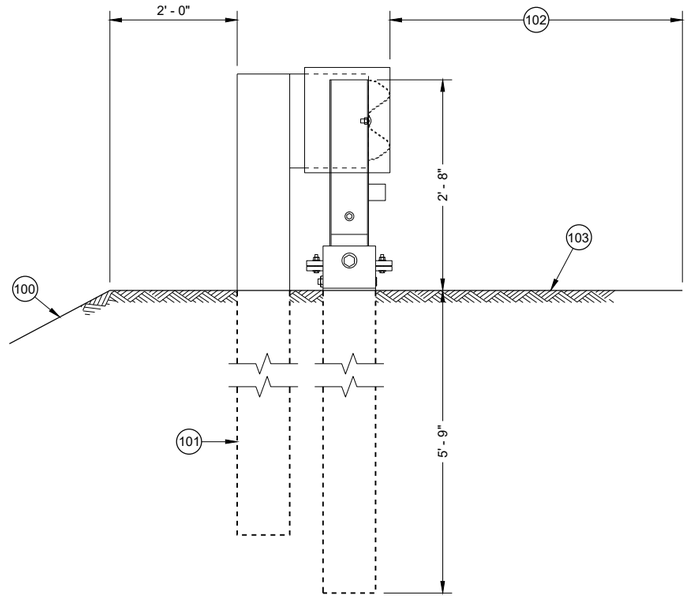
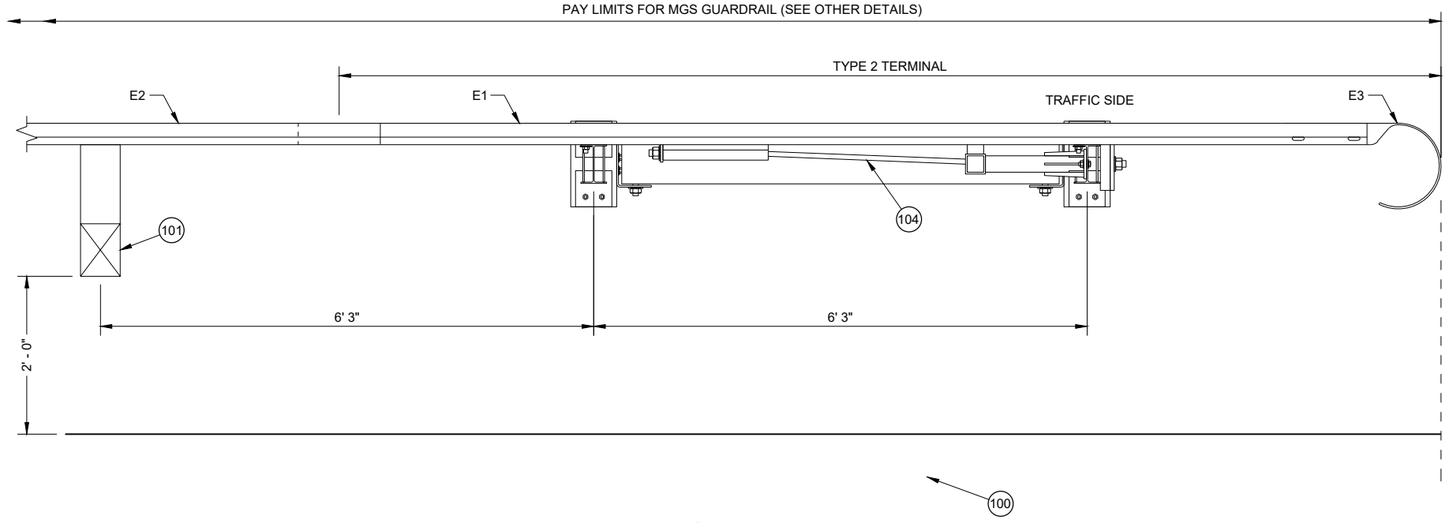
S.D.D. 14 B 45-5j



BACK VIEW
TYPE 2 TERMINAL



SIDE VIEW
TYPE 2 TERMINAL



TOP VIEW
TYPE 2 TERMINAL

GENERAL NOTES

(100) MAXIMUM SLOPE IS 2.5:1.

(101) SEE SDD 14B42 FOR MORE INFORMATION.

(102) SHOULDER

(103) MAXIMUM SLOPE IS 10:1.

(104) AFTER ASSEMBLY, CABLE IS TO BE TIGHTENED WITHOUT TWISTING THE CABLE.

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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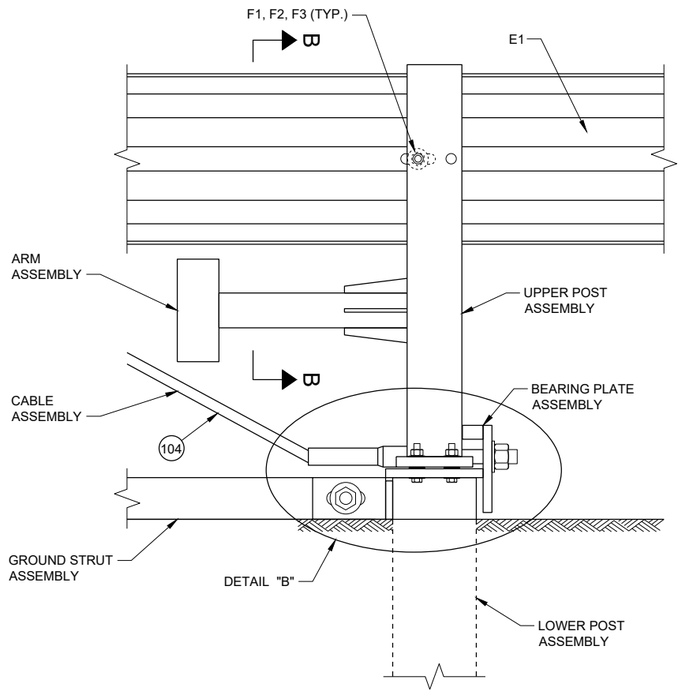
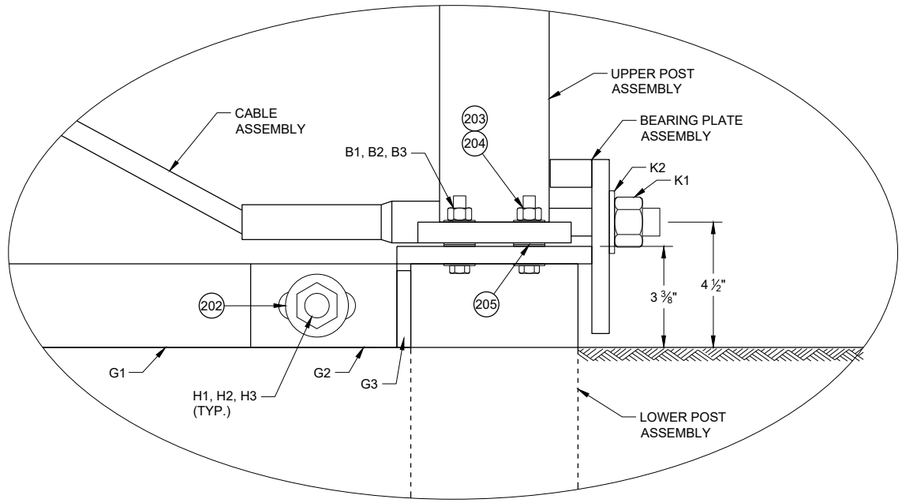
SDD 14B47 - 03a

SDD14B47 - 03a



DETAIL "A"



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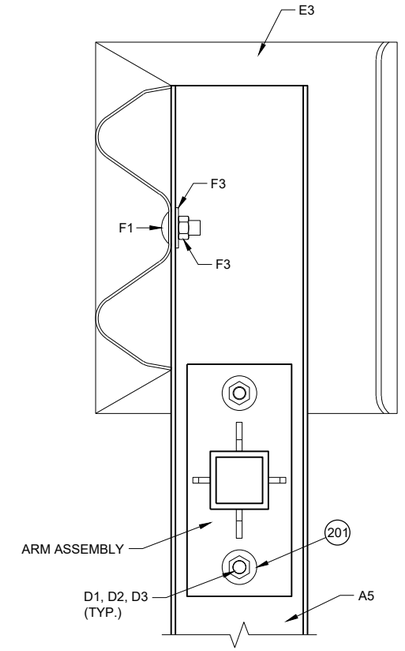
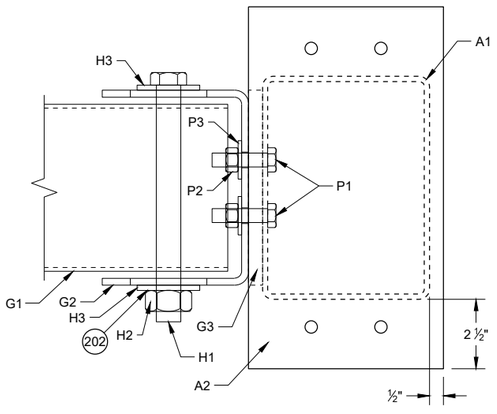
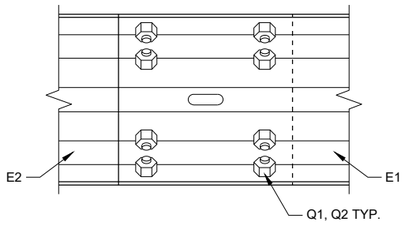


SECTION B - B



TOP VIEW

GROUND STRUT CONNECTION DETAIL



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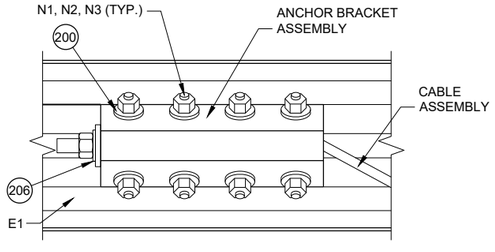

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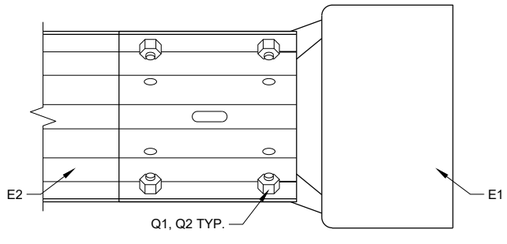


DETAIL "E"

GENERAL NOTES

200 INSTALL ONE WASHER UNDER BOLT HEAD AND RAIL AND ON WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

201 INSTALL ONE WASHER UNDER BOLT HEAD AND UPPER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND ARM PLATE.

202 INSTALL ONE WASHER UNDER BOLT HEAD AND GROUND STRUT CONNECTOR AND ONE WASHER BETWEEN NUT AND GROUND STRUT CONNECTOR.

203 INSTALL ONE WASHER UNDER BOLT HEAD AND LOWER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND UPPER POST ASSEMBLY.

204 TORQUE VALUE IS BETWEEN 60 - 75 FT-LB.

205 TWO WASHERS BETWEEN UPPER AND LOWER POST ASSEMBLY.

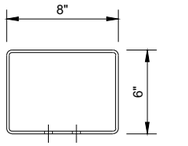
206 INSTALL ONE WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

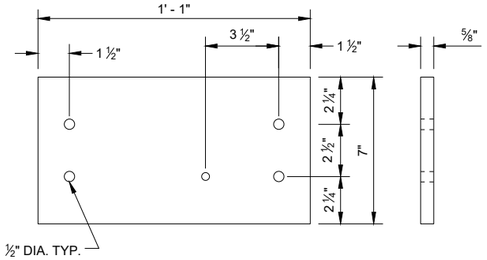
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

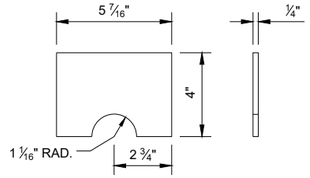
SDD 14B47 - 03b



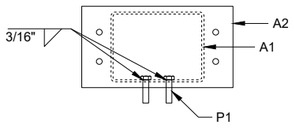
TOP VIEW



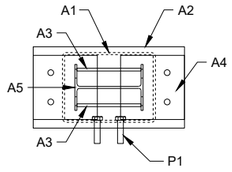
LOWER PLATE (A2)

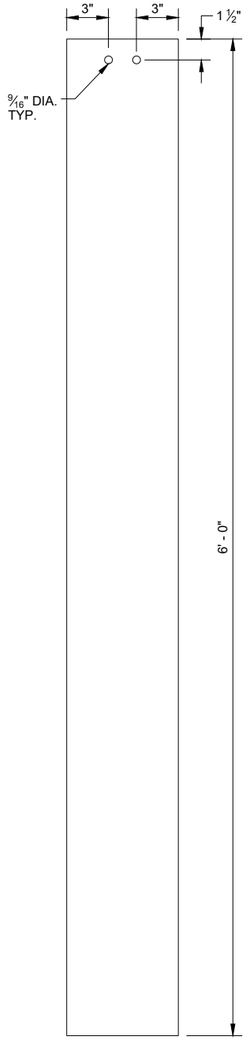


POST GUSSET (A3)



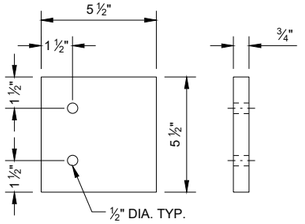
PLAN VIEW



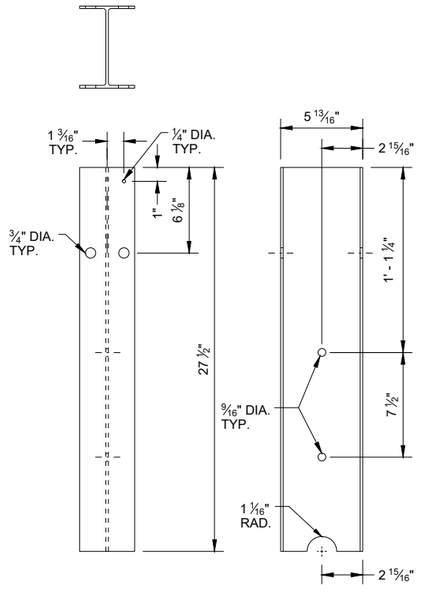


SIDE VIEW

FOUNDATION TUBE (A1)

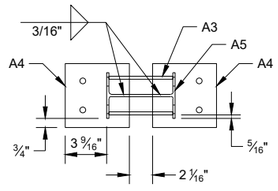


UPPER PLATE (A4)

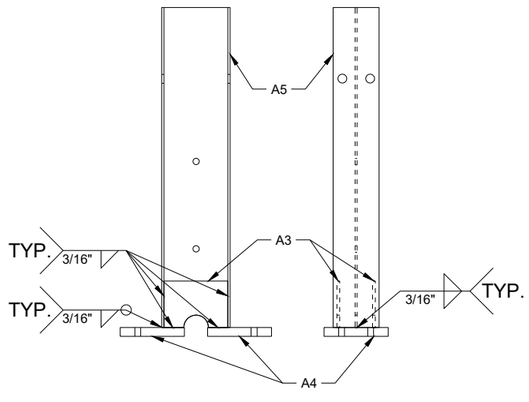


FRONT VIEW SIDE VIEW

TYPE 2 POST (A5)

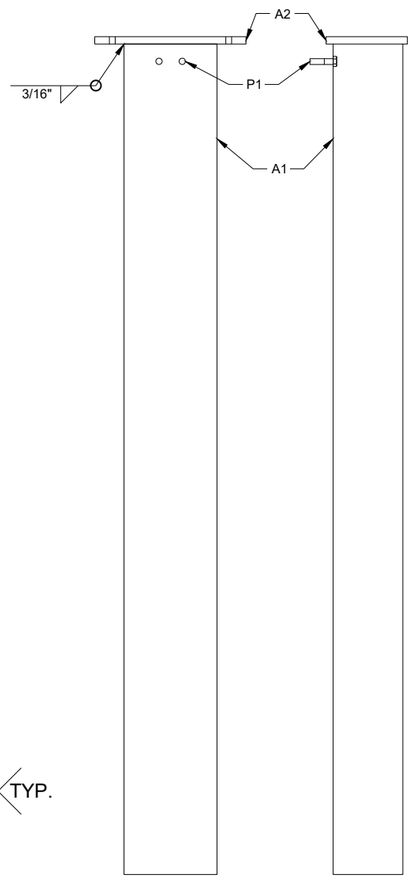


PLAN VIEW



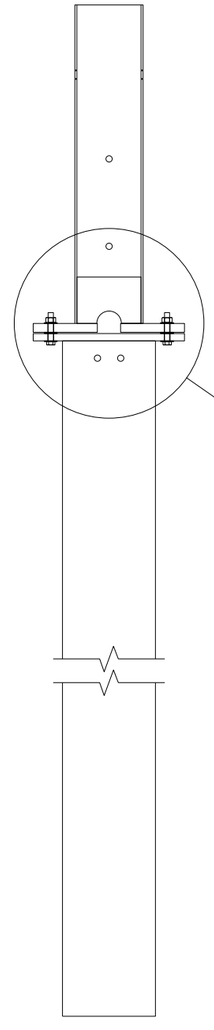
SIDE VIEW FRONT VIEW

UPPER POST ASSEMBLY

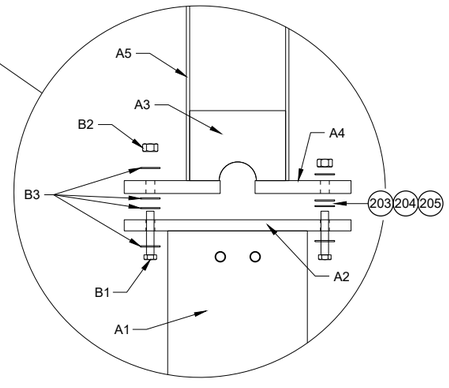


FRONT VIEW SIDE VIEW

LOWER POST ASSEMBLY



ASSEMBLED POST



POST CONNECTION DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

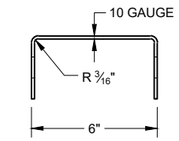
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

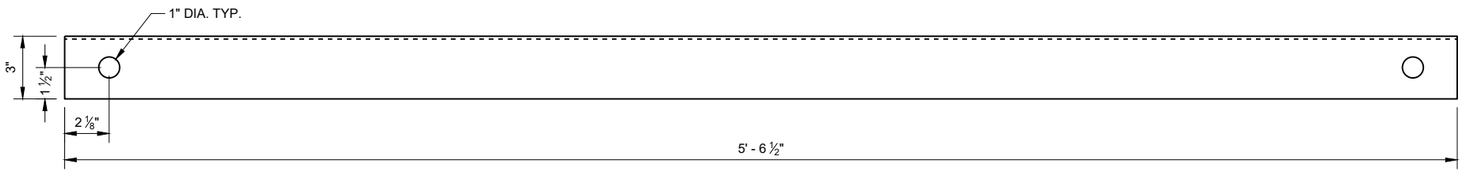
SDD14B47 - 03c

6

SDD14B47 - 03c

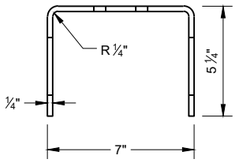


SIDE VIEW

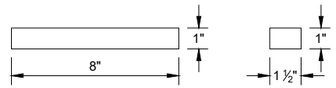


FRONT VIEW

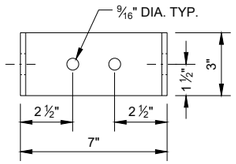
GROUND STRUT CHANNEL (G1)



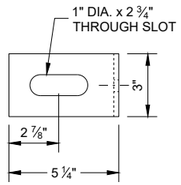
TOP VIEW



BEARING PLATE FLANGE (L2)

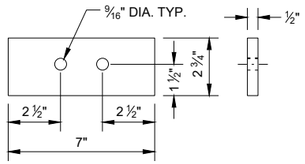


FRONT VIEW

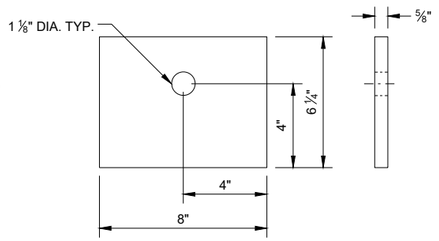


SIDE VIEW

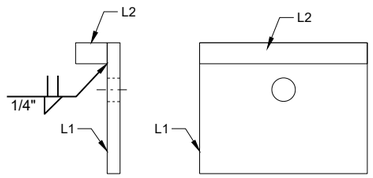
GROUND STRUT CONNECTOR (G2)



GROUND STRUT PLATE (G3)



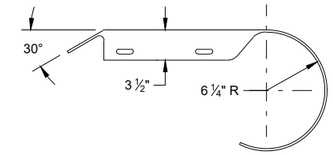
BEARING PLATE (L1)



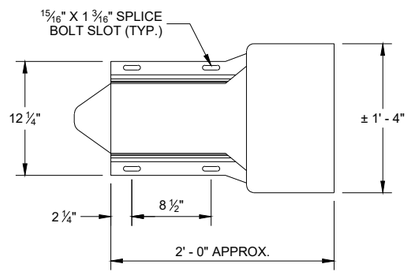
SIDE VIEW

FRONT VIEW

BEARING PLATE ASSEMBLY

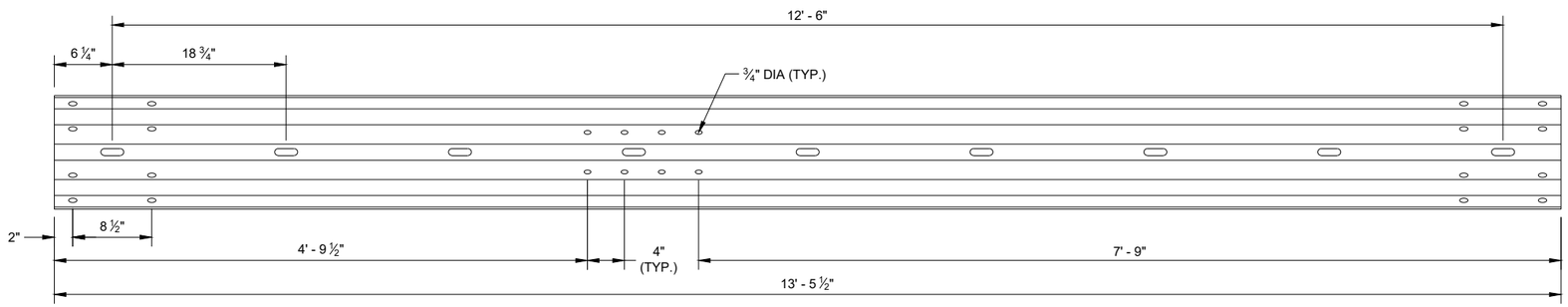


PLAN VIEW

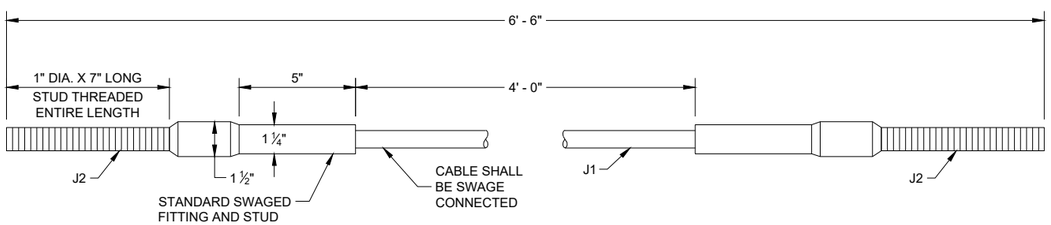


ELEVATION VIEW

ROUNDED BUFFER END (E3)



TYPE 2 GUARDRAIL (E1)



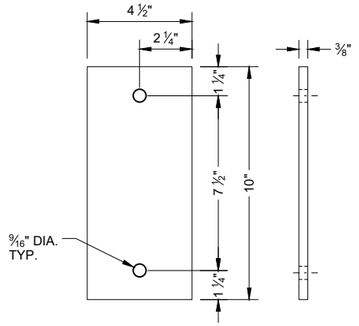
CABLE ASSEMBLY

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

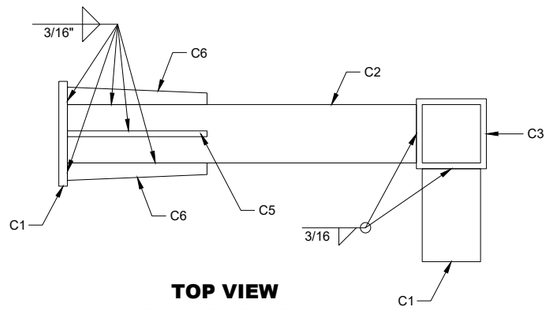
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

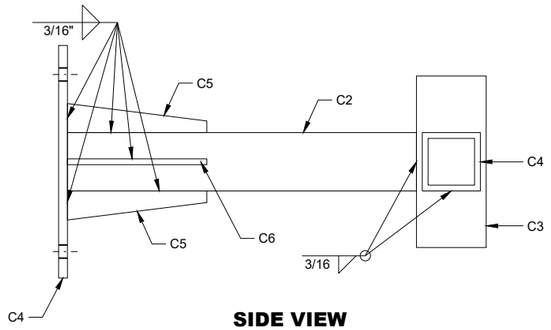
SDD 14B47 - 03d



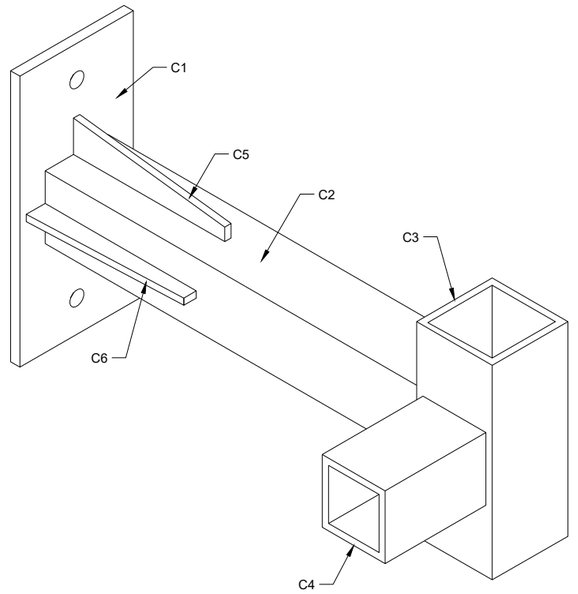
ARM PLATE (C1)



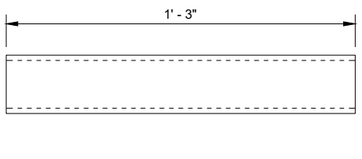
TOP VIEW
ARM ASSEMBLY



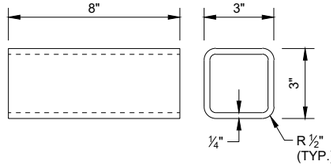
SIDE VIEW
ARM ASSEMBLY



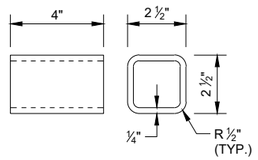
ISOMETRIC VIEW
ARM ASSEMBLY



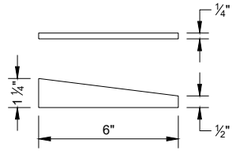
ARM TUBE 1 (C2)



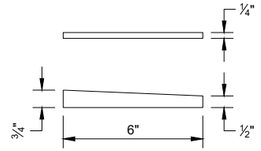
ARM TUBE 2 (C3)



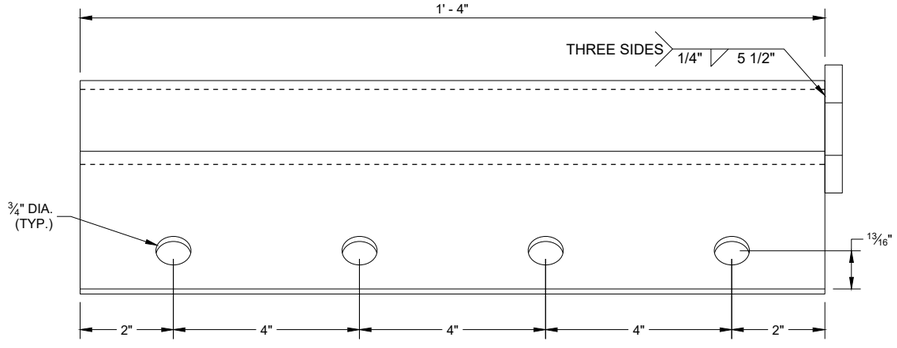
ARM TUBE 3 (C4)

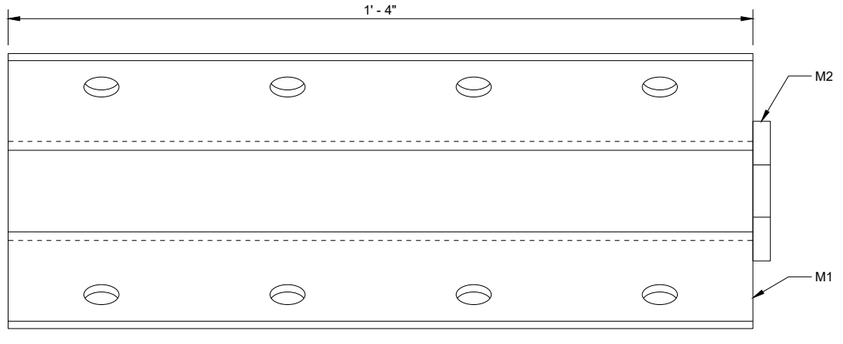


ARM GUSSET PLATE 1 (C5)

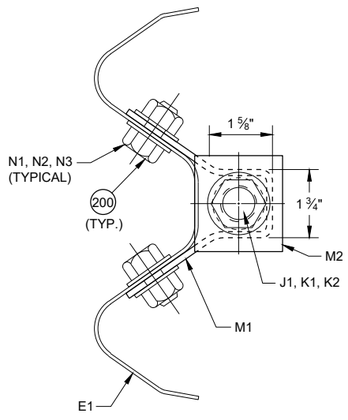


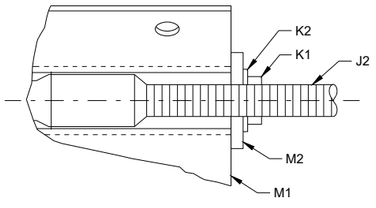
ARM GUSSET PLATE 2 (C6)



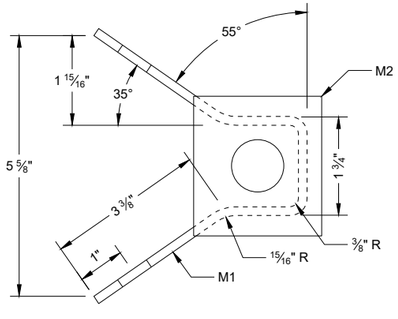


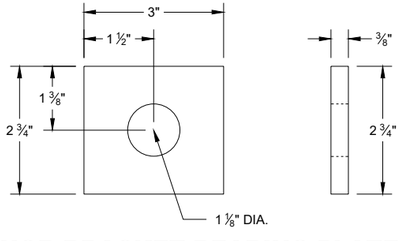
ANCHOR BRACKET (M1, M2)





SECTION A - A





ANCHOR BRACKET BEARING PLATE (M2)

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

SDD 14B47 - 03e

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	TYPE 2 FOUNDATION TUBE	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
A2	LOWER PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	5/8" THICKNESS
A3	POST GUSSET	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
A4	UPPER PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/4" THICKNESS
A5	TYPE 2 POST	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	
B1	BREAKAWAY BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED . PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT.	7/16" DIA.
B2	BREAKAWAY BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/16" DIA.
B3	BREAKAWAY BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
C1	ARM ASSEMBLY PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/8" THICKNESS
C2	ARM ASSEMBLY TUBE 1	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
C3	ARM ASSEMBLY TUBE 2	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 3" x 3" x 1/4"
C4	ARM ASSEMBLY TUBE 3	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 2 1/2" x 2 1/2" X 1/4"
C5	ARM ASSEMBLY GUSSET PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
C6	ARM ASSEMBLY GUSSET PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
D1	ARM ASSEMBLY BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	1/2" DIA.
D2	ARM ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	1/2" DIA.
D3	ARM ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
E1	TYPE 2 GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E2	BEAM GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E3	BEAM GUARD ROUNDED BUFFER END	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
F1	POST BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
F2	POST BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
F3	POST BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
G1	GROUND STRUT CHANNEL	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/2" x 11 3/4" x 10 GAUGE
G2	GROUND STRUT CONNECTOR	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
G3	GROUND STRUT PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/2" THICKNESS

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SDD 14B47 - 03f

SDD 14B47 - 03f

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
H1	GROUND STRUT BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	7/8" DIA.
H2	GROUND STRUT BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/8" DIA.
H3	GROUND STRUT BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
J1	BCT CABLE	AASHTO M30 / ASTM A741 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN. BREAKING STRENGTH OF 42.7 KIPS	**3/4" DIA.**
J2	BCT CABLE	UNC 1" ASTM A576 GRADE 1035 SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. MIN BREAKING STRENGTH OF 42.7 KIPS ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."	
K1	CABLE ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1" DIA.
K2	CABLE ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1	1" DIA.
L1	BEARING PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	5/8" THICKNESS
L2	BEARING PLATE FLANGE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1" THICKNESS
M1	BEAM GUARD ANCHOR BRACKET	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	
M2	BEAM GUARD ANCHOR END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/8" THICKNESS
N1	ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
N2	ANCHOR BRACKET BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
N3	ANCHOR BRACKET BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 /ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
P1	FOUNDATION TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 /ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
P2	FOUNDATION TUBE WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 7/8" ASTM F844 TYPE 1 (HARDENED WASHER ONLY)	1/2" DIA.
P3	FOUNDATION TUBE NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
Q1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
Q2	SPLICE NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	5/8" DIA.

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SDD 14B47 - 03g

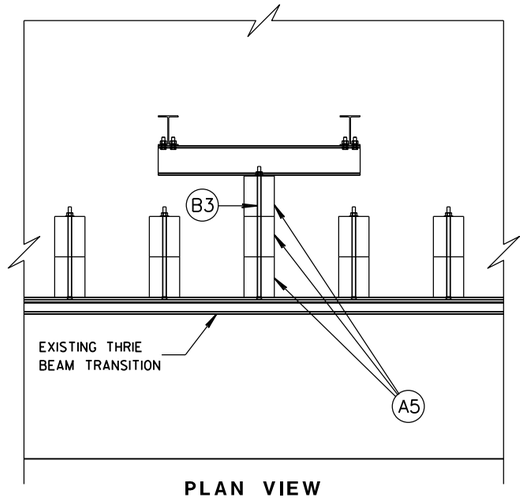
SDD 14B47 - 03g

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

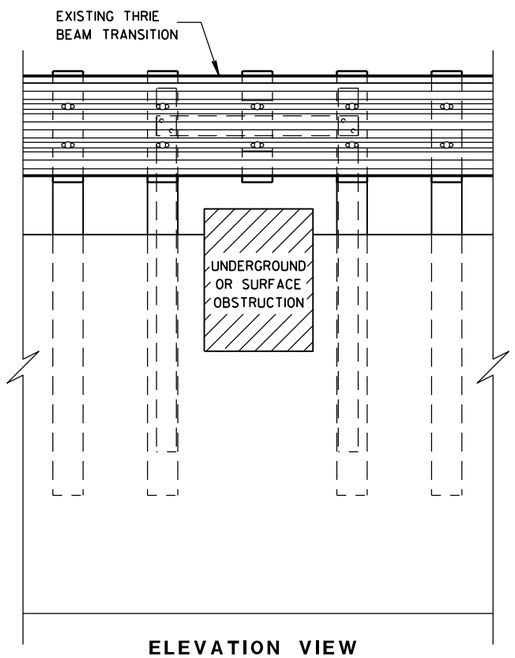
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

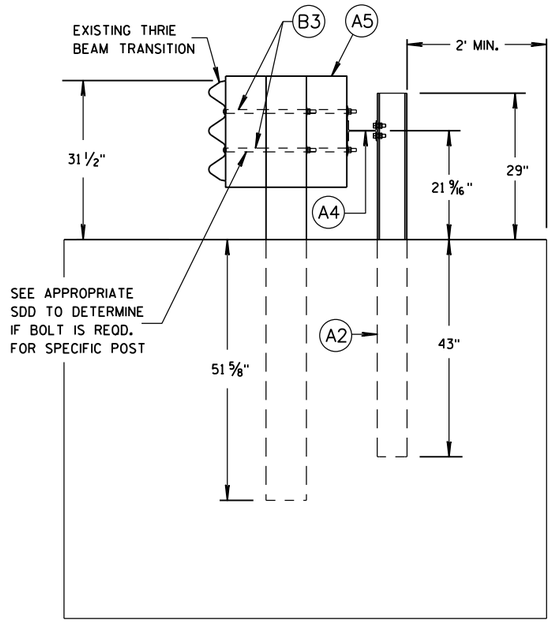
FHWA



PLAN VIEW



ELEVATION VIEW



SIDE VIEW

72" MISSING POST CROSS-BEAM

GENERAL NOTES

ONLY ONE SUCH POST RETROFIT PER SYSTEM.

SEE SDD 14B20 FOR MORE INFORMATION ON THE THRIE BEAM TRANSITIONS.

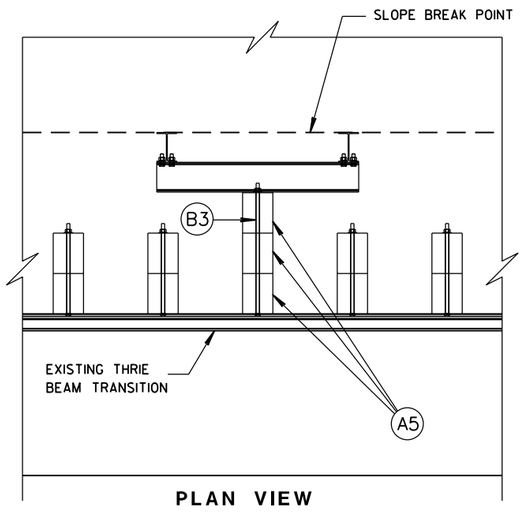
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½-INCHES AND 12-INCHES IN DIAMETER AROUND POST. SEE SDD 14B20 OR 14B45 FOR MORE DETAILS.

ONLY STEEL POST CAN BE USED.

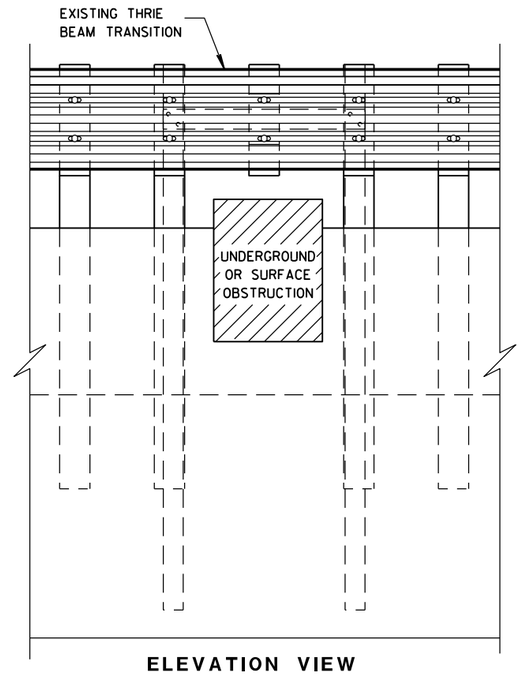
BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN ALL HARDWARE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH.

ONLY ONE WASHER AND ONE NUT CAN BE INSTALLED AT A CONNECTION. CUT THREADING OF BOLTS SO THAT NO MORE THAN ¼-INCH TO ½-INCH OF THREADING IS BEYOND THE NUT.

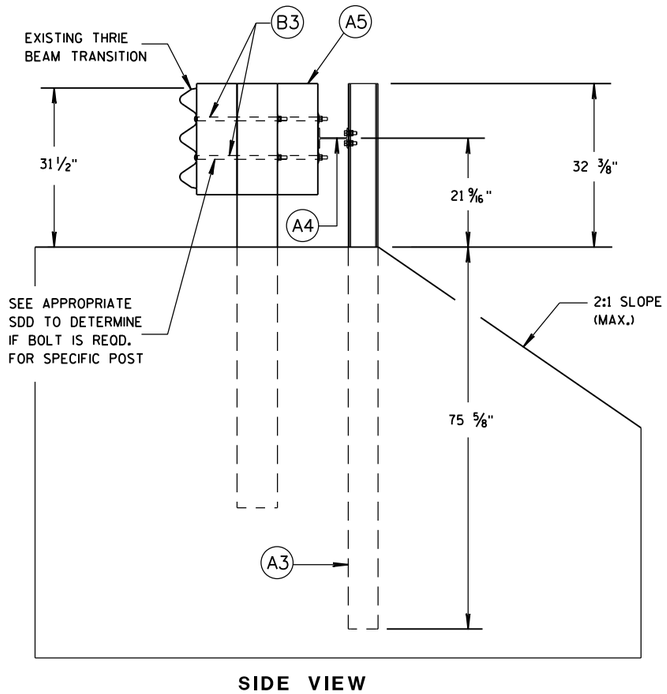
WHEN USING APPROACH RETROFIT POST BID ITEM, REVIEW SDD 14B20 INSTALL POST INFORMATION AND LOCATION, BLOCK AND HARDWARE.



PLAN VIEW



ELEVATION VIEW



SIDE VIEW

108" MISSING POST CROSS-BEAM

THRIE BEAM APPROACH
RETROFIT INSTALLATION
OF MISSING POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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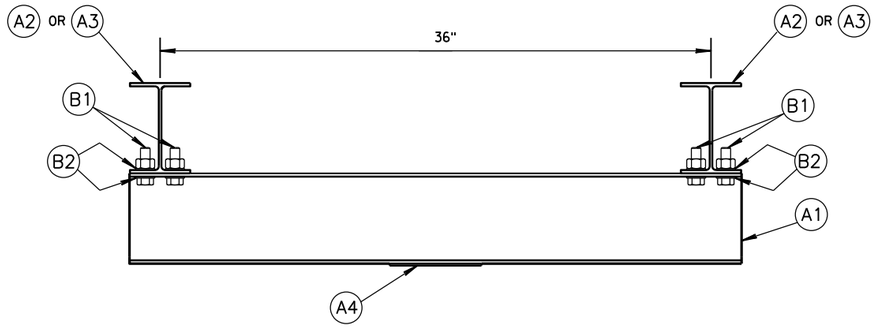
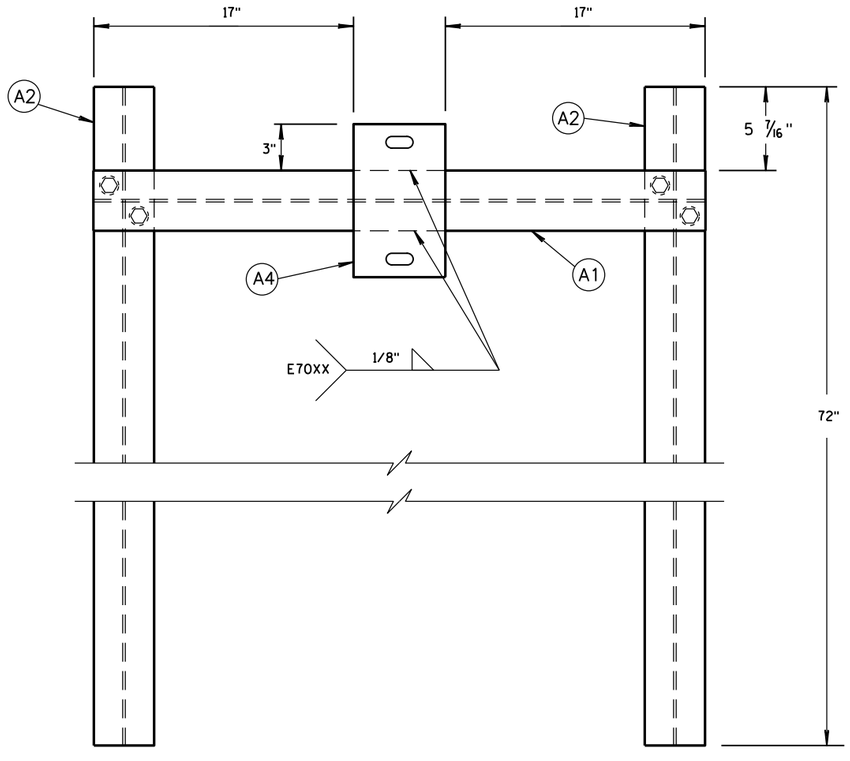
S.D.D. 14 B 50-1a

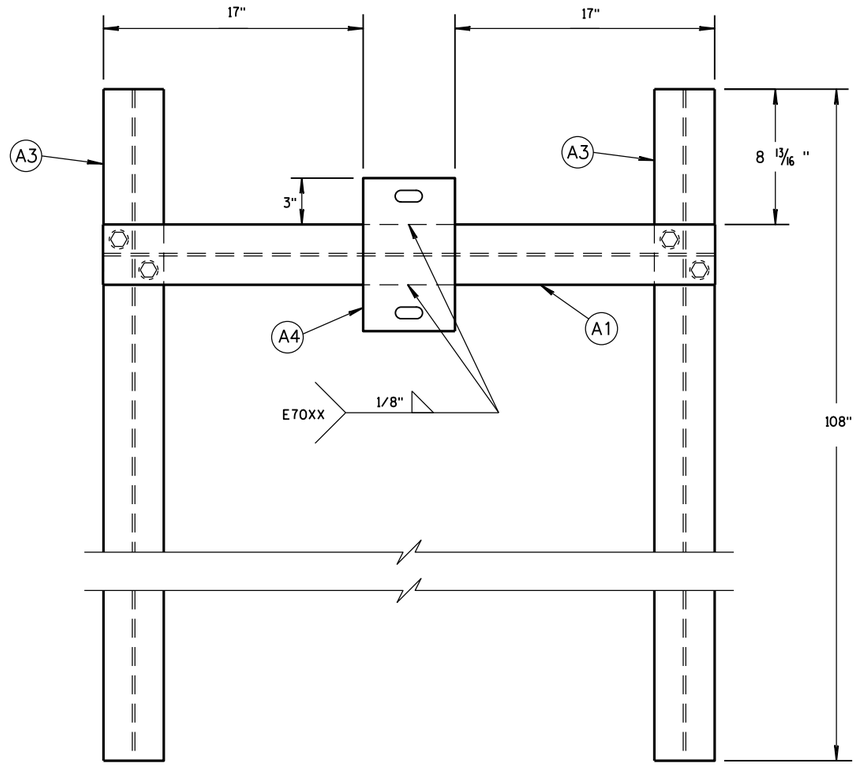


PLAN VIEW



ELEVATION VIEW

72" POST



ELEVATION VIEW

108" POST

MISSING POST CROSS-BEAM DETAIL

THRIE BEAM APPROACH
RETROFIT INSTALLATION
OF MISSING POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 14 B 50-1b

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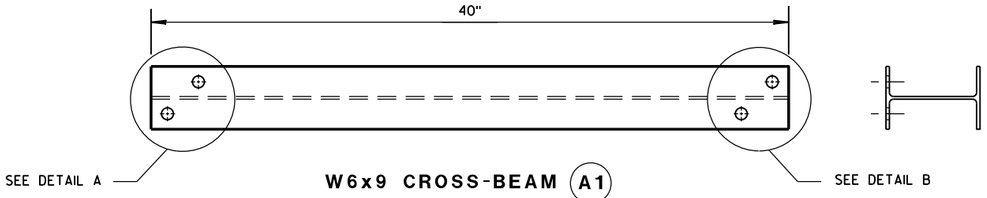
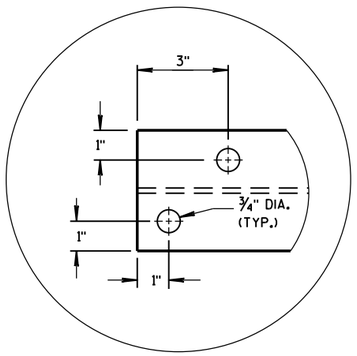
S.D.D. 14 B 50-1b

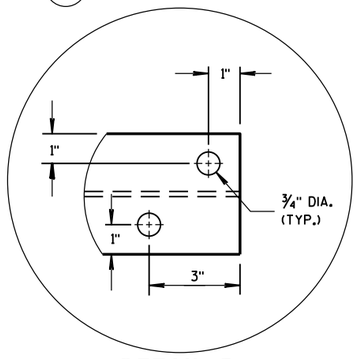


W6x9 CROSS-BEAM (A1)

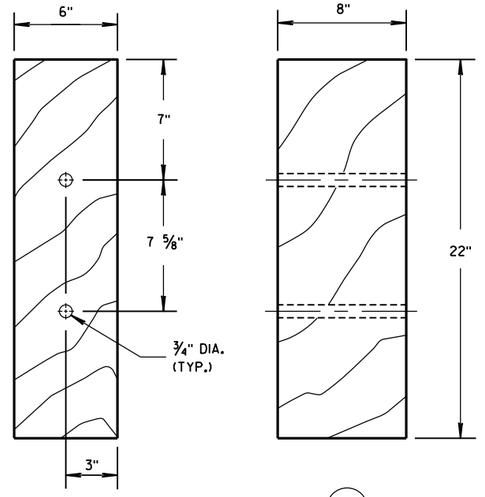
BILL OF MATERIALS			
ITEM NO.	QTY.	DESCRIPTION	MATERIAL SPECIFICATION
(A1)	1	40" LONG W6x9 CROSS-BEAM	ASTM A992 GR. 50 OR ASTM A36
(A2)	2	72" LONG W6x9 POST	ASTM A992 GR. 50 OR ASTM A36
(A3)	2	108" LONG W6x9 POST	ASTM A992 GR. 50 OR ASTM A36
(A4)	1	6" x 10" x 1/8" BACKUP PLATE	ASTM A992 GR. 50 OR ASTM A36
(A5)	3	6" x 8" x 22" BLOCKOUT	
(B1)	4	5/8" DIA. - HEX HEAD BOLT	BOLT: HEAVY HEX HEAD ASTM A307 OR SAE J429 GRADE 2 NUT: HEAVY HEX HEAD ASTM A563 A
(B2)	8	5/8" DIA. NARROW FLAT WASHER	ASTM F436
(B3)	2	LONG, 5/8" DIA. - POST BOLT AND NUT	BOLT: SAE J429 GRADE 2 OR ASTM A307 GRADE C OR ASTM F1554 GRADE 36 NUT: 5/8" DIA. ASTM A563 A DOUBLE RECESSED (DR) HEAVY HEX HEAD
(B4)	2	5/8" DIA. PLAIN ROUND WASHER	ASTM F844



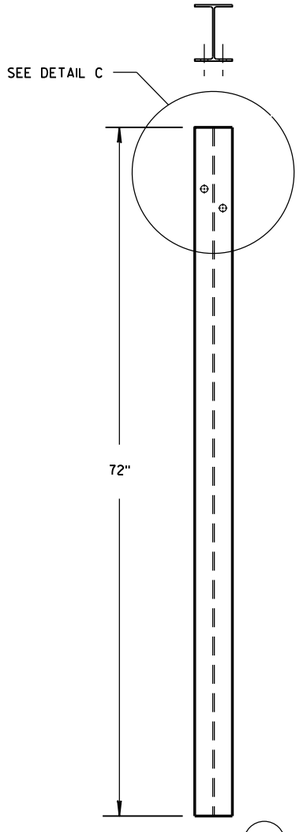
DETAIL A



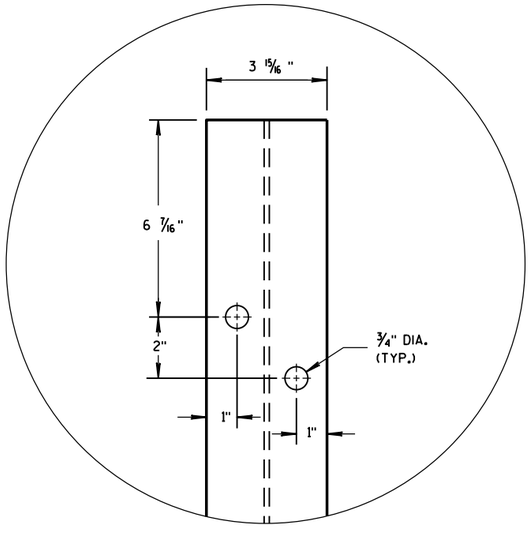
DETAIL B



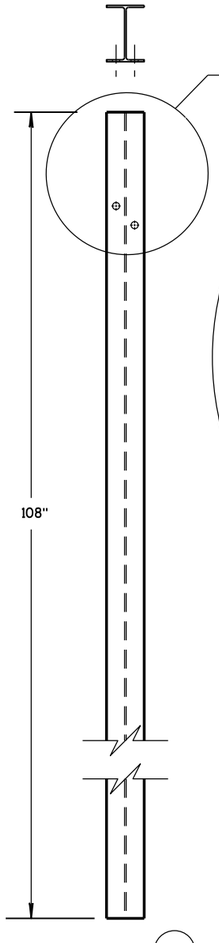
BLOCKOUT (A5)



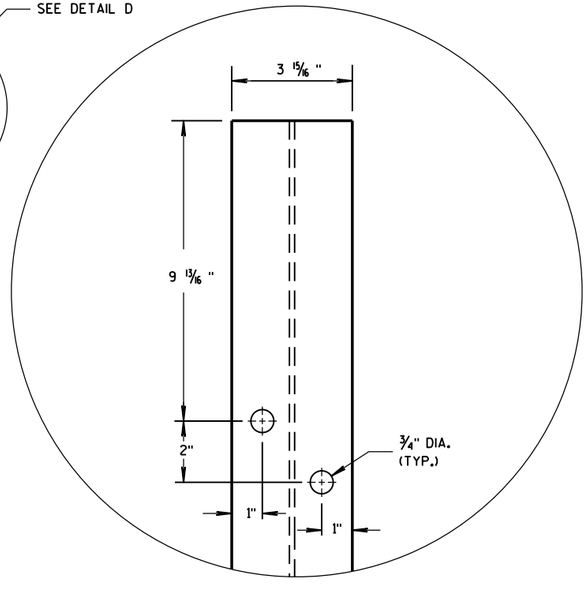
W6x9 POST (A2)



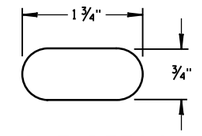
DETAIL C



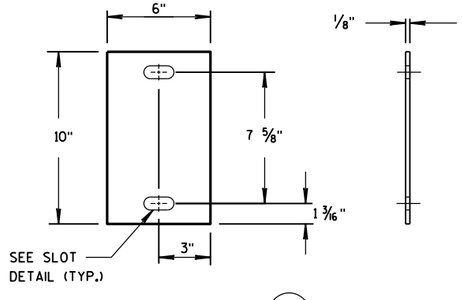
W6x9 POST (A3)



DETAIL D



SLOT DETAIL



BLACKUP PLATE (A4)

THRIE BEAM APPROACH
RETROFIT INSTALLATION
OF MISSING POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zoga — ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 14 B 50-1c

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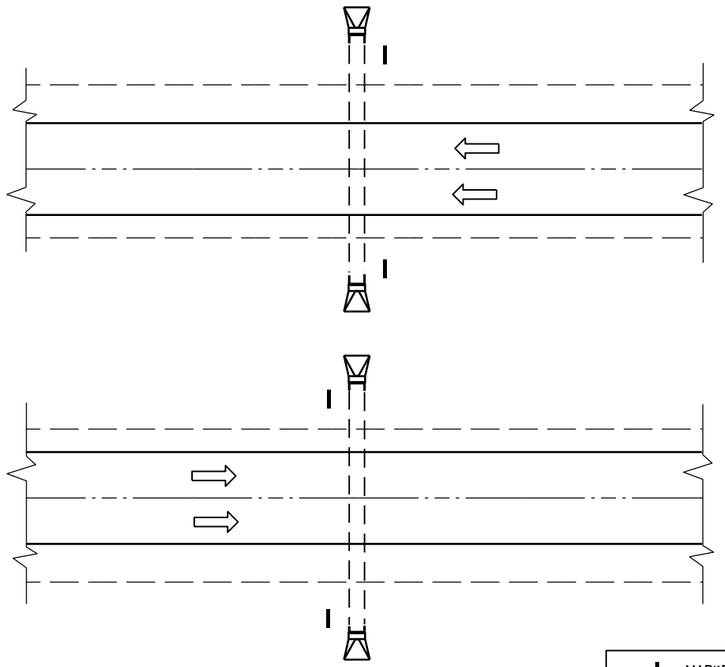
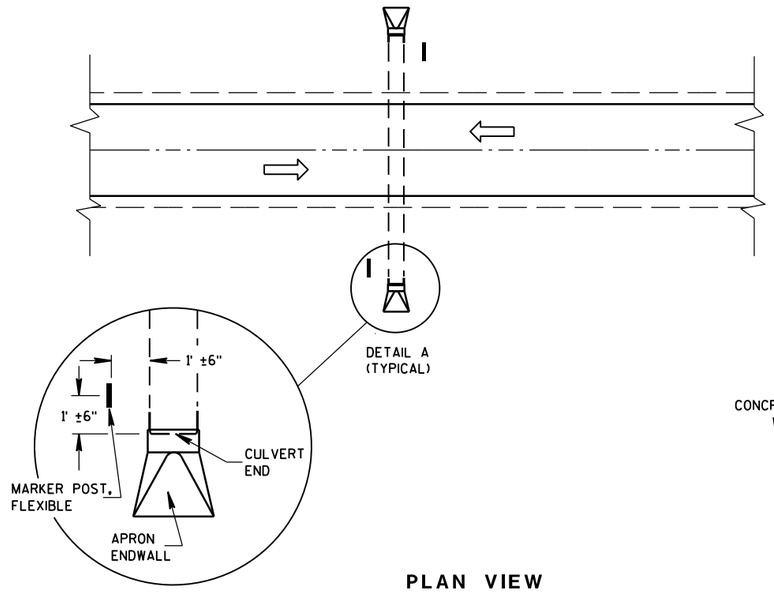
S.D.D. 14 B 50-1c



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

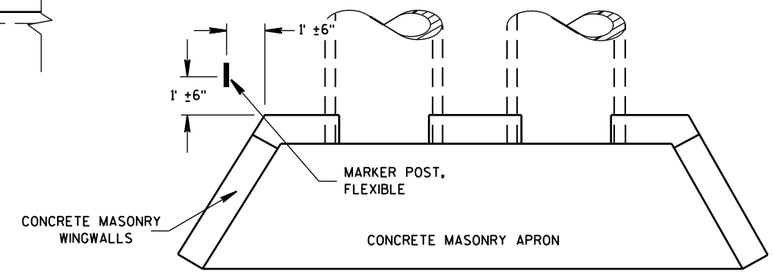
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

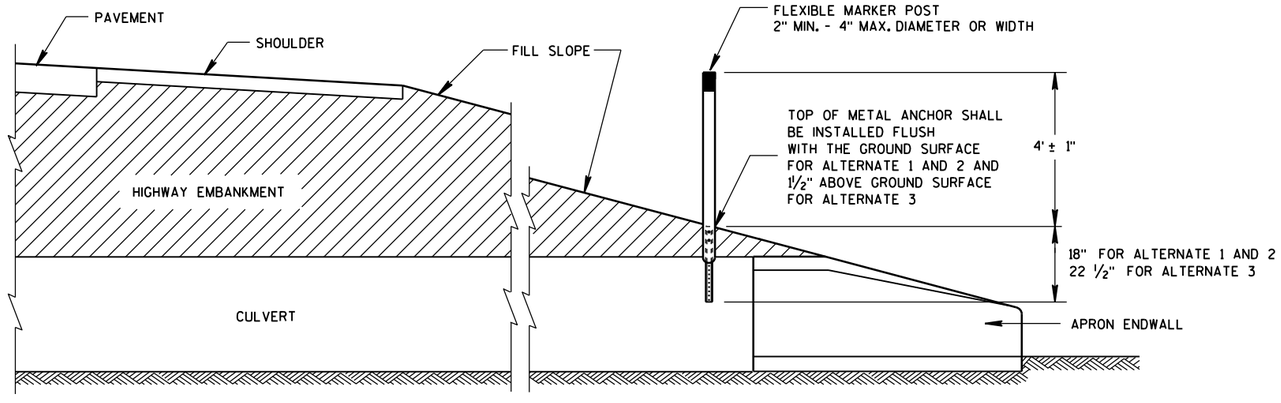
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

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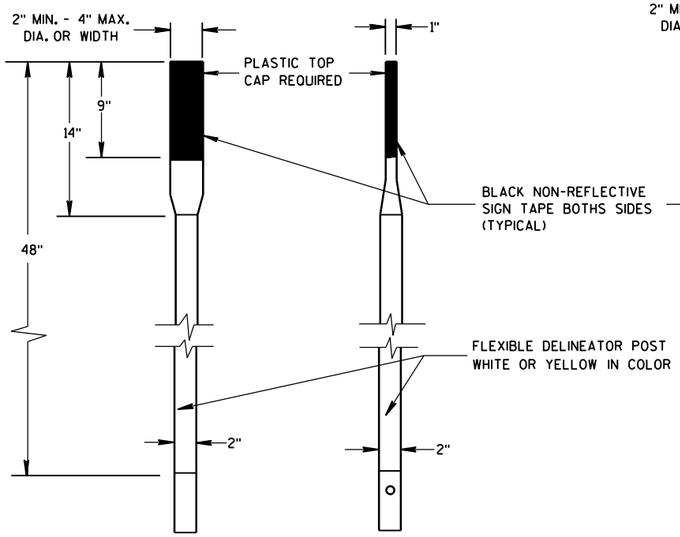
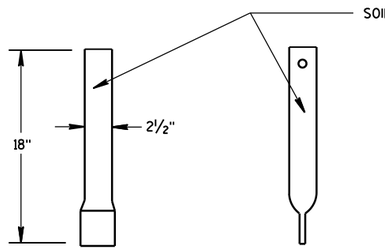
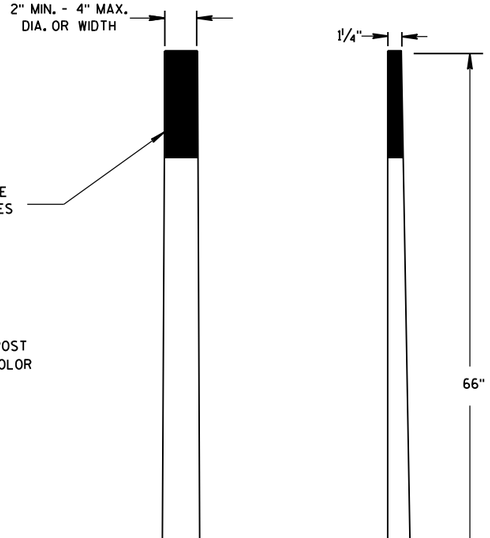
S.D.D. 15 A 3-2a





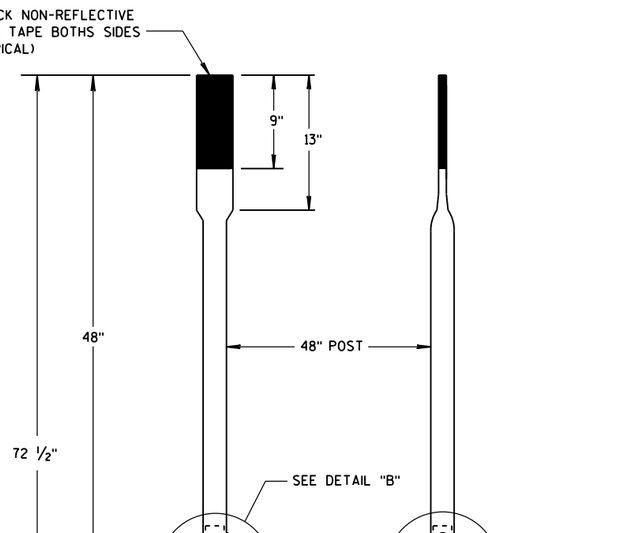
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

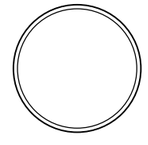
ALTERNATE 2



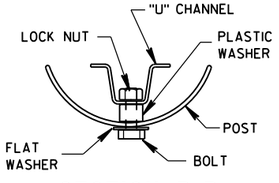
FRONT VIEW SIDE VIEW

ALTERNATE 3

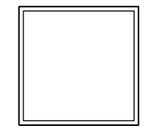
FLEXIBLE MARKER POSTS



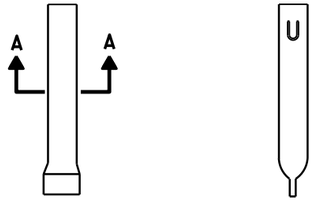
SECTION A-A



SECTION B-B

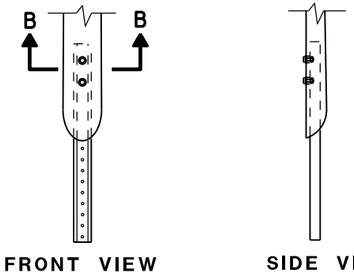


SECTION C-C



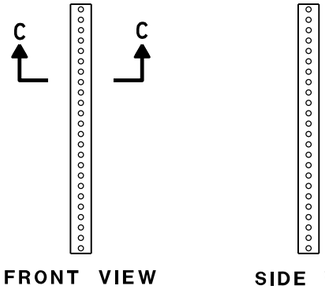
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

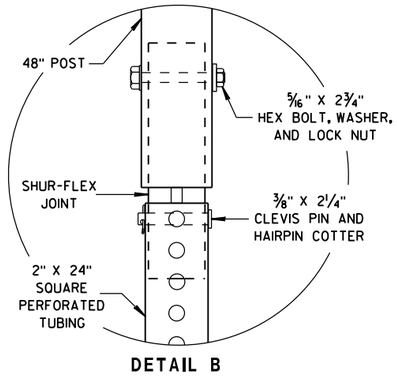
ALTERNATE 2



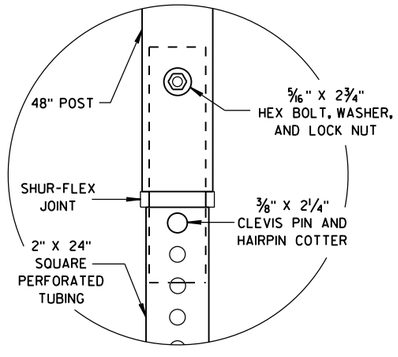
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

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

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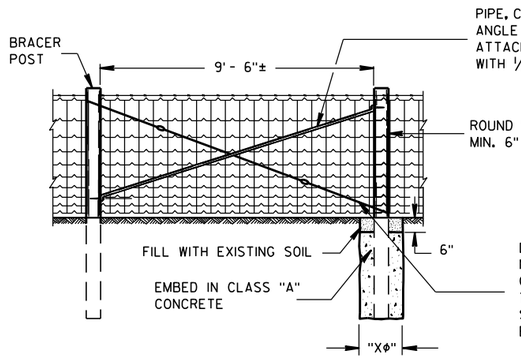
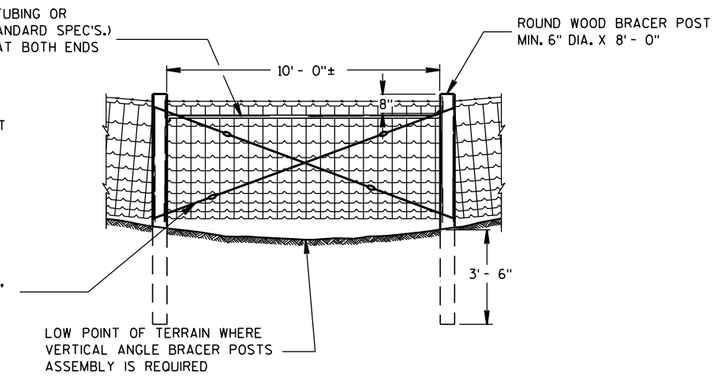
S.D.D. 15 A 3-2b

NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 660' BUT IS LESS THAN 1,320'. FOR RUNS OF FENCE IN EXCESS OF 1,320' MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 660'± C-C.

ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



PULL OR STRETCHER POSTS ASSEMBLY



VERTICAL ANGLE BRACER POSTS ASSEMBLY

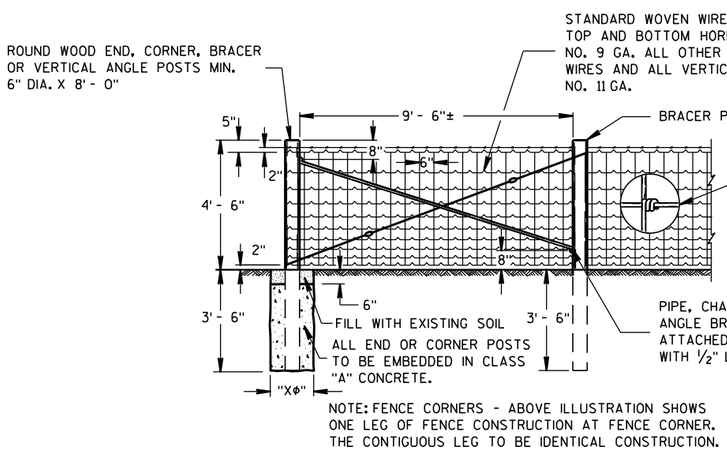
GENERAL NOTES

"XΦ" = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

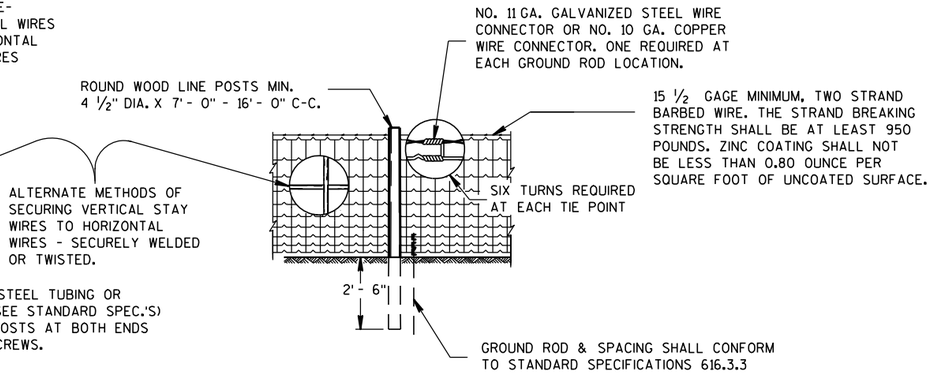
DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.



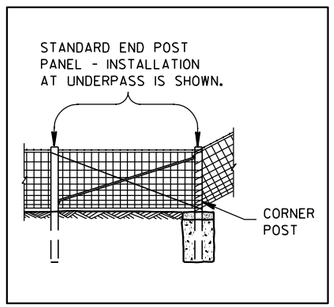
NOTE: FENCE CORNERS - ABOVE ILLUSTRATION SHOWS ONE LEG OF FENCE CONSTRUCTION AT FENCE CORNER. THE CONTIGUOUS LEG TO BE IDENTICAL CONSTRUCTION.

END OR CORNER POSTS ASSEMBLY

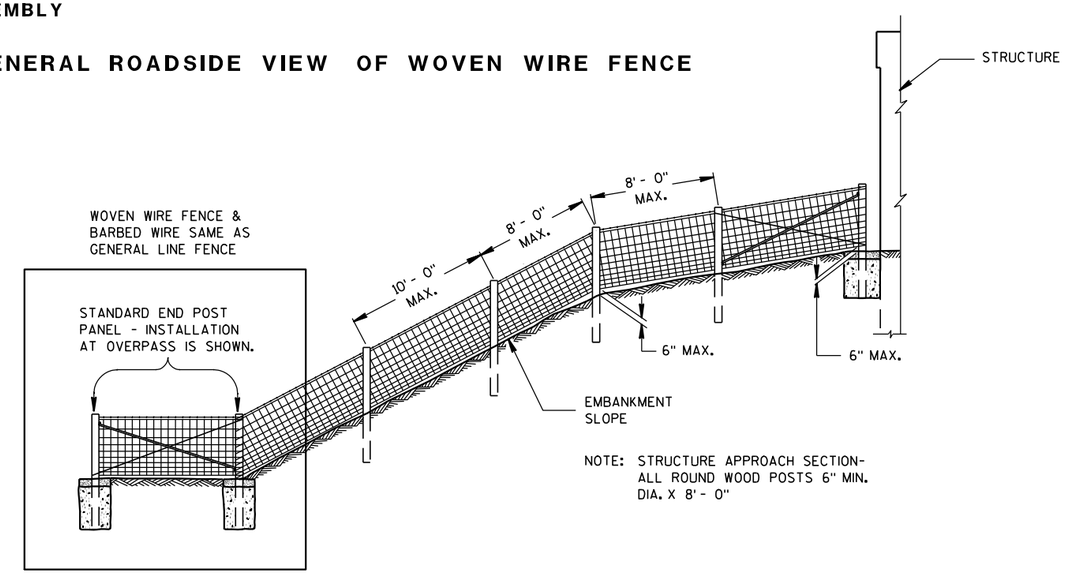


LINE FENCE CONSTRUCTION

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



ALTERNATE FENCE DESIGN AT STRUCTURE



FENCE DESIGN AT STRUCTURE APPROACH

FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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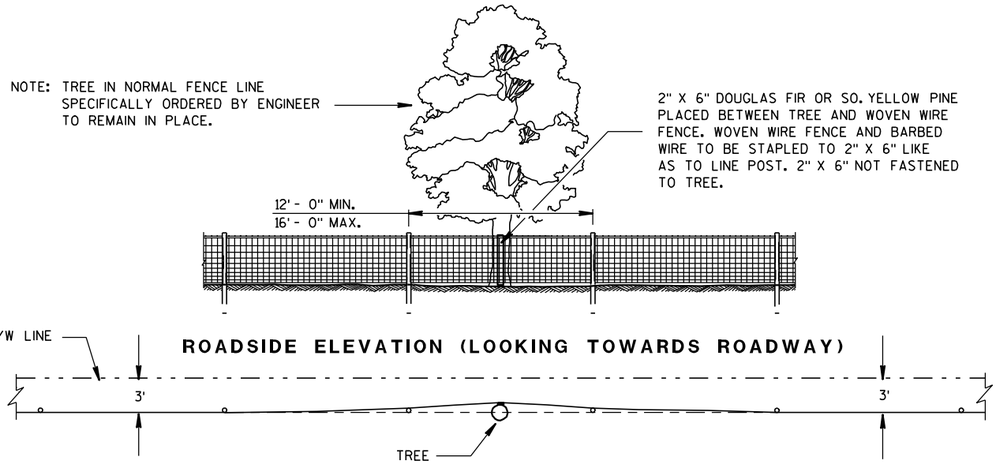
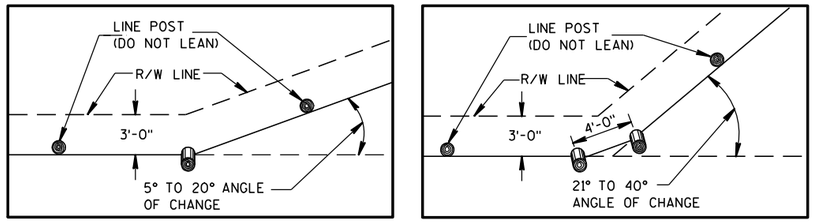
S.D.D. 15 B 1-8a



PLAN VIEW

FENCE DESIGN AT TREES REMAINING IN NORMAL FENCE LINE



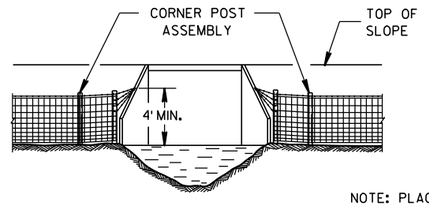
PLAN VIEW SINGLE POST CORNER

PLAN VIEW DOUBLE POST CORNER

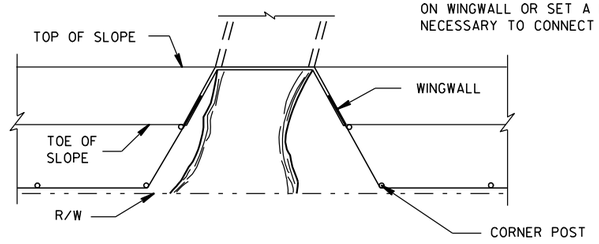
RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

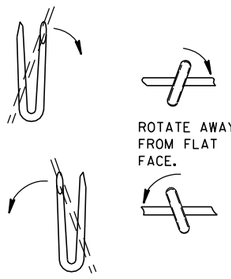
WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



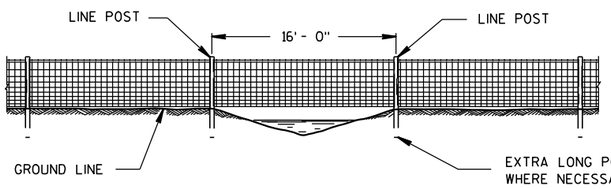
NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.



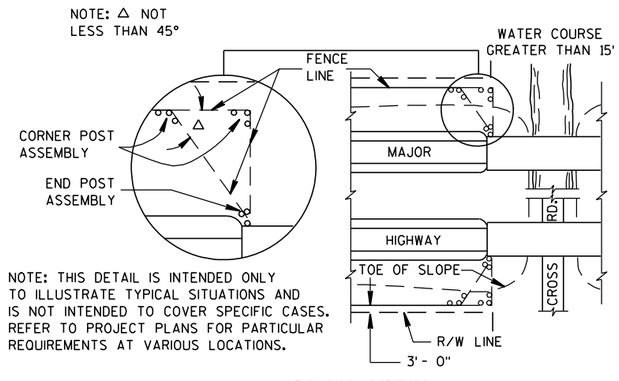
FENCE INSTALLATION TO WINGWALLS



LINE POST

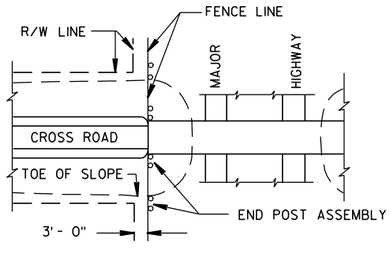


FENCE CONSTRUCTION OVER STREAM COURSES OF 15 FT. OR LESS IN WIDTH



PLAN VIEW

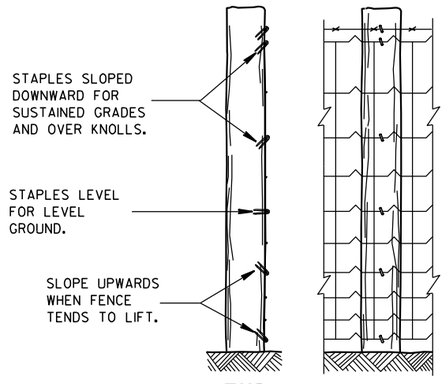
MAJOR HIGHWAY OVERPASS OR STREAM COURSE CROSSING OF GREATER THAN 15 FT. IN WIDTH



PLAN VIEW

MAJOR HIGHWAY UNDERPASS

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.



END ELEVATION **FARM SIDE ELEVATION**

FENCE MOUNTING DETAIL

FENCE LOCATION AT STRUCTURES

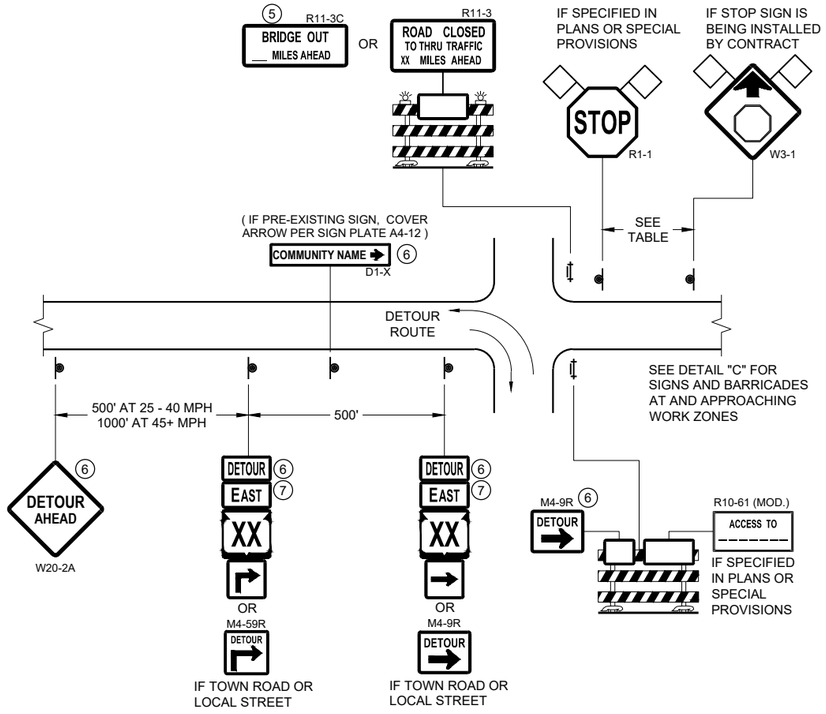
FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/4/2008 DATE
/S/ Jerry H. ---
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

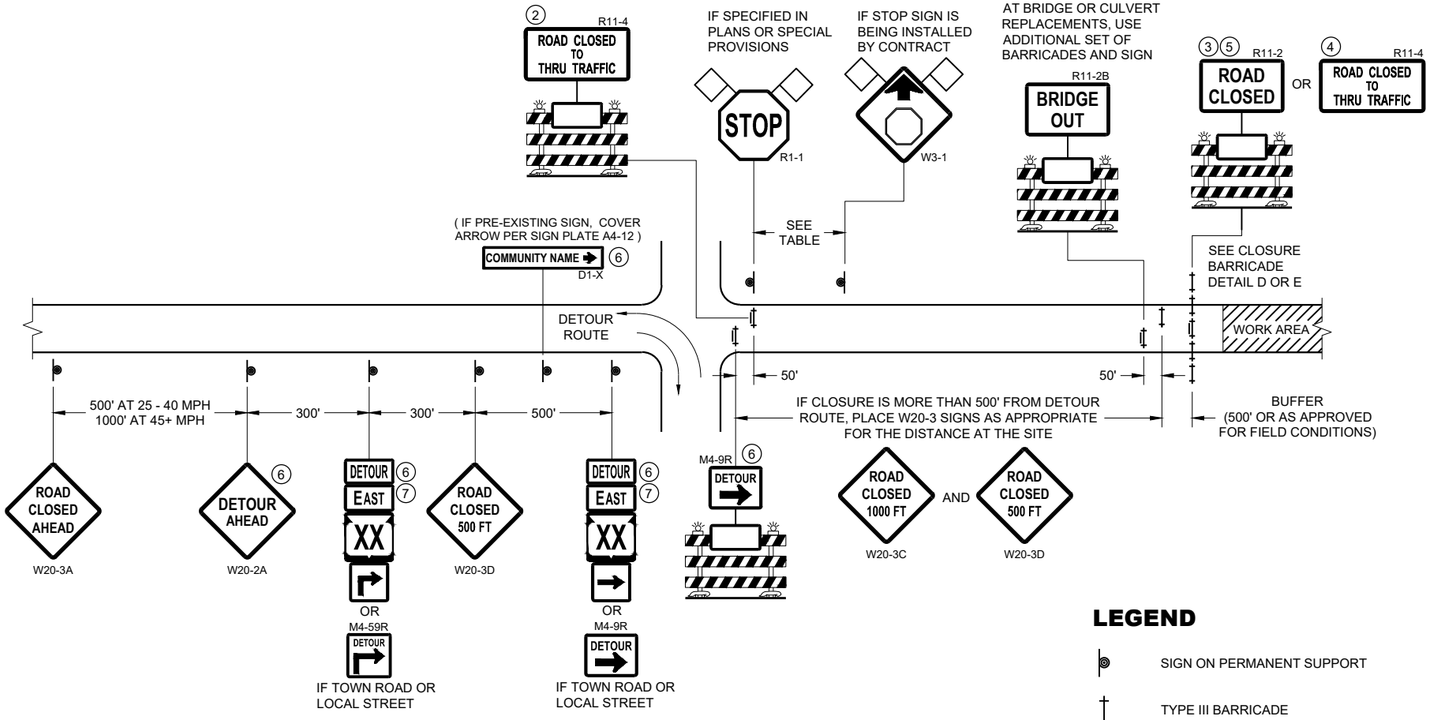
6

S.D.D. 15 B 1-8b



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

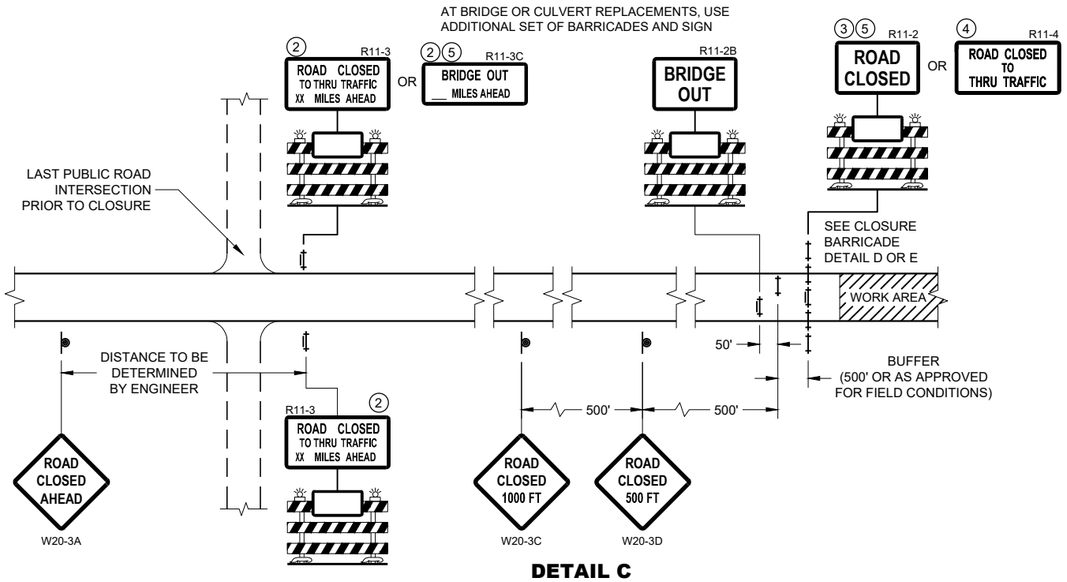
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8

EAST M3 - X

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M06 - 1



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

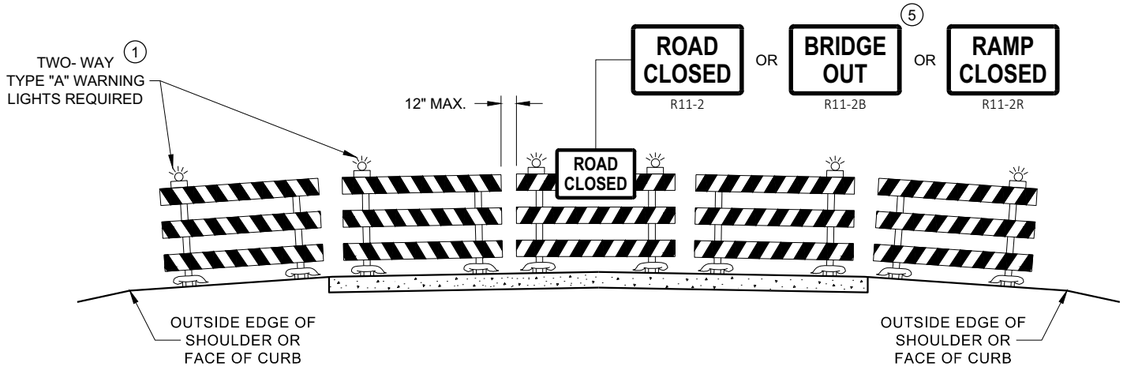
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

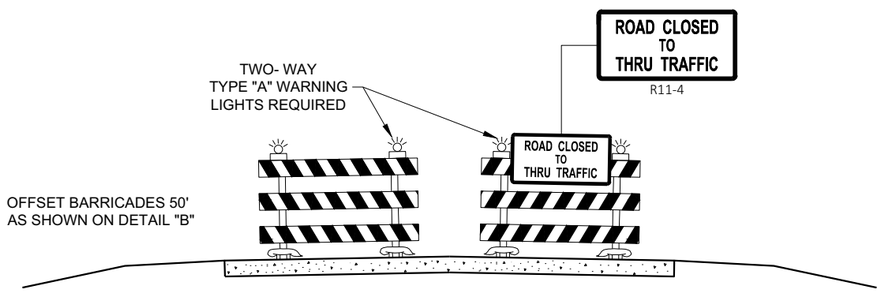
6

SDD 15C02 - 08a

SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 08b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR 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.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

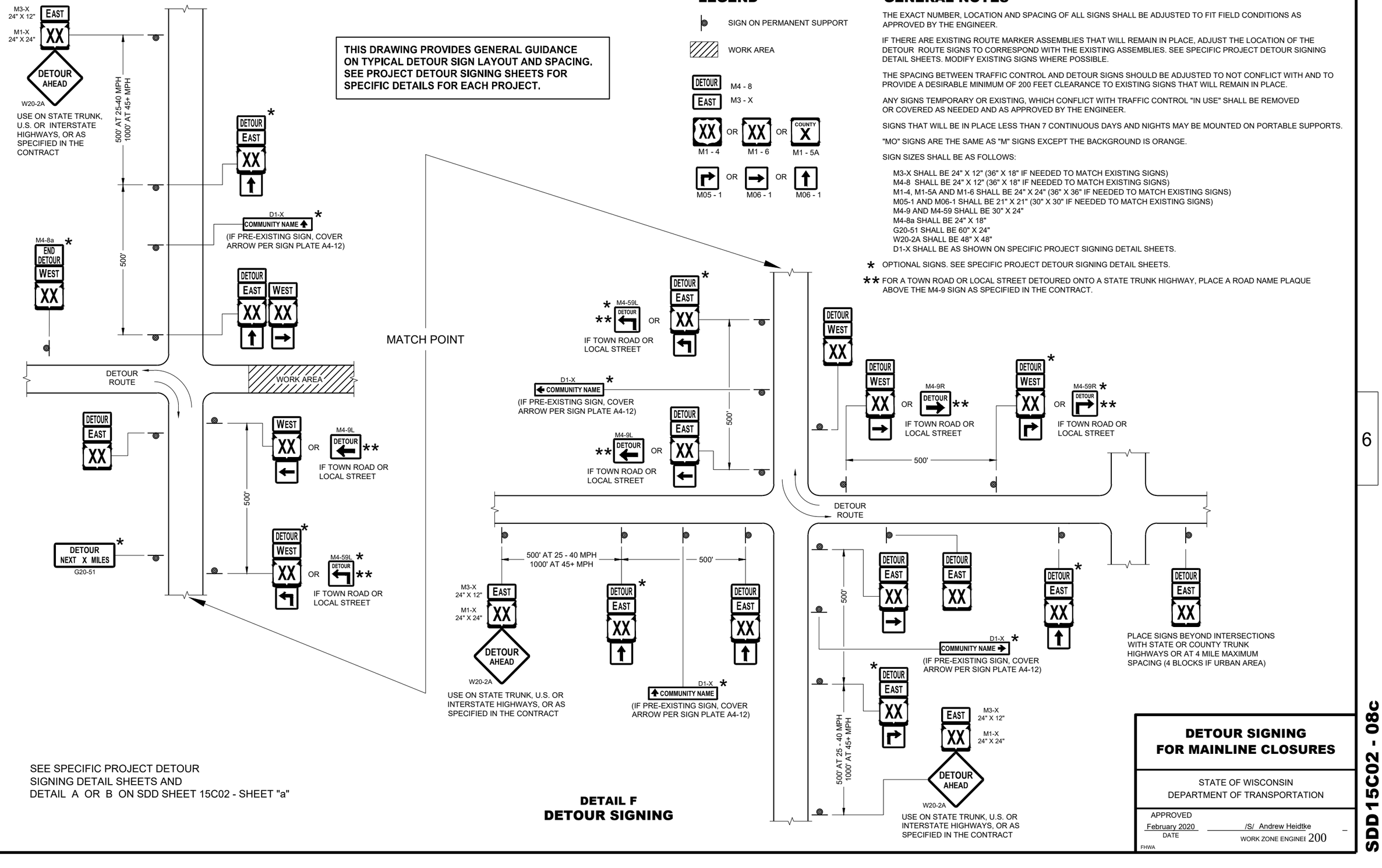
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

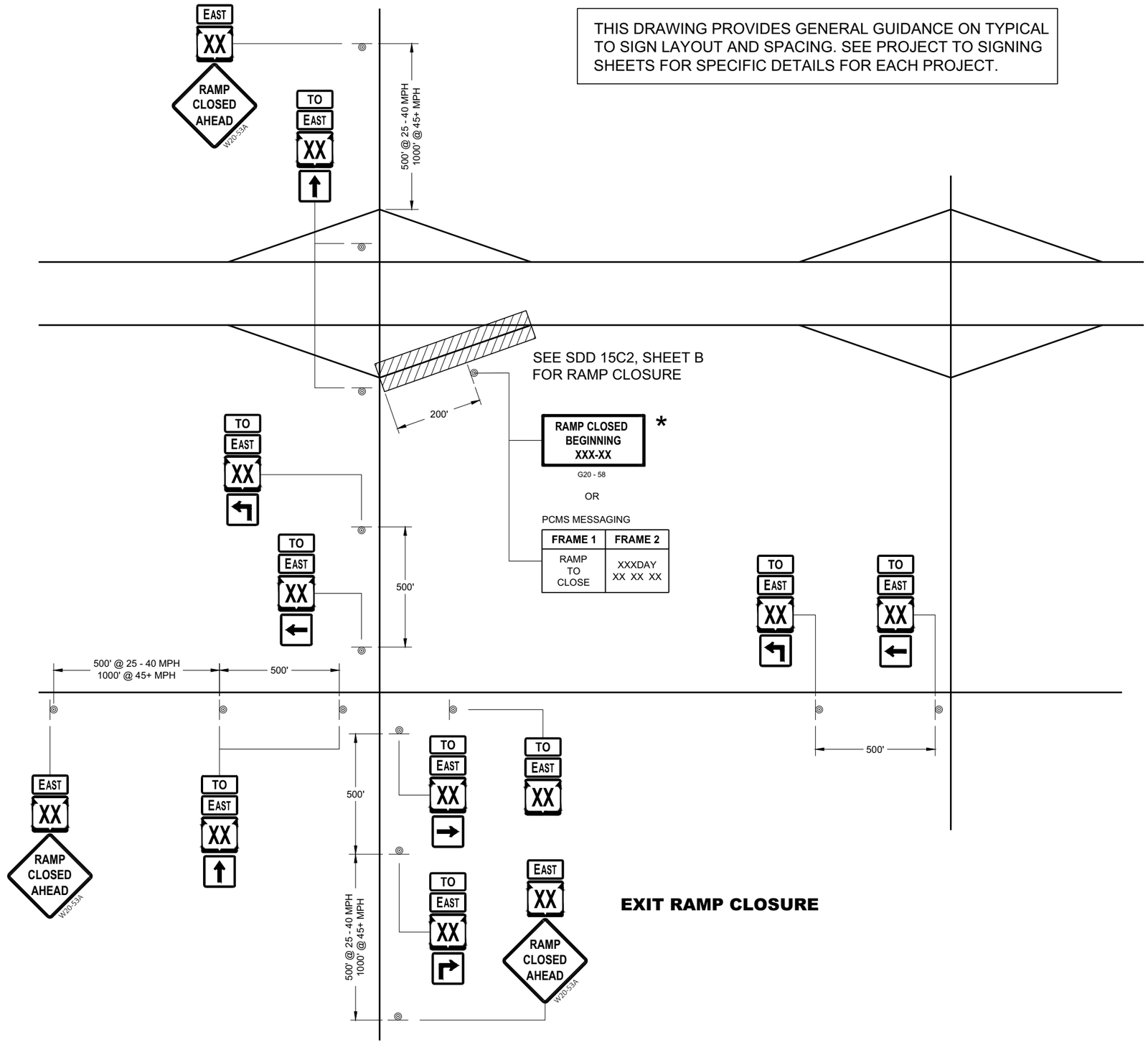
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 08c

6



EXIT RAMP CLOSURE

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL TO SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

◎ SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

XX M1 - 6 OR XX M1 - 4 OR INTERSTATE XX M1 - 1

M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE TO ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND TO 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.

SIGNS THAT SHALL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOW:
- M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
- W20 - 53A SHALL BE 48" X 48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

ON RAMP LANE CLOSURE

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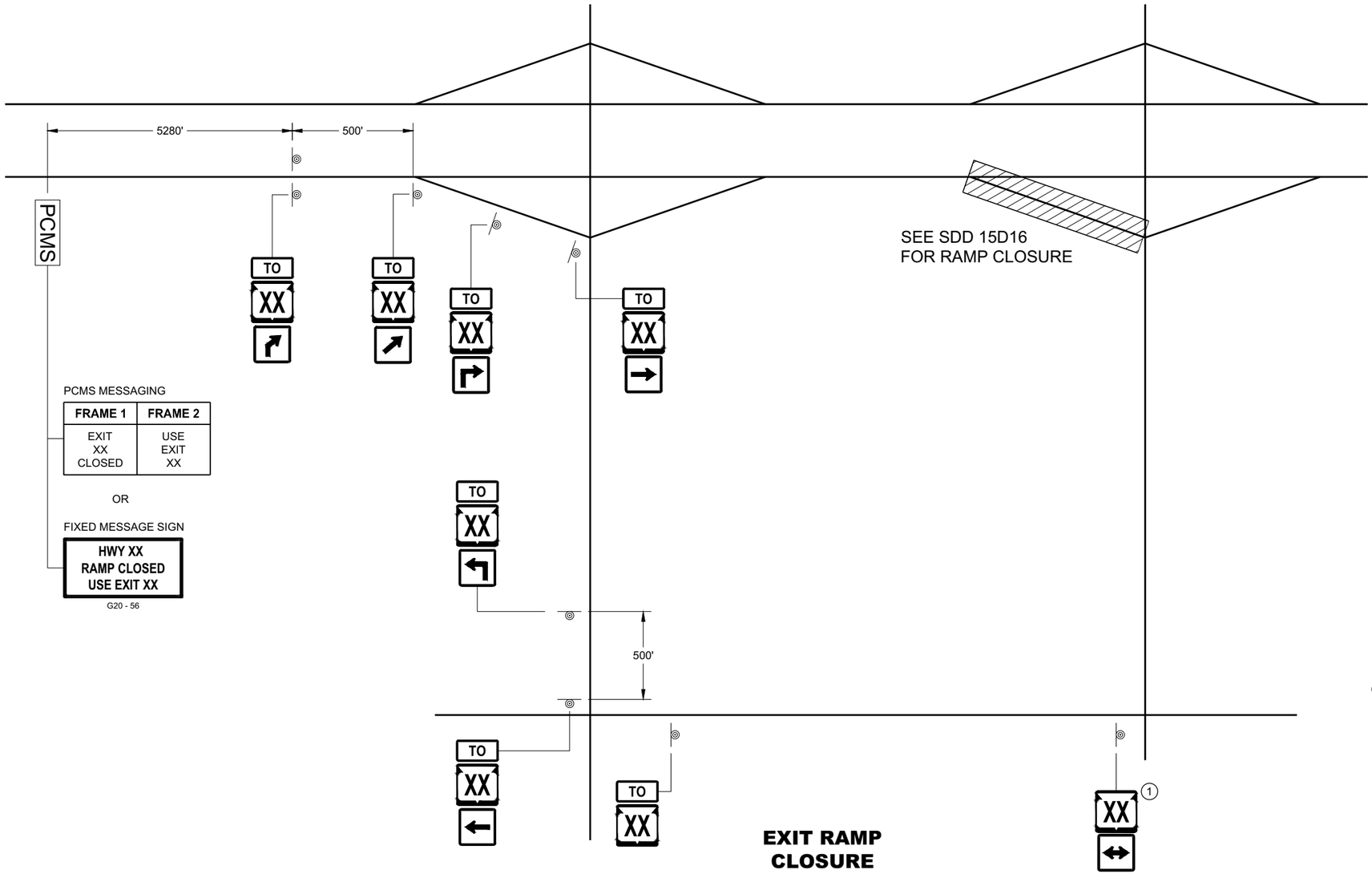
THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.



PCMS MESSAGING

FRAME 1	FRAME 2
EXIT XX CLOSED	USE EXIT XX

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

EXIT RAMP CLOSURE

LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M05 - 2 OR M06 - 1 OR M06 - 2 OR M06 - 4

GENERAL NOTES

SEE SDD 15D16 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" DETAIL FOR TRAFFIC CONTROL AT EXIT RAMP CLOSURE.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE "TO" MO-4 ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 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.

SIGNS THAT SHALL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOW:
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 4, M1 - 5A, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

(1) ONLY ADD IF THERE ARE NO EXISTING ROUTE MARKERS FOR THE INTERSECTING ROADWAY.

OFF RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEE
FHWA

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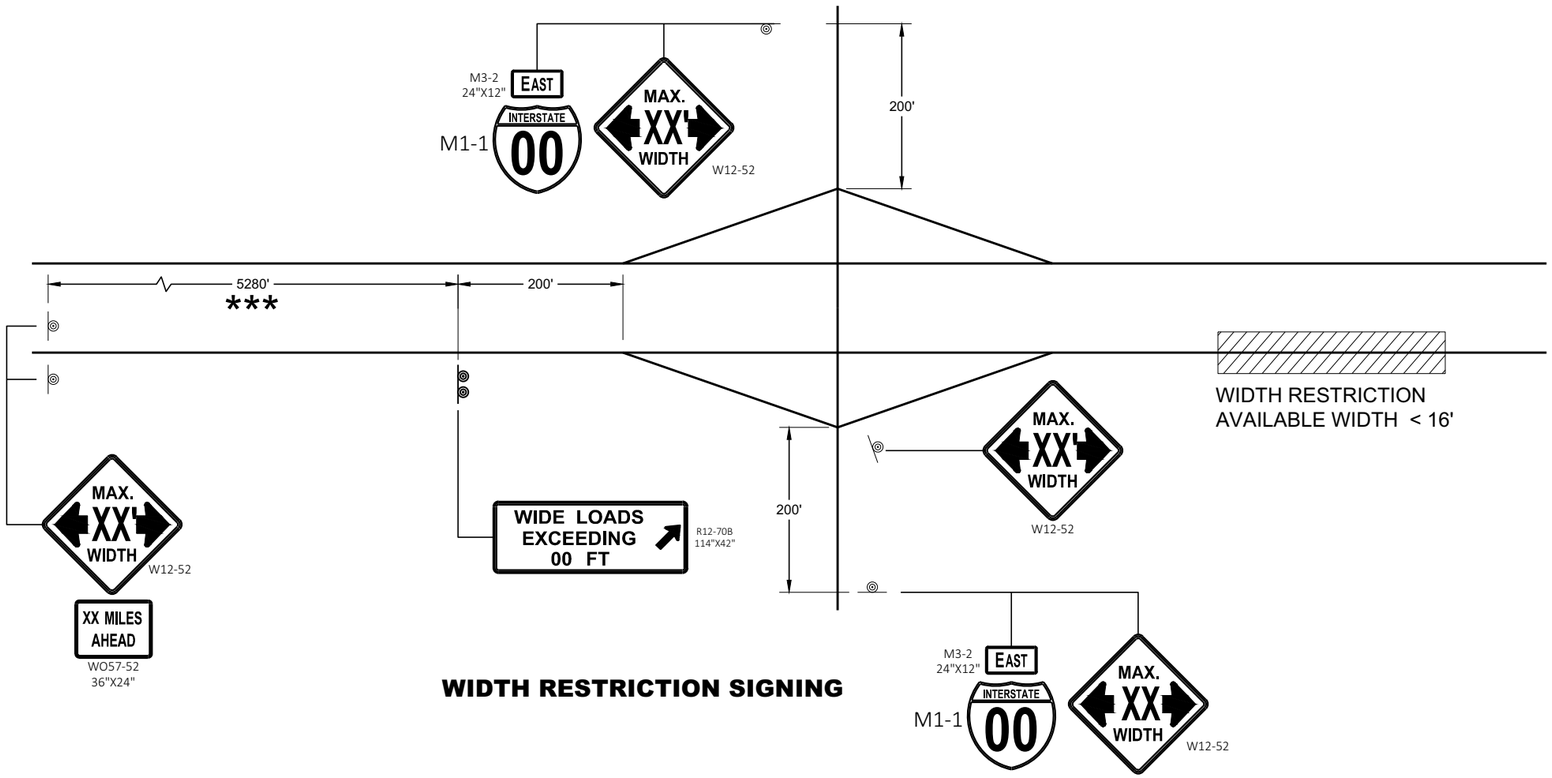
SDD 15C02 - 08e



WIDTH RESTRICTION SIGNING

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.

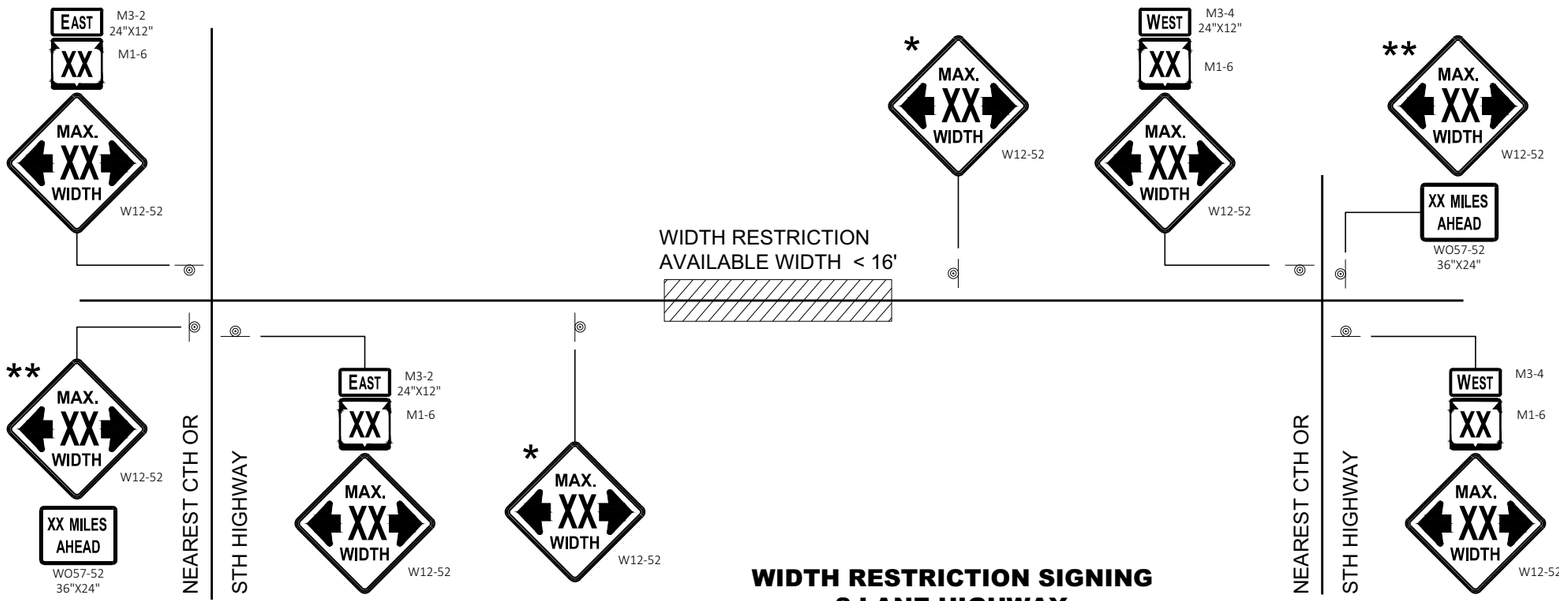
WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

* 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



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE 203

FHWA

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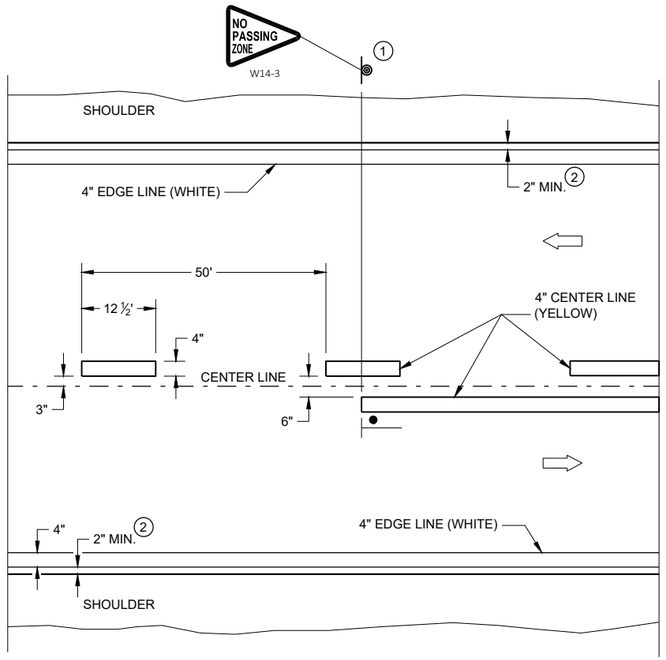
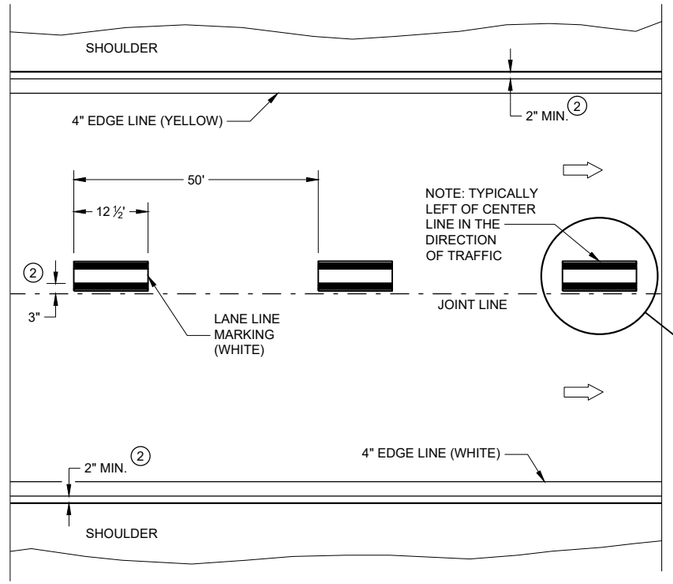
SDD 15C02 - 08f

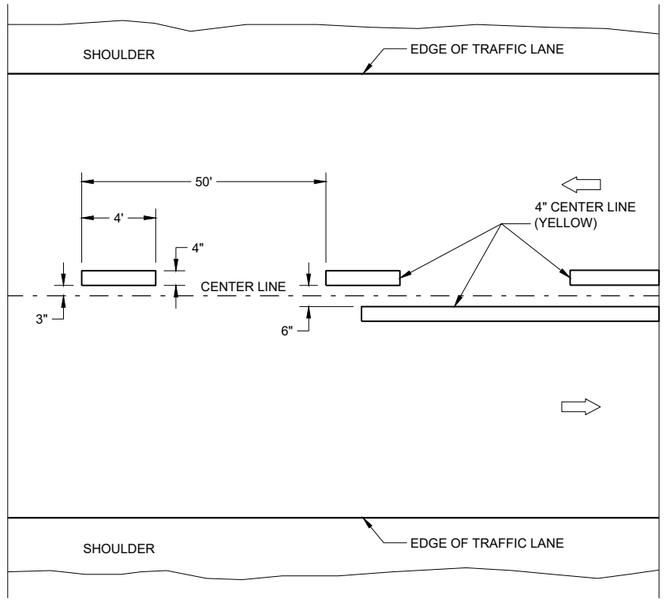


TWO WAY TRAFFIC

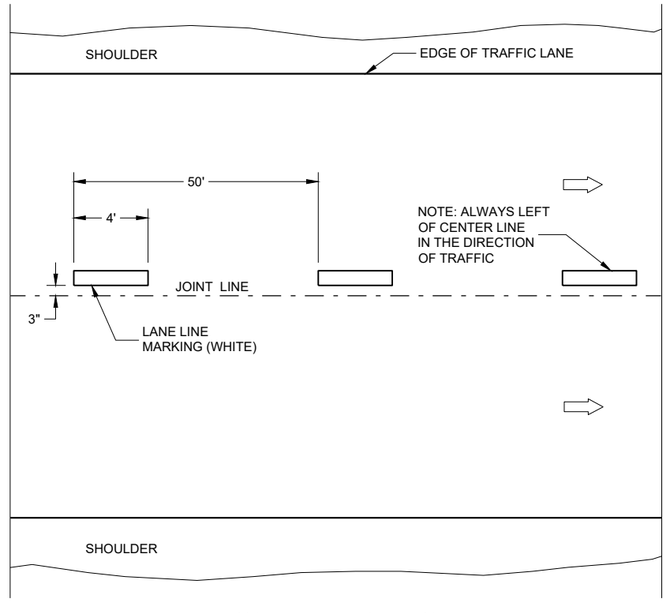


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

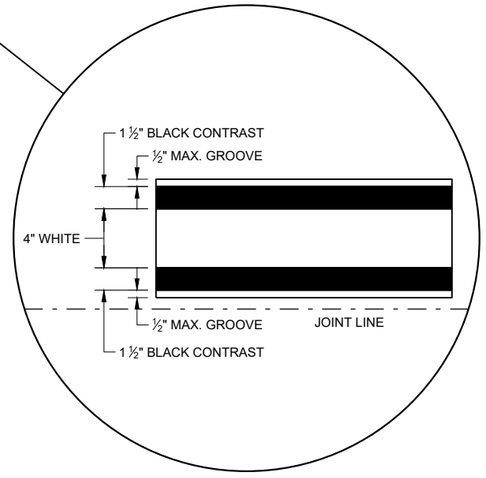
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

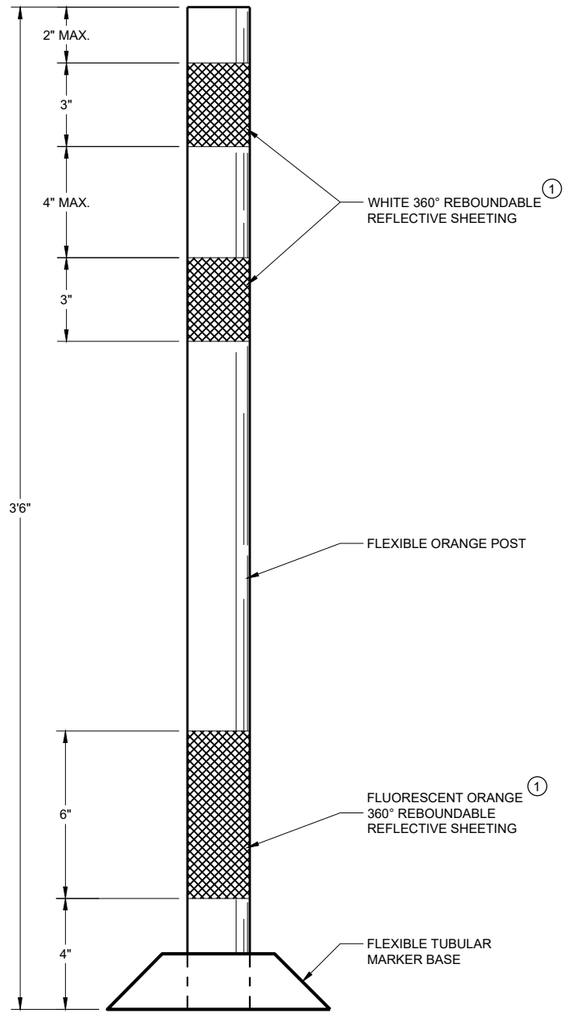
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND M
ENGINEER

FHWA

SDD 15C08 - 20a

SDD 15C08 - 20a



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

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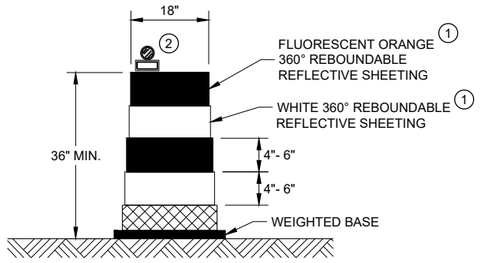
SDD 15C11 - 09a

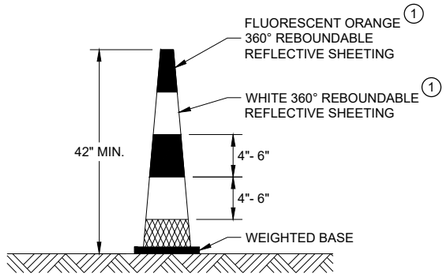
SDD 15C11 - 09a

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.

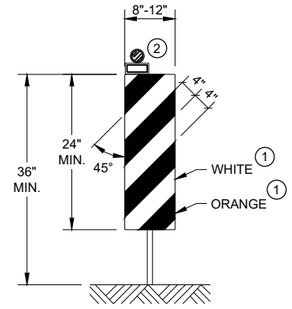


DRUM



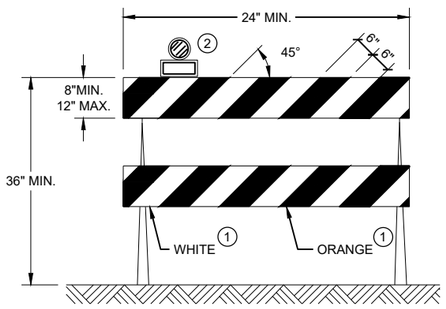
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



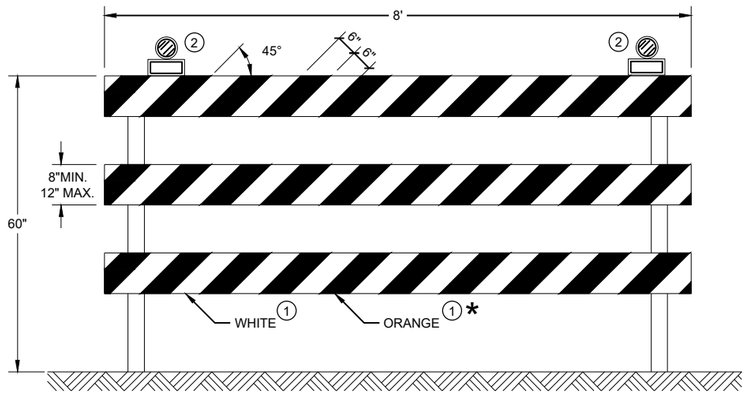
VERTICAL PANEL

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
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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SDD 15C11 - 09b

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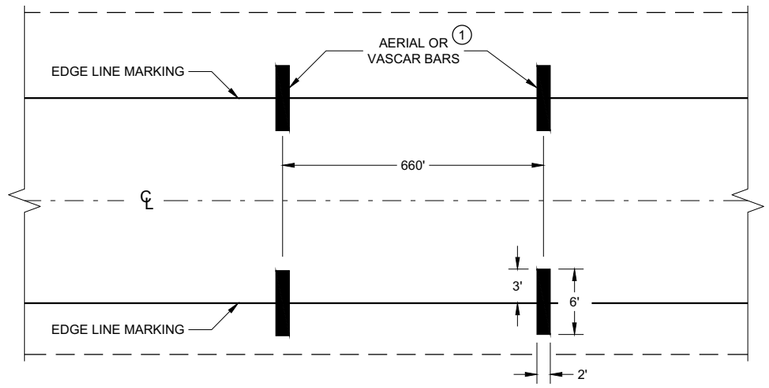
SDD 15C11 - 09b

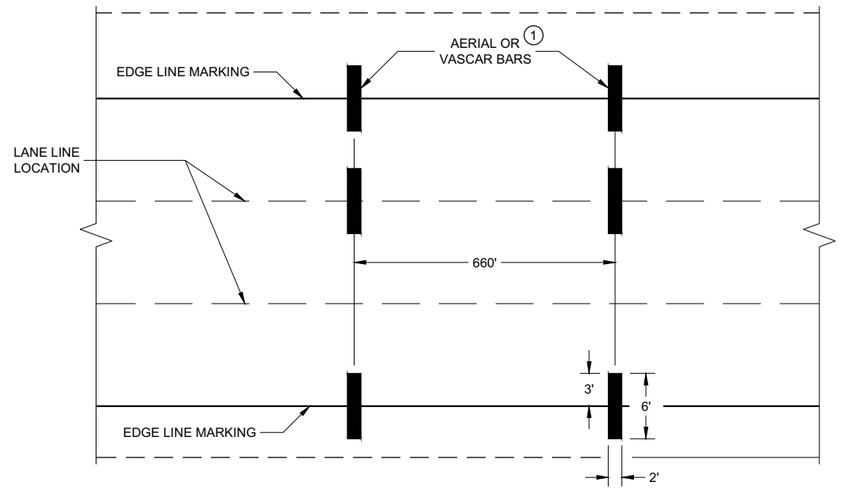
GENERAL NOTES

(1) PLACE TWO TO FIVE AERIAL OR VASCAR BARS AT 660 FOOT SPACING.

A CAR CAN BE PROVIDED BY THE WISCONSIN STATE PATROL FOR TRAFFIC CONTROL.



TYPICAL FOR TWO WAY OR ONE WAY TRAFFIC



TYPICAL FOR MULTILANE TRAFFIC

SPEED ENFORCEMENT ZONE WITH AERIAL OR VASCAR BARS

6

SDD 15C14 - 04

AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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February 2021
DATE

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STATE SIGNING AND MAR ENGINEER

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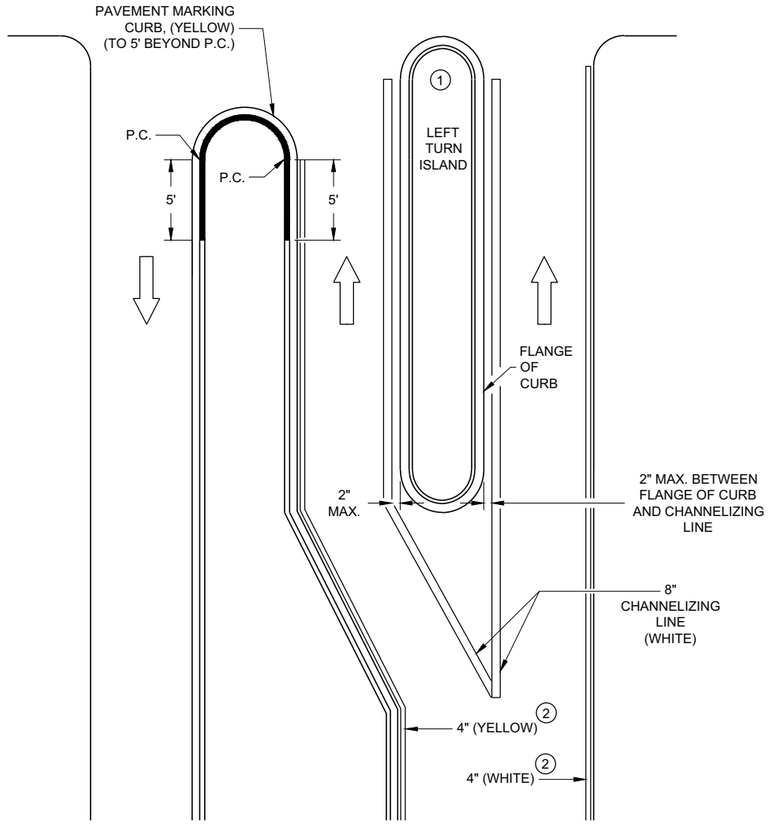
SDD 15C14 - 04

REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

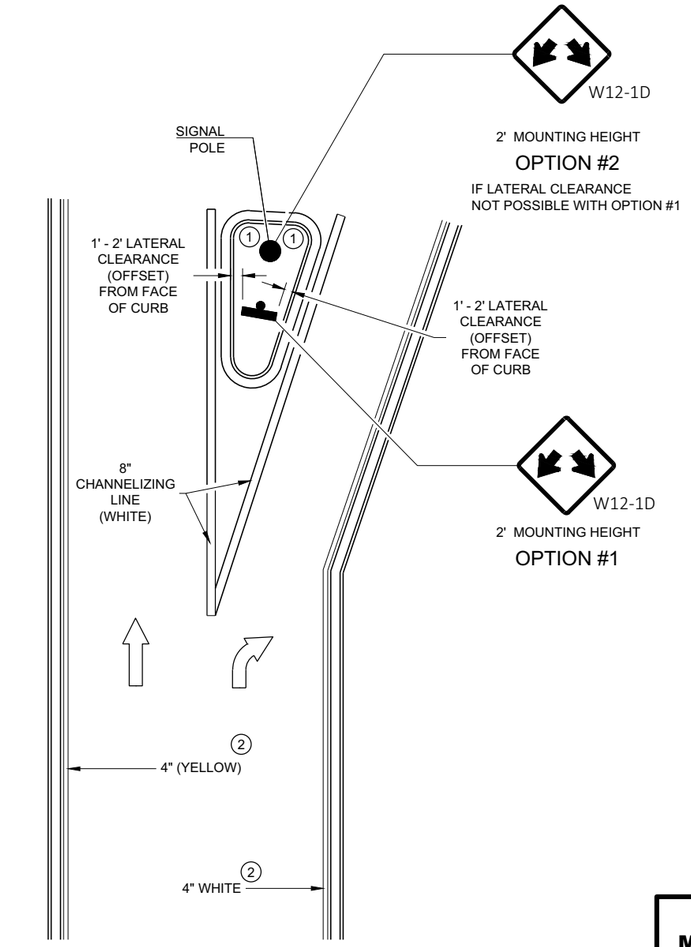
APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

(1) MARK CURB NOSES YELLOW.

(2) MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

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SDD 15C18 - 05c

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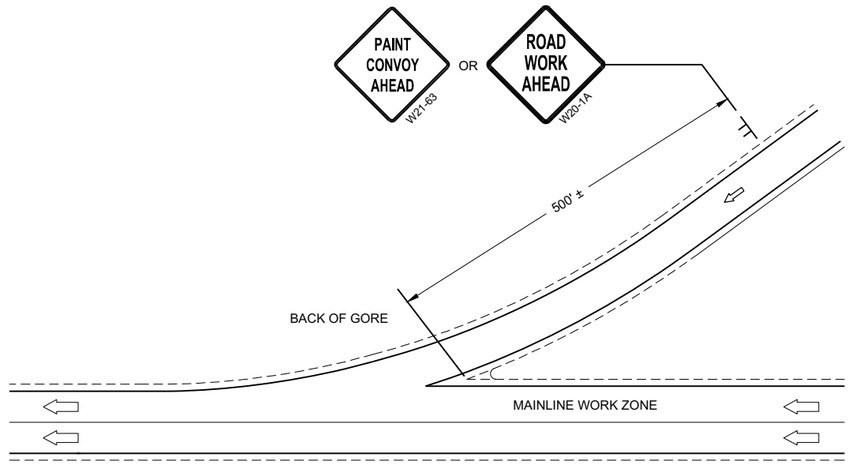
SDD15C18 - 05c

LEGEND

- V1 MARKING VEHICLE
- V2 SHADOW VEHICLE
- V3 TRAIL VEHICLE
- TRUCK MOUNTED ATTENUATOR (TMA)
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW PANEL (MERGE)
- 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. 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.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.

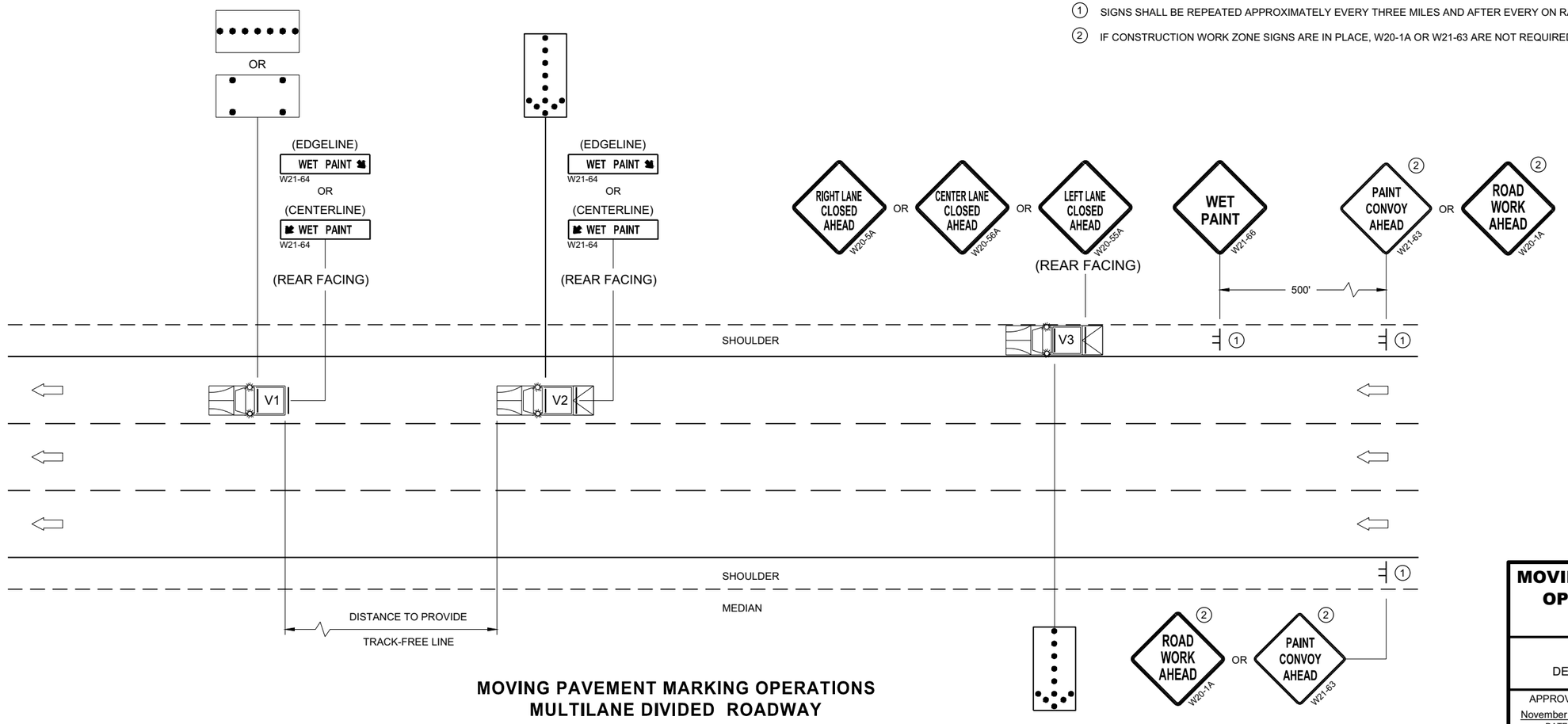
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

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 HEIGHT OF 18" FOR WET PAVEMENT MARKINGS

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY ON RAMP.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS
MULTILANE DIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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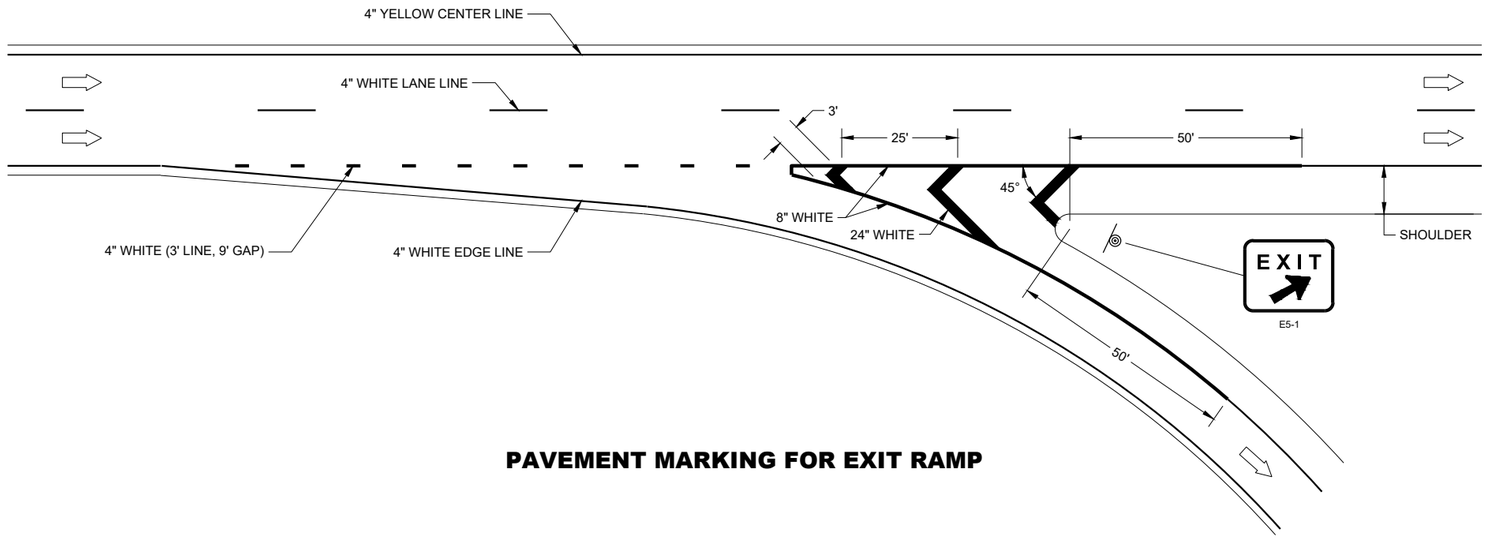
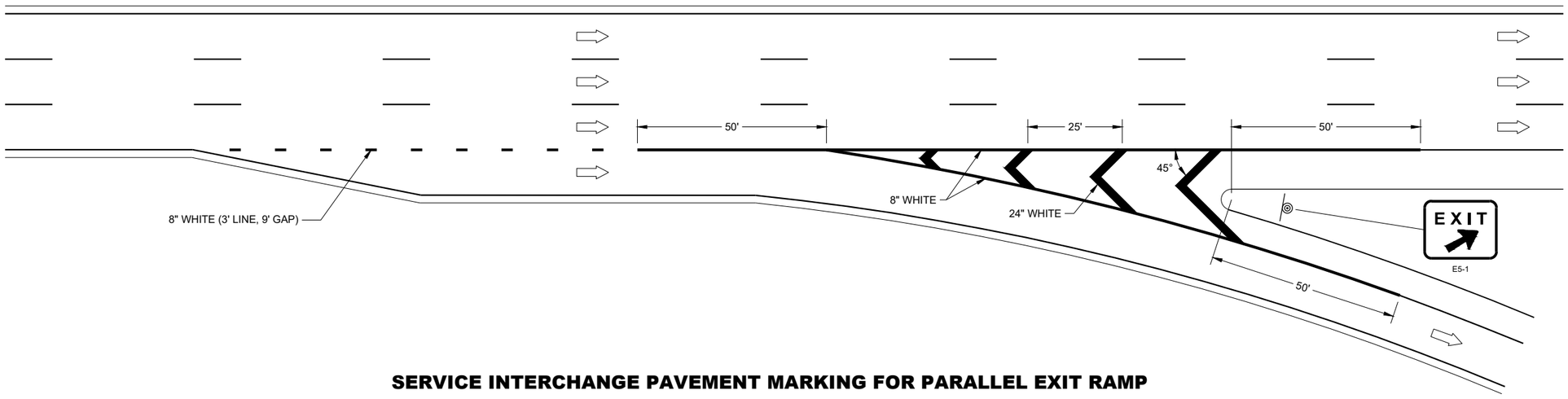
SDD 15C19 - 06c

6

SDD 15C19 - 06c



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT RAMP

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL

6

SDD 15C31 - 04a

PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C31 - 04a

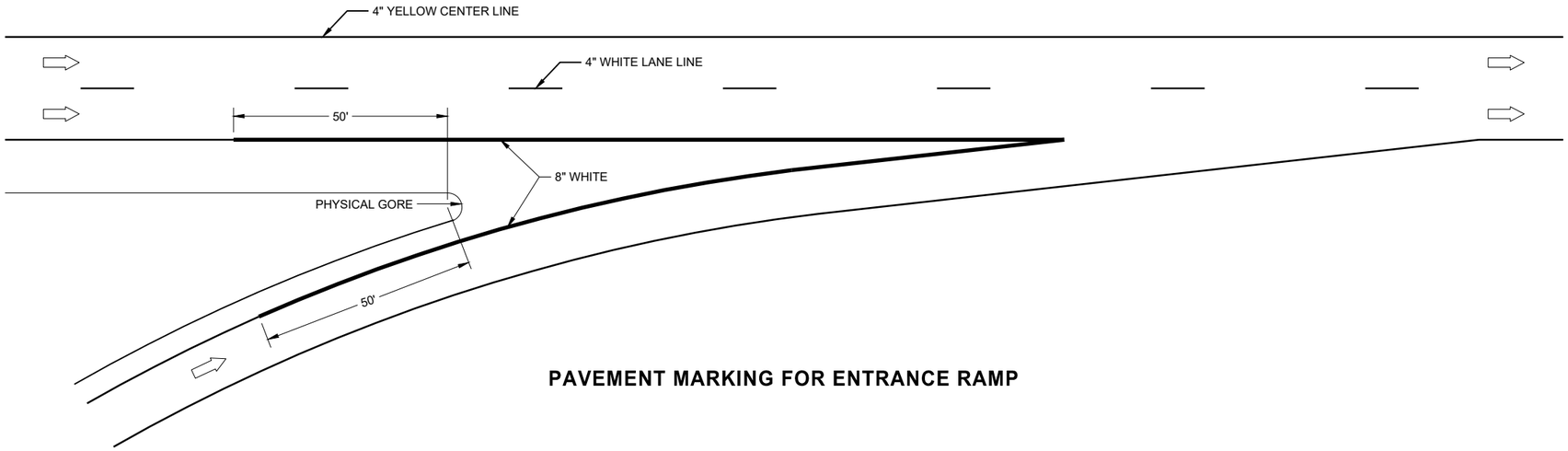
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

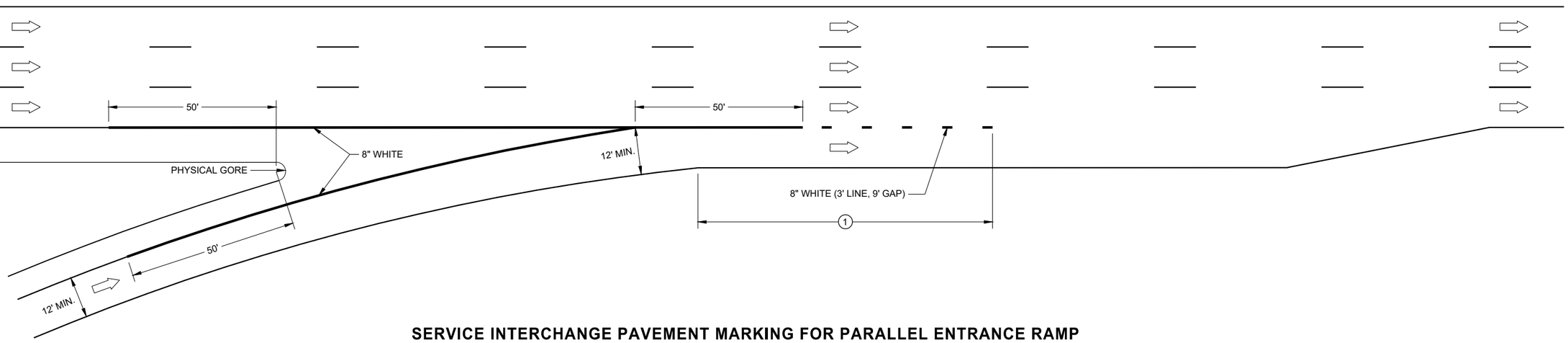
(1) ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

LEGEND

DIRECTION OF TRAVEL



PAVEMENT MARKING FOR ENTRANCE RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

6

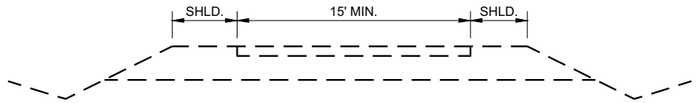
6

SDD 14C31 - 04c

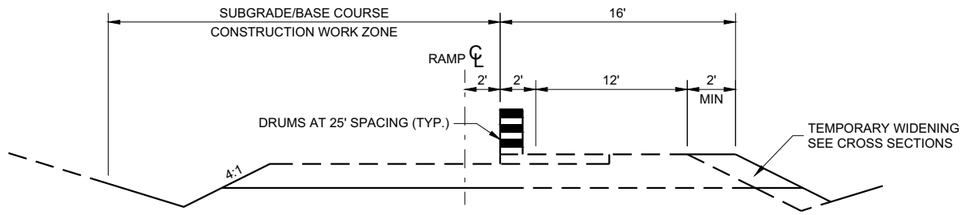
SDD 14C31 - 04c

PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

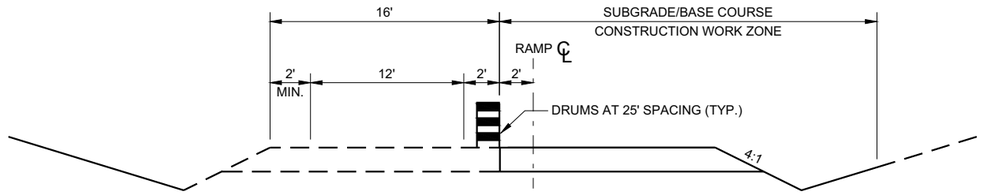
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



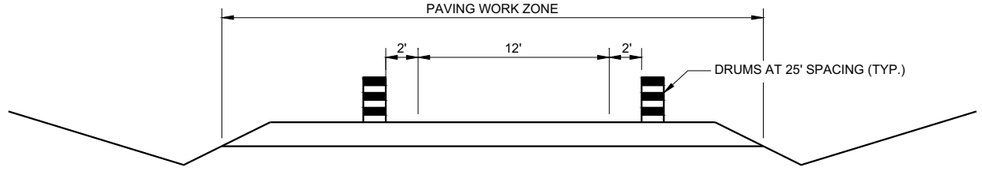
INITIAL RAMP - TYPICAL



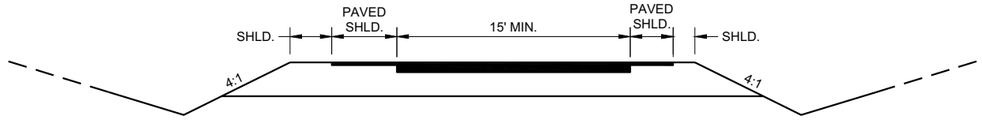
STAGE I - CONSTRUCTION TO SUBGRADE, LEFT



STAGE II - CONSTRUCTION TO SUBGRADE, RIGHT



STAGE III - TRAFFIC ON BASE COURSE



STAGE IV - PAVING

GENERAL NOTES

WORK SHALL BE SCHEDULED FOR ALL STAGES TO MINIMIZE INCONVENIENCE TO THE TRAFFIC USING THE RAMP WHILE IT IS ONLY BASE COURSE.

IN STATE III, A MINIMUM 12' LANE WIDTH SHALL BE DELINEATED WITH DRUMS ALONG BOTH EDGES AT ALL TIMES UNTIL PAVED AND PAVEMENT MARKINGS ARE PLACED.

6

SDD 15D04 - 01

TRAFFIC CONTROL, RAMP CONSTRUCTION STAGING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 1994
DATE

/S/ Chester J. Spano
DIRECTOR, OFFICE OF TR

FHWA

6

SDD 15D04 - 01

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DELINEATOR, FLEXIBLE/TUBULAR MARKER
- TEMPORARY DELINEATOR (STEEL POST W/SINGLE DELINEATOR)
- PORTABLE CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

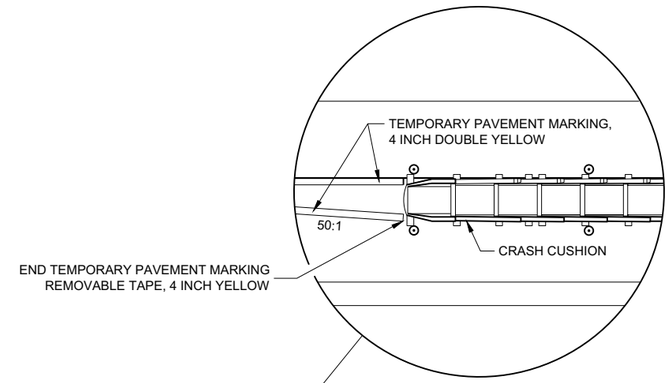
"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

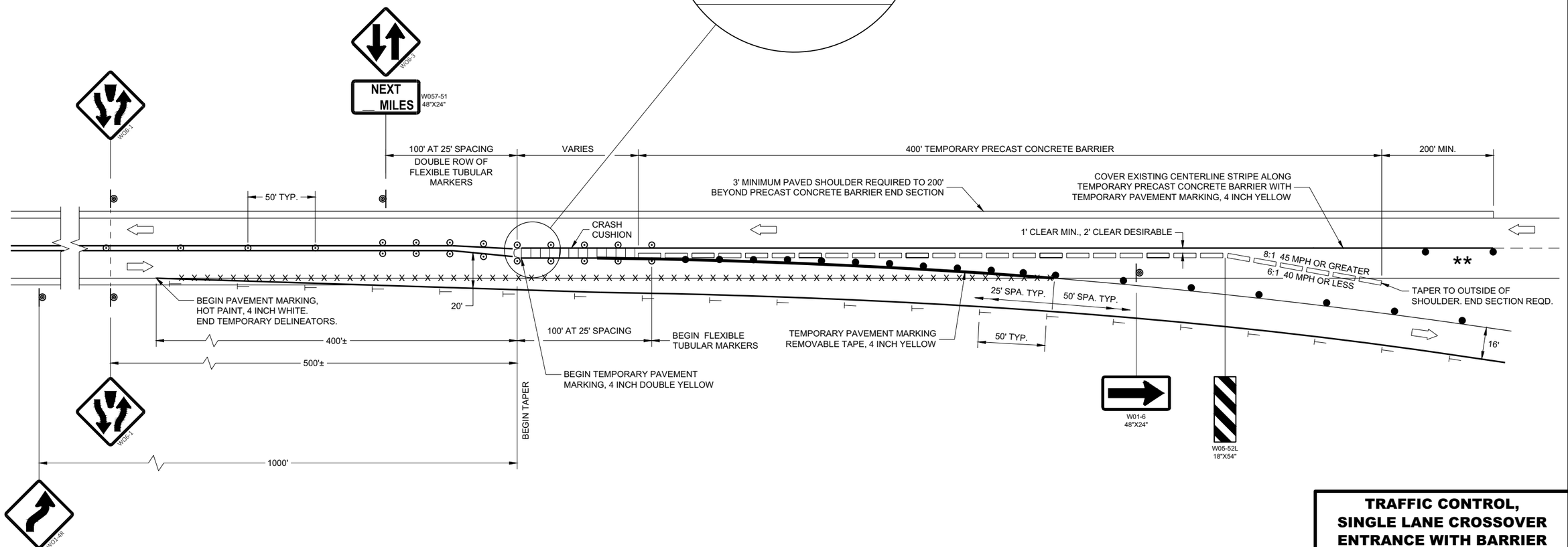
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES 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 MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

** SEE SDD 15D12 FOR LANE CLOSURE DETAILS.





TRAFFIC CONTROL, SINGLE LANE CROSSOVER ENTRANCE WITH BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2015 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

SDD 15D05 - 04

SDD 15D05 - 04

LEGEND

SIGN ON PERMANENT SUPPORT

DELINEATOR, FLEXIBLE/TUBULAR MARKER

DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"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. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES 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 MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50 FOOT SPACING.

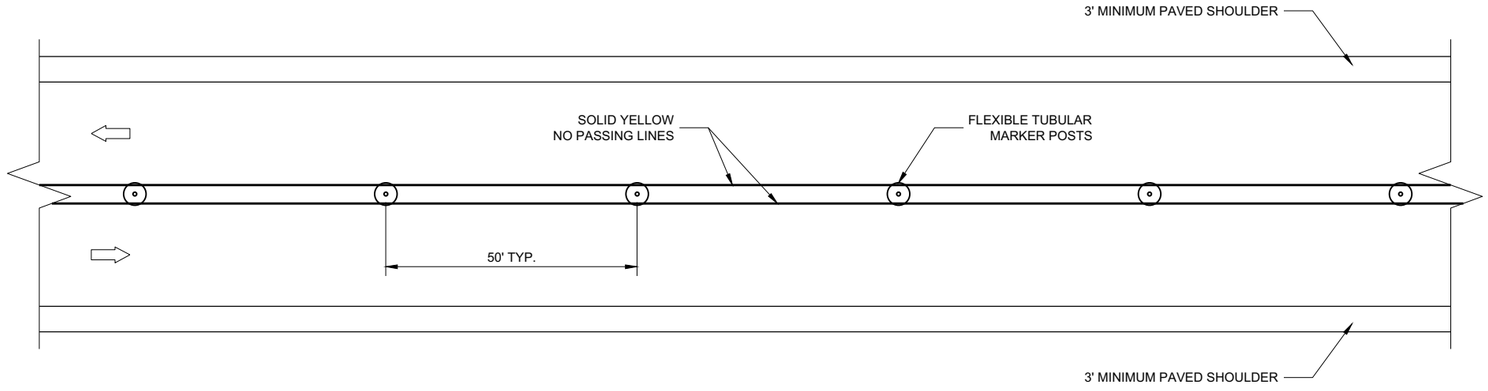
COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4 INCH DOUBLE YELLOW.

(1)

(2)

(1) THE WO6-3 AND WO57-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND / OR 500 FEET BEYOND ANY SIDE ROAD. THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE WO6-3 AND THE WO57-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN THE SIGNS.

(2) CONVENTIONAL: 24" X 30"
FREEWAY AND EXPRESSWAY: 36" X 48"



TWO LANE, TWO WAY OPERATION

6

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SDD 15D06 - 04

SDD 15D06 - 04

TRAFFIC CONTROL
TWO LANE TWO WAY
OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
STATE TRAFFIC ENGINEER

FHWA

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DELINEATOR FLEXIBLE / TUBULAR MARKER
- TEMPORARY DELINEATOR (STEEL POST DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE RESPECTIVE EDGE LINE MARKING
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKINGS

DO NOT PASS ①
R4-1
24"X30"

INSTALL THE R4-1 SIGN 1000 FEET BEYOND THE WO6-3 SIGN WITH THE WO57-51 AND ALTERNATE THE SEQUENCE OF THESE SIGNS EVERY 1 MILE.

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

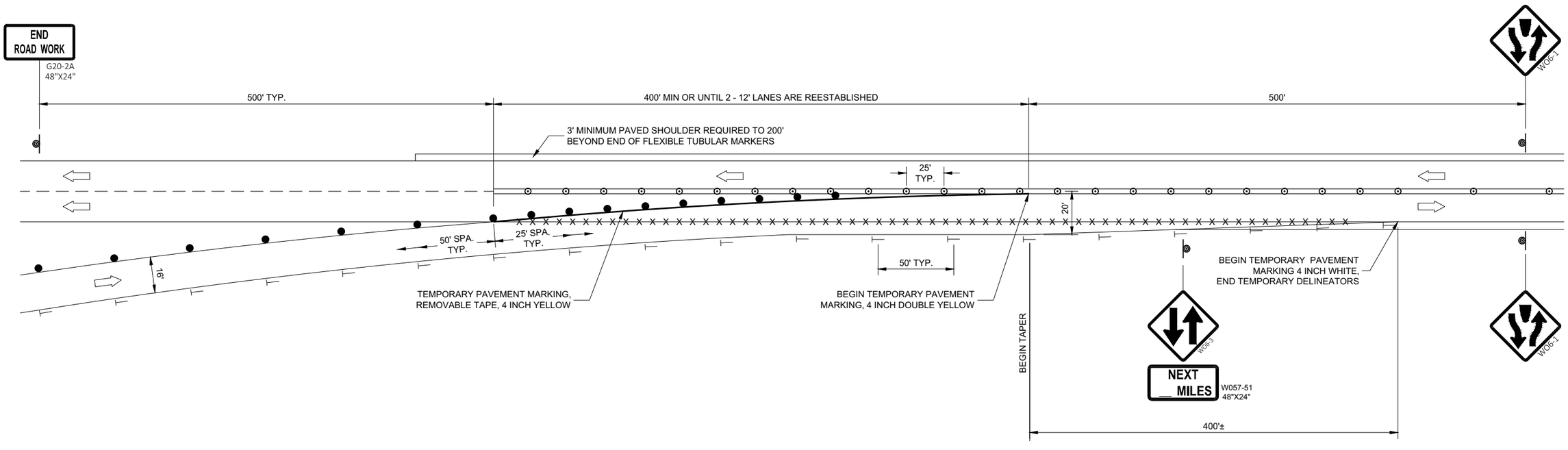
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES 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 MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USED OF CROSSOVER.

① CONVENTIONAL: 24" X 30"
FREEWAY AND EXPRESSWAY: 36" X 48"



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SDD 15D09 - 05

SDD 15D09 - 05

TRAFFIC CONTROL, SINGLE LANE CROSSOVER EXIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

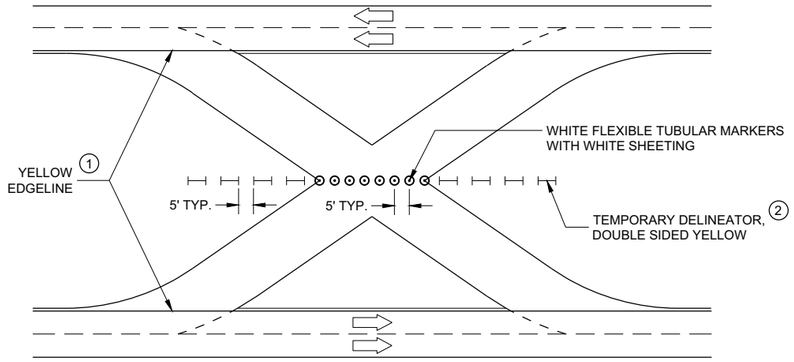
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- DELINEATOR FLEXIBLE / TUBULAR MARKER
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE MARKING
- TEMPORARY DELINEATOR (DOUBLE SIDED)
- TYPE "A" WARNING LIGHT (FLASHING)
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKINGS
- WORK AREA



TRAFFIC CONTROL FOR CROSSOVER THAT IS NOT IN USE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"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. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

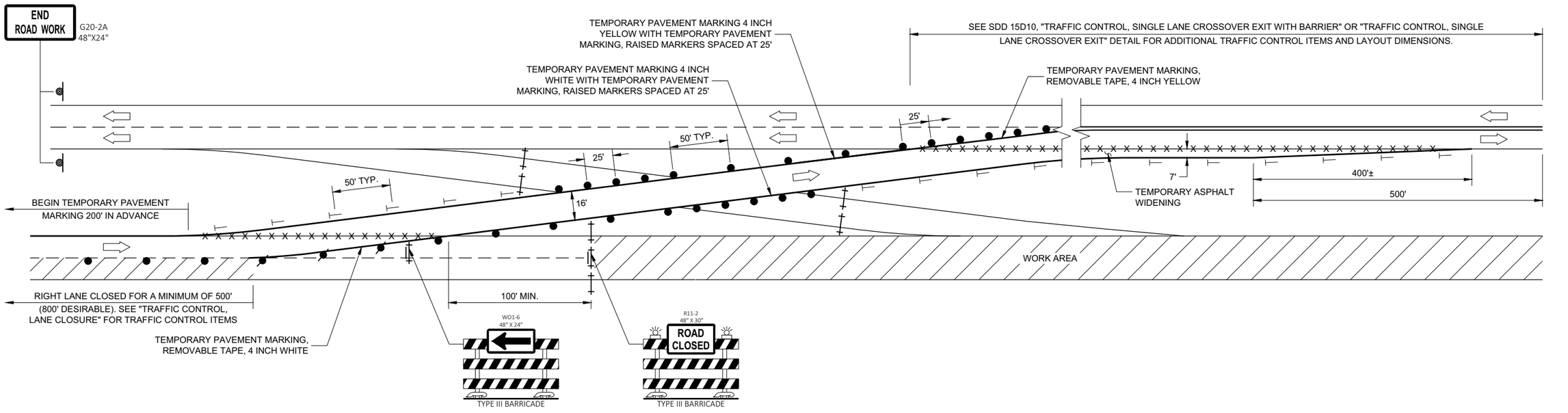
THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

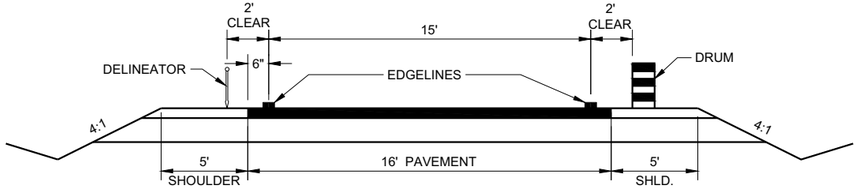
THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USED OF CROSSOVER AND TEMPORARY PAVEMENT MARKING WHERE USED.

REVERSE DEVICES WHEN OTHER LEG OF CROSSOVER IS IN USE.

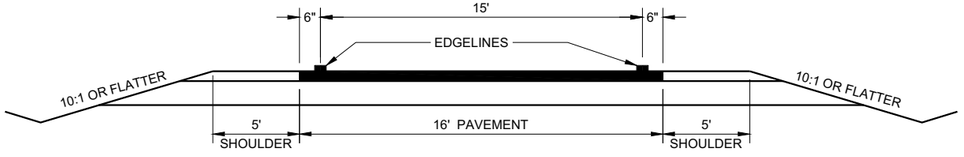
1. FOR PERMANENT CROSSOVER, PAVEMENT MARKING SHOULD CONFORM TO SECTION 646 OF THE STANDARD SPECIFICATIONS.
2. FOR PERMANENT CROSSOVER, INSTALL PERMANENT DELINEATORS ACCORDING TO SECTION 633 OF THE STANDARD SPECIFICATIONS.





TYPICAL TEMPORARY CROSSOVER ROADWAY DIMENSIONS

(SEE PLAN FOR ROADWAY DESIGN ELEMENTS)



TYPICAL CROSSOVER TO REMAIN IN PLACE ROADWAY DIMENSIONS

(SEE PLAN FOR ROADWAY DESIGN ELEMENTS)

TRAFFIC CONTROL, SINGLE LANE CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D11 - 07

SDD 15D11 - 07

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES 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 MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

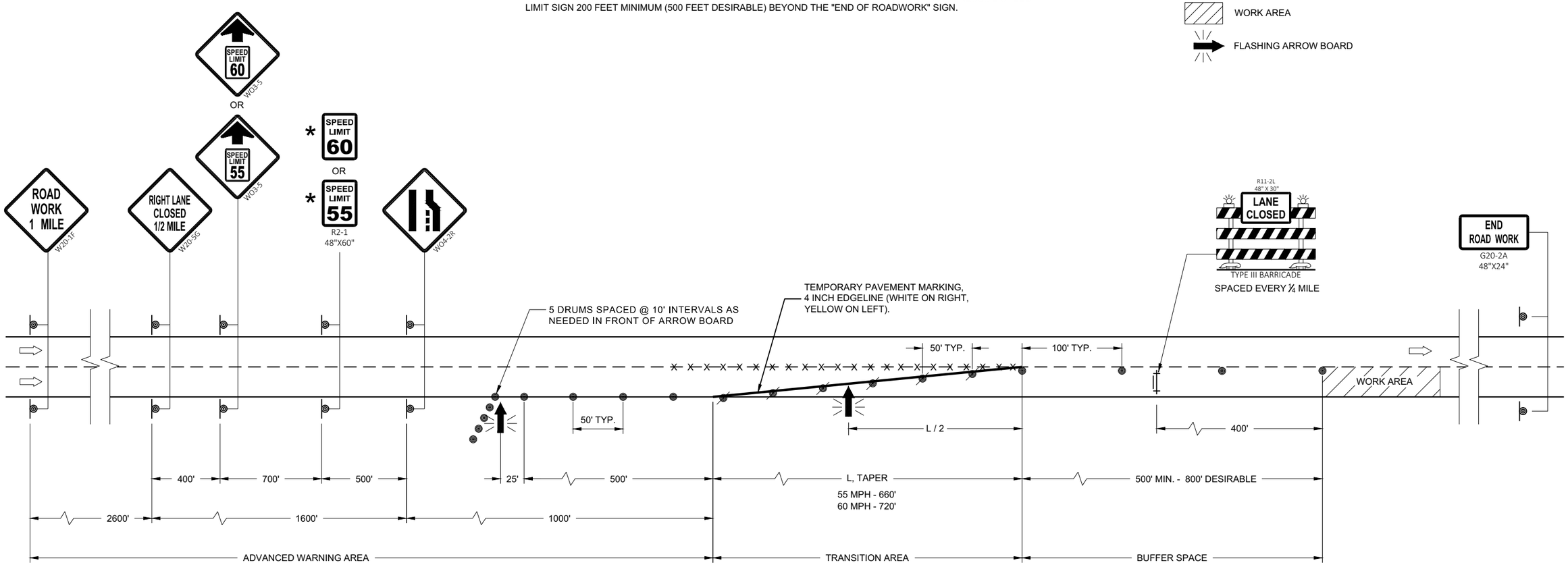
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D12 - 09b

6
SDD 15D12 - 09b

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

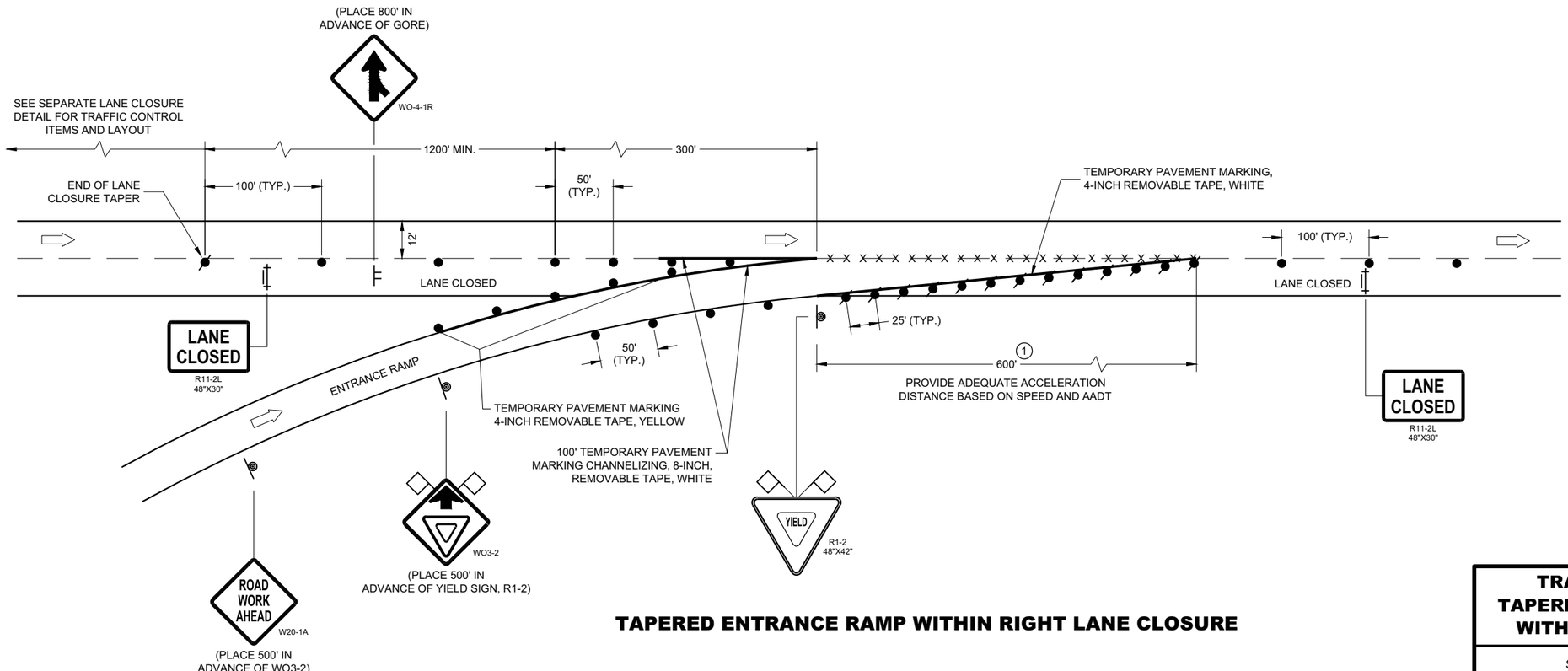
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) CONSULT WITH REGIONAL WORK ZONE ENGINEER IF NEED TO REDUCE LENGTH EXISTS.



TAPERED ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE

TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 05c

6

SDD 15D15 - 05c

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

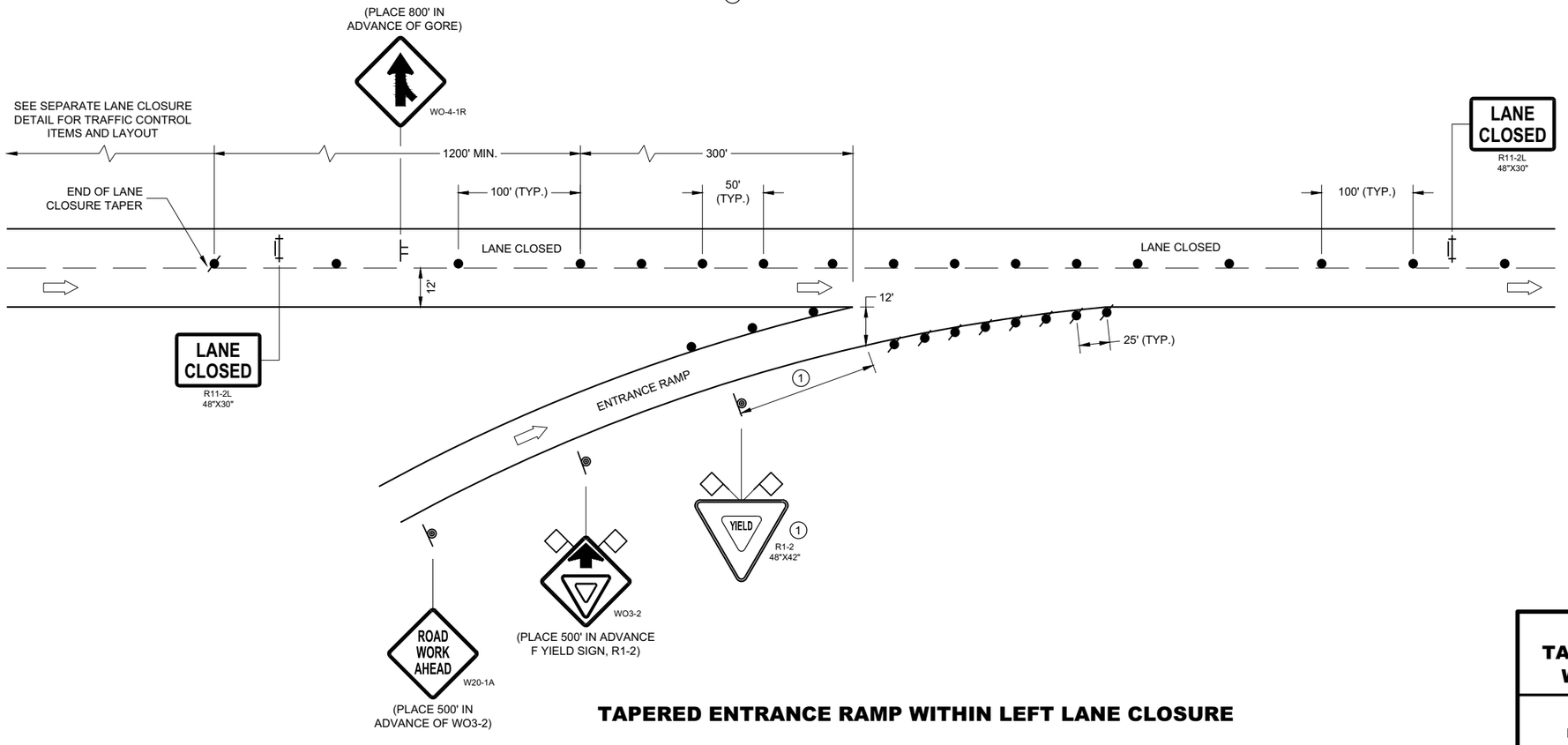
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) PLACE YIELD SIGN TO PROVIDE ADEQUATE SIGHT DISTANCE AND ACCELERATION DISTANCE.



TAPERED ENTRANCE RAMP WITHIN LEFT LANE CLOSURE

TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

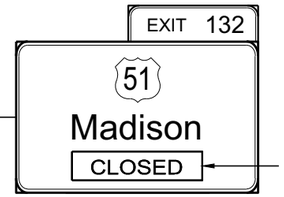
SDD 15D15 - 05d

6

SDD15D15 - 05d

G20 - 60
108" X 24"

OR



G20 - 60
108" X 24"

PLACE SIGN G20 - 60 OVER MILEAGE
ON EXISTING E1 - 1A SIGN

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.

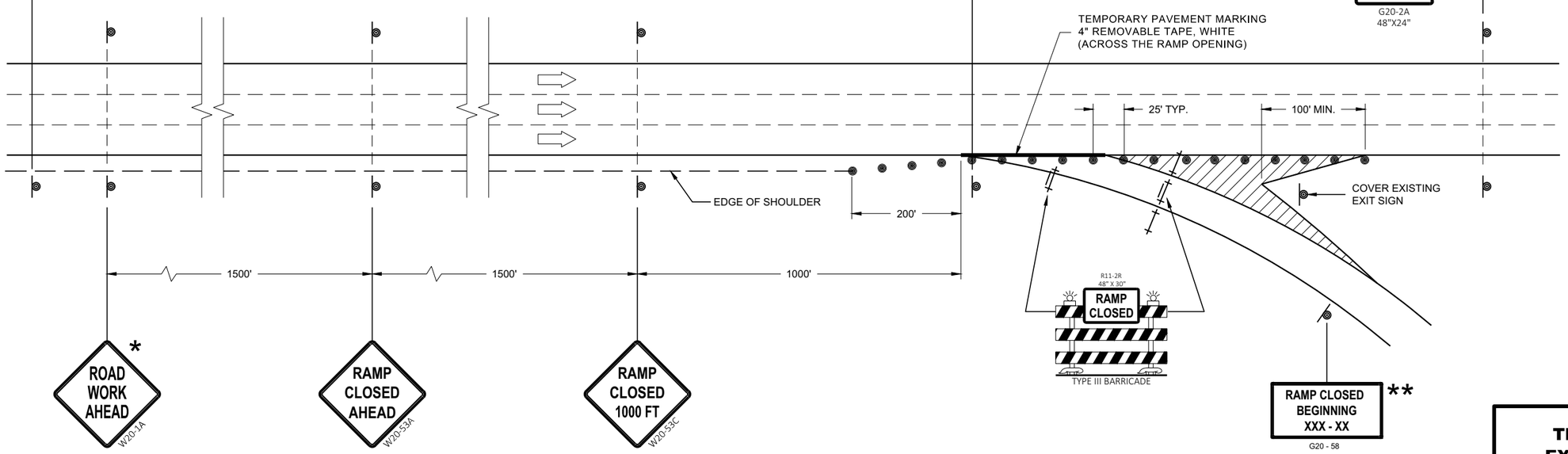
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

* W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

** PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.

COVER ARROW ON EXISTING
E4 - 1 SIGN (COVERING SIGNS
TYPE I)

G20 - 61
120 ' X 30"



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 15D16 - 04

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

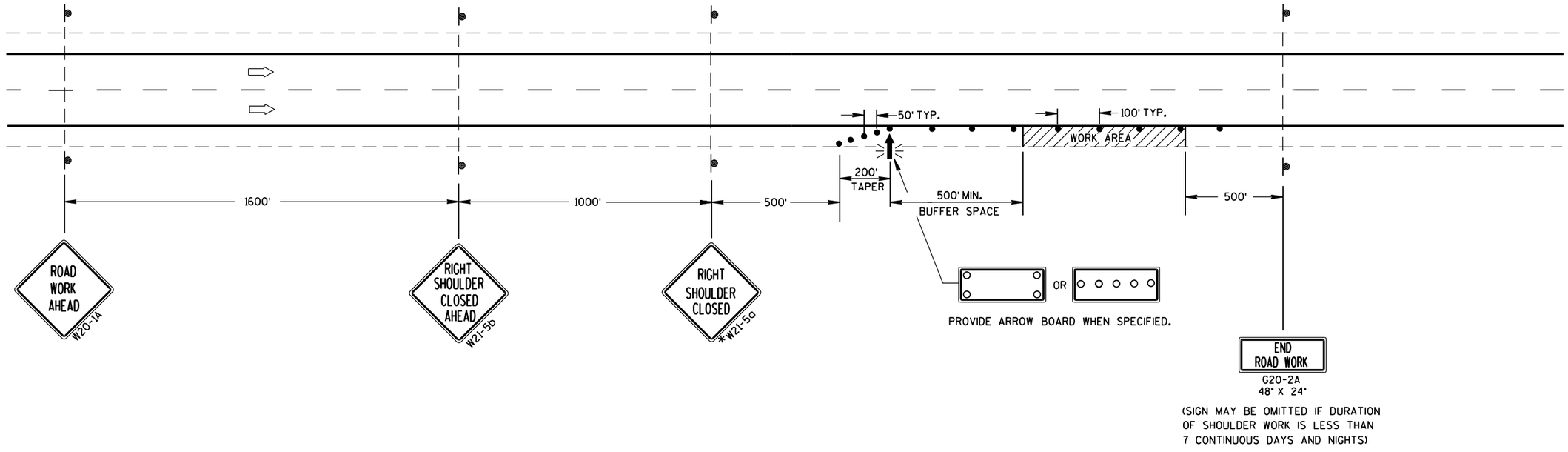
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A 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.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

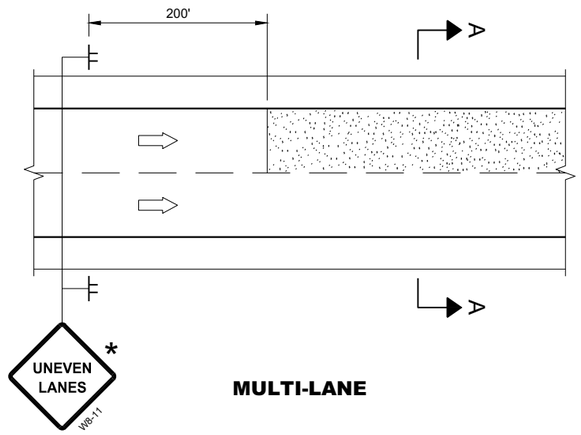
June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

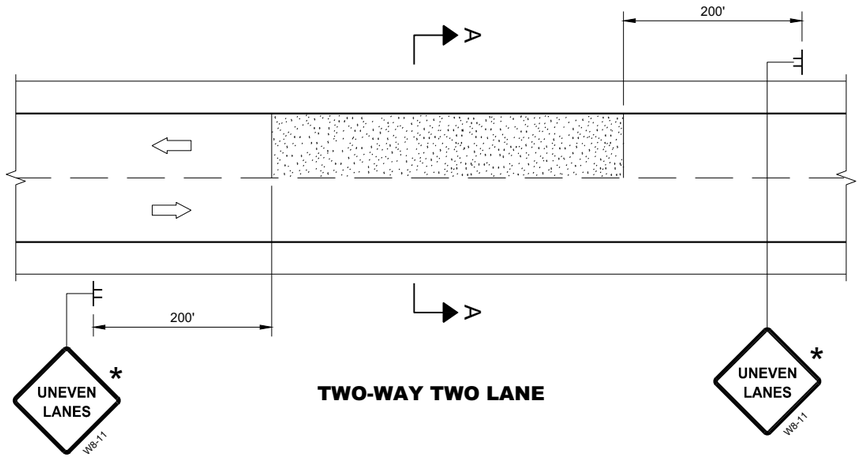
FHWA

6

S.D.D. 15 D 27-3



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

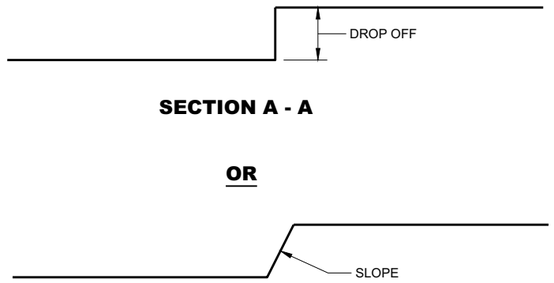
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

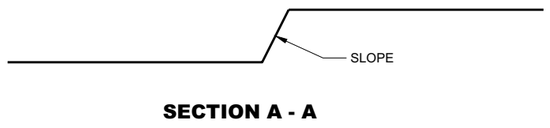
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

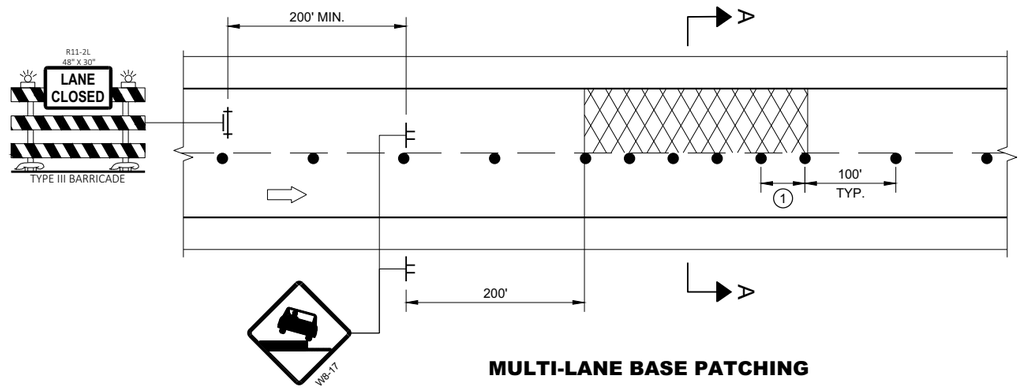


SECTION A - A

OR

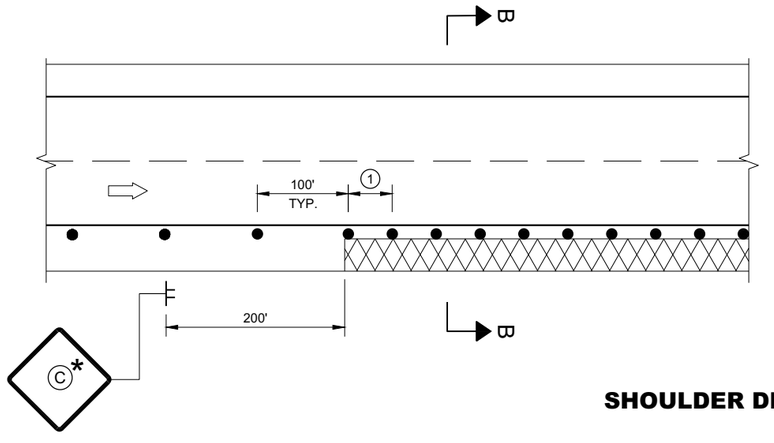


SECTION A - A

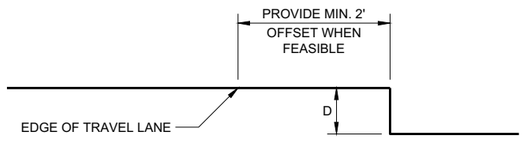


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D39 - 02

LEGEND

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE "A" WARNING LIGHT (FLASHING)

DIRECTION OF TRAFFIC

WORK AREA

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES 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 MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

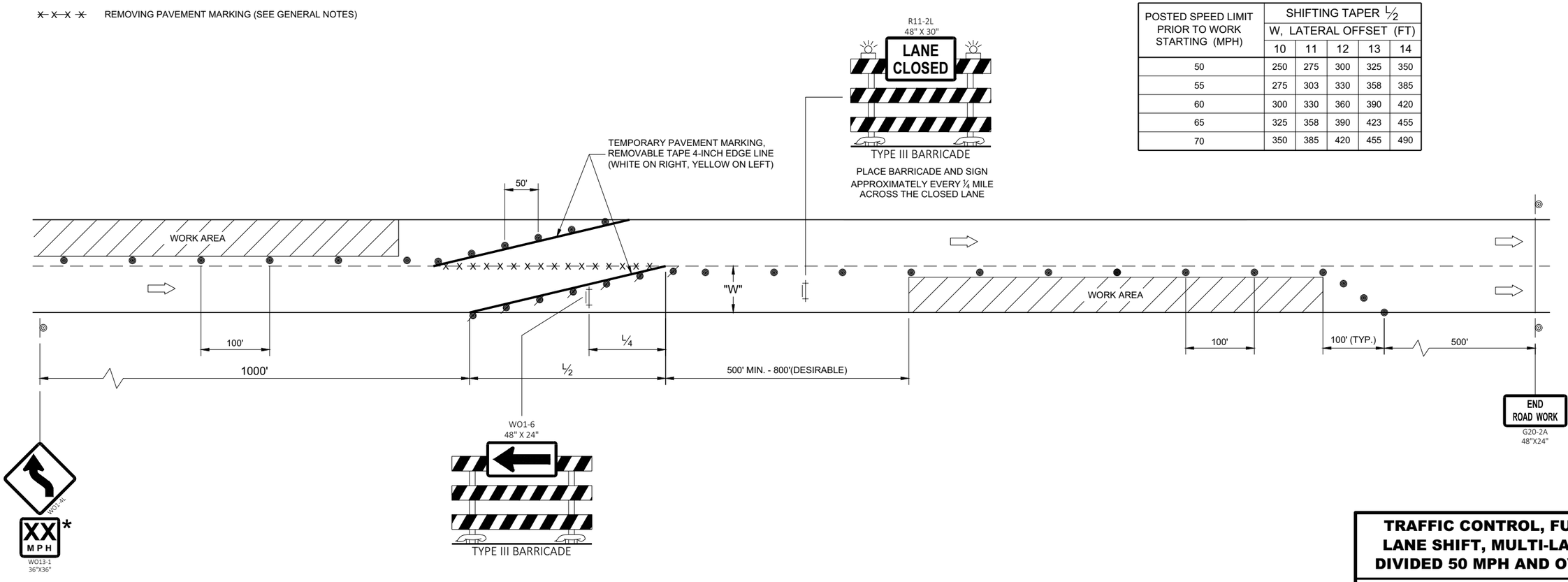
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)				
	10	11	12	13	14
50	250	275	300	325	350
55	275	303	330	358	385
60	300	330	360	390	420
65	325	358	390	423	455
70	350	385	420	455	490



TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D40 - 02b

SDD 15D40 - 02b

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVE PAVEMENT MARKING

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES 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 MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

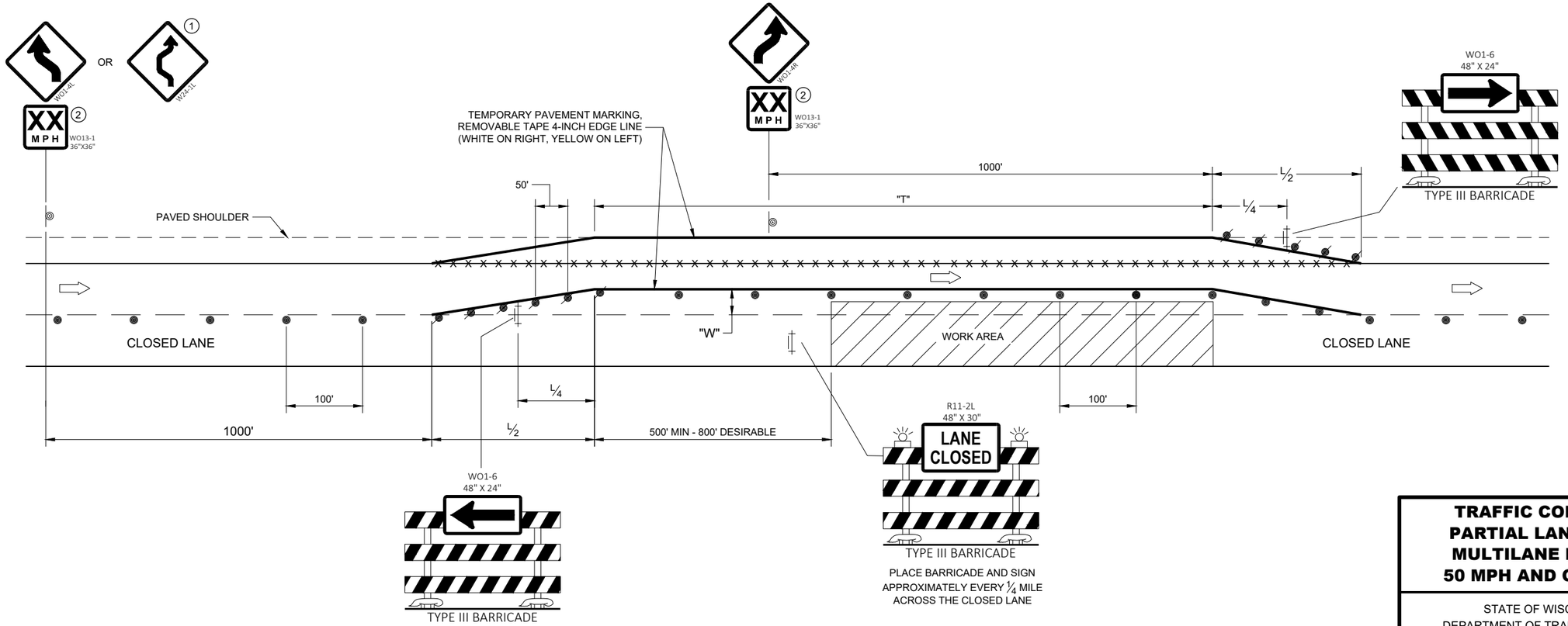
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) USE ONLY WHEN T<600', OMIT WO1-4R.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)								
	1	2	3	4	5	6	7	8	9
50	25	50	75	100	125	150	175	200	225
55	28	55	83	110	138	165	193	220	248
60	30	60	90	120	150	180	210	240	270
65	33	65	98	130	163	195	228	260	293
70	35	70	105	140	175	210	245	280	315



PLACE BARRICADE AND SIGN APPROXIMATELY EVERY 1/4 MILE ACROSS THE CLOSED LANE

TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 15D40 - 02d

SDD 15D40 - 02d

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

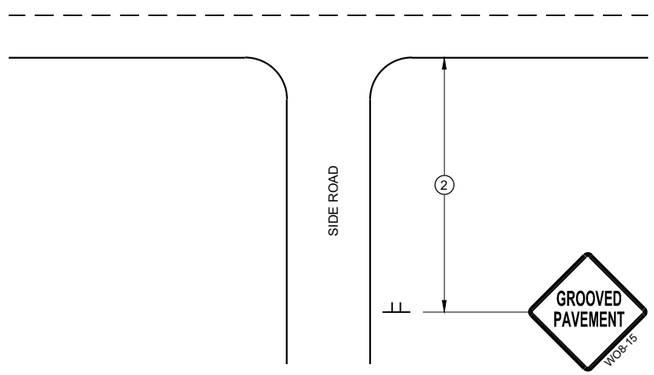
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

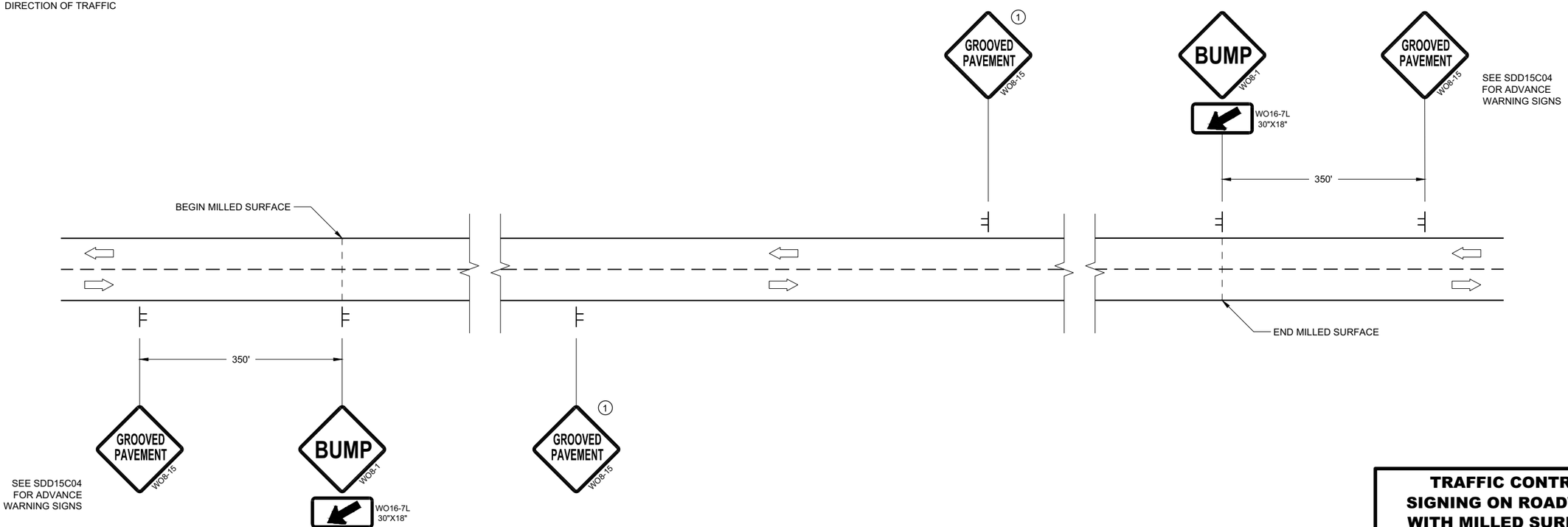
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

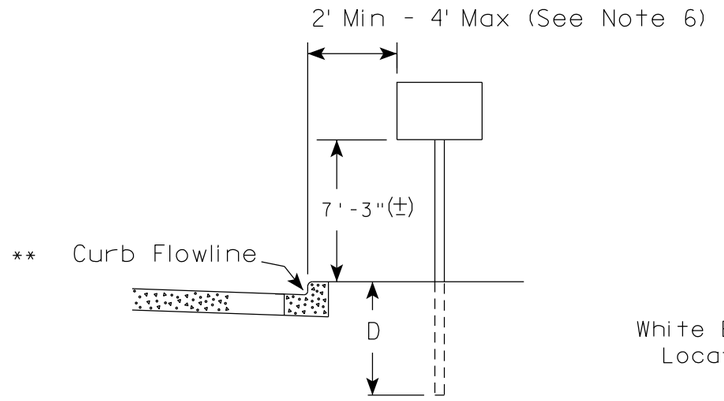
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

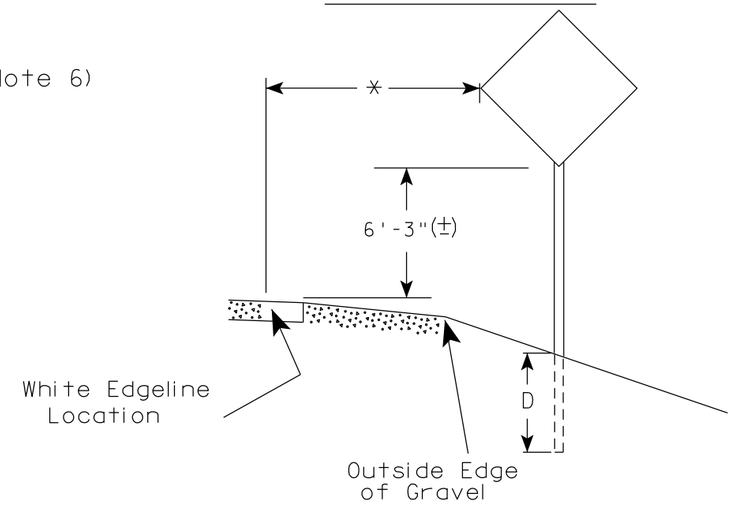
SDD 15D44 - 02

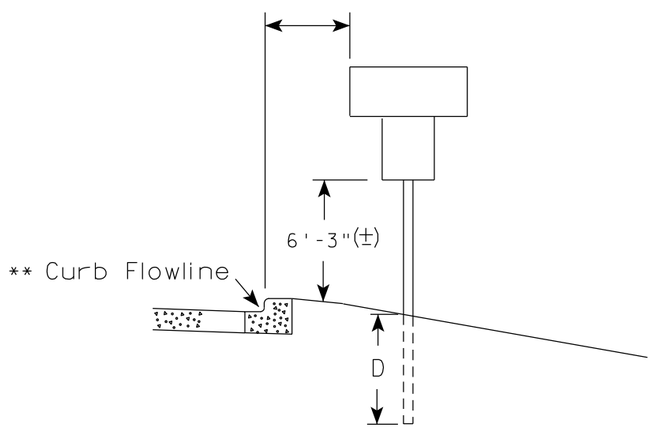
SDD 15D44 - 02

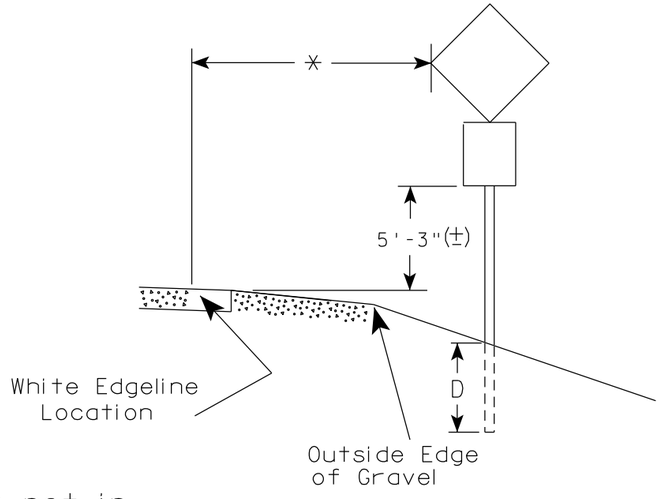
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

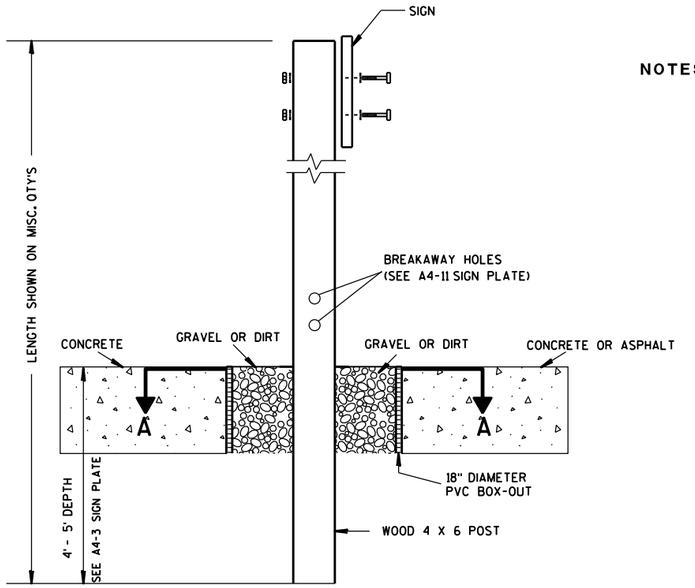
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

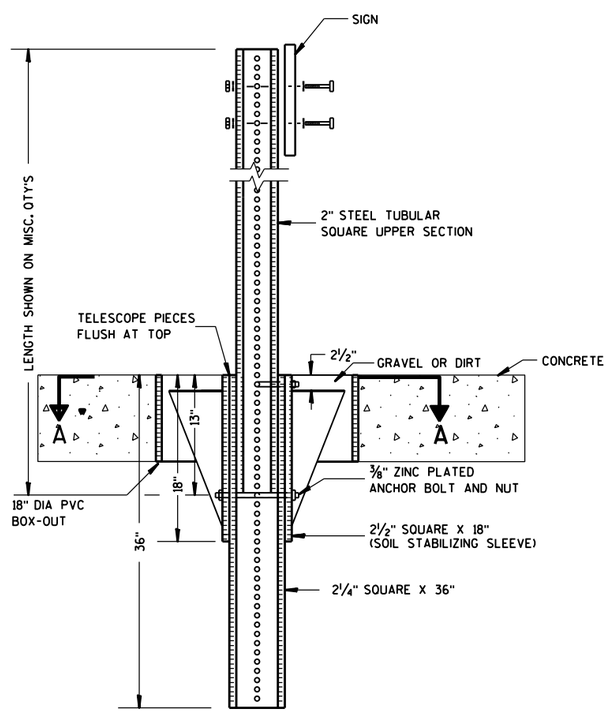
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 226	E



ELEVATION VIEW

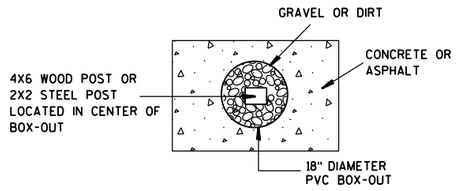
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

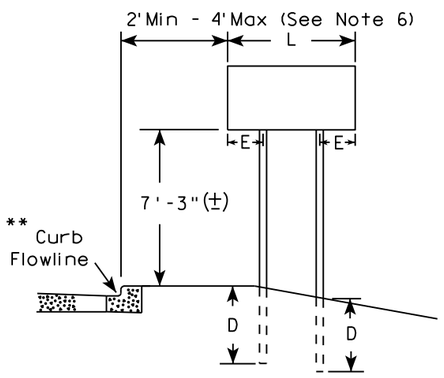
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

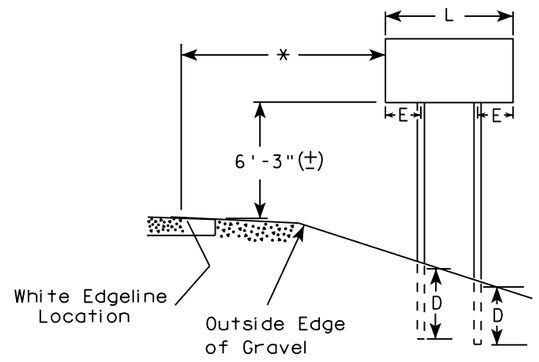
DATE 1/27/14 PLATE NO. A4-3B.1

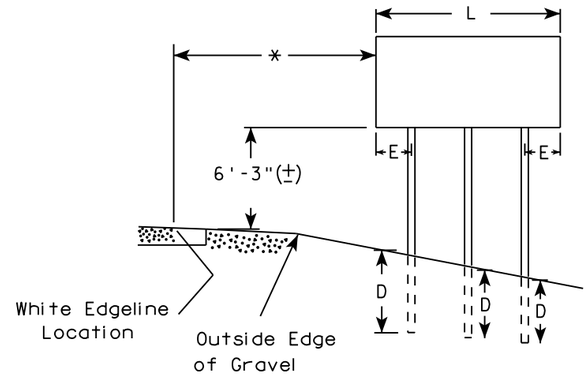
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

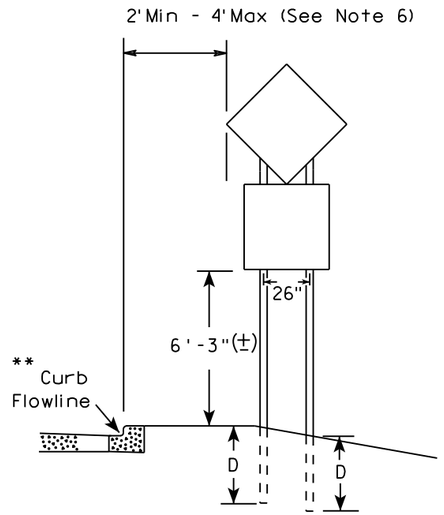
URBAN AREA



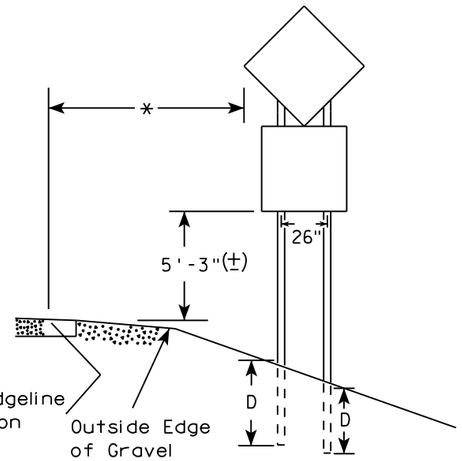
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

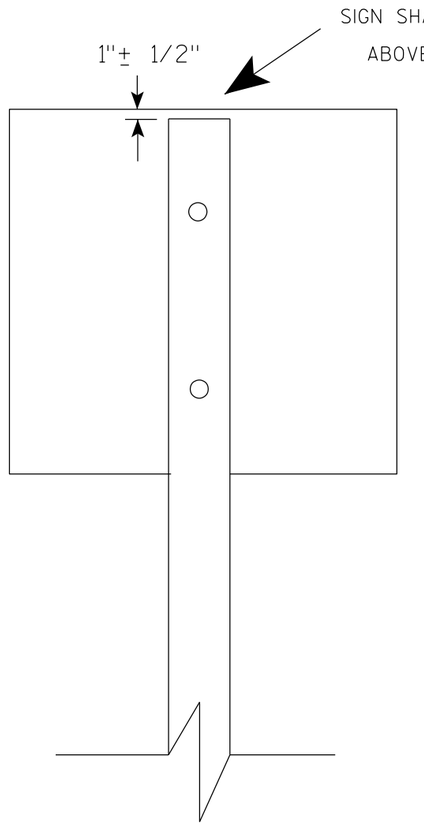
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

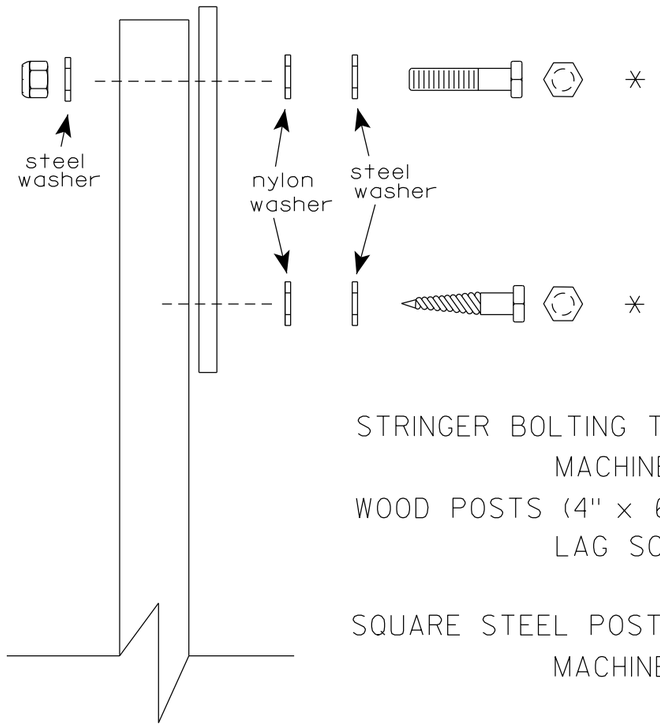
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 228	E





Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

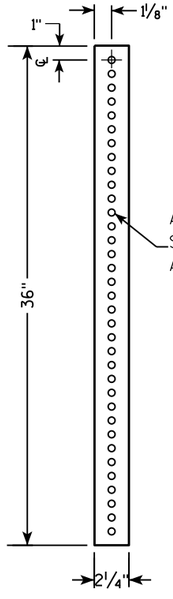
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

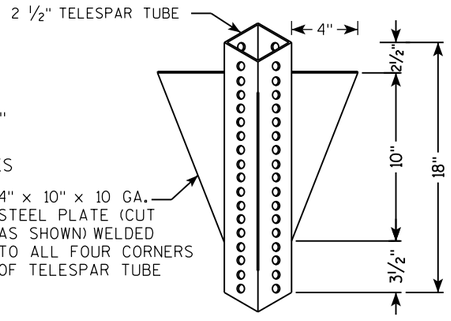
SHEET NO: 229 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

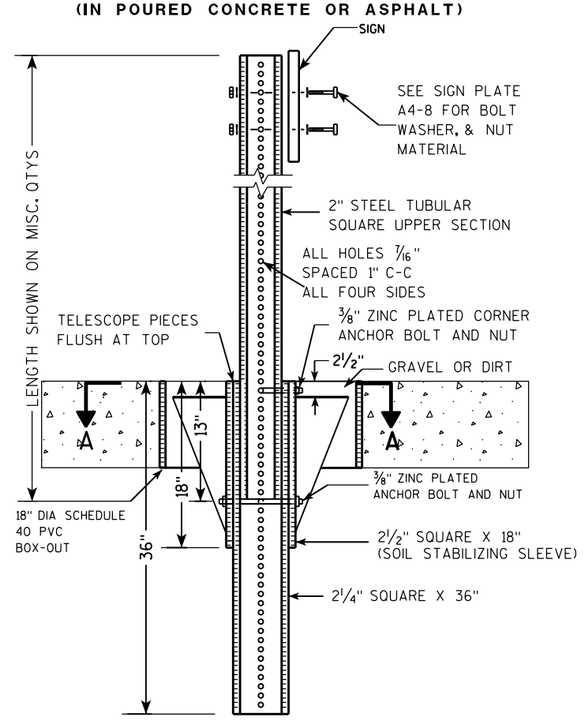
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



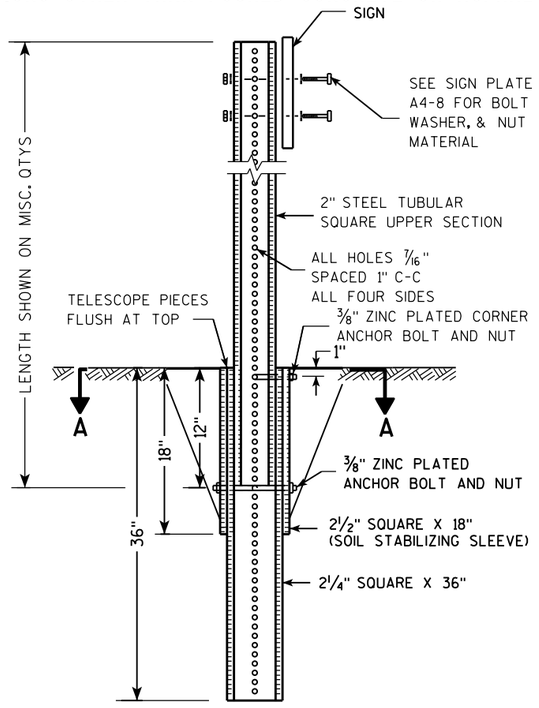
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

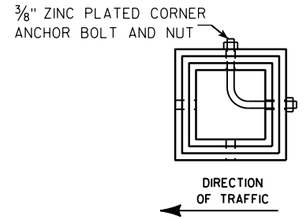


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

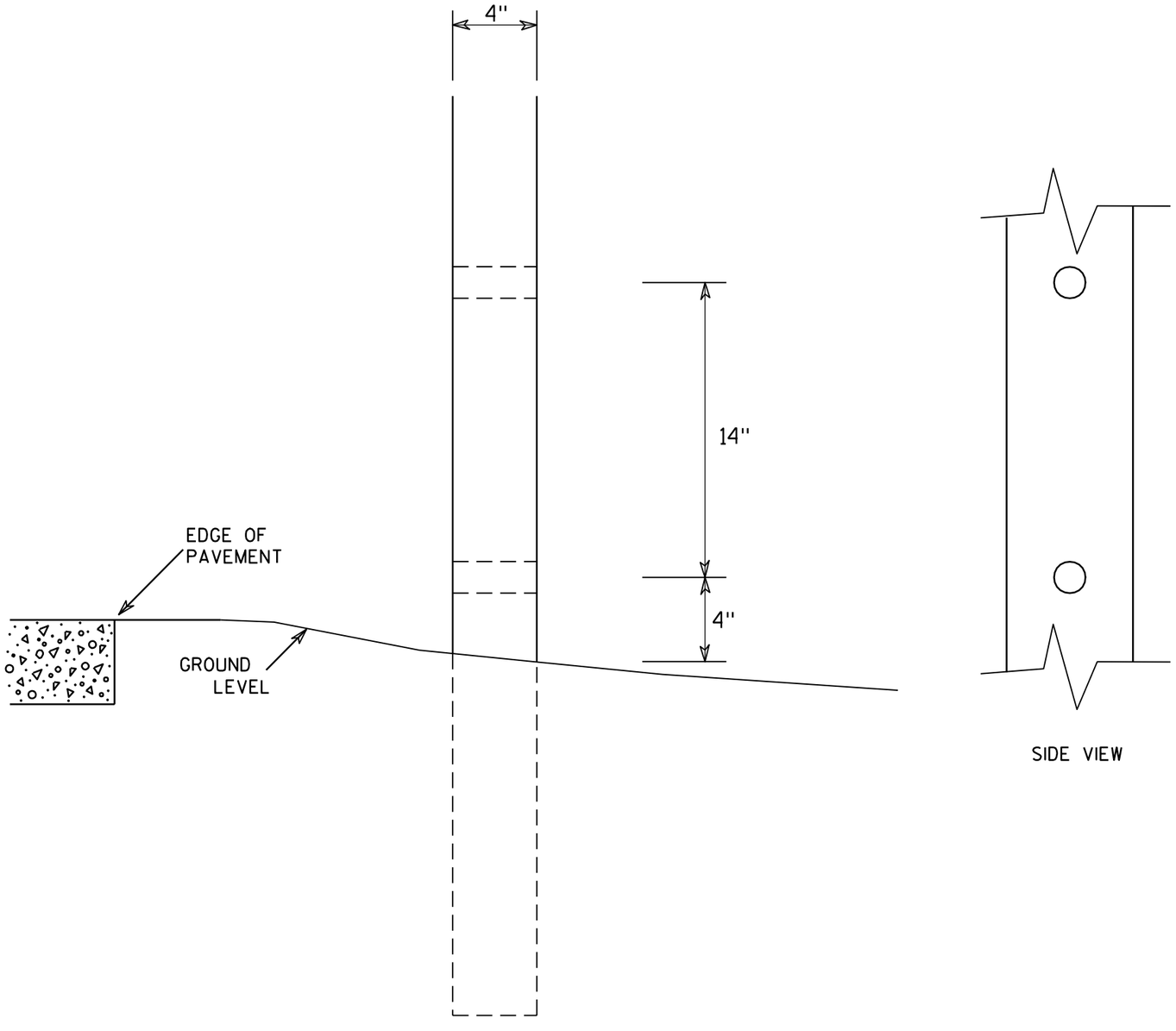
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 230 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

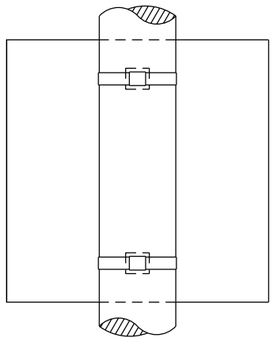
APPROVED Chester J Spang for State Traffic Engineer

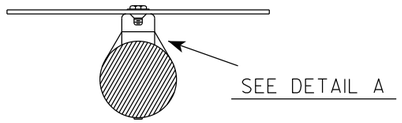
DATE 3/27/97 PLATE NO. A4-11.2

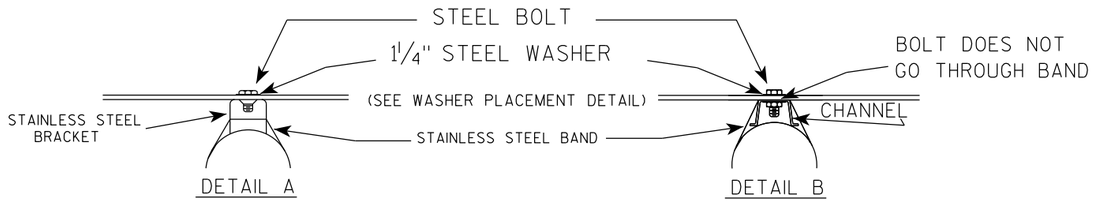
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 231	E

BANDING

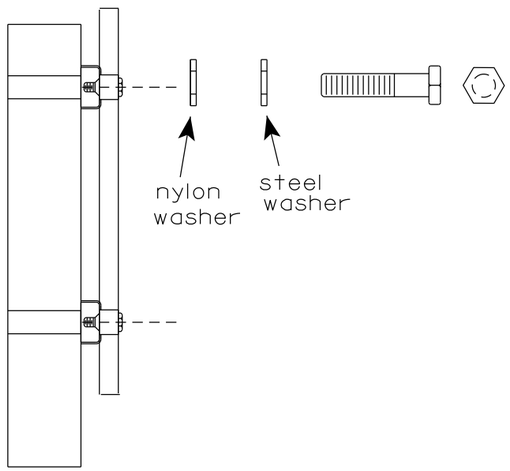
SINGLE SIGN







WASHER PLACEMENT

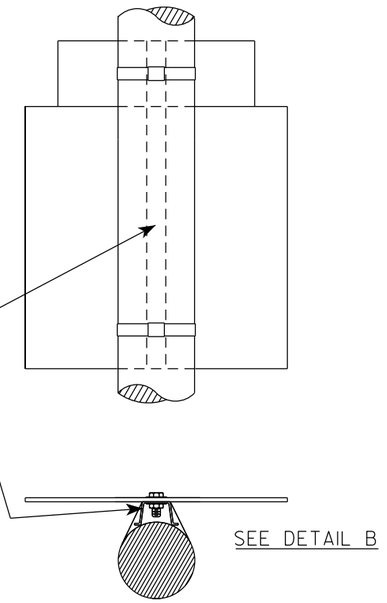


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

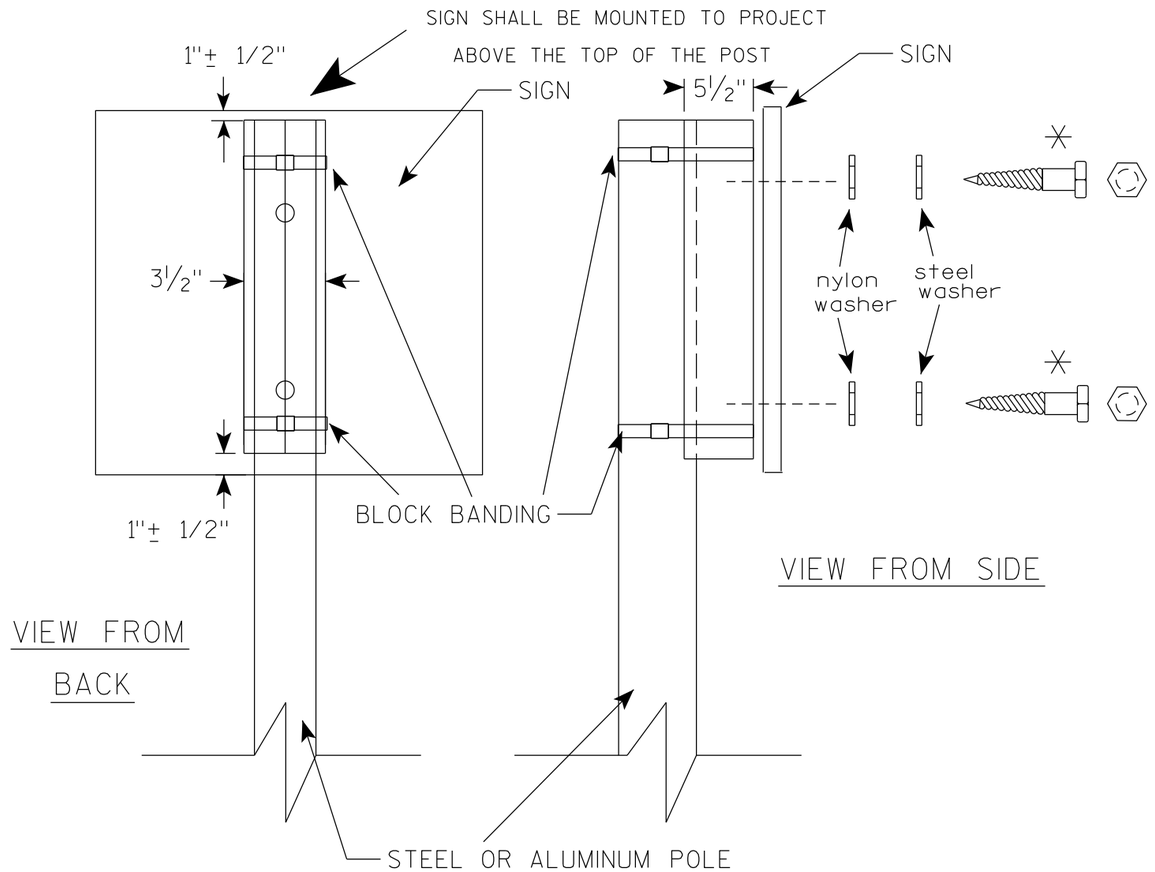
DATE 6/10/19 PLATE NO. A5-9.4

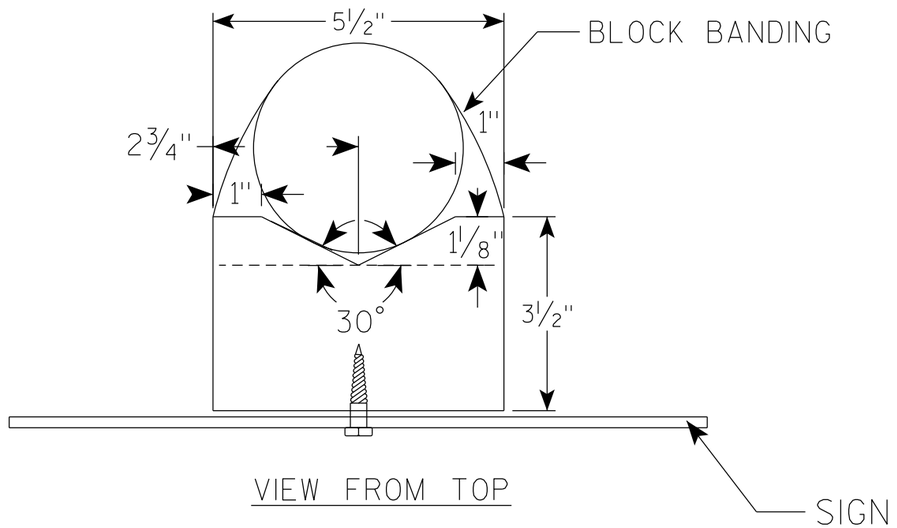
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 232	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

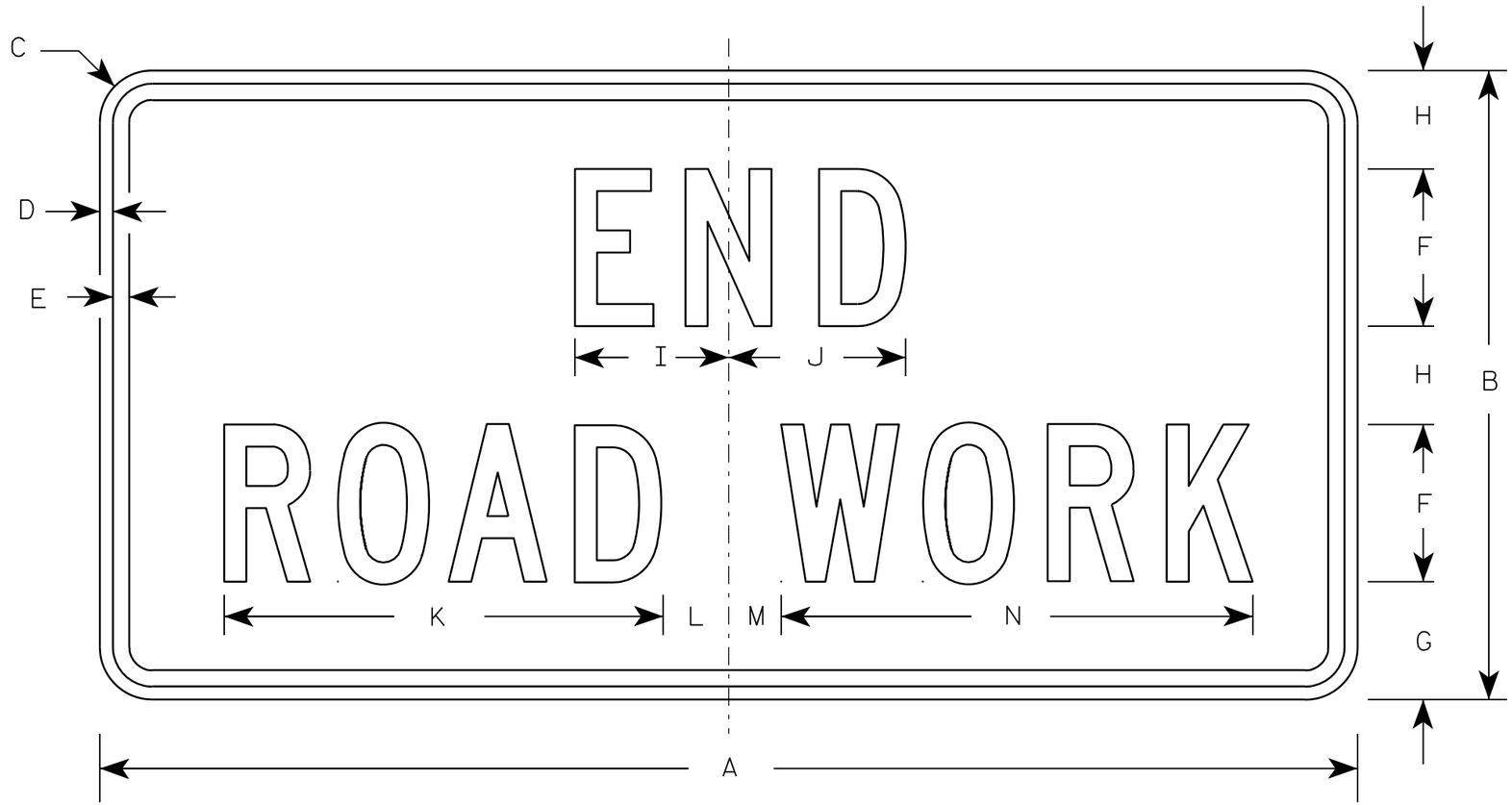
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO: | SHEET NO: 233 | E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 234	E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E
4. Material shall be .040 aluminmum

G20-60

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	108	24				12	6	14 7/8	78 1/4																		18.0
5																											

STANDARD SIGN
G20-60

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/15 PLATE NO G20-60.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\G2060.DGN PLOT DATE : 13-MAY-2015 08:46 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 20.431338:1.000000 WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E

G20-61

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	120	30	6		2	12	9	21	78 1/4	20 3/4																	25.0
5																											

STANDARD SIGN
G20-61

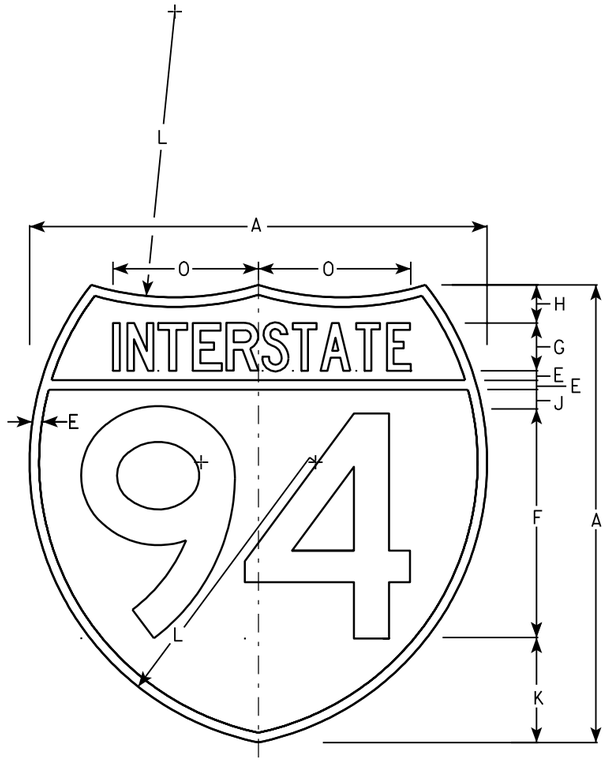
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

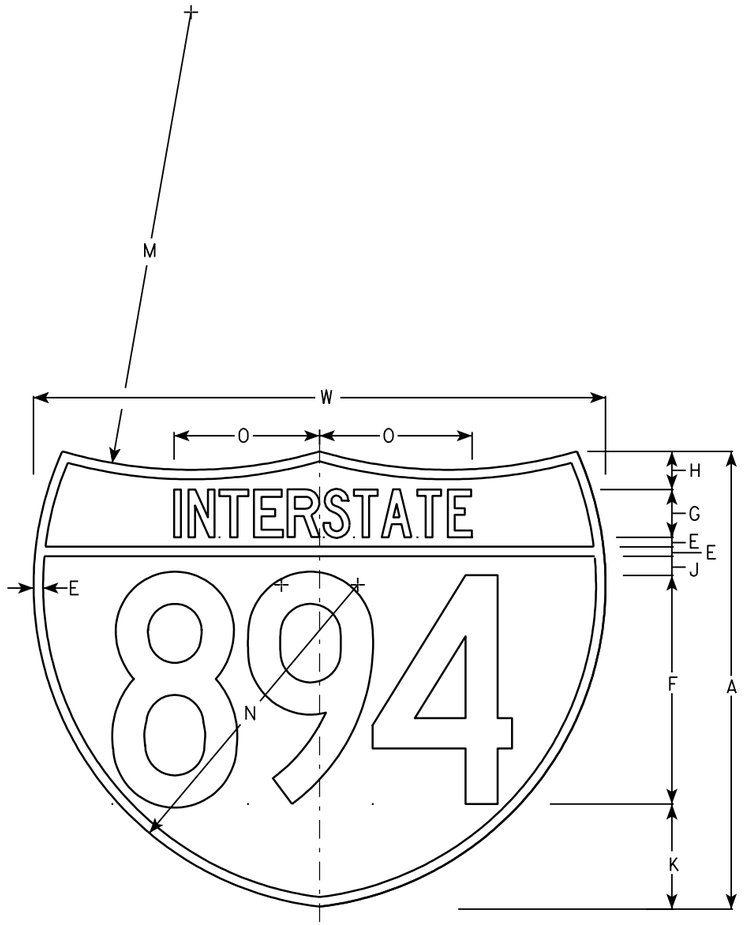
DATE 5/07/15 PLATE NO G20-61.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\G2061.DGN PLOT DATE : 07-MAY-2015 13:47 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 20.431338:1.000000 WISDOT/CADDS SHEET 42



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

7

7

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

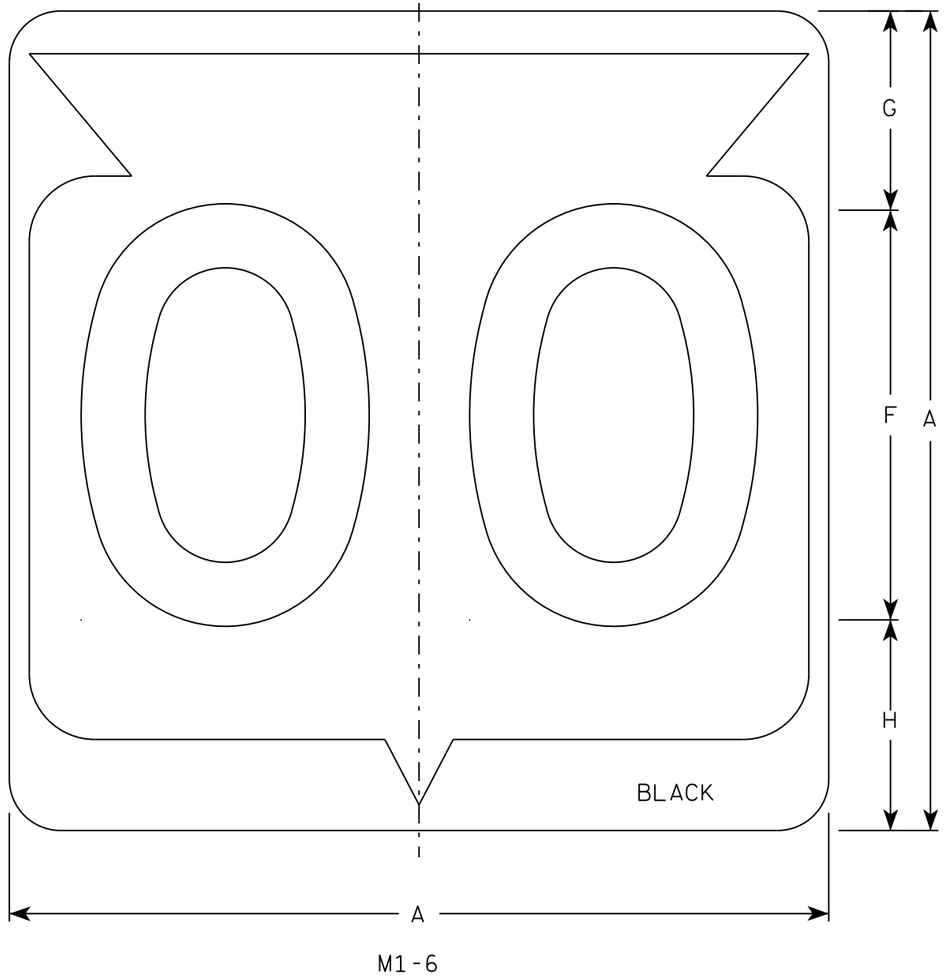
INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

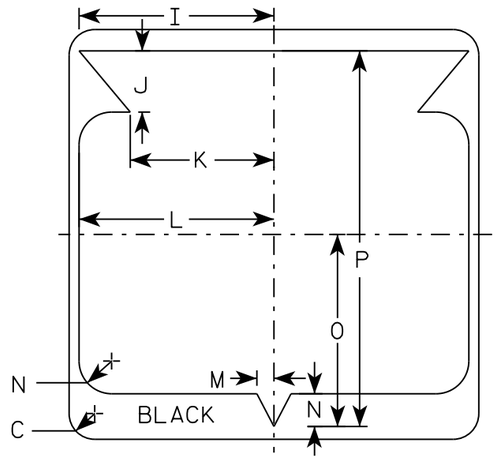
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 237	E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

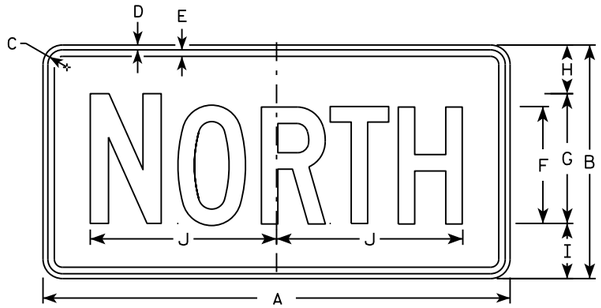
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

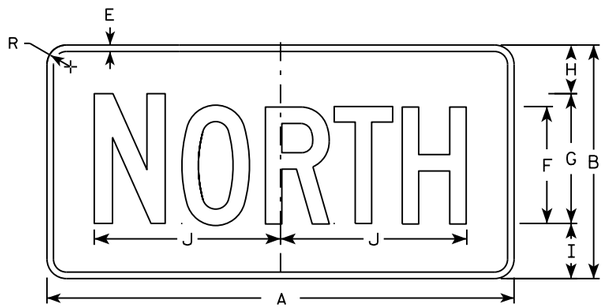
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 238	E



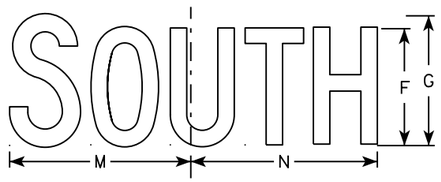
M3-1
MM3-1
MP3-1



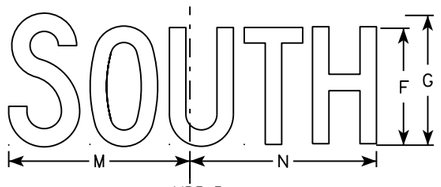
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

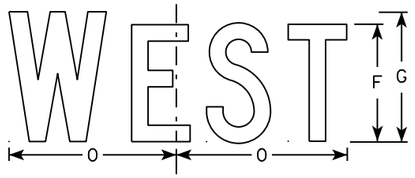
MB3-2
MK3-2
MN3-2



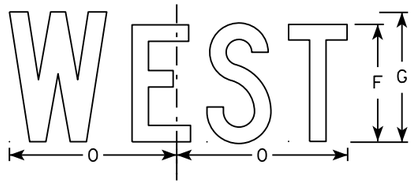
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

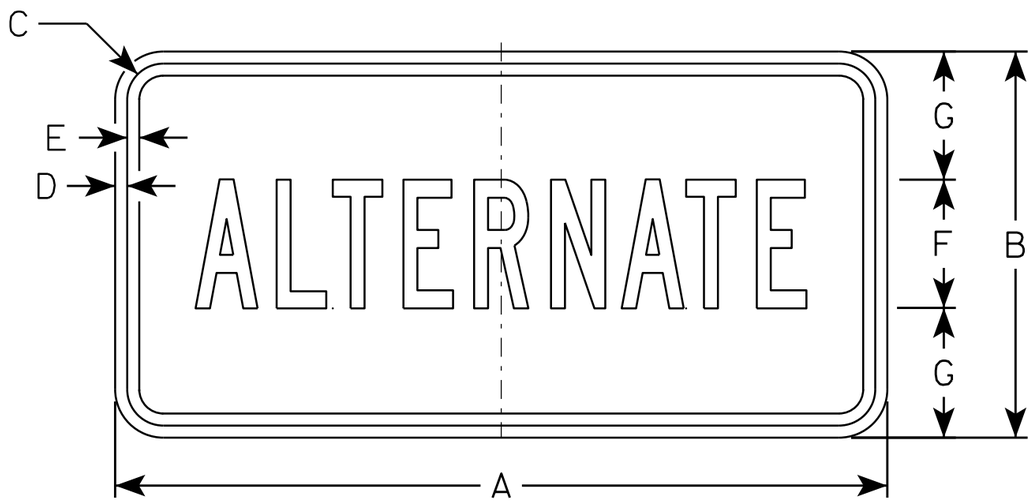
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

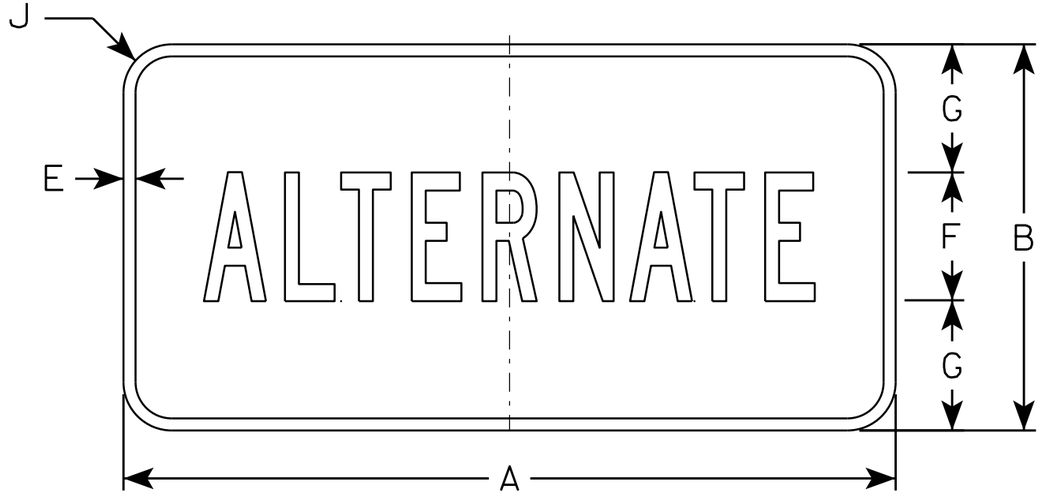
DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-1
M04-1



MB4-1

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:
   Background - See Note 5
   Message - See note 5
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-1 Background - White
   Message - Black

   MB4-1 Background - Blue
   Message - White

   M04-1 Background - Orange - Type F
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	4	4	9 3/4	9 1/2	1 1/2																	2.00
3	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
4	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
5	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5

STANDARD SIGN
M4-1

WISCONSIN DEPT OF TRANSPORTATION

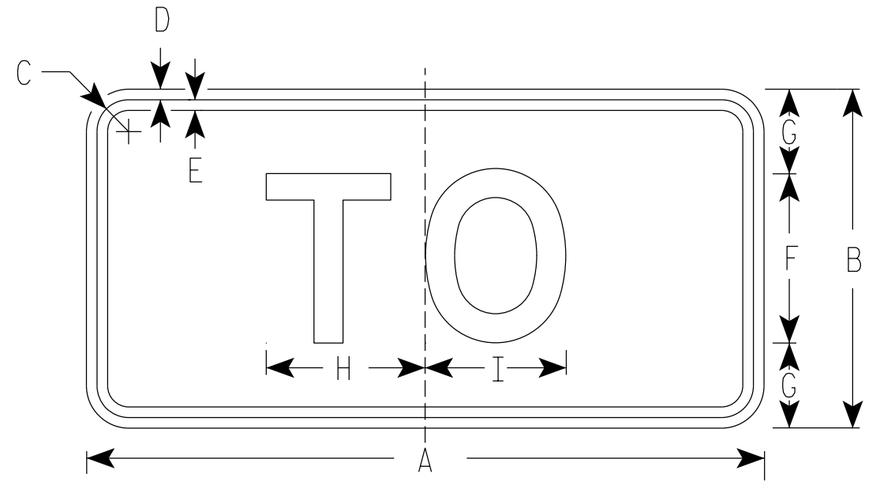
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/14 PLATE 240 '14-1.8

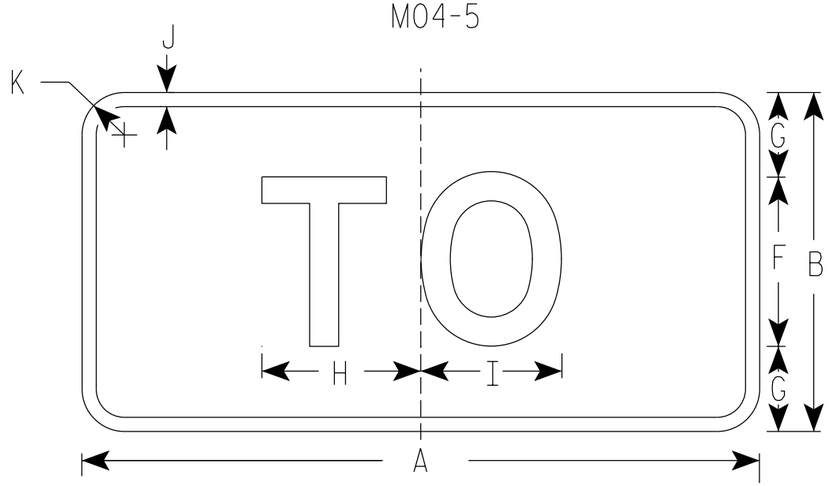
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M41.DGN PLOT DATE : 30-JUN-2014 15:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 4.708937:1.000000 WISDOT/CADDS SHEET 42



M4-5
MM4-5
MP4-5
MO4-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   MO4-5 Background - Orange Type F Reflective
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

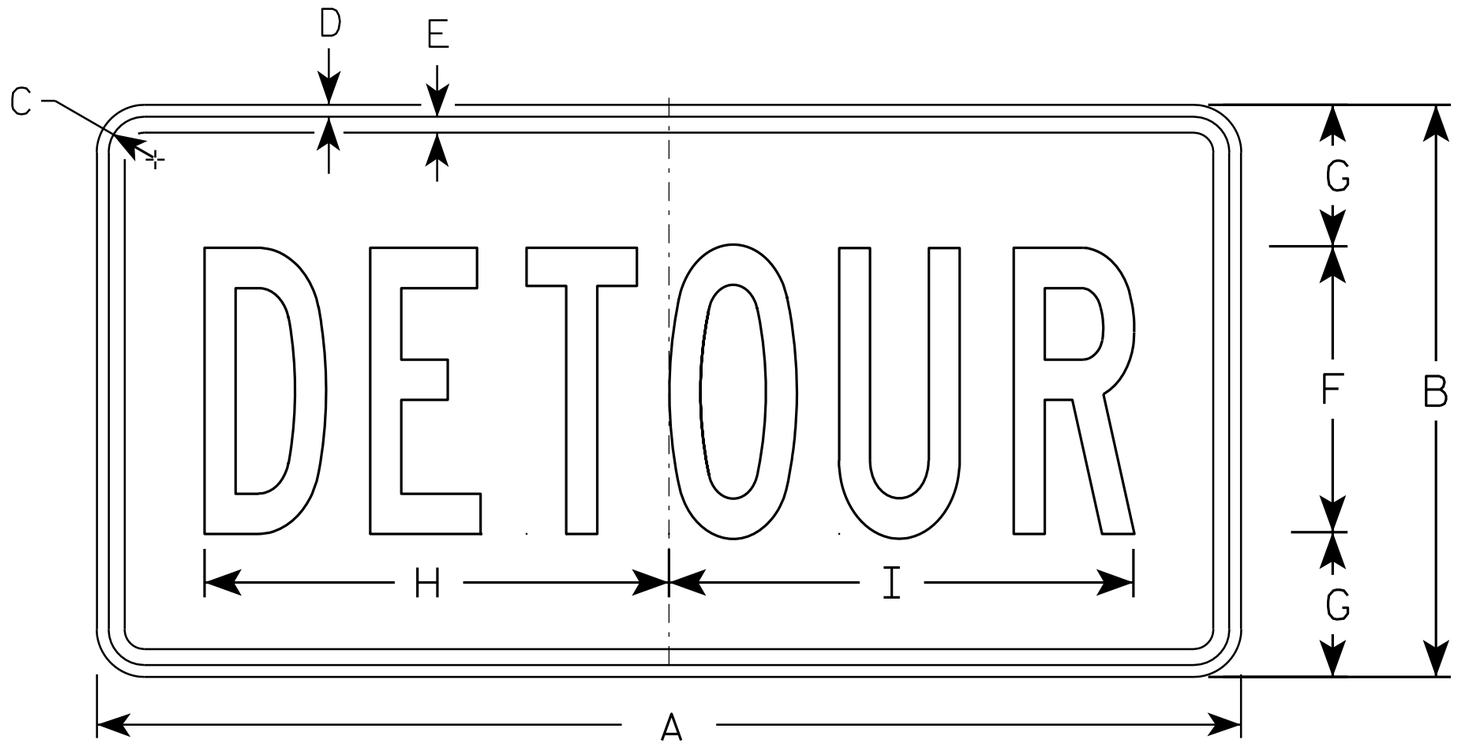
STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/7/19 PLATE NO. M4-5.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 241 | E



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

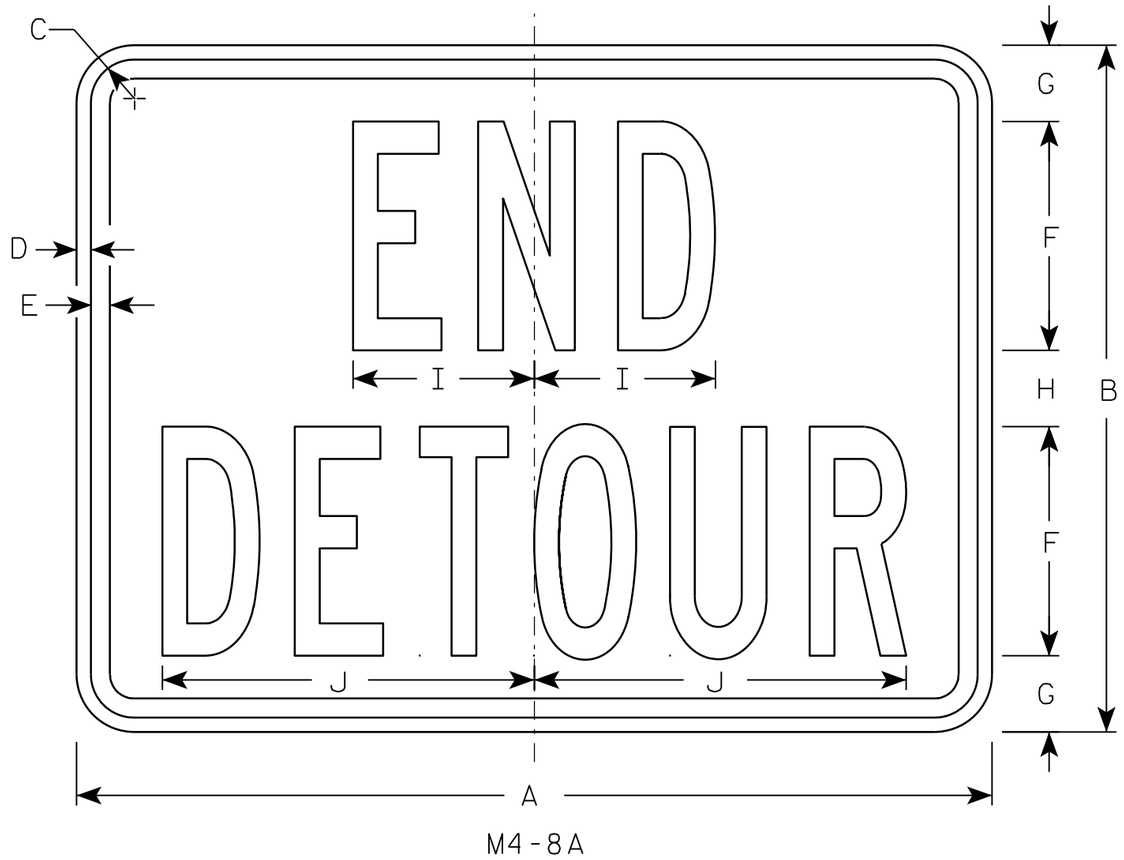
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 242	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

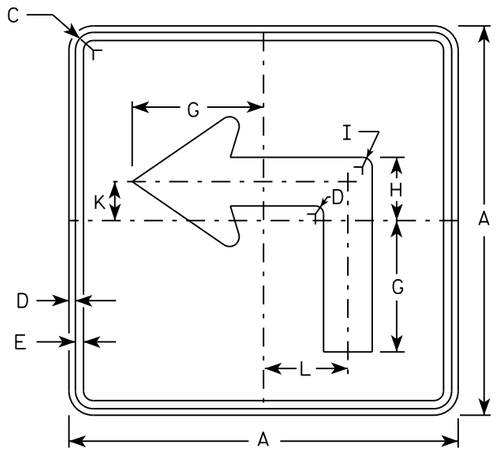
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

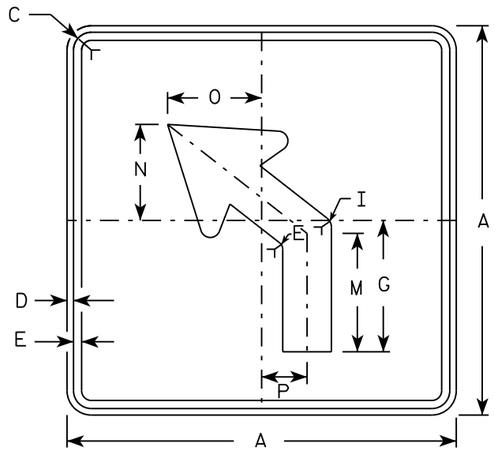
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

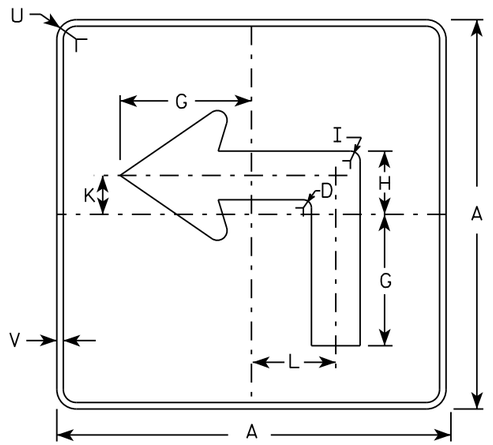
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 243	E



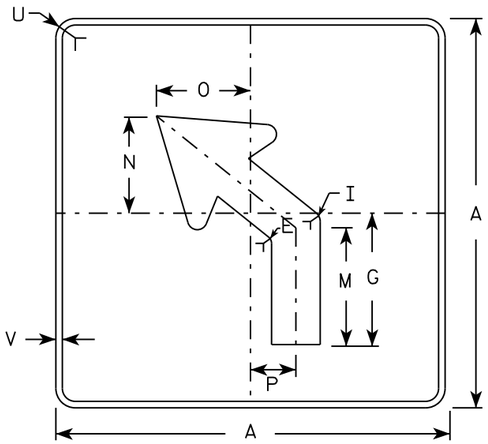
M5-1L
MM5-1L
MO5-1L
MP5-1L



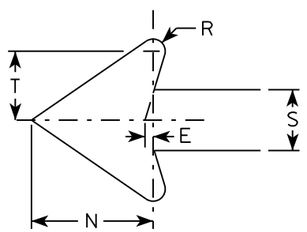
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

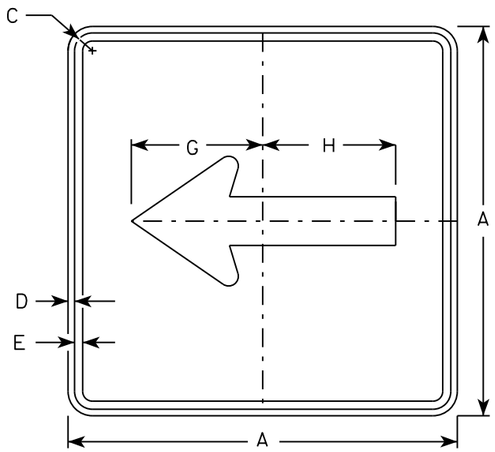
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

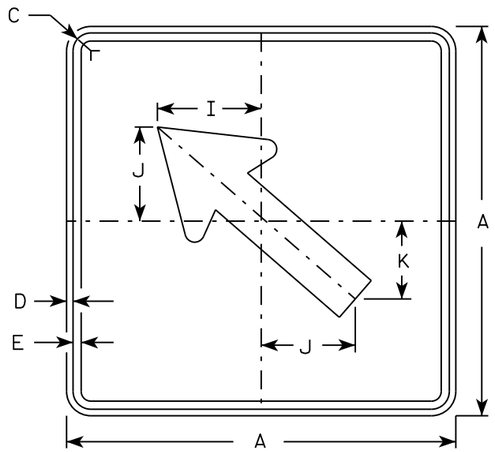
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



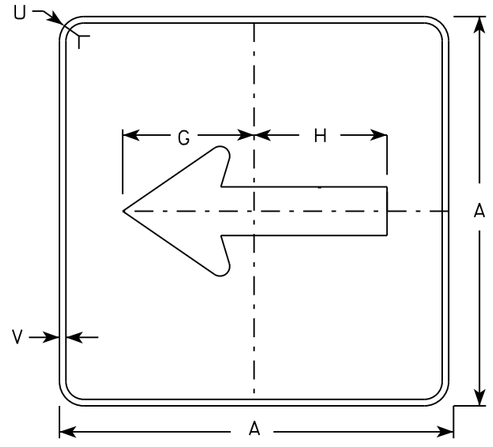
M6-1
MM6-1
MO6-1
MP6-1



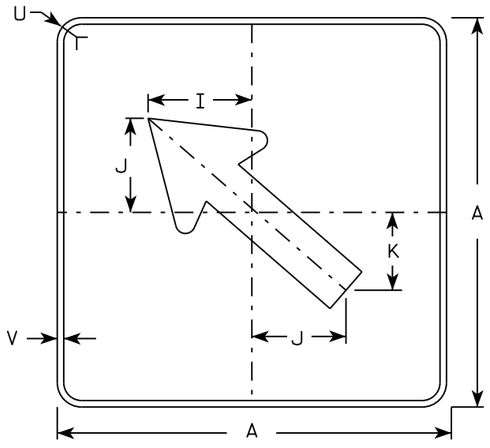
M6-2
MM6-2
MO6-2
MP6-2

NOTES

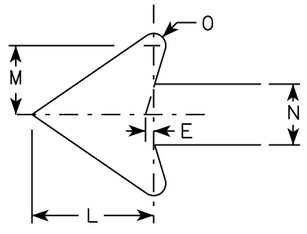
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

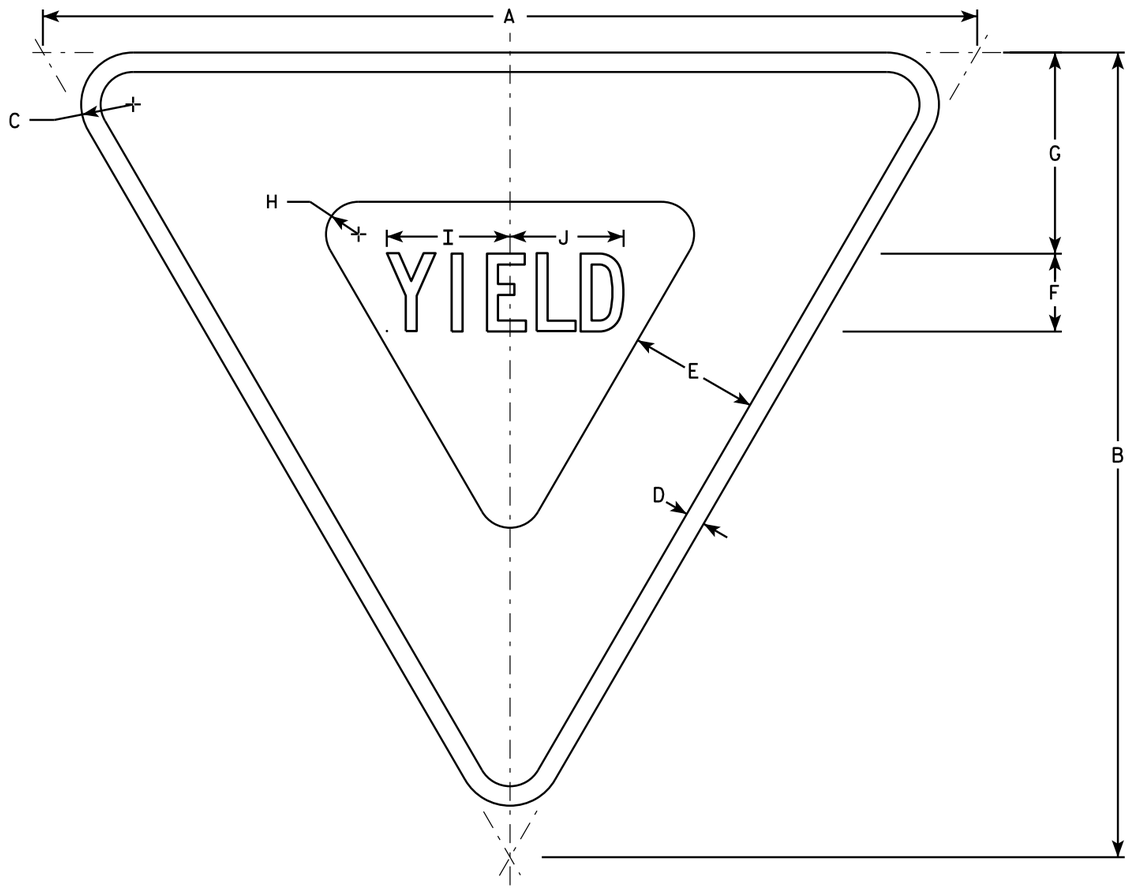
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 245 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

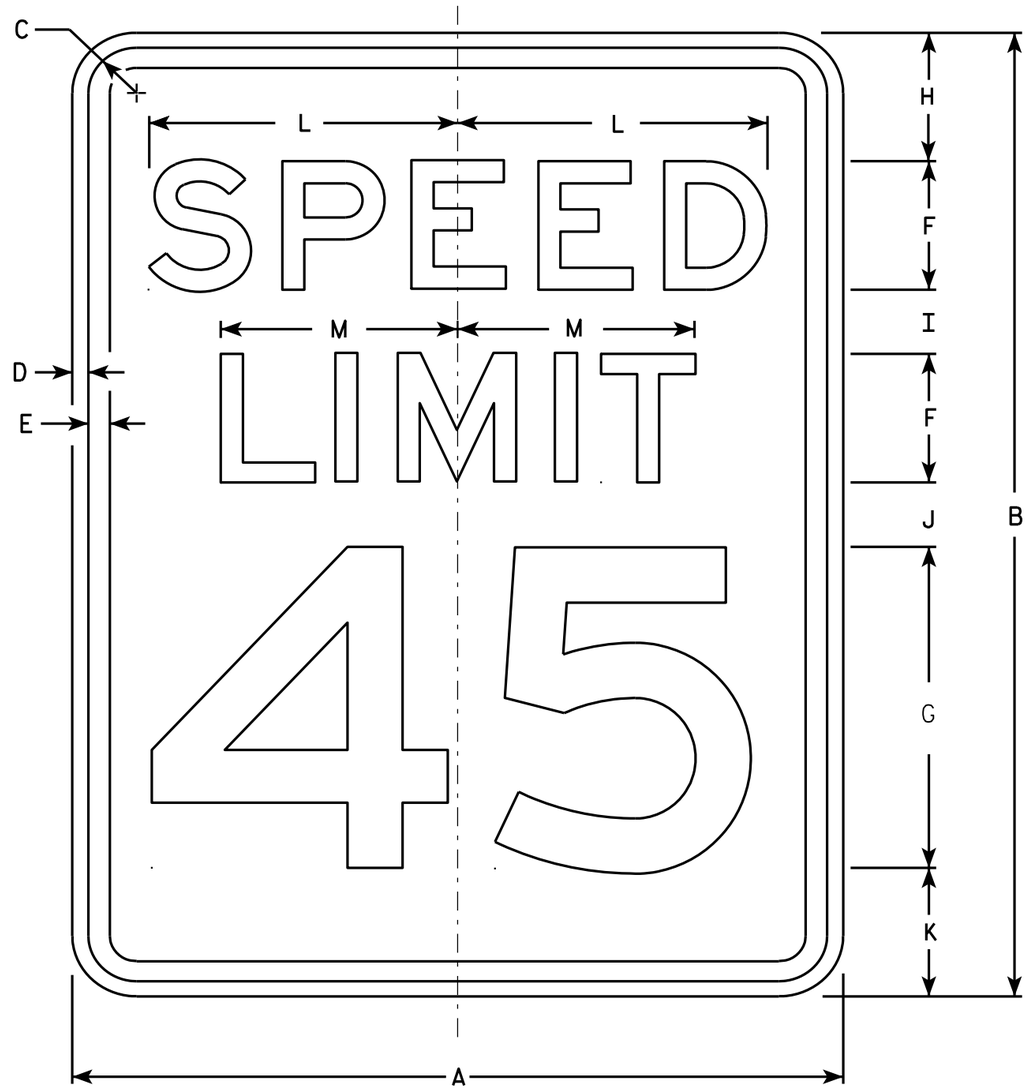
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

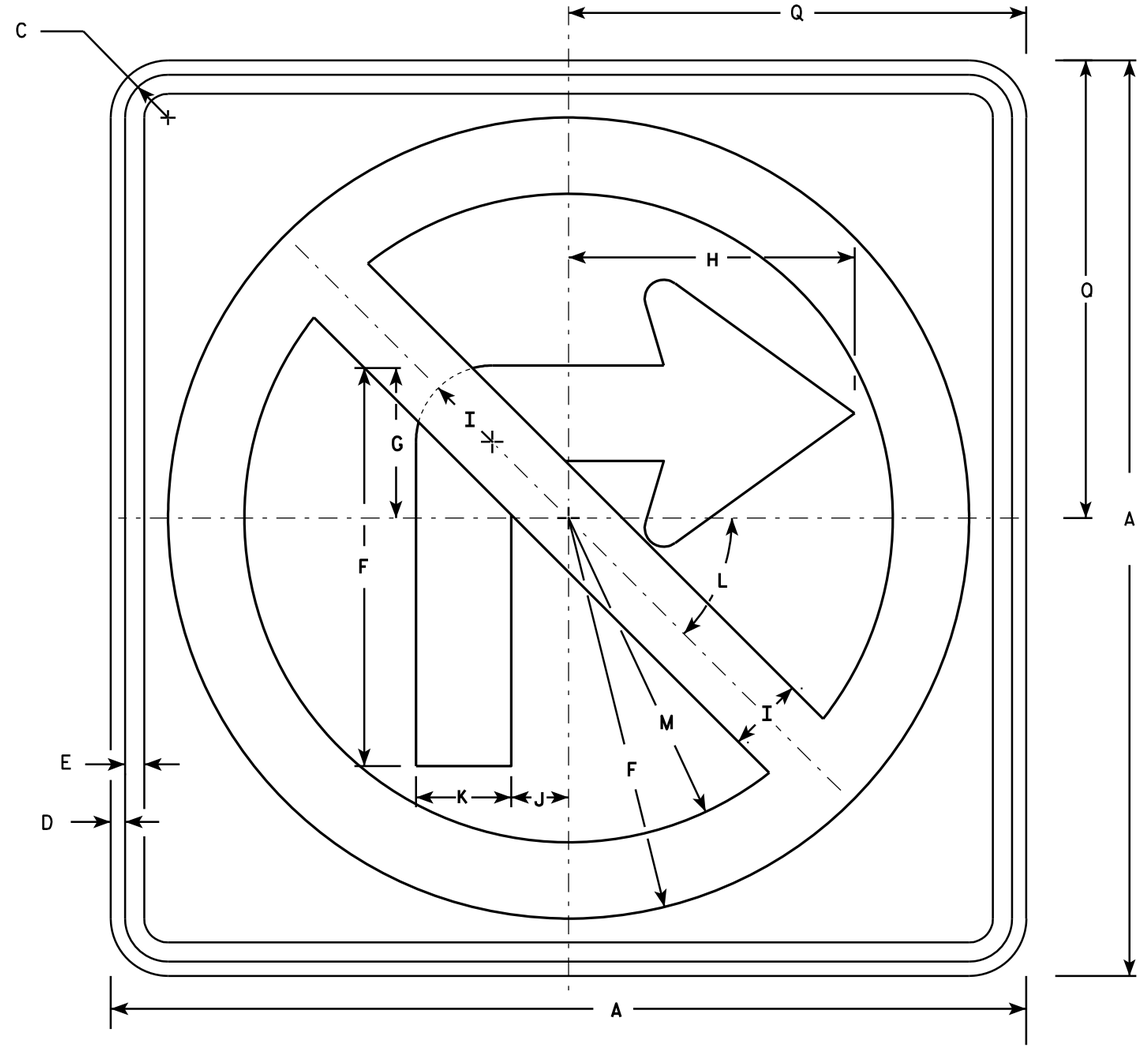
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

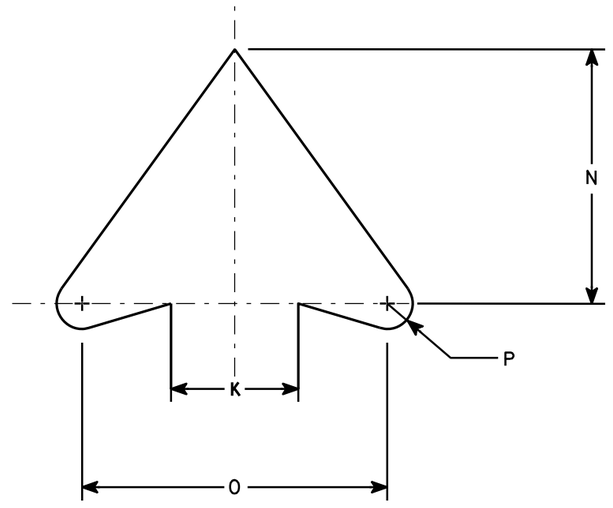
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 247	E



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

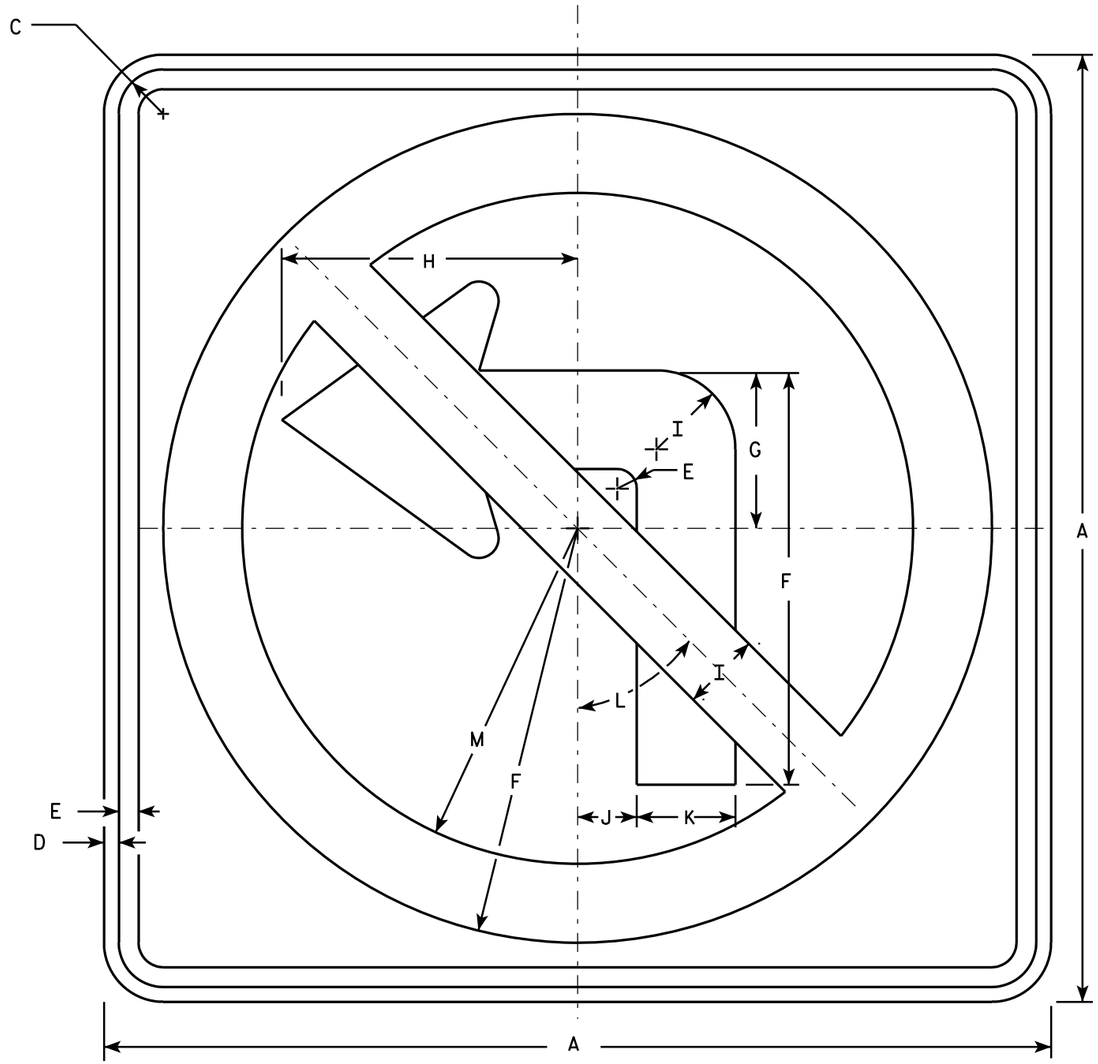
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

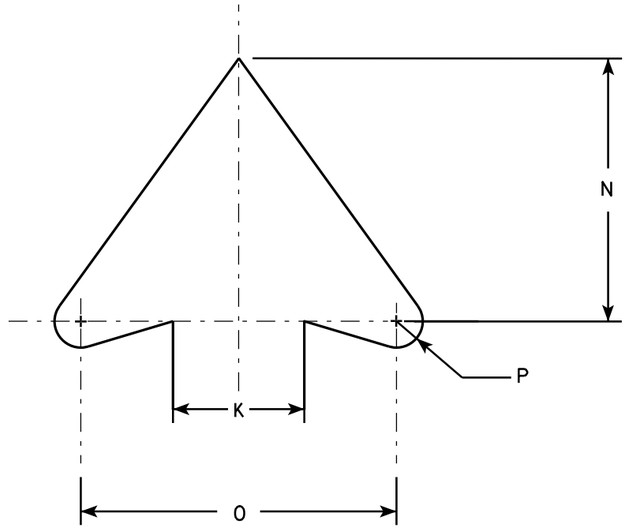
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 248	E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

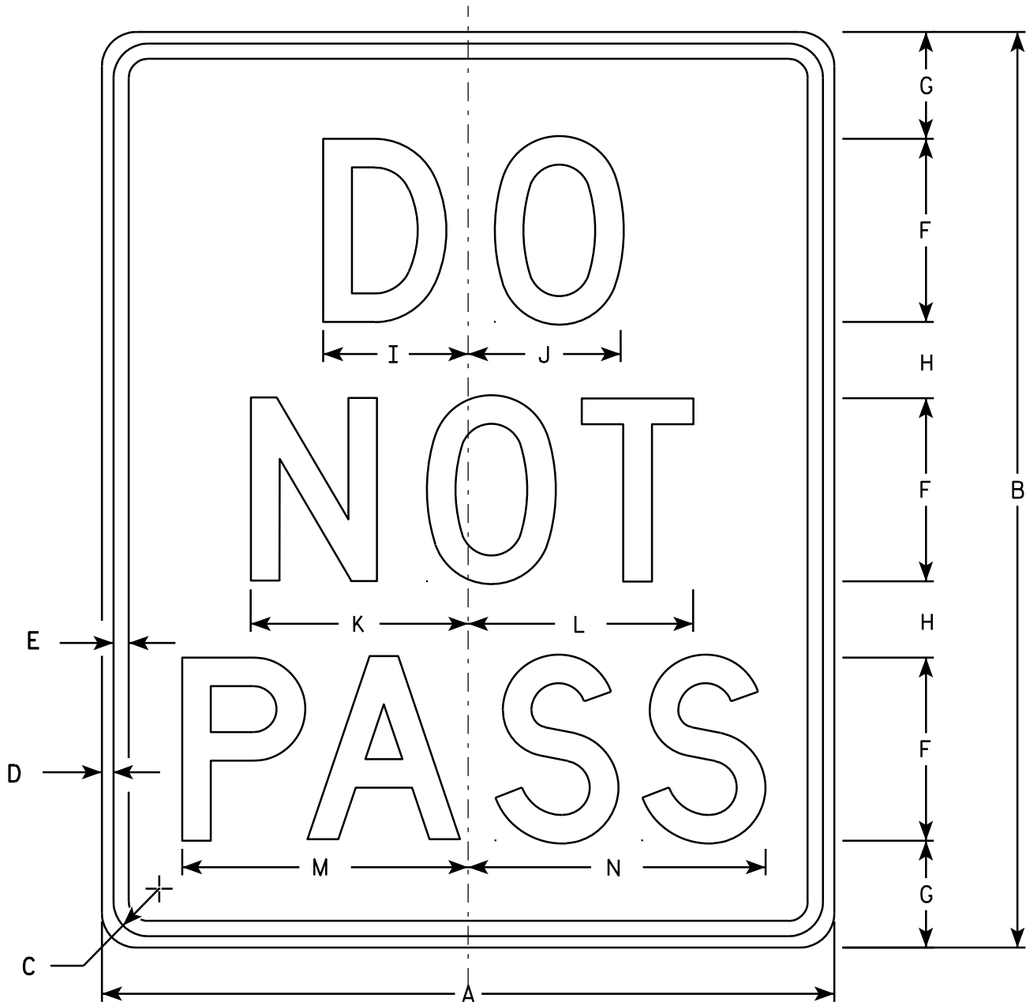
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 249	E



R4-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 1/8	3 1/4	4 3/4	4 7/8	6 1/4	6 1/2													3.0
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
2M	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
3																											
4	36	48	1 5/8	5/8	3/4	8	7	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13													12.0
5	48	60	2 1/4	3/4	1	10	8	7	7 3/4	8 3/8	11 7/8	12 1/4	15 5/8	16 1/4													20.0

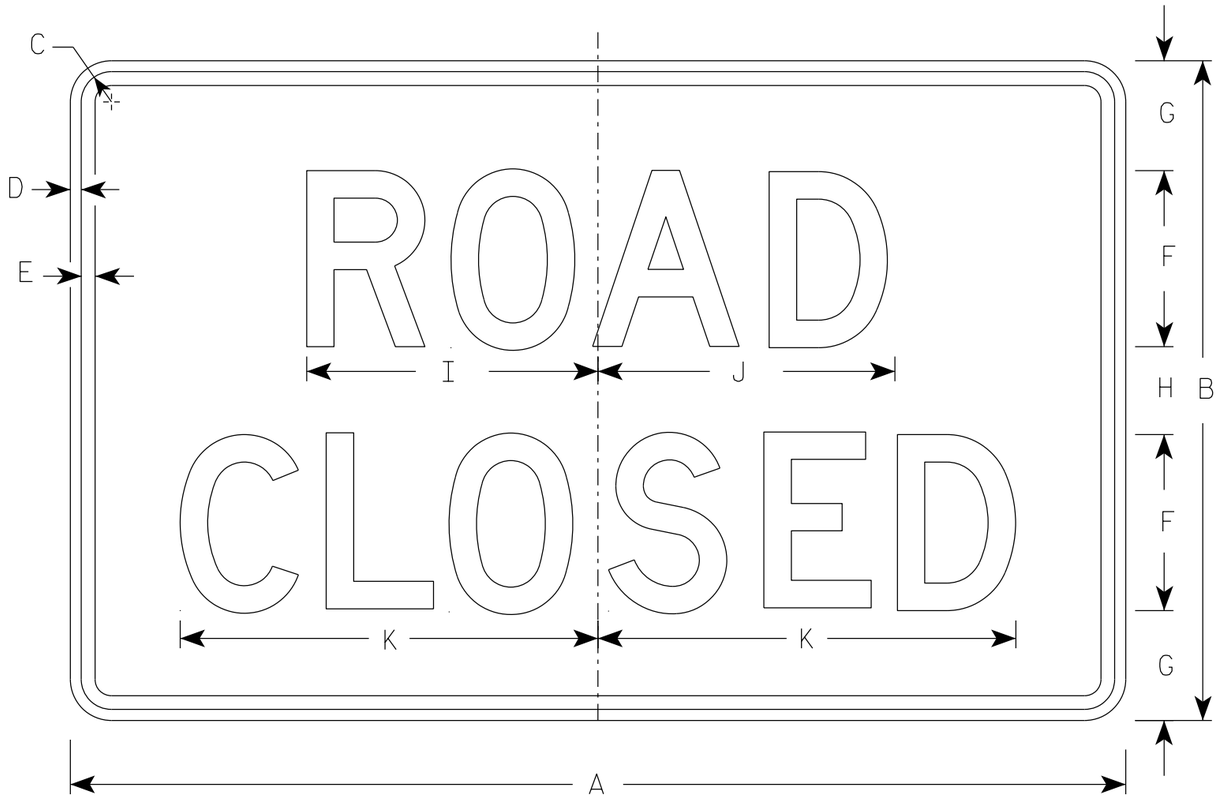
STANDARD SIGN
R4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-1.7

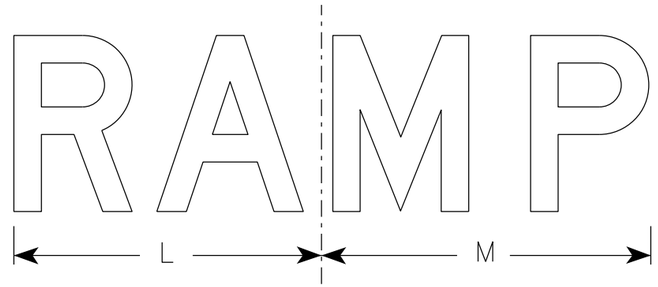
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 250 | E



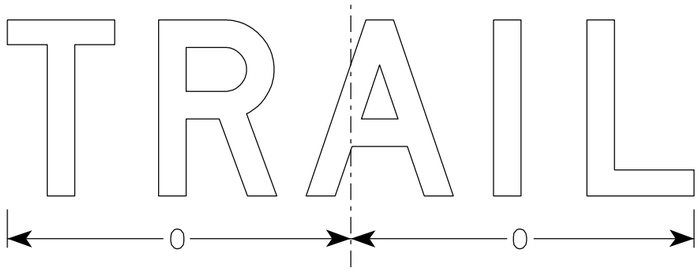
R11-2

NOTES

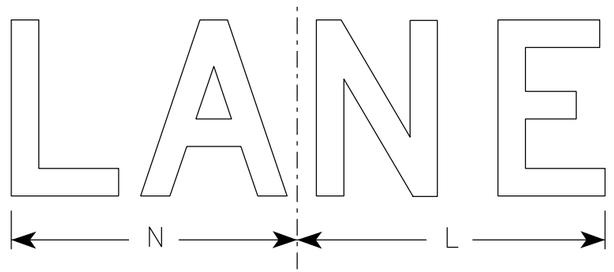
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

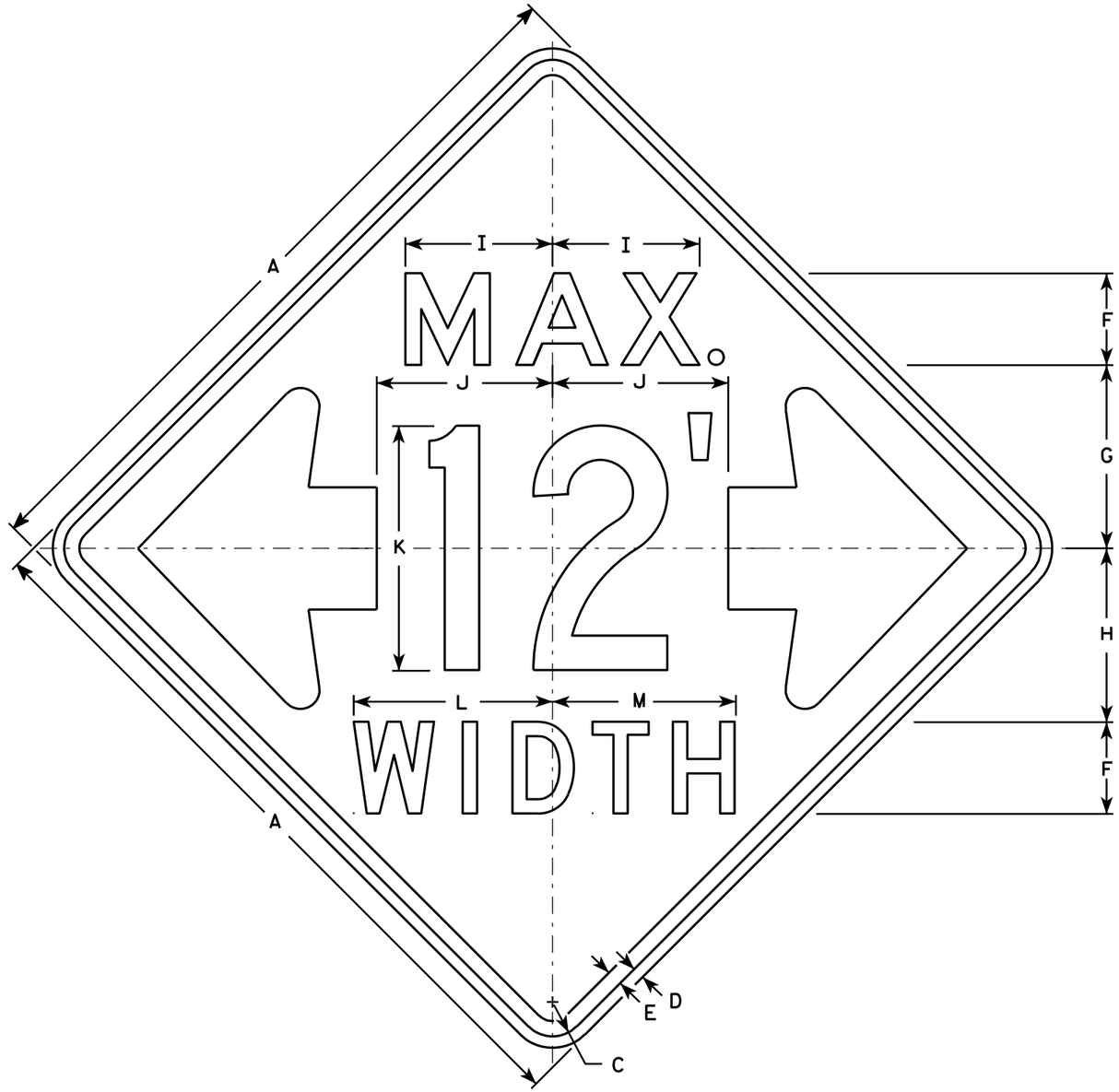
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

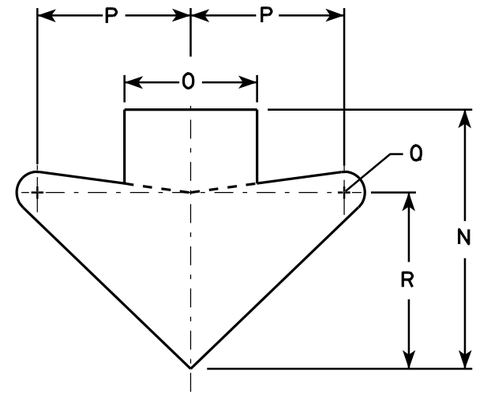
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 251	E



W12-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

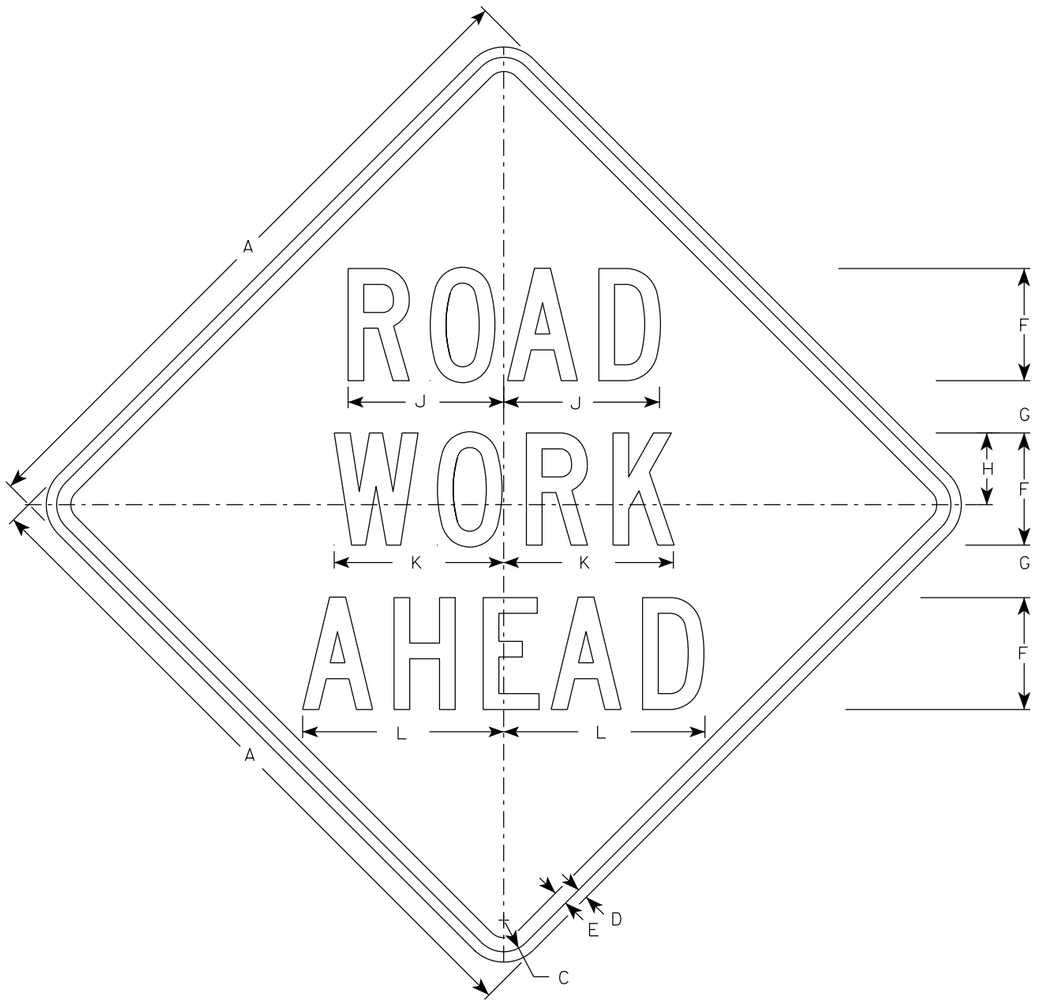
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 252 | E

7

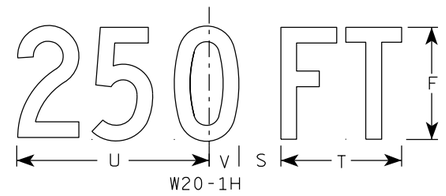
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000
WISDOT/CADDS SHEET 42

NOTES

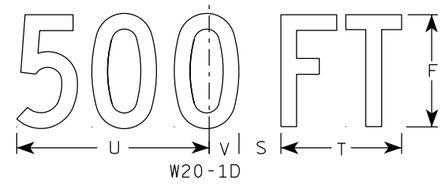
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



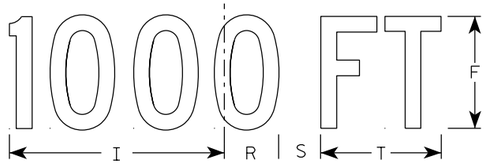
W20-1A



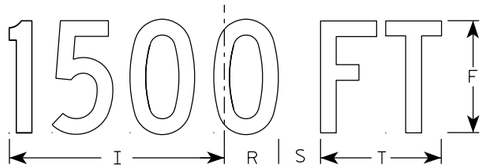
W20-1H



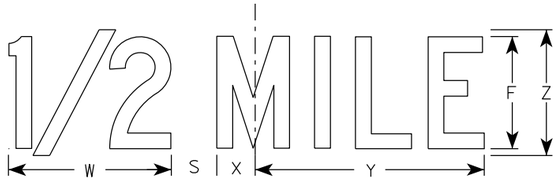
W20-1D



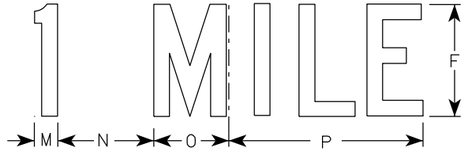
W20-1C



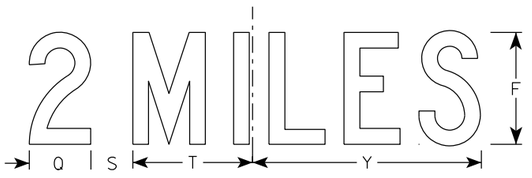
W20-1B



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

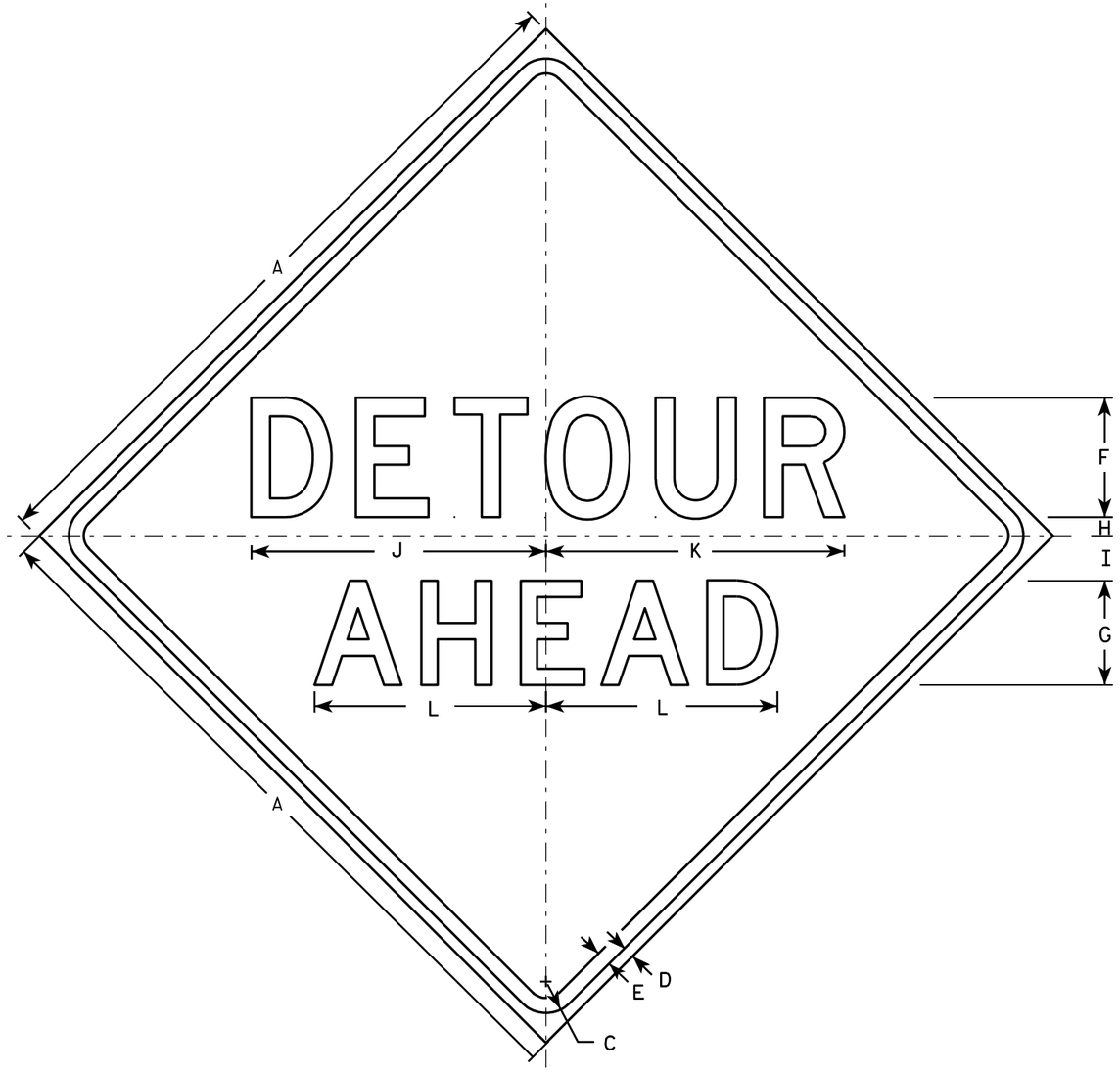
SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

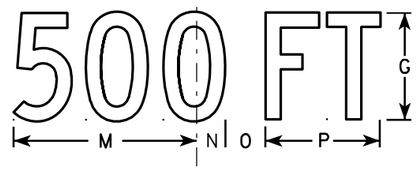
WISDOT/CADDS SHEET 42

7

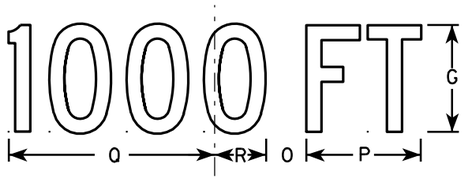
7



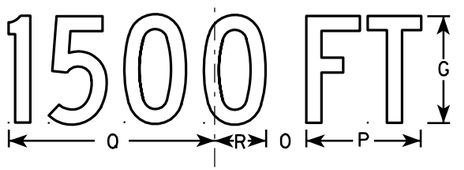
W20-2A



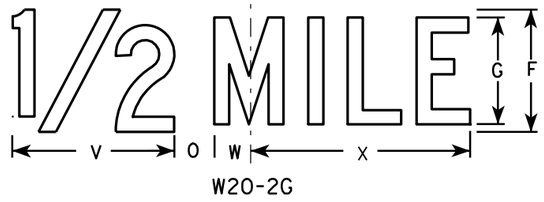
W20-2D



W20-2C



W20-2B



W20-2G

W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

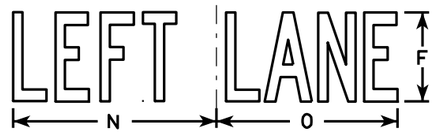
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

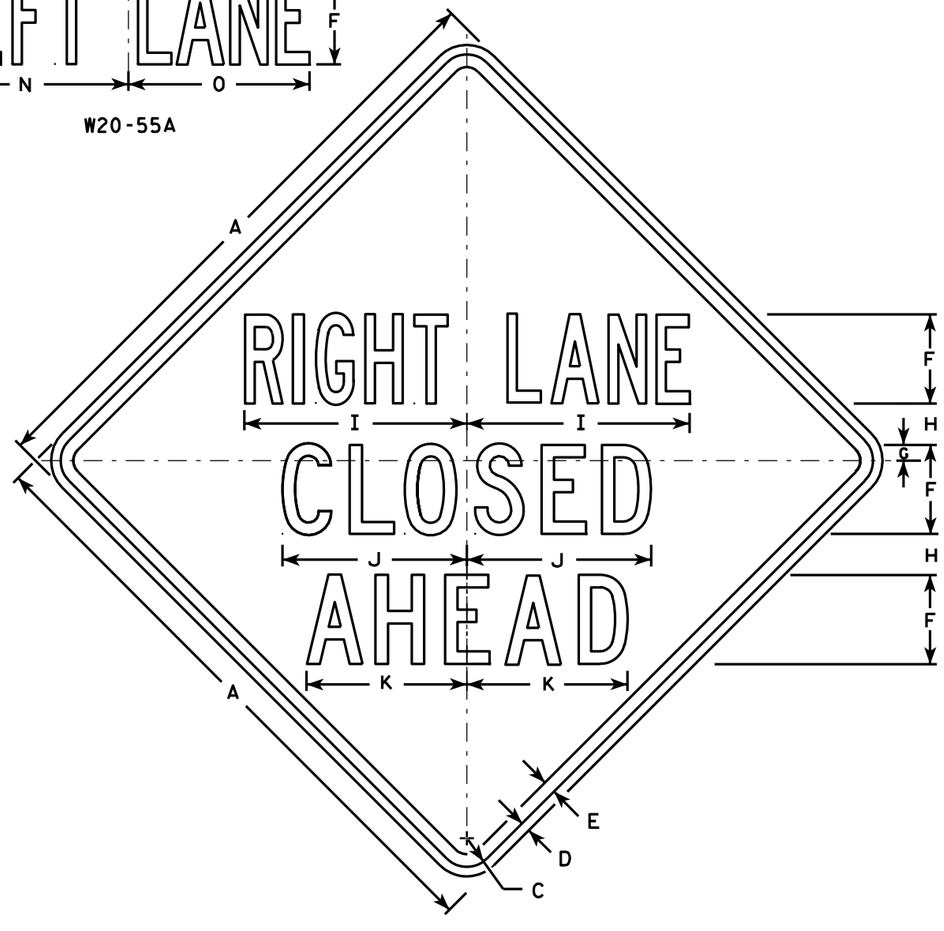
DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 254	E

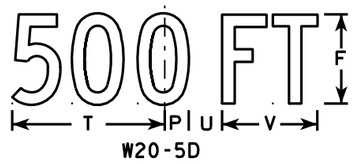
W20-56A



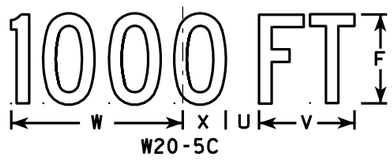
W20-55A



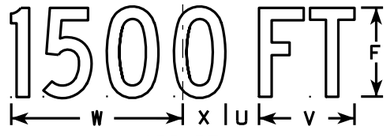
W20-5A



W20-5D



W20-5C



W20-5B

W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

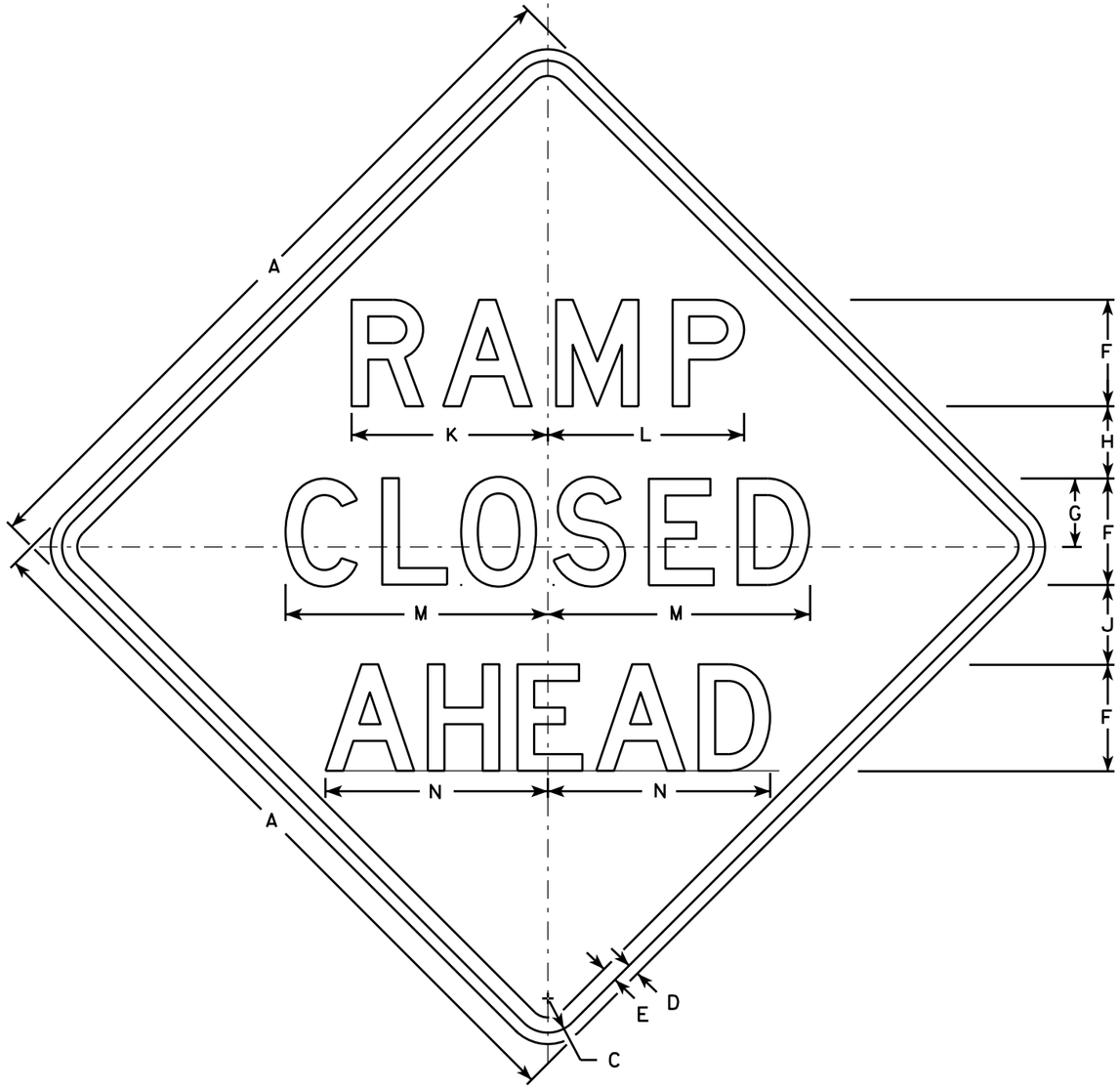
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

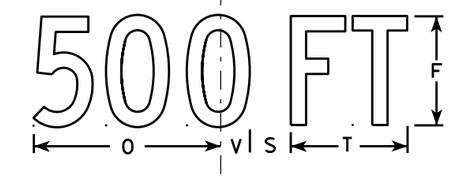
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

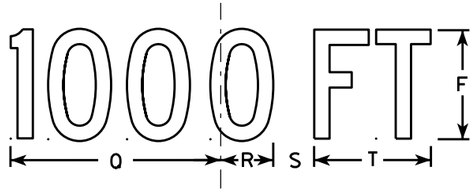
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 255	E



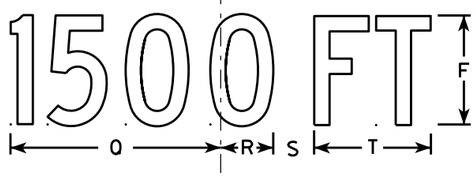
W20-53A



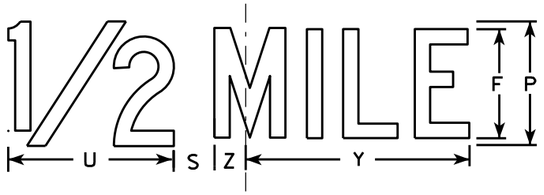
W20-53D



W20-53C



W20-53B



W20-53G

W20-53F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	9 1/4	9 1/4	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-53A,B,C,D,F,G

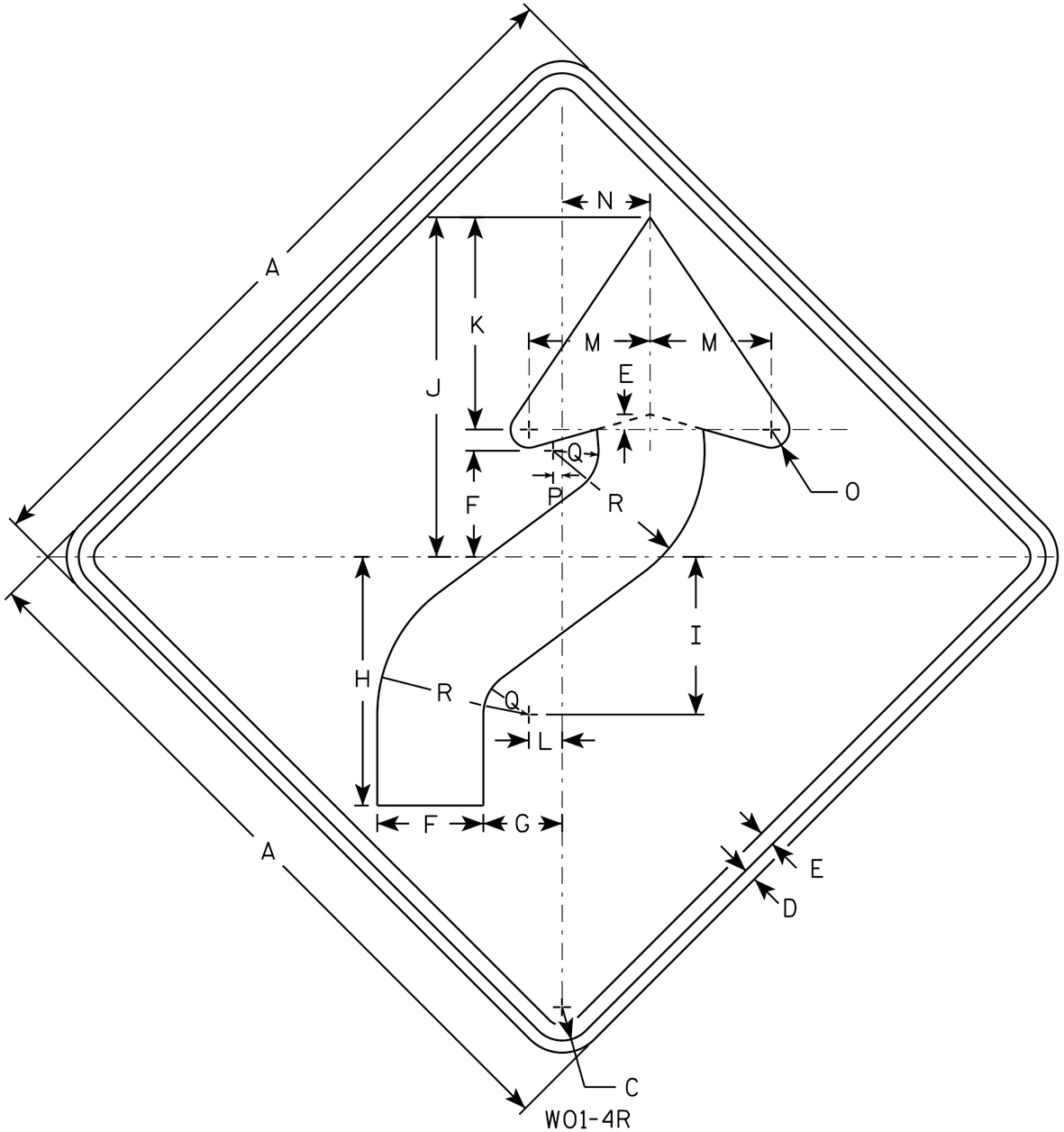
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/27/15 PLATE NO. W20-53.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 27-MAY-2015 19:40 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.729210:1.000000
WISDOT/CADDS SHEET 42



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

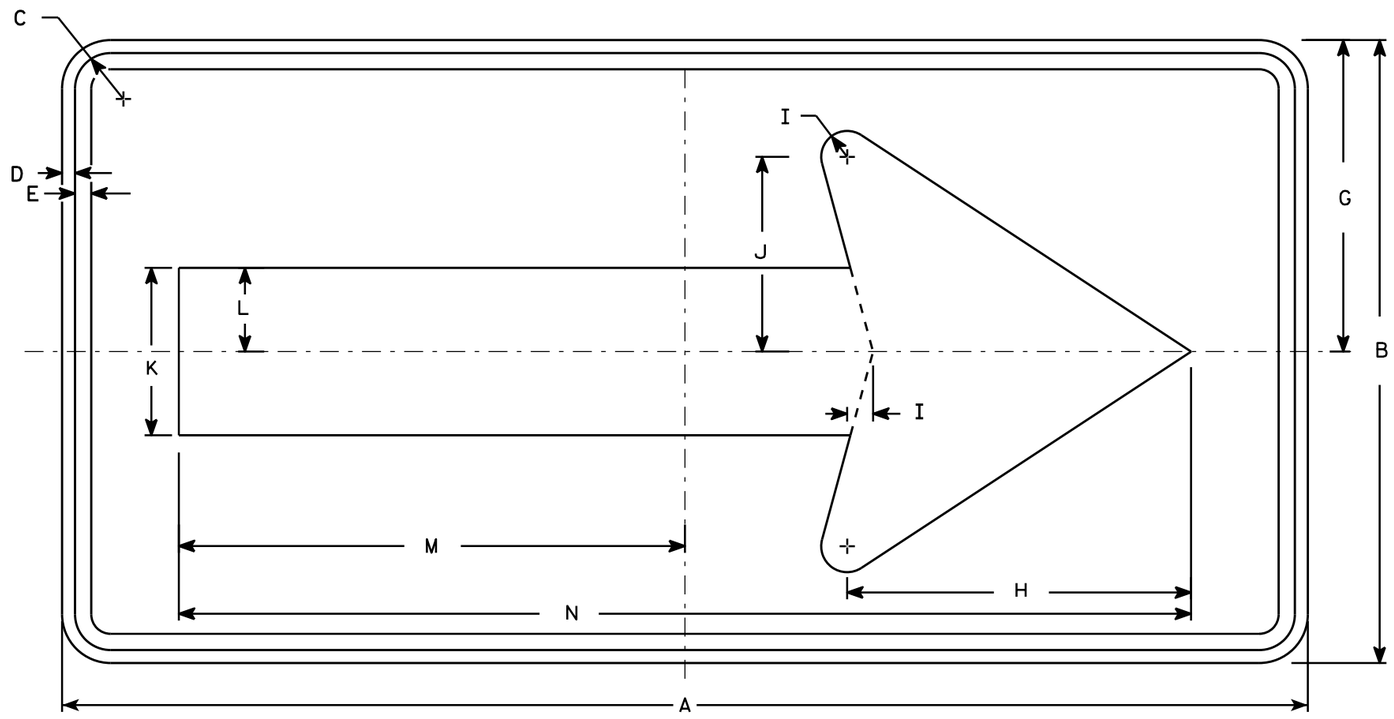
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

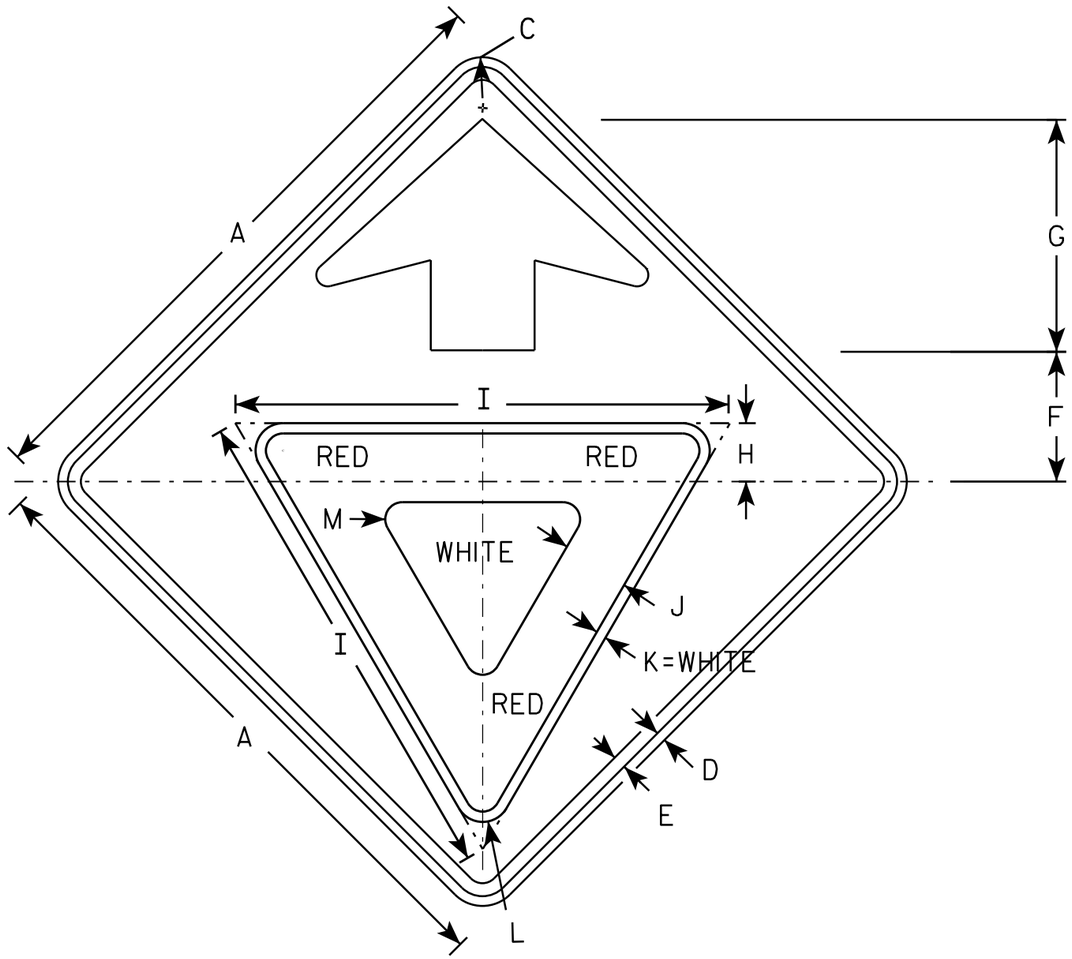
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

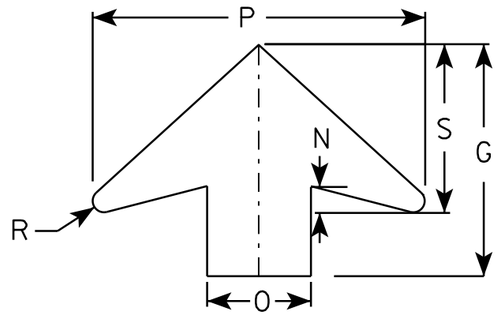
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W03-2

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Arrow & Border - BLACK
   Yield Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
2S	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
2M	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
3	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0

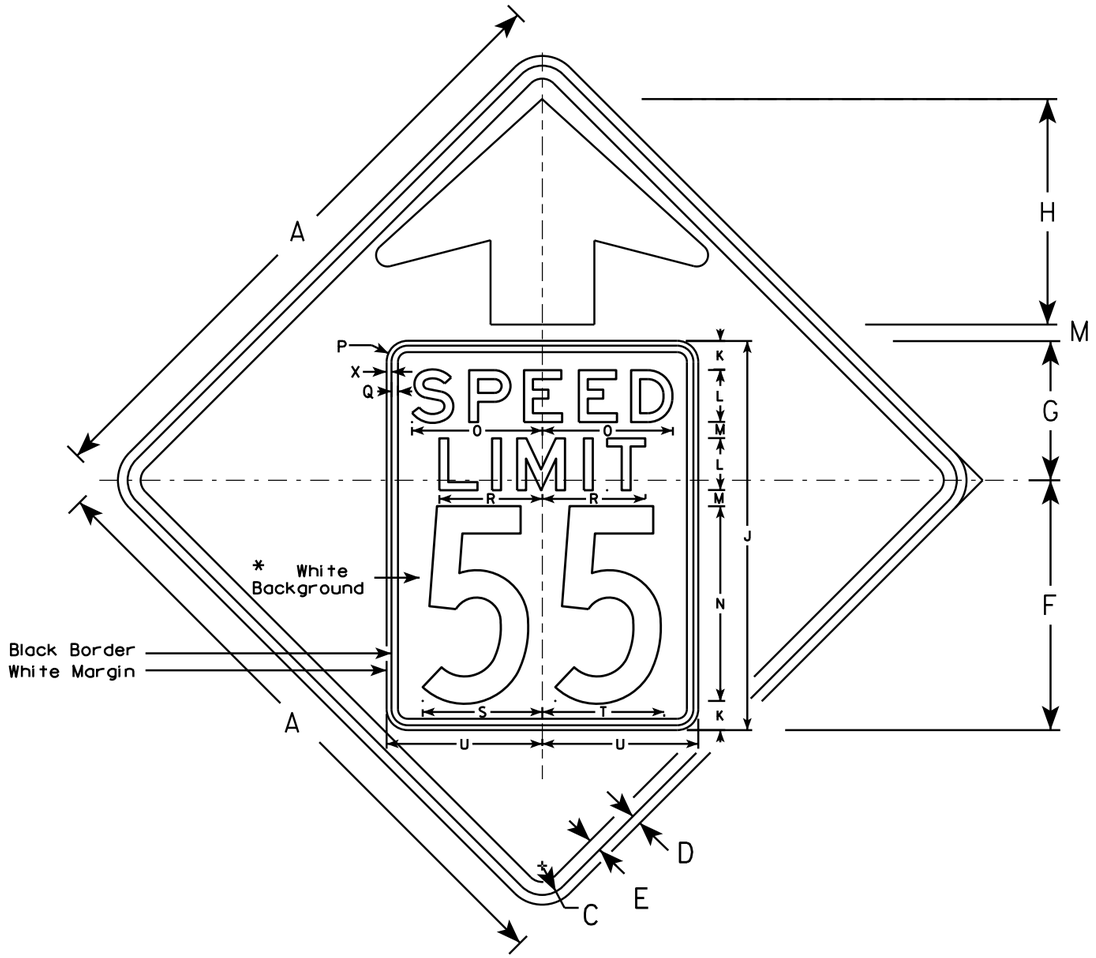
STANDARD SIGN
W03-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W03-2.1

PROJECT NO: SHEET NO: E

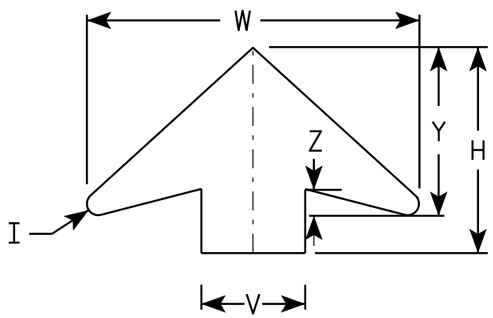


W03-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - ORANGE*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2S	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
2M	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
3	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W03-5

WISCONSIN DEPT OF TRANSPORTATION

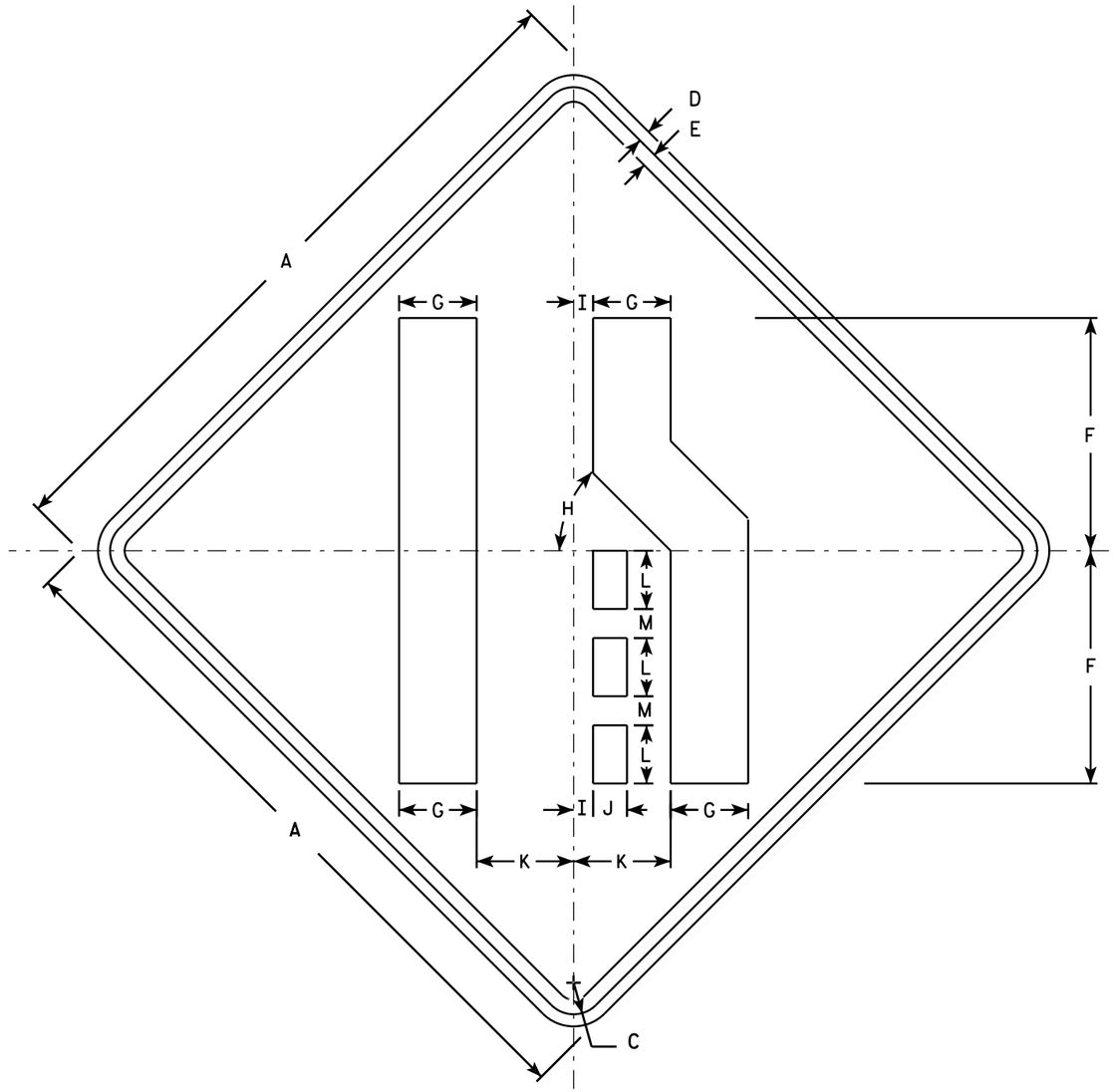
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W03-5.1

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W035.DGN PLOT DATE : 20-NOV-2013 11:32 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

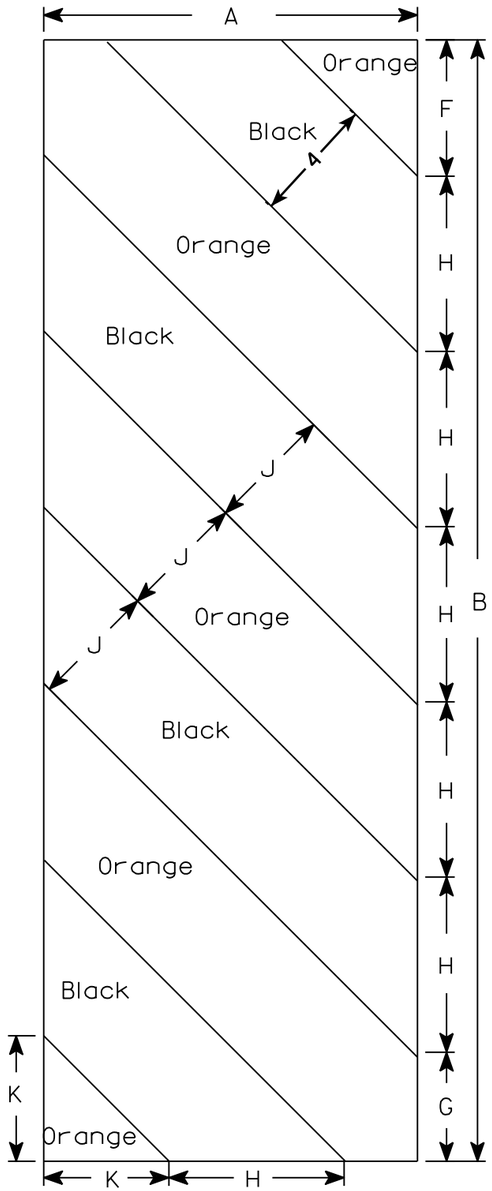
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 261 W04-2.1

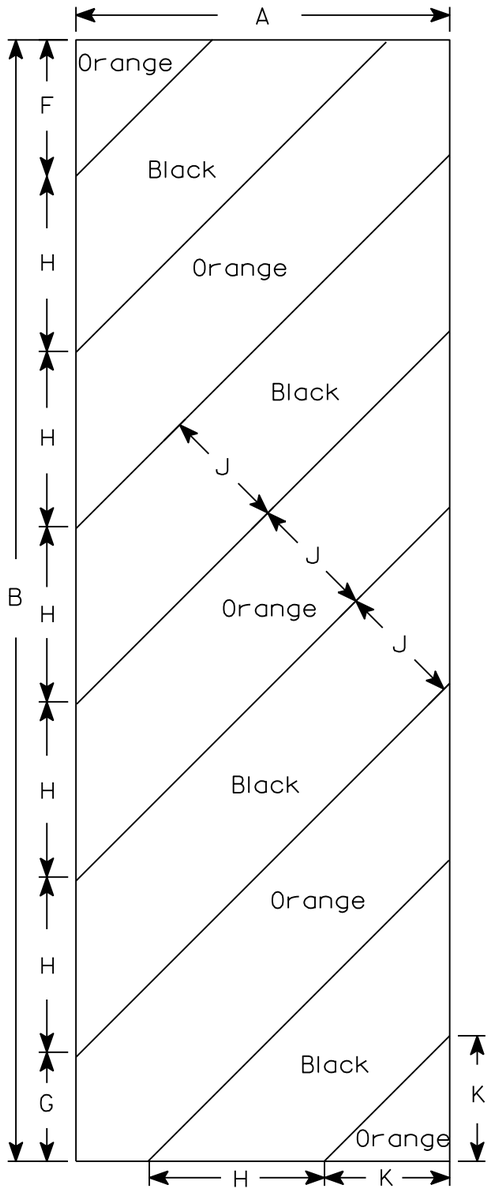
PROJECT NO: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W042.DGN PLOT DATE : 20-NOV-2013 11:43 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



W05-52L



W05-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

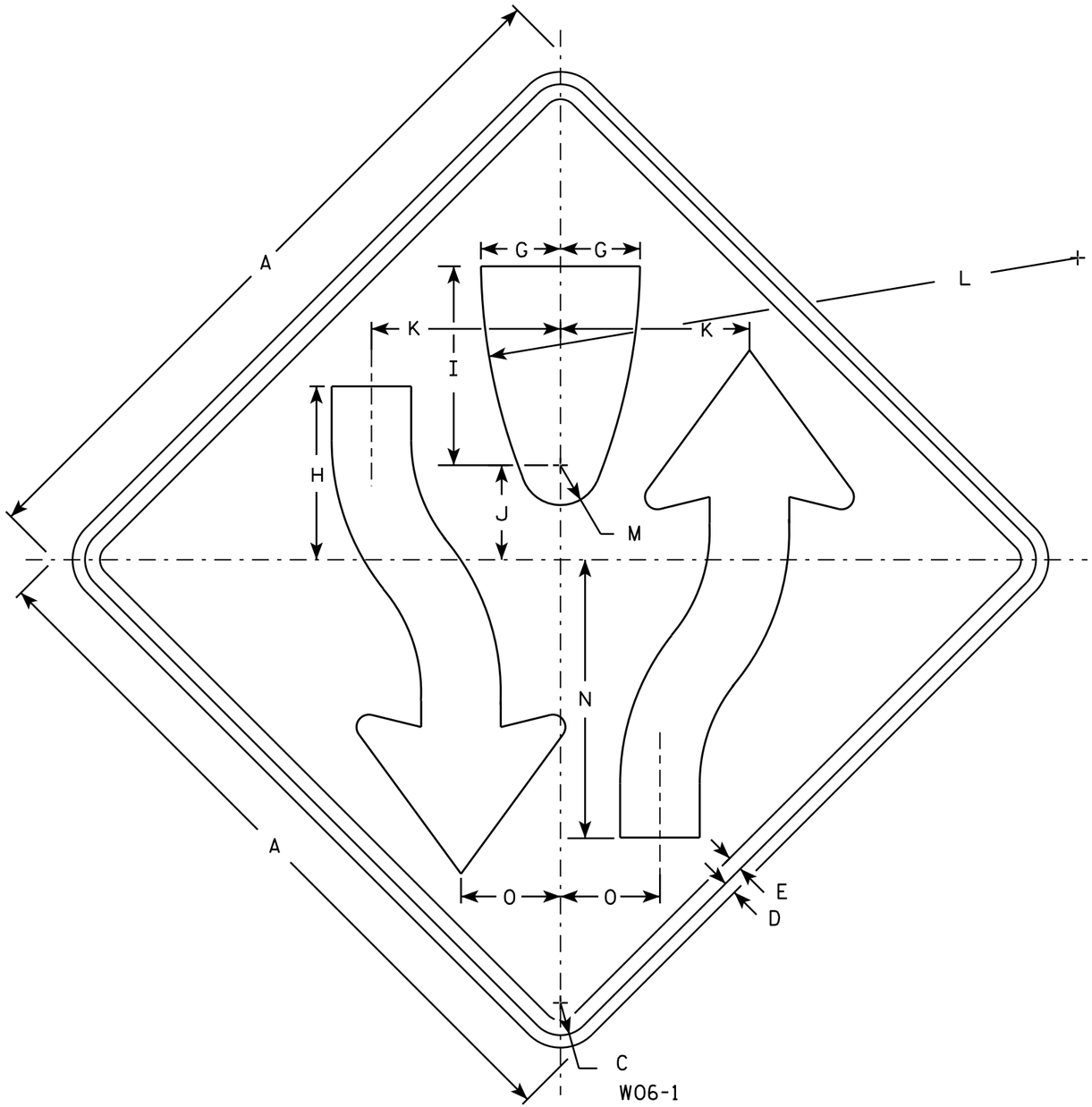
STANDARD SIGN
W05-52L & W05-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE No. W05-52.1

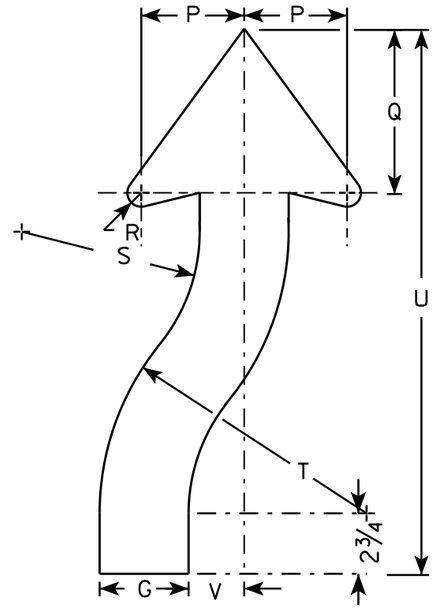
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W06-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W06-2 same as W06-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2S	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
2M	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
3	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W06-1 & W06-2

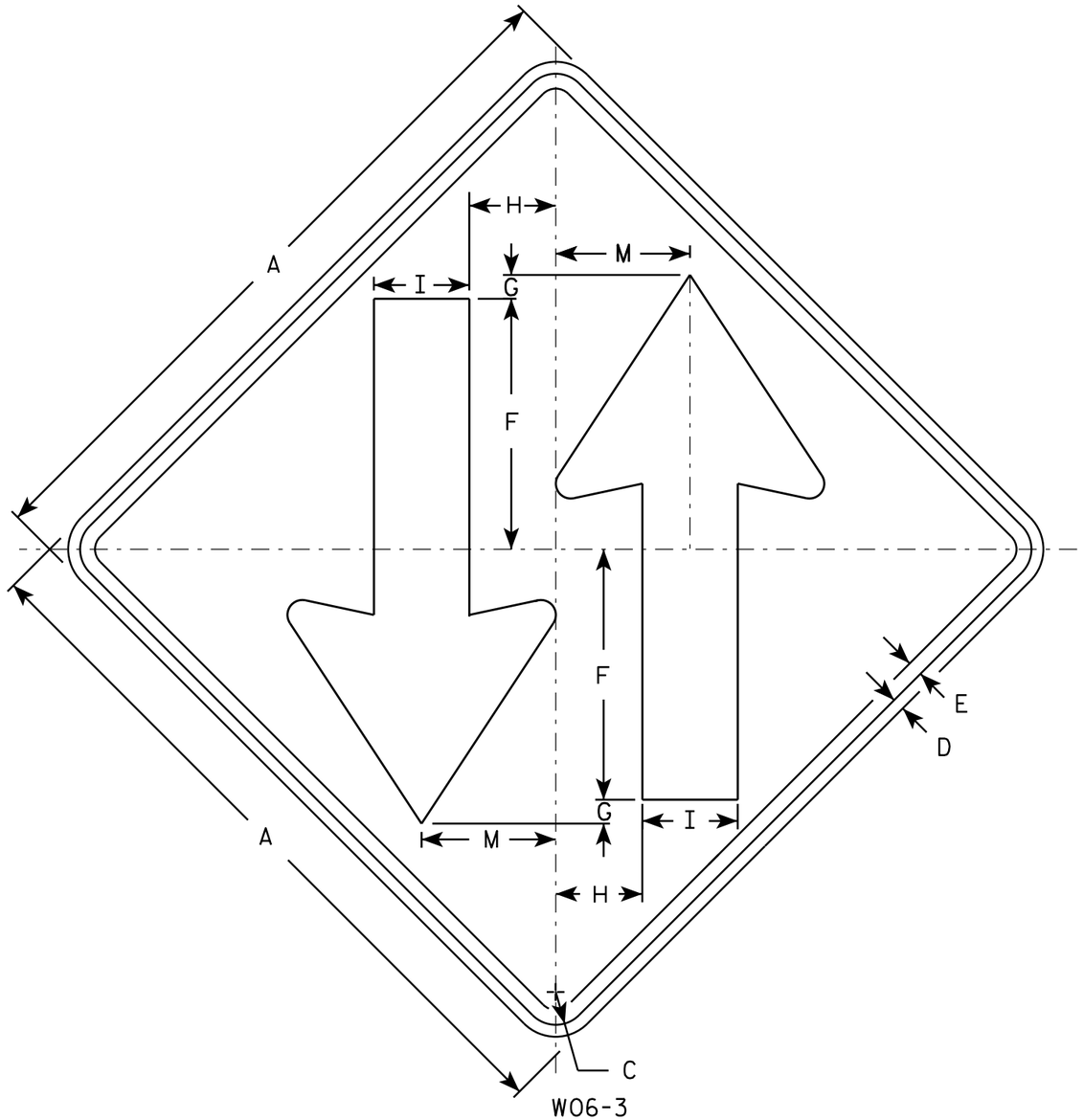
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO W06-1.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

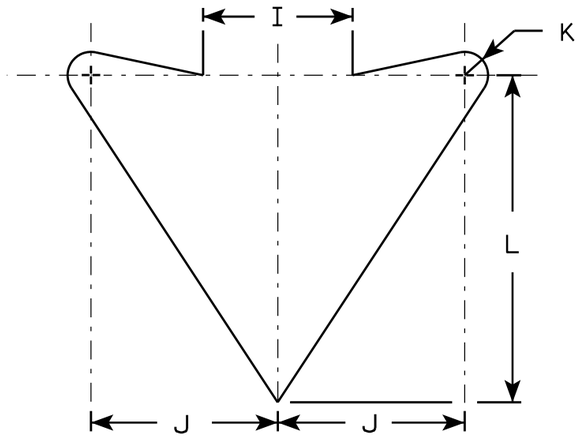
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W061.DGN PLOT DATE : 20-NOV-2013 12:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.810449:1.000000
WISDOT/CADDS SHEET 42



W06-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2S	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
2M	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
3	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

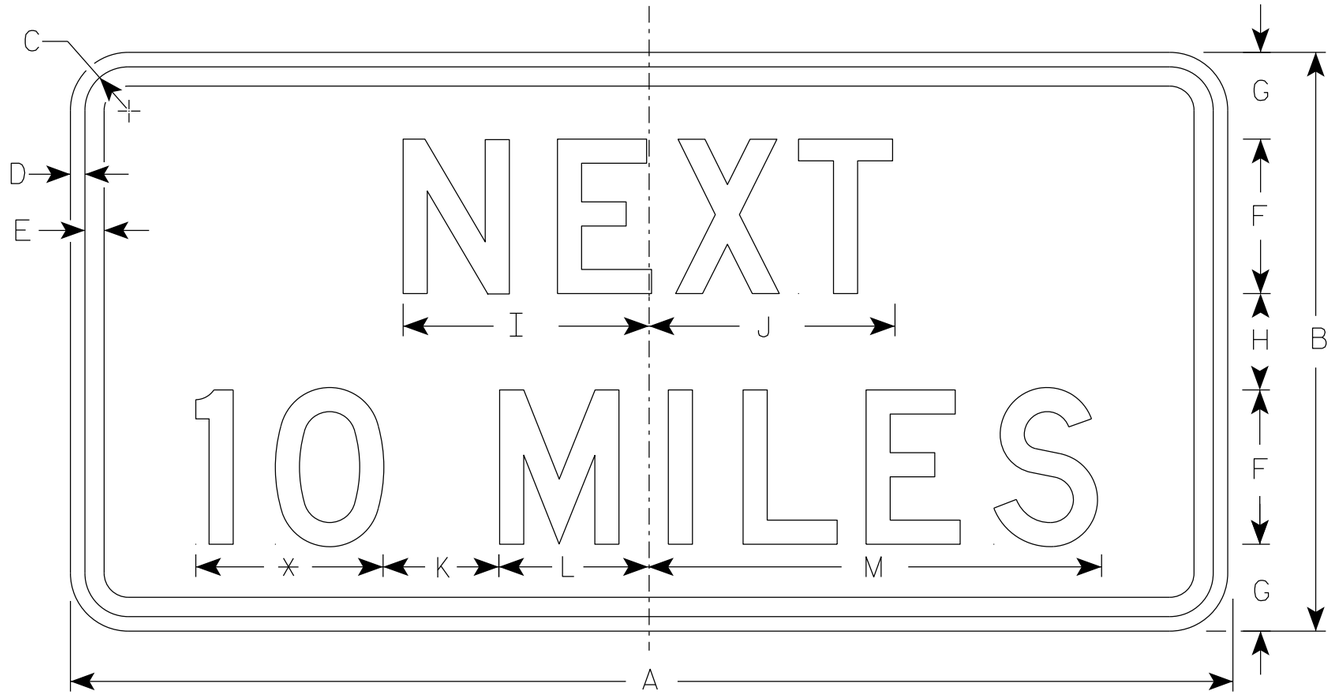
STANDARD SIGN
W06-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 264 W06-3.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W057-51

* See note 5

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Round distance to the nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 3/4	2 1/2	7 7/8	8	5	4 1/8	15 3/8														4.5
2S	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
2M	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
3	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
4	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
5	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0

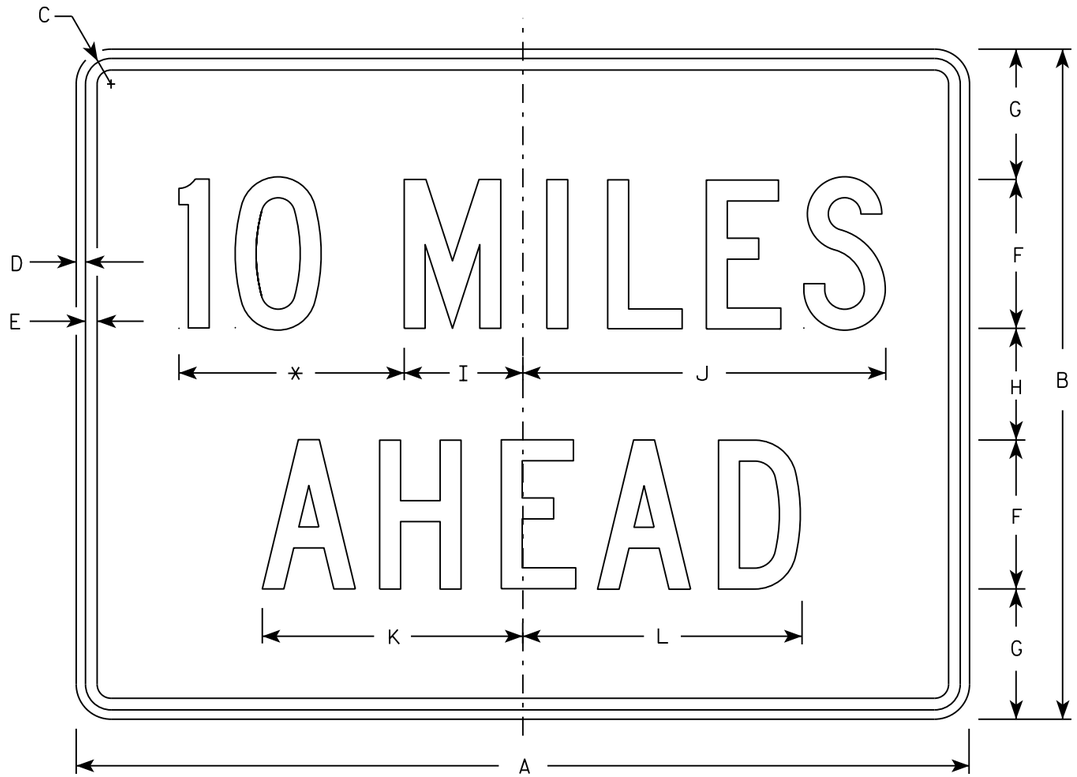
STANDARD SIGN
W057-51

WISCONSIN DEPT OF TRANSPORTATION

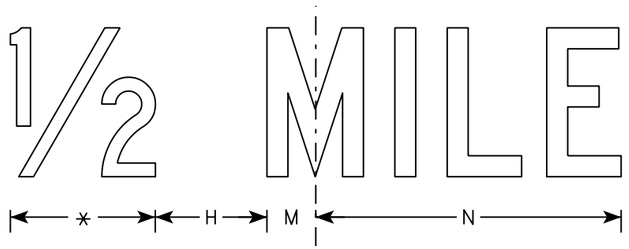
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/1/19 PLATE NO. W057-51.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 265	E



W057-52



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W057-52.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 266	E

SOUTH CROSSOVER

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/ UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/ UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.20	MASS ORDINATE
302+91	0.00	13.59	0.00	0.12	0	0	0	0	0	0
303+00	8.73	13.53	0.00	0.14	4	0	0	4	0	4
303+50	50.00	13.19	0.00	1.02	25	0	1	29	1	28
304+00	50.00	13.19	0.00	2.58	24	0	3	53	5	48
304+50	50.00	13.45	0.00	3.91	25	0	6	78	12	66
305+00	50.00	14.25	0.00	5.31	26	0	9	104	23	81
305+50	50.00	15.91	0.00	6.92	28	0	11	132	36	96
306+00	50.00	19.35	0.00	7.14	33	0	13	165	52	113
306+50	50.00	22.53	0.00	6.40	39	0	13	204	67	137
307+00	50.00	29.20	0.00	5.45	48	0	11	252	80	172
307+50	50.00	30.58	0.00	5.86	55	0	10	307	92	215
308+00	50.00	40.14	0.00	0.00	65	0	5	372	98	274
308+50	50.00	31.66	0.00	4.46	66	0	4	438	103	335
309+00	50.00	15.95	0.00	13.75	44	0	17	482	124	358
309+50	50.00	9.60	0.00	23.25	24	0	34	506	164	342
310+00	50.00	5.27	0.00	36.86	14	0	56	520	232	288
310+50	50.00	1.07	0.00	60.54	6	0	90	526	340	186
311+00	50.00	3.98	0.00	81.89	5	0	132	531	498	33
311+50	50.00	5.06	0.00	84.55	8	0	154	539	683	-144
312+00	50.00	6.36	0.00	80.17	11	0	153	550	866	-316
312+50	50.00	7.75	0.00	71.66	13	0	141	563	1,036	-473
313+00	50.00	11.83	0.00	61.49	18	0	123	581	1,183	-602
313+50	50.00	13.58	0.00	52.38	24	0	105	605	1,309	-704
314+00	50.00	13.48	0.00	42.28	25	0	88	630	1,415	-785
314+50	50.00	13.30	0.00	30.15	25	0	67	655	1,495	-840
315+00	50.00	12.96	0.00	19.01	24	0	46	679	1,550	-871
315+50	50.00	12.86	0.00	12.43	24	0	29	703	1,585	-882
316+00	50.00	12.58	0.00	13.56	24	0	24	727	1,614	-887
316+50	50.00	12.77	0.00	12.53	23	0	24	750	1,643	-893
317+00	50.00	12.77	0.00	12.21	24	0	23	774	1,670	-896
317+50	50.00	13.03	0.00	10.20	24	0	21	798	1,696	-898
318+00	50.00	13.22	0.00	7.55	24	0	16	822	1,715	-893
318+50	50.00	13.45	0.00	3.62	25	0	10	847	1,727	-880
319+00	50.00	14.13	0.00	0.89	26	0	4	873	1,732	-859
319+50	50.00	14.37	0.00	0.12	26	0	1	899	1,733	-834
319+85	34.55	14.41	0.00	0.00	18	0	0	917	1,733	-816

NORTH CROSSOVER

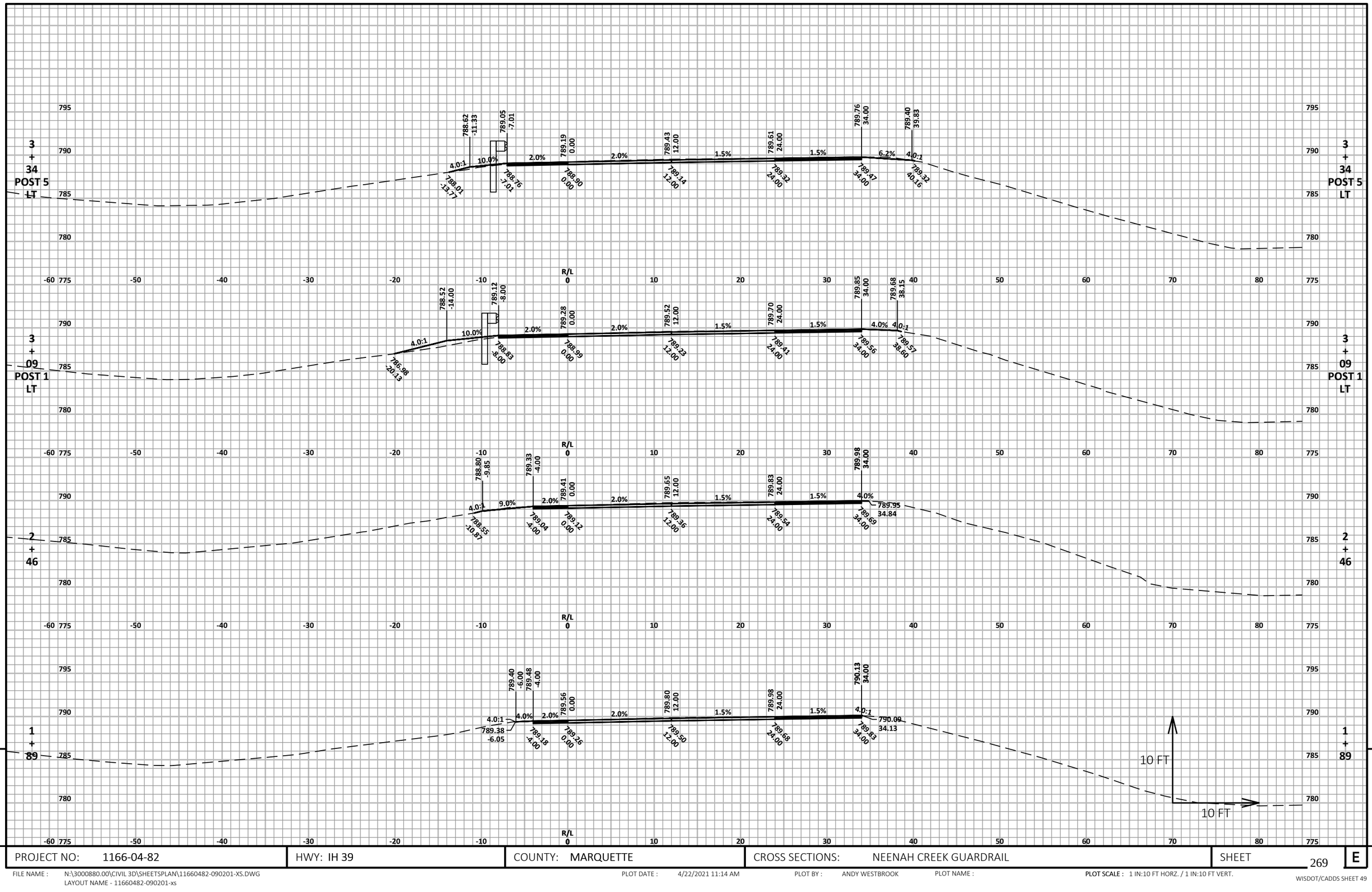
STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/ UNUSABLE	FILL	CUT	SALVAGED/ UNUSABLE	FILL	CUT 1.00	EXPANDED FILL 1.20	MASS ORDINATE
434+61	0.00	12.60	0.00	0.00	0	0	0	0	0	0
435+00	39.15	13.61	0.00	0.00	19	0	0	19	0	19
435+50	50.00	15.86	0.00	0.00	27	0	0	46	0	46
436+00	50.00	14.54	0.00	1.98	28	0	2	74	2	72
436+50	50.00	14.41	0.00	3.27	27	0	5	101	8	93
437+00	50.00	14.17	0.00	3.67	26	0	6	127	16	111
437+50	50.00	13.78	0.00	4.61	26	0	8	153	25	128
438+00	50.00	13.10	0.00	5.67	25	0	10	178	37	141
438+50	50.00	13.04	0.00	6.28	24	0	11	202	50	152
439+00	50.00	12.51	0.00	7.79	24	0	13	226	66	160
439+50	50.00	12.20	0.00	12.54	23	0	19	249	89	160
440+00	50.00	12.03	0.00	20.76	22	0	31	271	126	145
440+50	50.00	12.14	0.00	26.34	22	0	44	293	179	114
441+00	50.00	12.29	0.00	32.62	23	0	55	316	245	71
441+50	50.00	12.53	0.00	36.55	23	0	64	339	322	17
442+00	50.00	6.95	0.00	38.78	18	0	70	357	406	-49
442+50	50.00	6.94	0.00	39.76	13	0	73	370	493	-123
443+00	50.00	6.84	0.00	38.26	13	0	72	383	580	-197
443+50	50.00	6.83	0.00	37.58	13	0	70	396	664	-268
444+00	50.00	0.00	0.00	34.46	6	0	67	402	744	-342
444+50	50.00	0.09	0.00	23.90	0	0	54	402	809	-407
445+00	50.00	1.75	0.00	14.09	2	0	35	404	851	-447
445+50	50.00	2.95	0.00	11.25	4	0	23	408	878	-470
446+00	50.00	12.42	0.00	10.38	14	0	20	422	902	-480
446+50	50.00	12.95	0.00	12.89	23	0	22	445	929	-484
447+00	50.00	13.07	0.00	15.11	24	0	26	469	960	-491
447+50	50.00	12.98	0.00	13.08	24	0	26	493	991	-498
448+00	50.00	17.72	0.00	13.23	28	0	24	521	1,020	-499
448+50	50.00	17.66	0.00	10.96	33	0	22	554	1,046	-492
449+00	50.00	17.18	0.00	7.31	32	0	17	586	1,067	-481
449+50	50.00	16.82	0.00	3.07	31	0	10	617	1,079	-462
450+00	50.00	17.90	0.00	0.99	32	0	4	649	1,084	-435
450+50	50.00	14.79	0.00	0.77	30	0	2	679	1,086	-407
451+00	50.00	14.12	0.00	0.98	27	0	2	706	1,088	-382
451+50	50.00	15.16	0.00	0.26	27	0	1	733	1,090	-357
451+79	29.41	14.12	0.00	0.00	16	0	0	749	1,090	-341

SOUTH CROSSOVER REMOVAL

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/ UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/ UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.20	MASS ORDINATE
303+00	0.00	3.87	0.00	0.00	0	0	0	0	0	0
303+50	50.00	4.87	0.00	0.02	8	0	0	8	0	8
304+00	50.00	6.91	0.00	0.00	11	0	0	19	0	19
304+50	50.00	10.74	0.00	0.00	16	0	0	35	0	35
305+00	50.00	15.88	0.00	0.17	25	0	0	60	0	60
305+50	50.00	21.44	0.00	2.78	35	0	3	95	4	91
306+00	50.00	26.34	0.00	5.40	44	0	8	139	13	126
306+50	50.00	29.43	0.00	9.20	52	0	14	191	30	161
307+00	50.00	30.84	0.00	22.29	56	0	29	247	65	182
307+50	50.00	23.27	0.00	26.03	50	0	45	297	119	178
308+00	50.00	15.29	0.00	29.58	36	0	51	333	180	153
308+50	50.00	29.20	0.00	17.89	41	0	44	374	233	141
309+00	50.00	42.96	0.00	10.90	67	0	27	441	265	176
309+50	50.00	55.85	0.00	6.78	91	0	16	532	284	248
310+00	50.00	70.72	0.00	3.68	117	0	10	649	296	353
310+50	50.00	92.10	0.00	1.38	151	0	5	800	302	498
311+00	50.00	113.40	0.00	0.00	190	0	1	990	304	686
311+50	50.00	115.25	0.00	0.02	212	0	0	1,202	304	898
312+00	50.00	111.76	0.00	0.02	210	0	0	1,412	304	1,108
312+50	50.00	99.36	0.00	0.00	195	0	0	1,607	304	1,303
313+00	50.00	84.51	0.00	0.00	170	0	0	1,777	304	1,473
313+50	50.00	72.86	0.00	0.00	146	0	0	1,923	304	1,619
314+00	50.00	57.90	0.00	0.00	121	0	0	2,044	304	1,740
314+50	50.00	43.65	0.00	0.00	94	0	0	2,138	304	1,834
315+00	50.00	28.88	0.00	0.00	67	0	0	2,205	304	1,901
315+50	50.00	18.44	0.00	0.00	44	0	0	2,249	304	1,945
316+00	50.00	18.71	0.00	0.00	34	0	0	2,283	304	1,979
316+50	50.00	17.79	0.00	0.02	34	0	0	2,317	304	2,013
317+00	50.00	17.20	0.00	0.00	32	0	0	2,349	304	2,045
317+50	50.00	15.91	0.00	0.02	31	0	0	2,380	304	2,076
318+00	50.00	13.78	0.00	0.02	27	0	0	2,407	304	2,103
318+50	50.00	10.02	0.00	0.00	22	0	0	2,429	304	2,125
319+00	50.00	6.68	0.00	0.00	15	0	0	2,444	304	2,140
319+50	50.00	4.56	0.00	0.00	10	0	0	2,454	304	2,150
319+80	30.00	3.50	0.00	0.00	4	0	0	2,458	304	2,154

NORTH CROSSOVER REMOVAL

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/ UNUSABLE	FILL	CUT	SALVAGED/ UNUSABLE	FILL	CUT 1.00	EXPANDED FILL 1.20	MASS ORDINATE
434+64	0.00	2.15	0.00	0.00	0	0	0	0	0	0
435+00	36.00	2.60	0.00	0.00	3	0	0	3	0	3
435+50	50.00	4.44	0.00	0.00	7	0	0	10	0	10
436+00	50.00	8.58	0.00	0.00	12	0	0	22	0	22
436+50	50.00	11.05	0.00	0.00	18	0	0	40	0	40
437+00	50.00	12.29	0.00	0.00	22	0	0	62	0	62
437+50	50.00	12.91	0.00	0.00	23	0	0	85	0	85
438+00	50.00	13.58	0.00	0.00	25	0	0	110	0	110
438+50	50.00	13.45	0.00	0.01	25	0	0	135	0	135
439+00	50.00	13.72	0.00	0.02	25	0	0	160	0	160
439+50	50.00	17.41	0.00	0.00	29	0	0	189	0	189
440+00	50.00	27.49	0.00	0.00	42	0	0	231	0	231
440+50	50.00	37.67	0.00	0.00	60	0	0	291	0	291
441+00	50.00	46.99	0.00	0.00	78	0	0	369	0	369
441+50	50.00	55.88	0.00	0.00	95	0	0	464	0	464
442+00	50.00	59.15	0.00	0.01	107	0	0	571	0	571
442+50	50.00	66.96	0.00	0.00	117	0	0	688	0	688
443+00	50.00	72.98	0.00	0.00	130	0	0	818	0	818
443+50	50.00	78.18	0.00	0.00	140	0	0	958	0	958
444+00	50.00	85.49	0.00	0.18	152	0	0	1,110	0	1,110
444+50	50.00	79.58	0.00	0.06	153	0	0	1,263	0	1,263
445+00	50.00	71.89	0.00	0.00	140	0	0	1,403	0	1,403
445+50	50.00	63.75	0.00	0.00	126	0	0	1,529	0	1,529
446+00	50.00	56.87	0.00	0.00	112	0	0	1,641	0	1,641
446+50	50.00	51.78	0.00	0.00	101	0	0	1,742	0	1,742
447+00	50.00	47.14	0.00	0.00	92	0	0	1,834	0	1,834
447+50	50.00	40.65	0.00	0.00	81	0	0	1,915	0	1,915
448+00	50.00	38.80	0.00	0.00	74	0	0	1,989	0	1,989
448+50	50.00	31.51	0.00	0.00	65	0	0	2,054	0	2,054
449+00	50.00	23.41	0.00	0.00	51	0	0	2,105	0	2,105
449+50	50.00	15.07	0.00	0.43	36	0	0	2,141	0	2,141
450+00	50.00	7.79	0.00	2.80	21	0	3	2,162	4	2,158
450+50	50.00	7.40	0.00	0.00	14	0	3	2,176	7	2,169
451+00	50.00	6.02	0.00	0.00	12	0	0	2,188	7	2,181
451+50	50.00	4.39	0.00	0.00	10	0	0	2,198	7	2,191
451+79	29.00	2.80	0.00	0.00	4	0	0	2,202	7	2,195

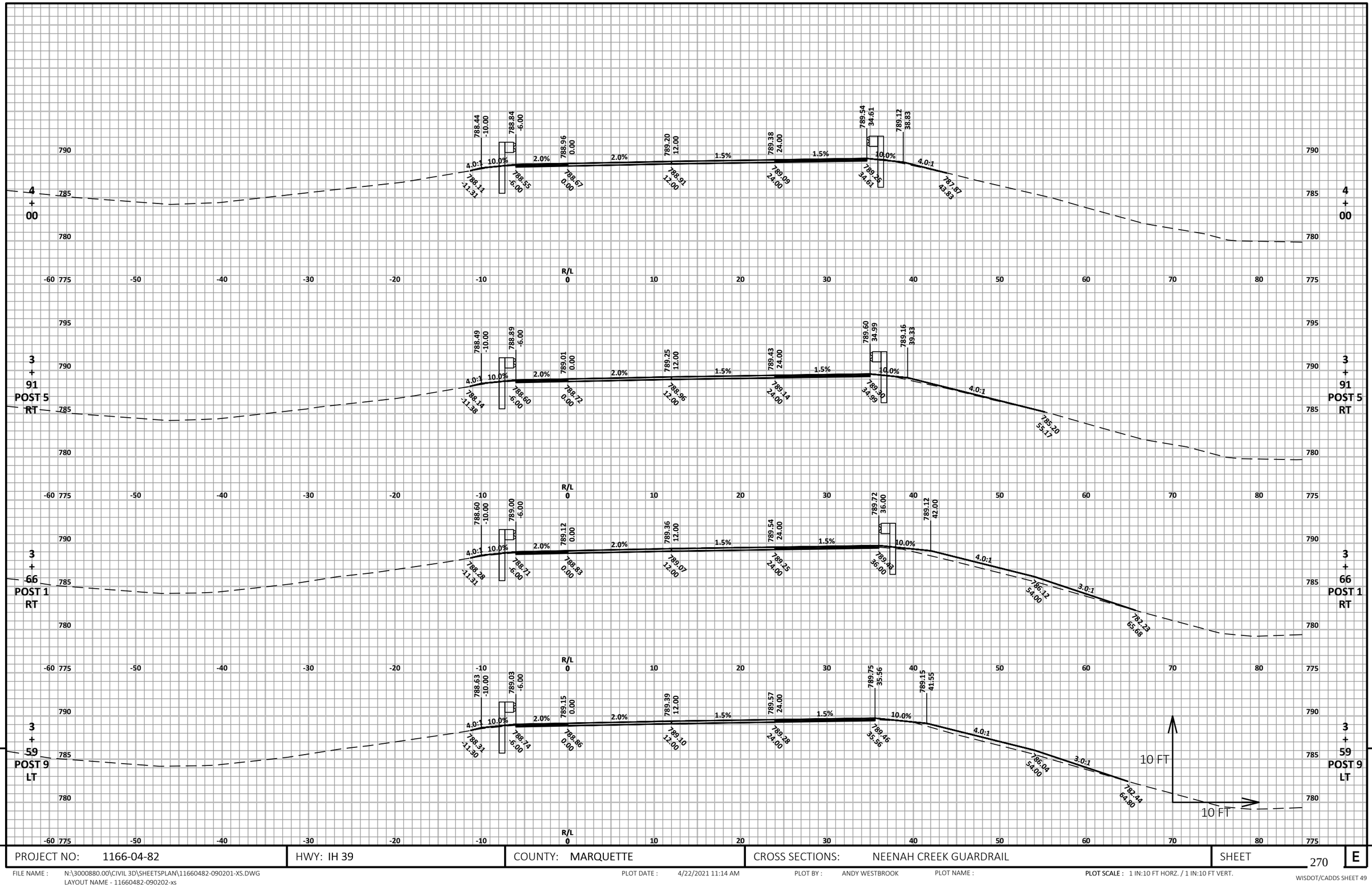


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: NEENAH CREEK GUARDRAIL	SHEET 269	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090201-xs

PLOT DATE : 4/22/2021 11:14 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

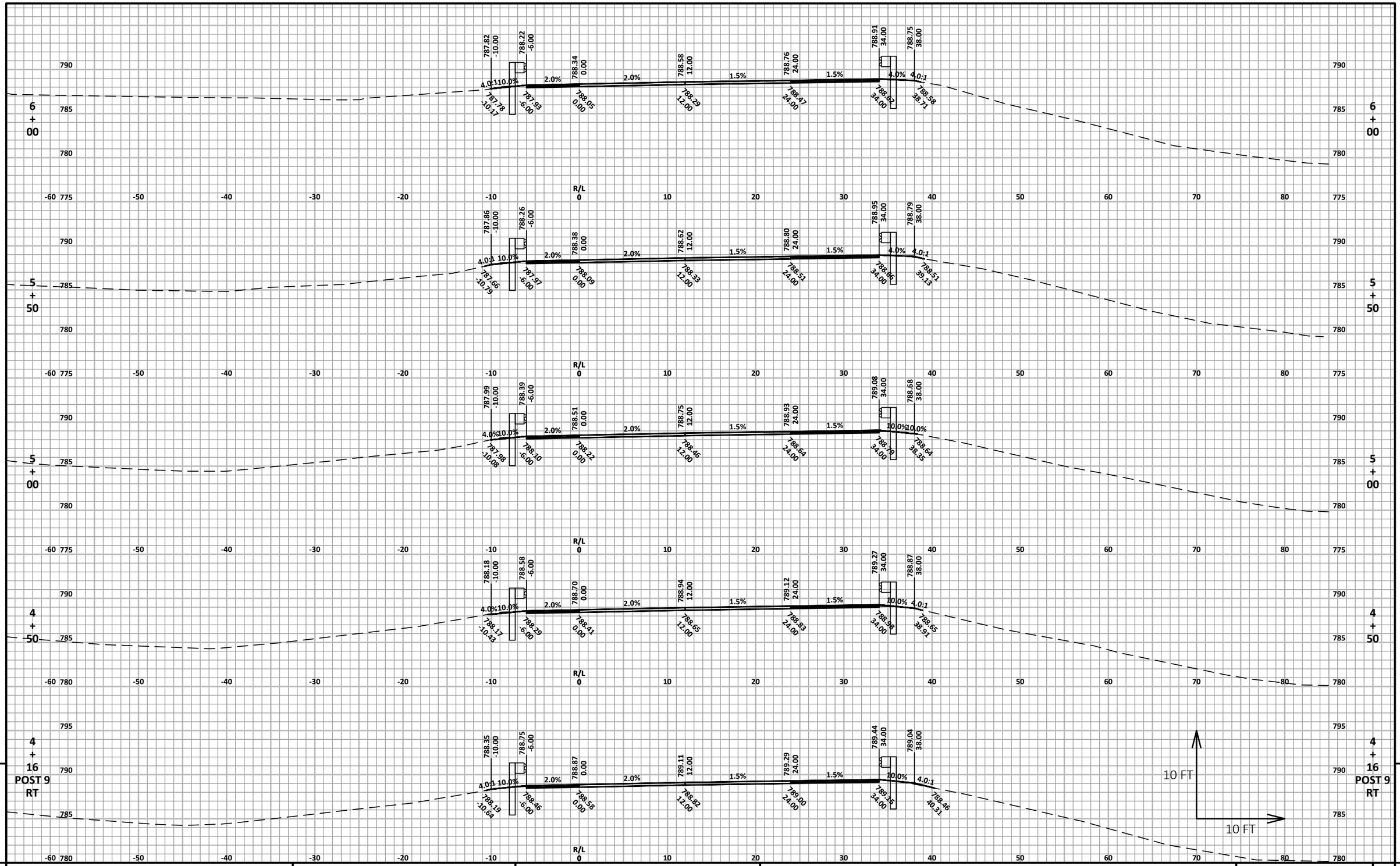


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: NEENAH CREEK GUARDRAIL	SHEET 270 E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090202-xs

PLOT DATE : 4/22/2021 11:14 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

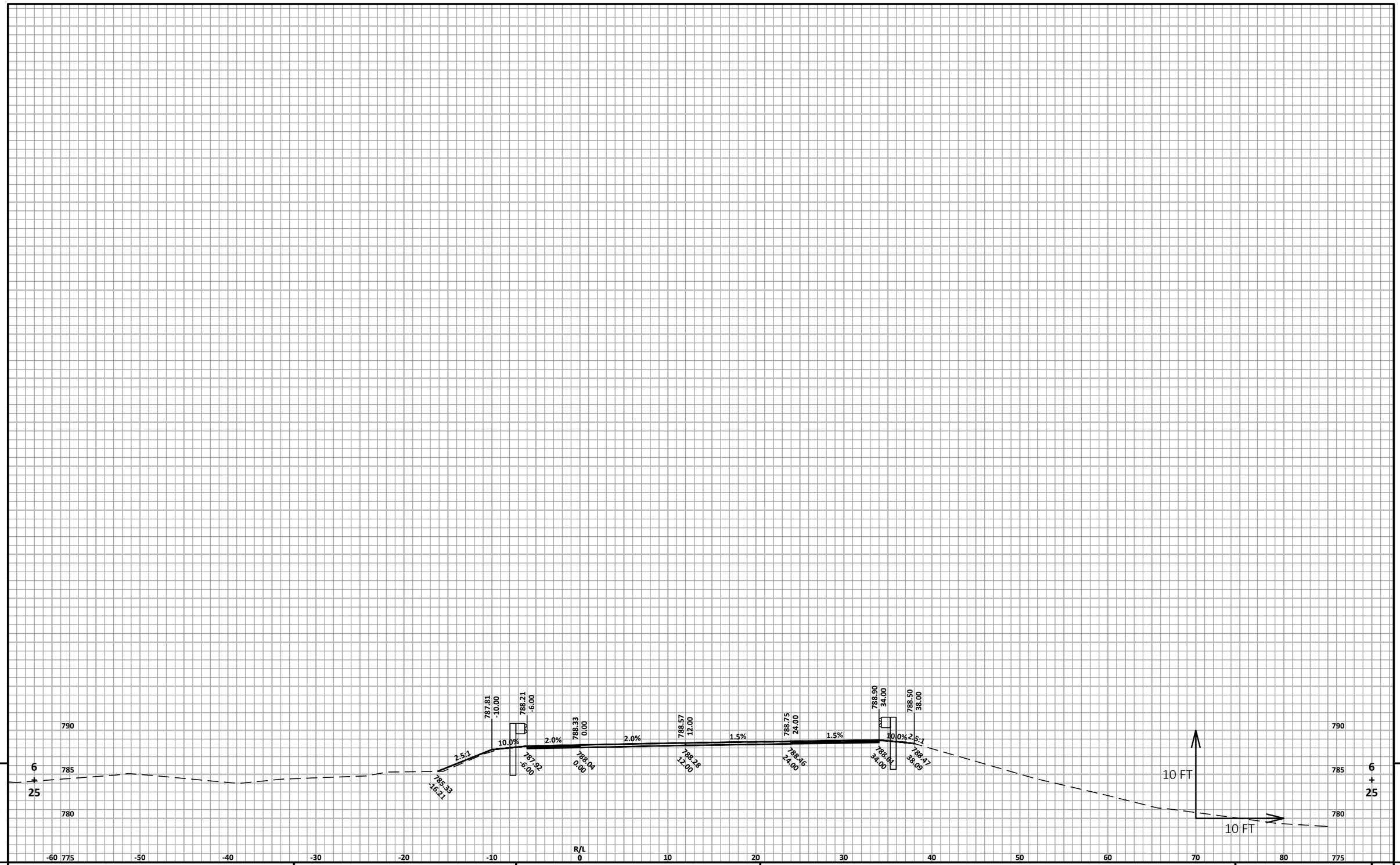


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: NEENAH CREEK GUARDRAIL	SHEET 271	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090203-xs

PLOT DATE : 4/22/2021 11:14 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



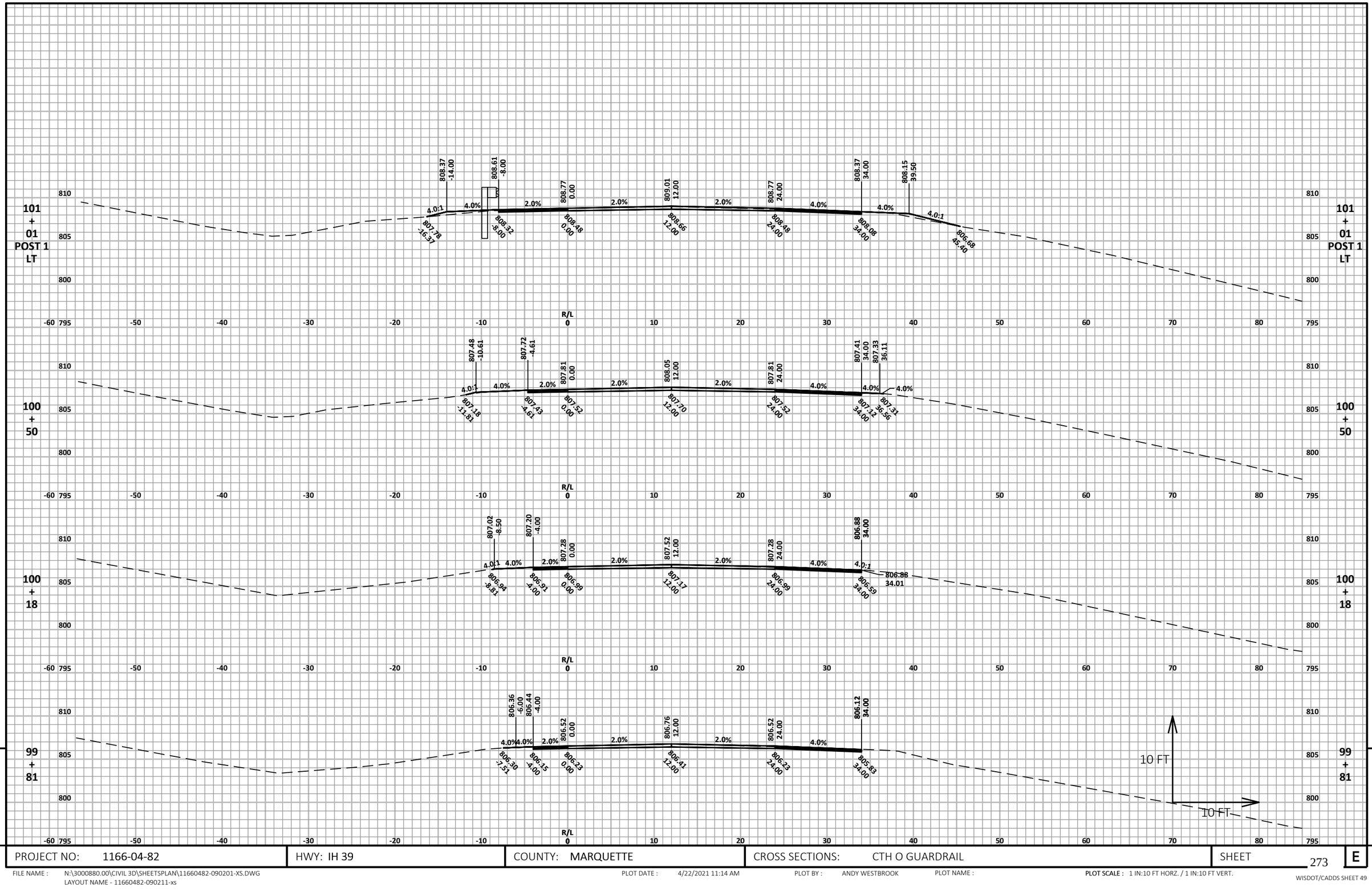
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: NEENAH CREEK GUARDRAIL	SHEET 272	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090204-xs

PLOT DATE : 4/22/2021 11:14 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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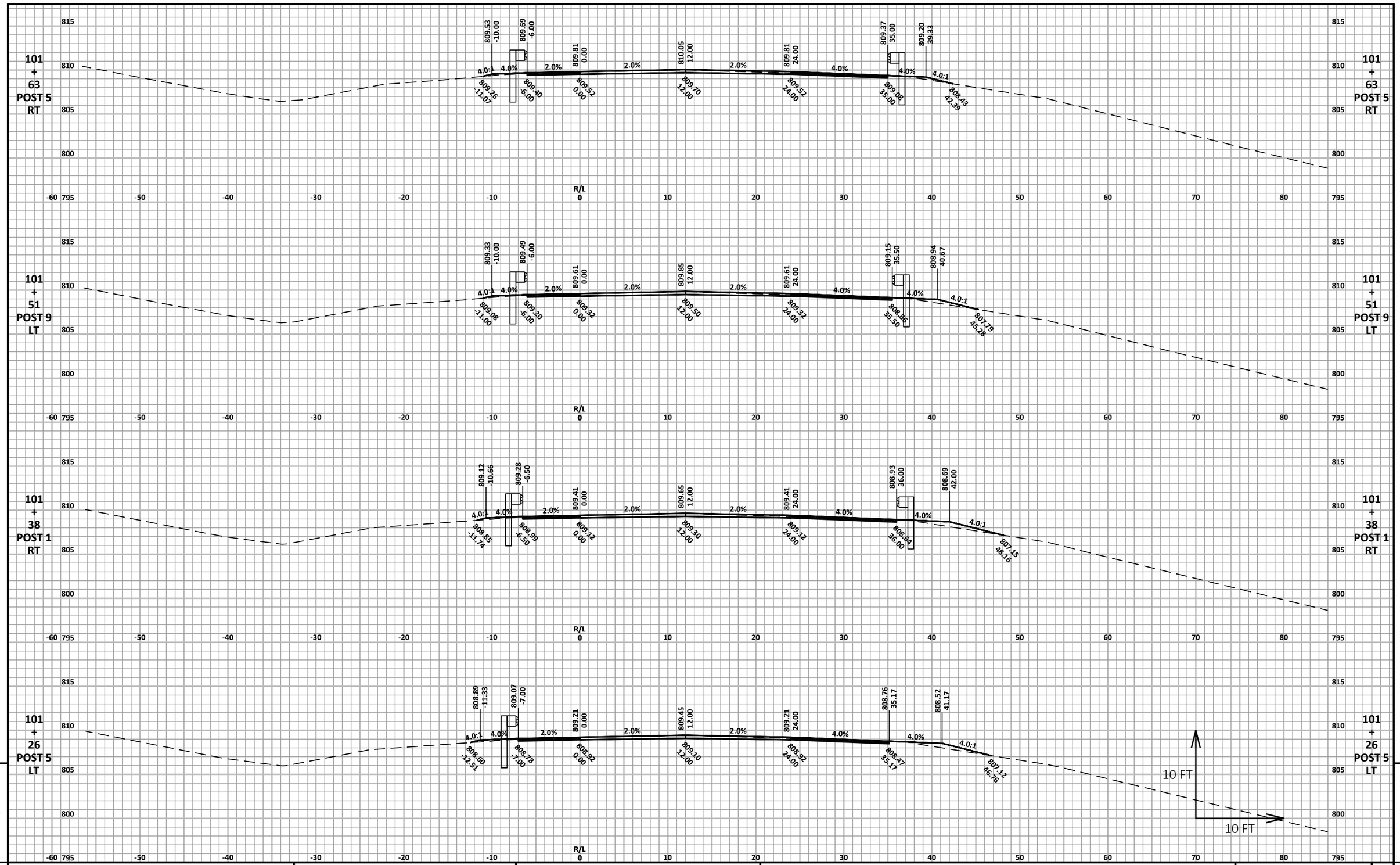
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH O GUARDRAIL	SHEET 273	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090211-xs

PLOT DATE : 4/22/2021 11:14 AM PLOT BY : ANDY WESTBROOK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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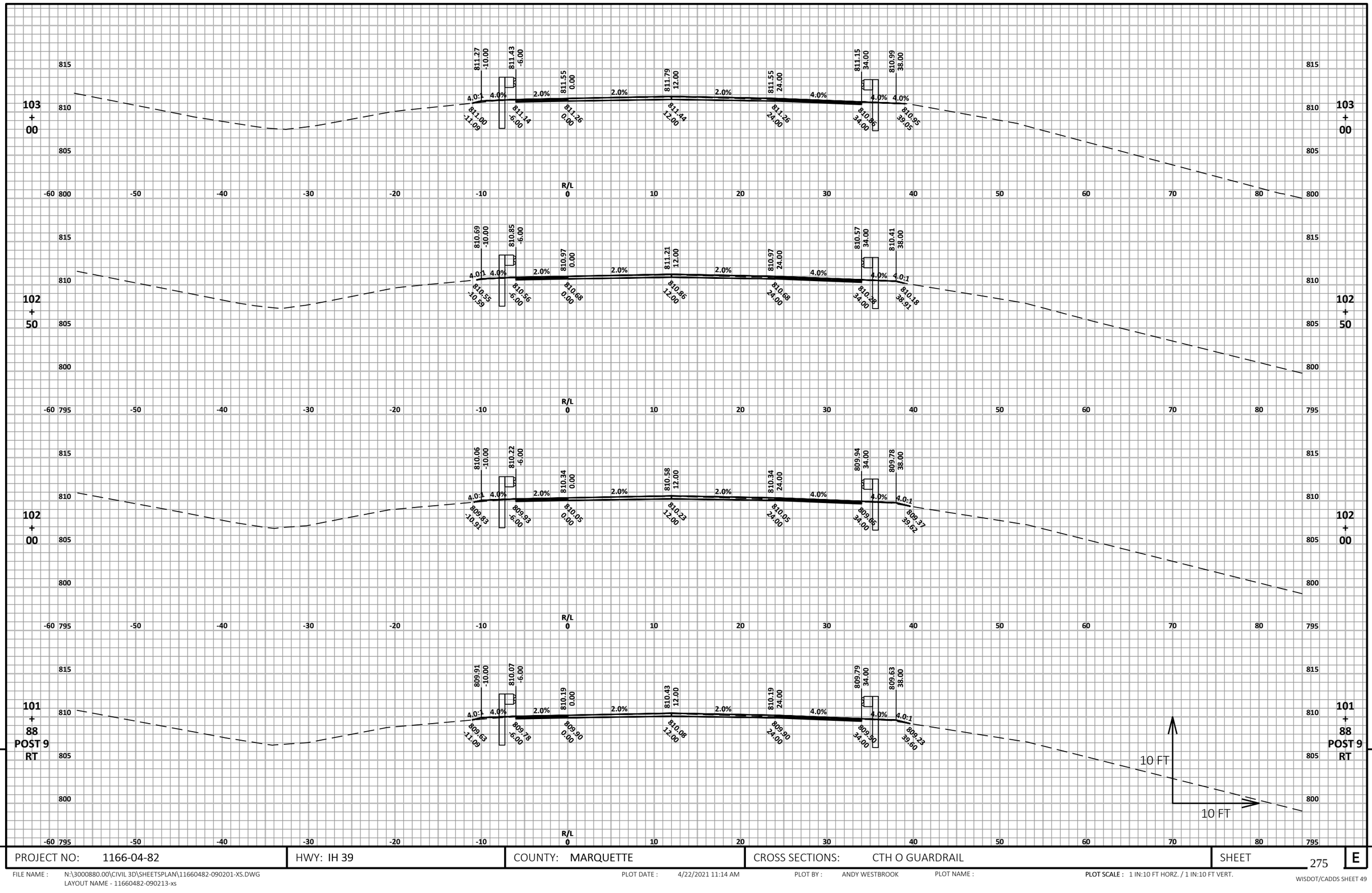
9

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH O GUARDRAIL	SHEET 274	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090212-xs

PLOT DATE : 4/22/2021 11:14 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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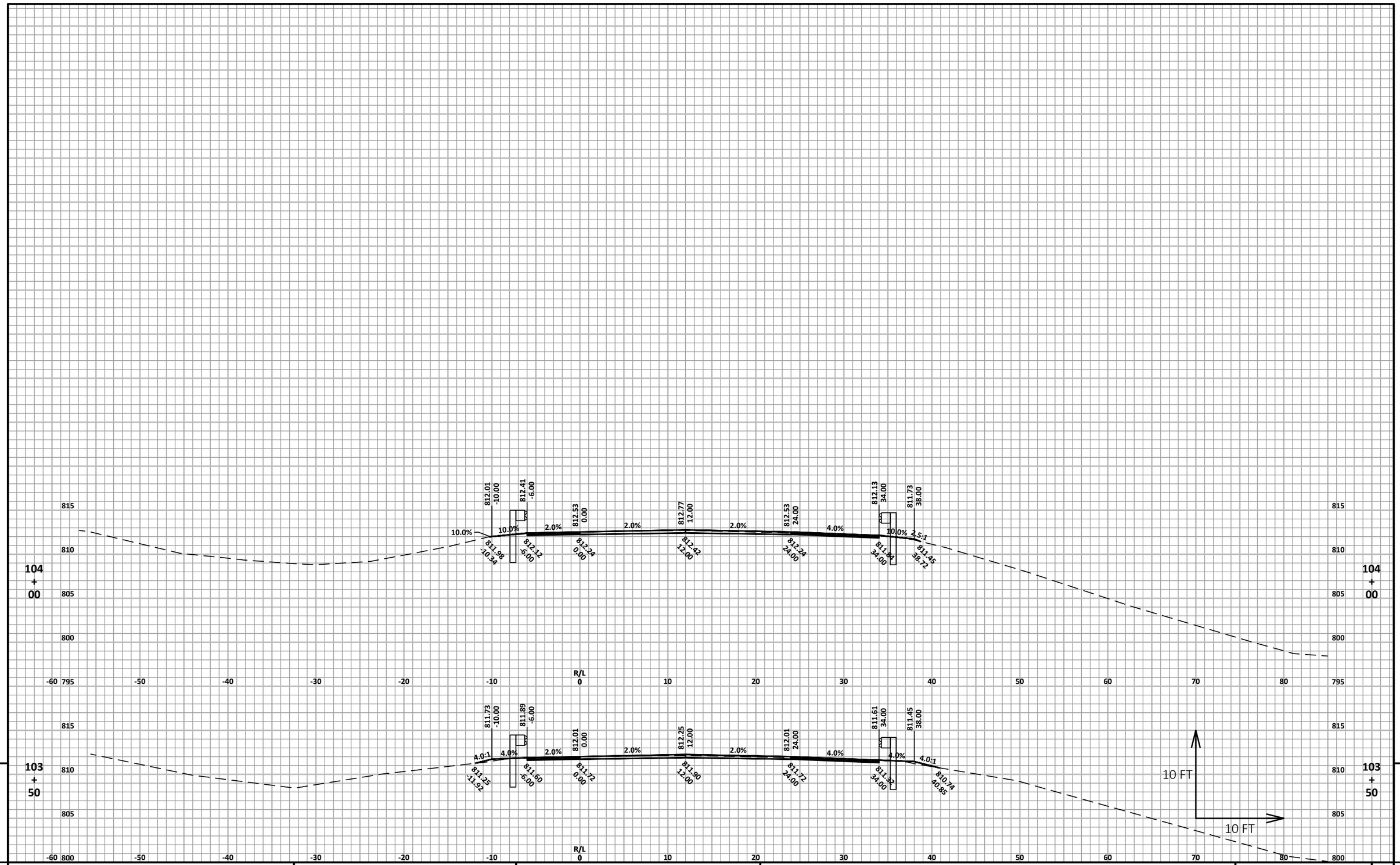
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH O GUARDRAIL	SHEET 275	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090213-xs

PLOT DATE : 4/22/2021 11:14 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

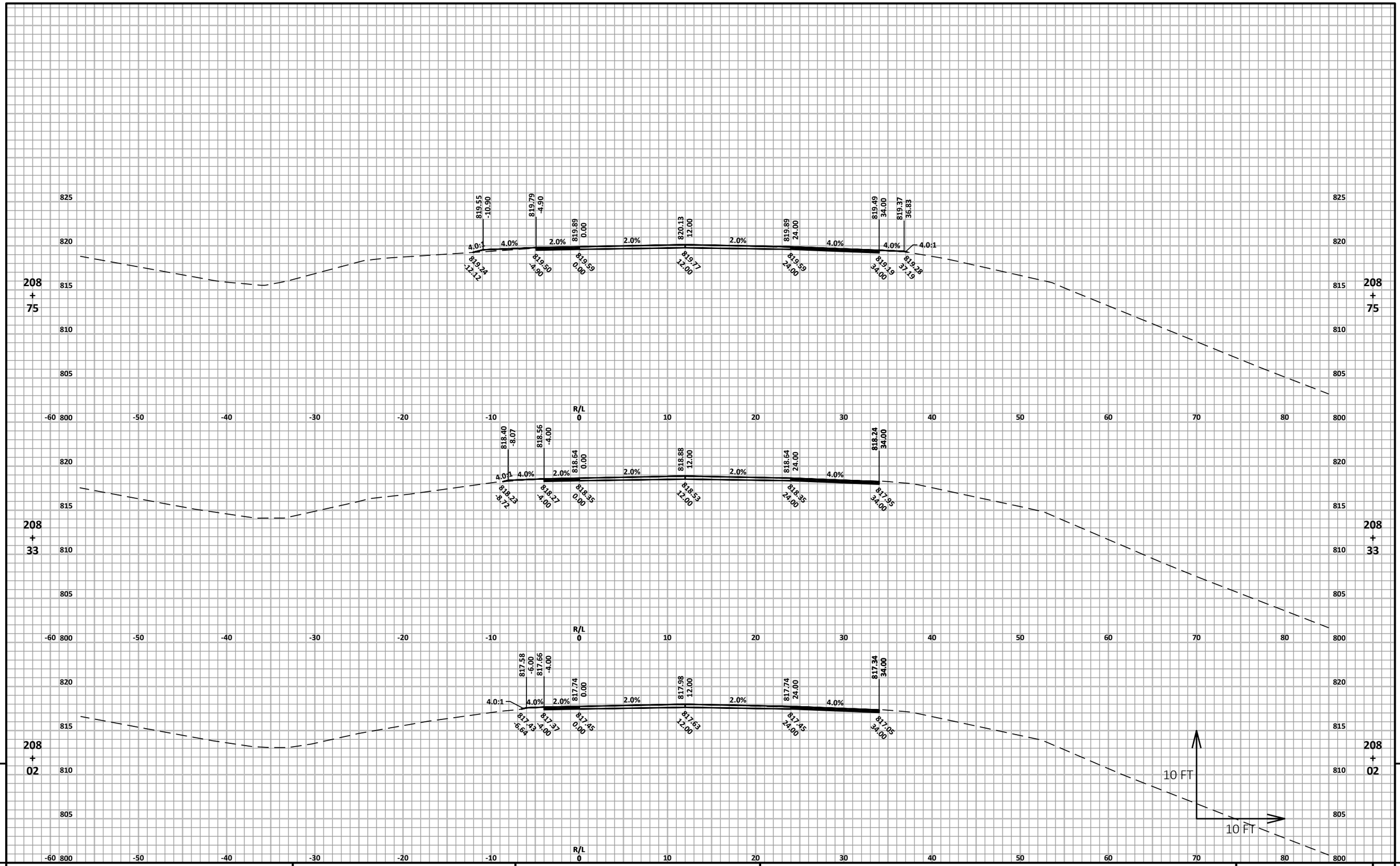


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH O GUARDRAIL	SHEET 276	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090214-xs

PLOT DATE : 4/22/2021 11:14 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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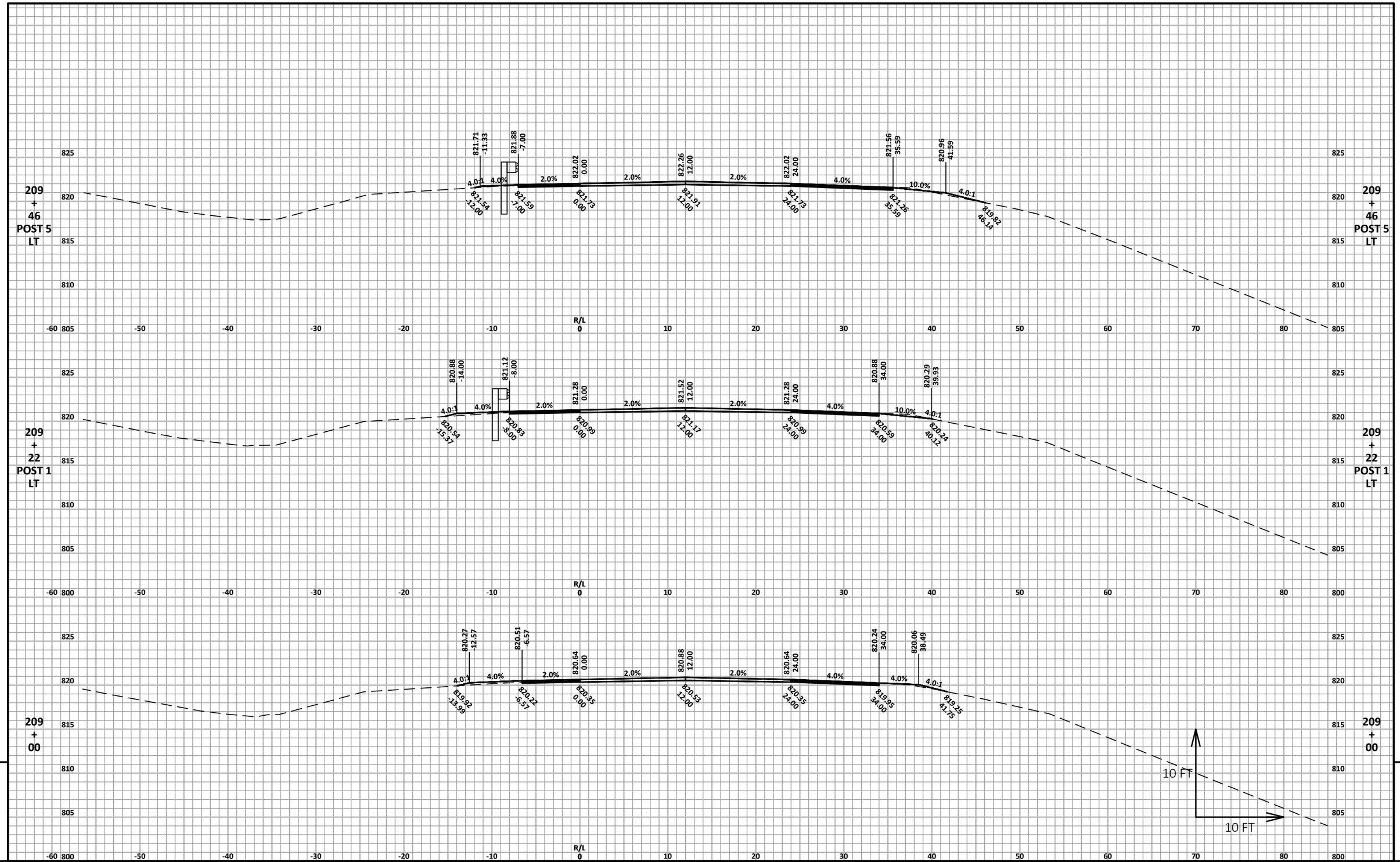
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: STH 23 WEST GUARDRAIL	SHEET 277	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090221-xs

PLOT DATE : 4/22/2021 11:15 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

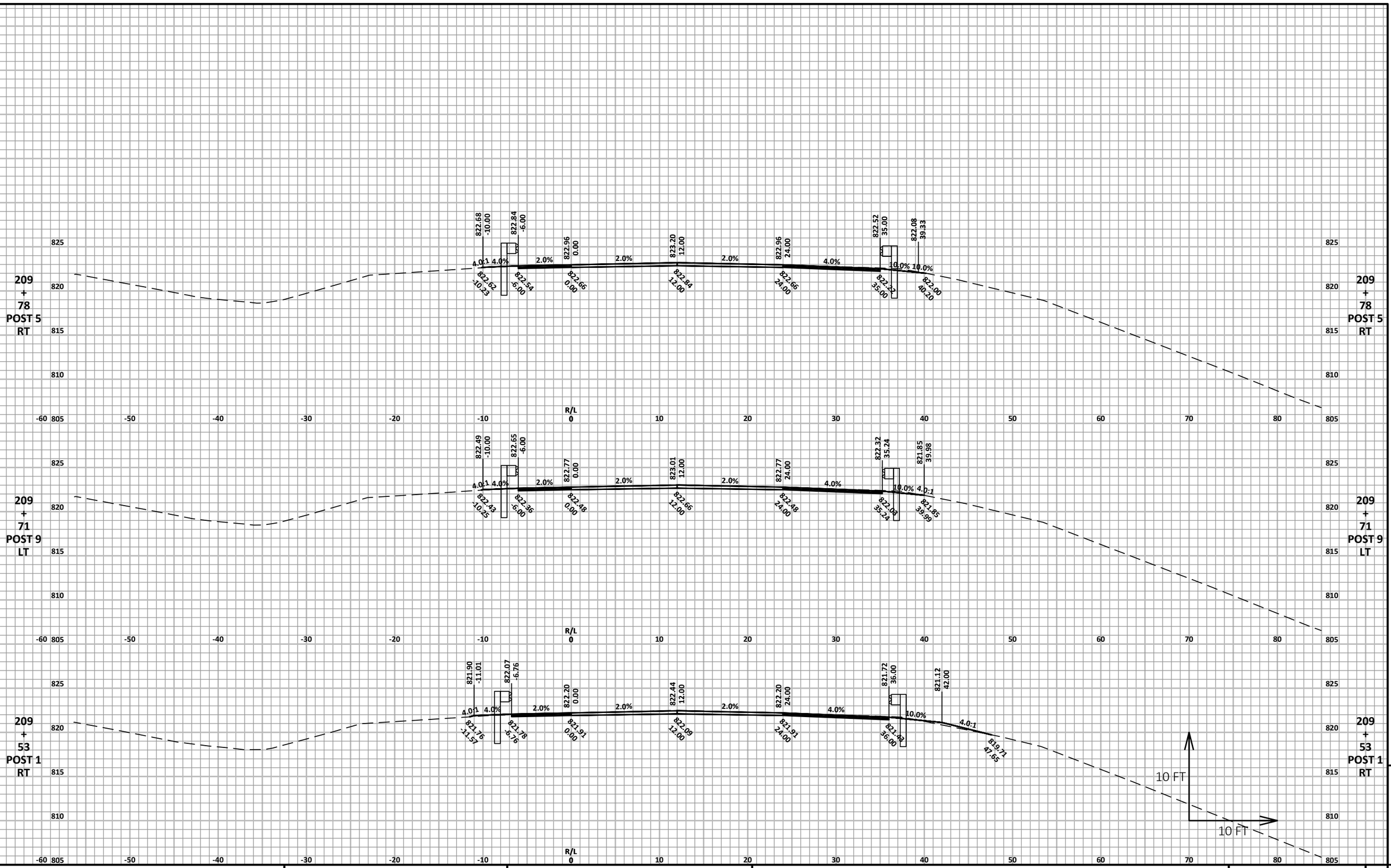


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: STH 23 WEST GUARDRAIL	SHEET 278 E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090222-xs

PLOT DATE : 4/22/2021 11:15 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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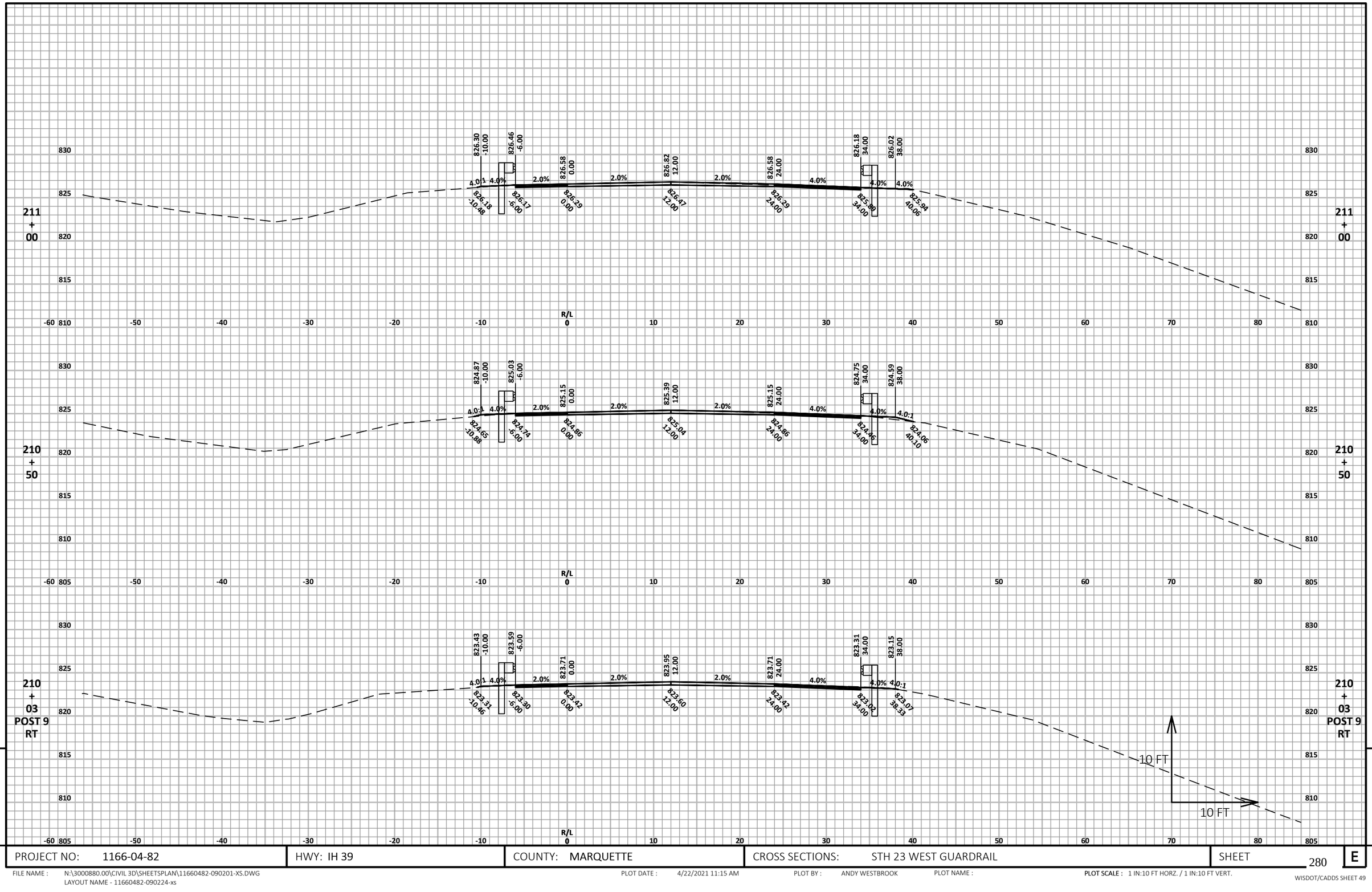
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: STH 23 WEST GUARDRAIL	SHEET 279	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090223-xs

PLOT DATE : 4/22/2021 11:15 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

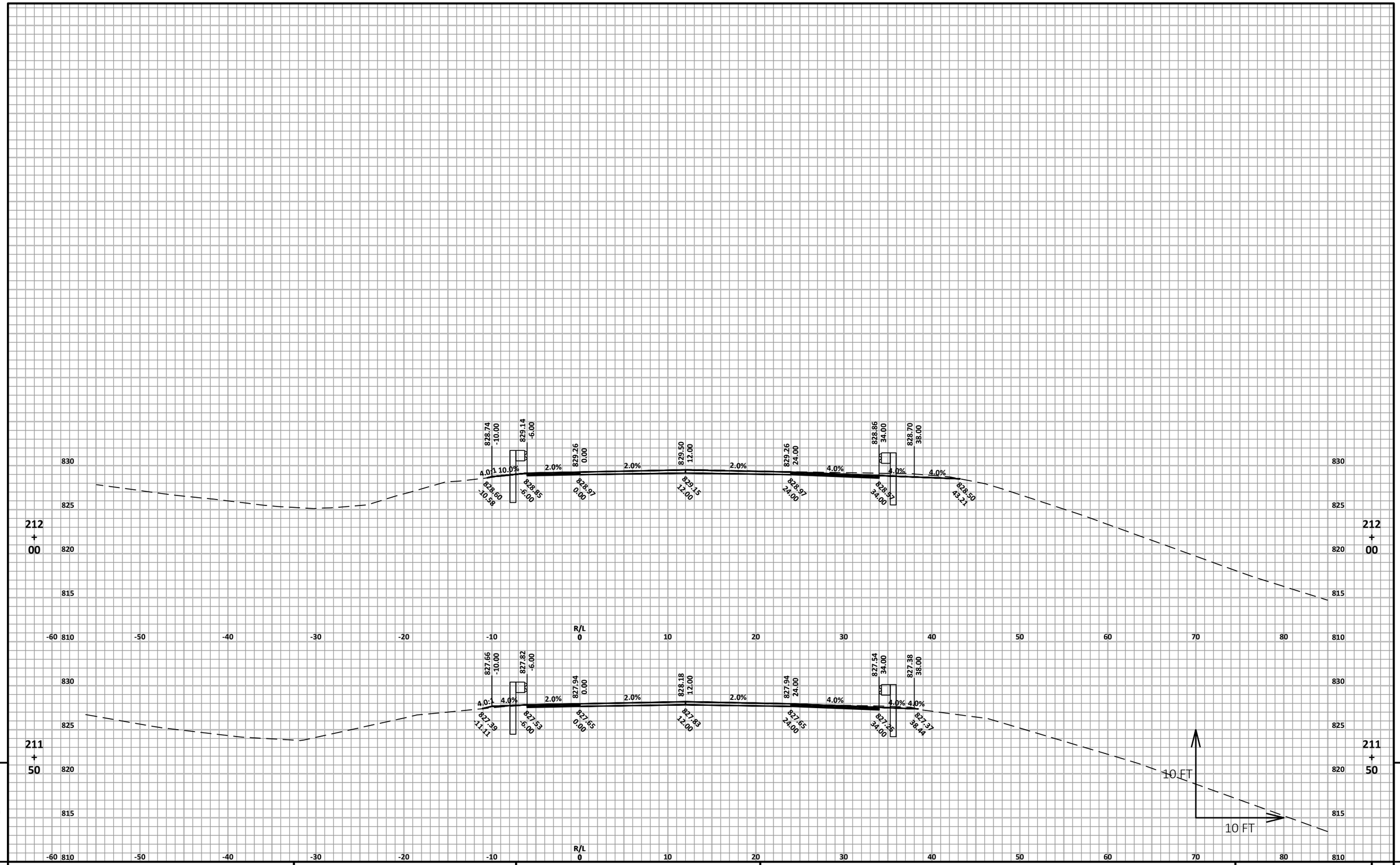


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: STH 23 WEST GUARDRAIL	SHEET 280	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090224-xs

PLOT DATE : 4/22/2021 11:15 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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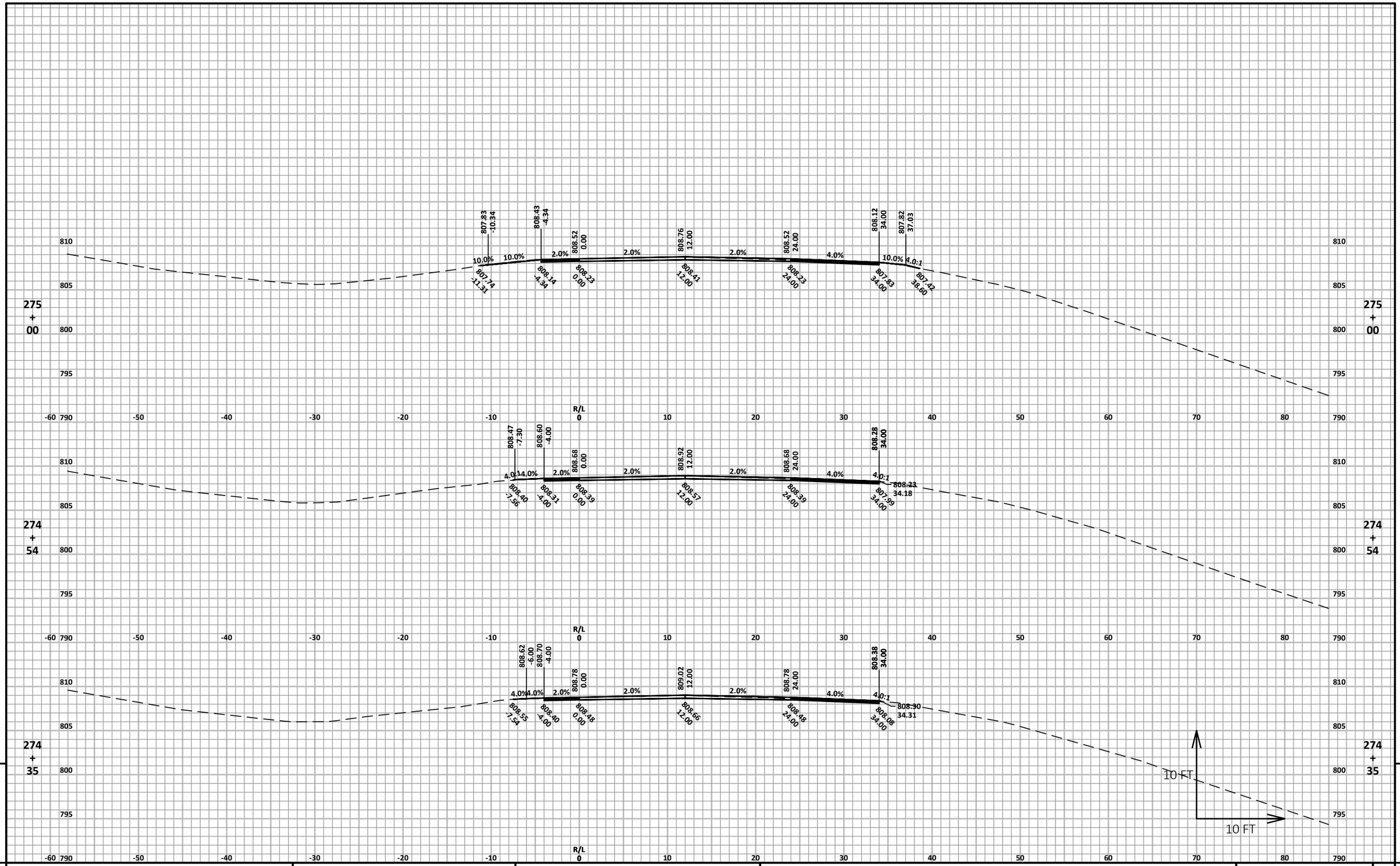
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: STH 23 WEST GUARDRAIL	SHEET 281	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090225-xs

PLOT DATE : 4/22/2021 11:15 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



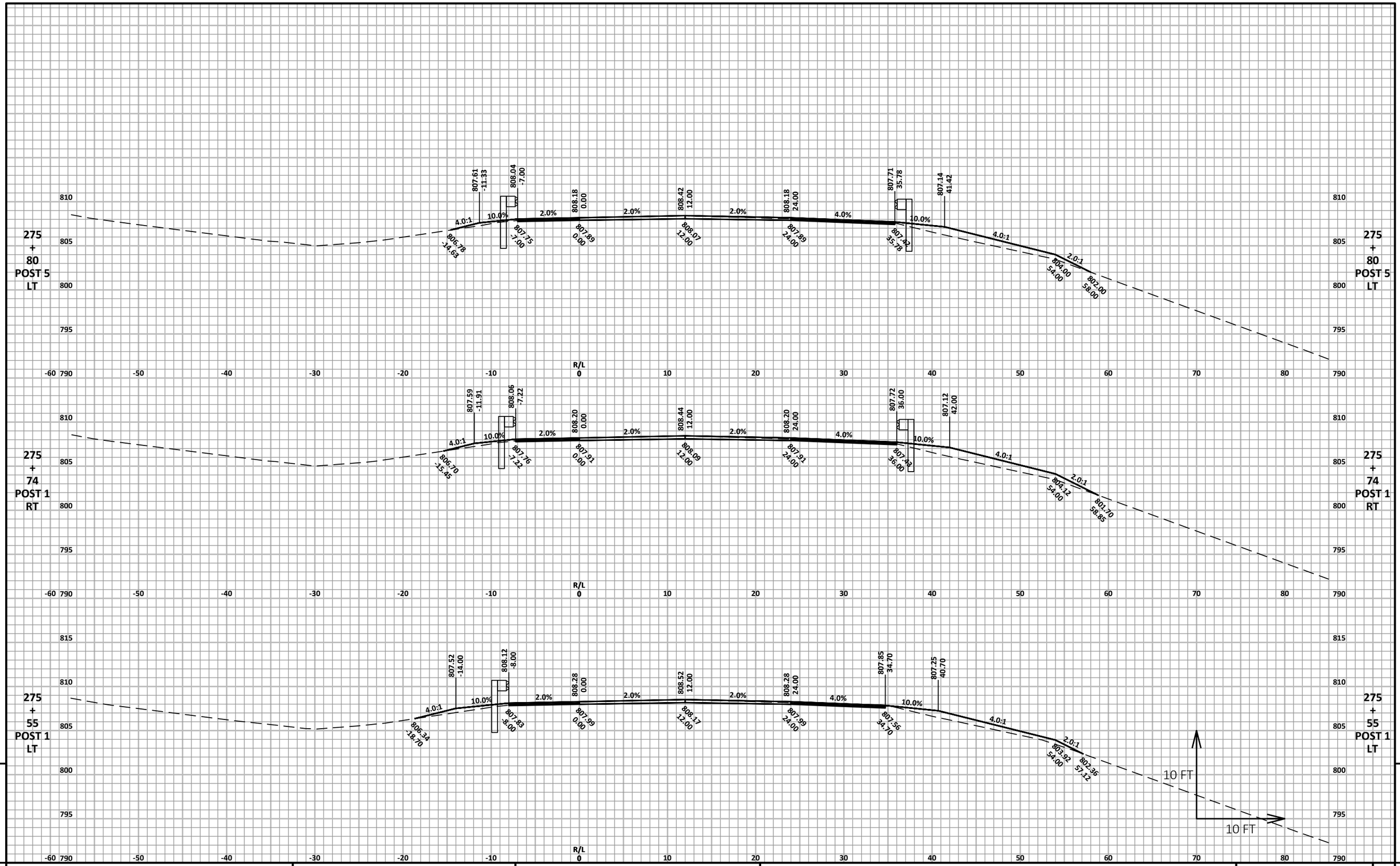
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH CX GUARDRAIL	SHEET 282	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090231-xs

PLOT DATE : 4/22/2021 11:15 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

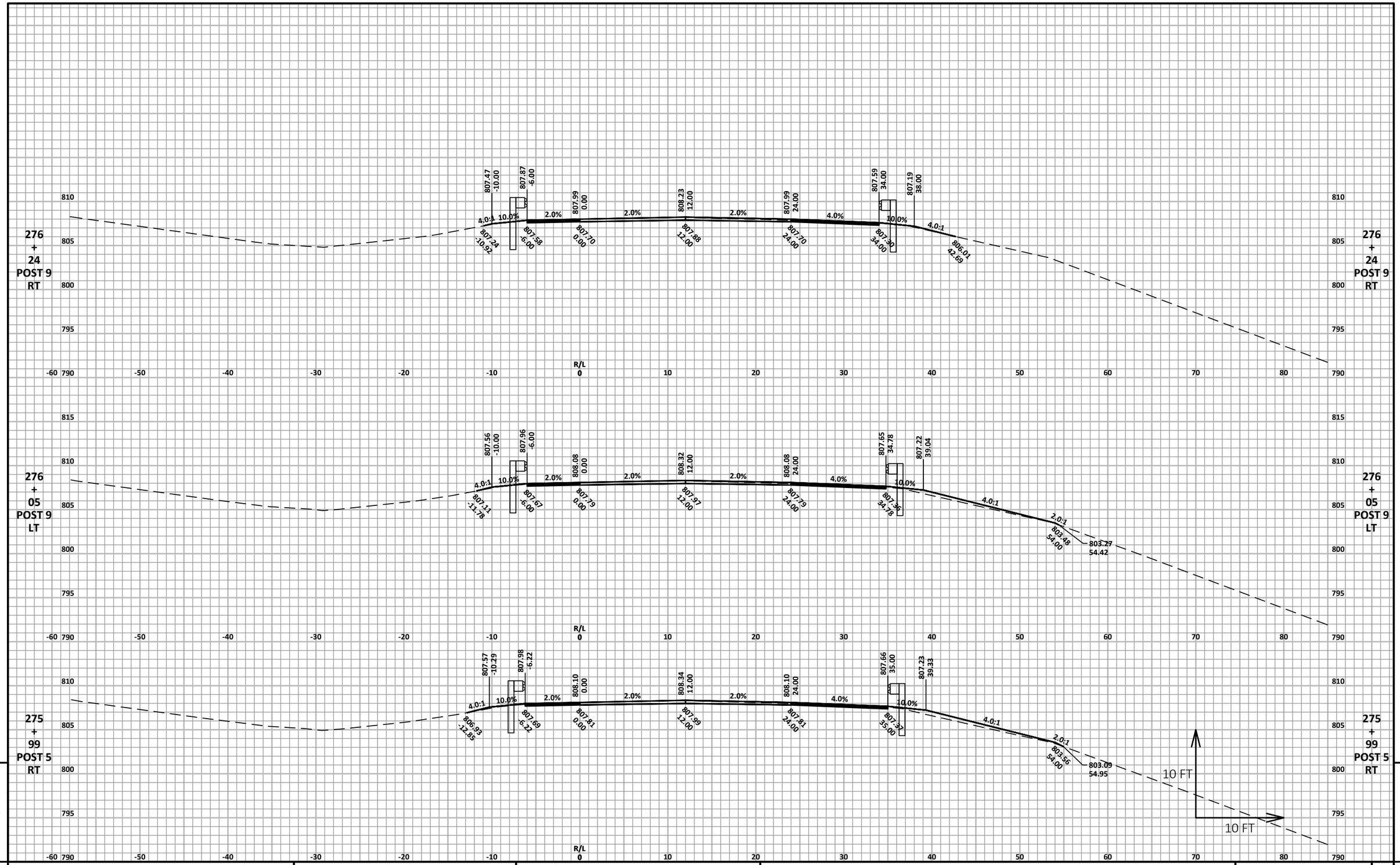


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH CX GUARDRAIL	SHEET 283	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090232-xs

PLOT DATE : 4/22/2021 11:15 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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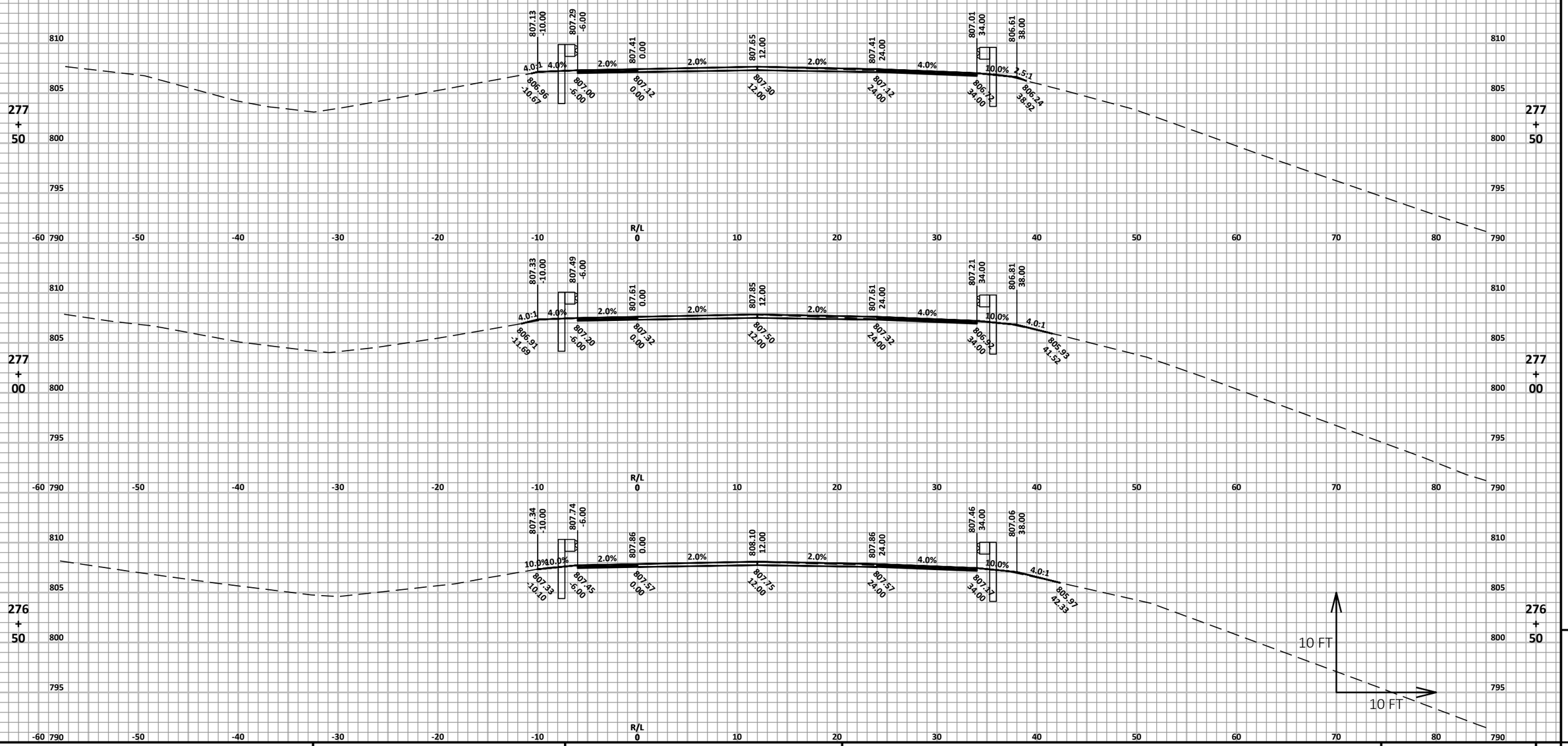
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH CX GUARDRAIL	SHEET 284	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090233-xs

PLOT DATE : 4/22/2021 11:15 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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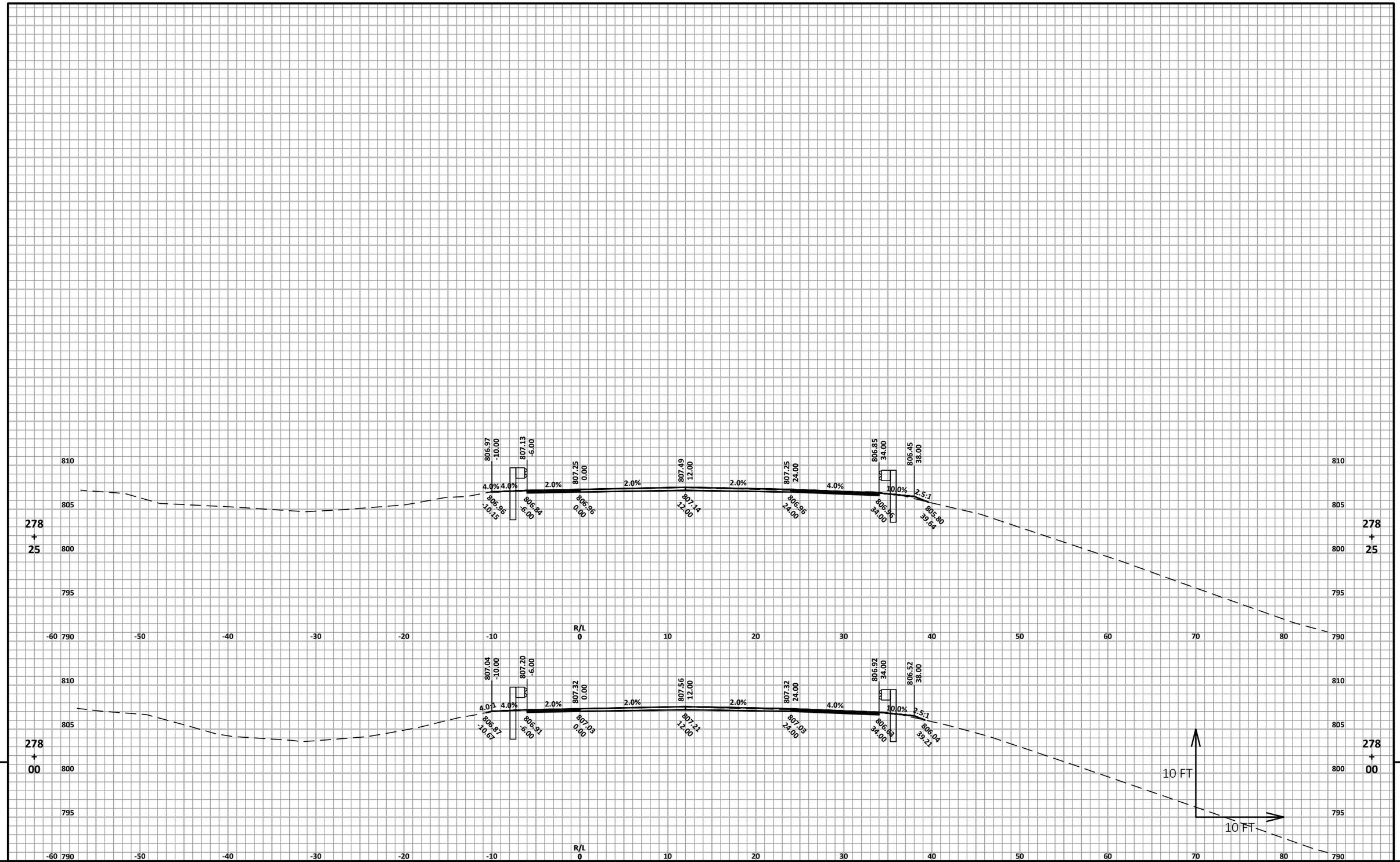
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH CX GUARDRAIL	SHEET 285	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090234-xs

PLOT DATE : 4/22/2021 11:15 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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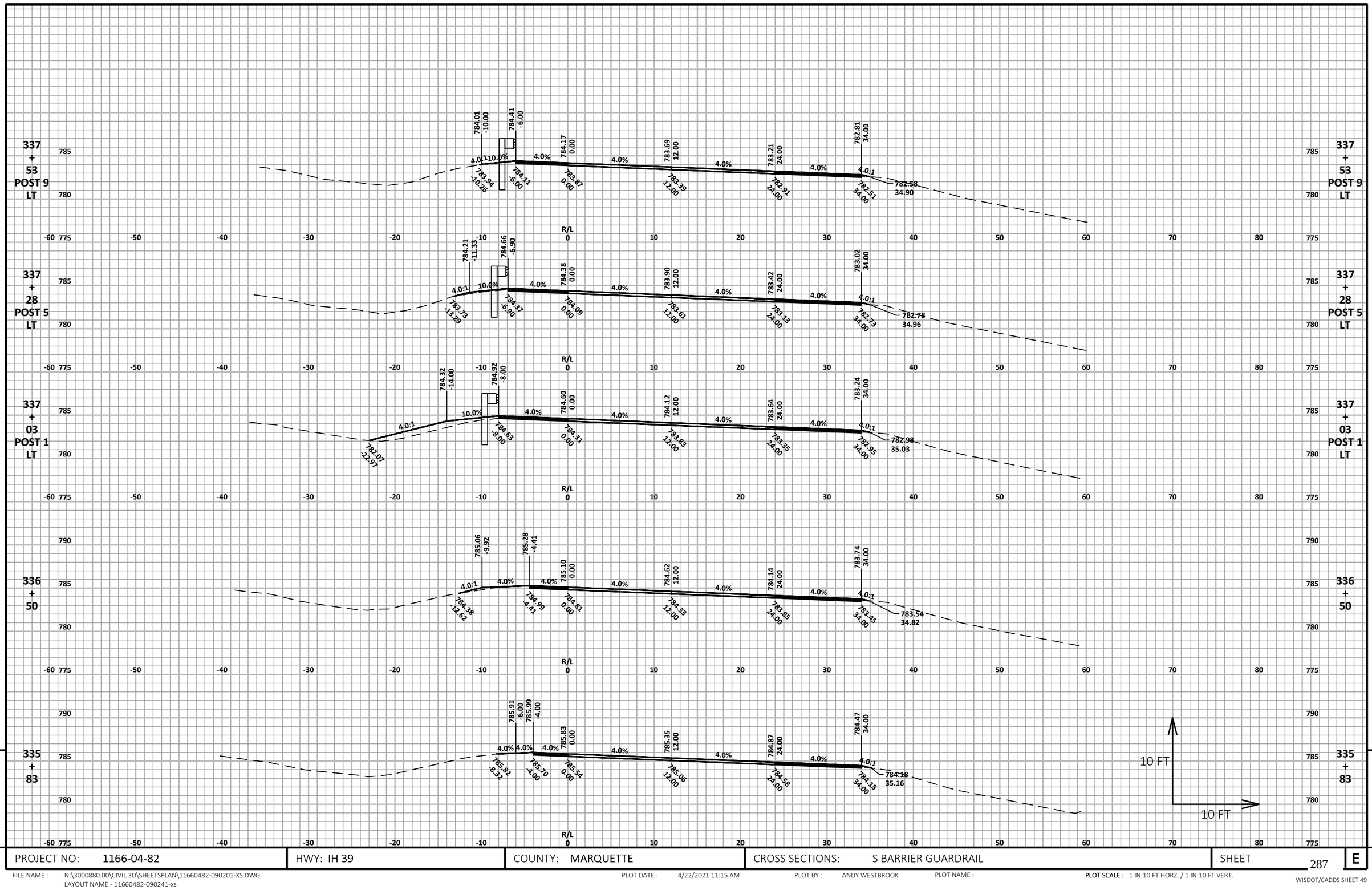
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH CX GUARDRAIL	SHEET 286	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090235-xs

PLOT DATE : 4/22/2021 11:15 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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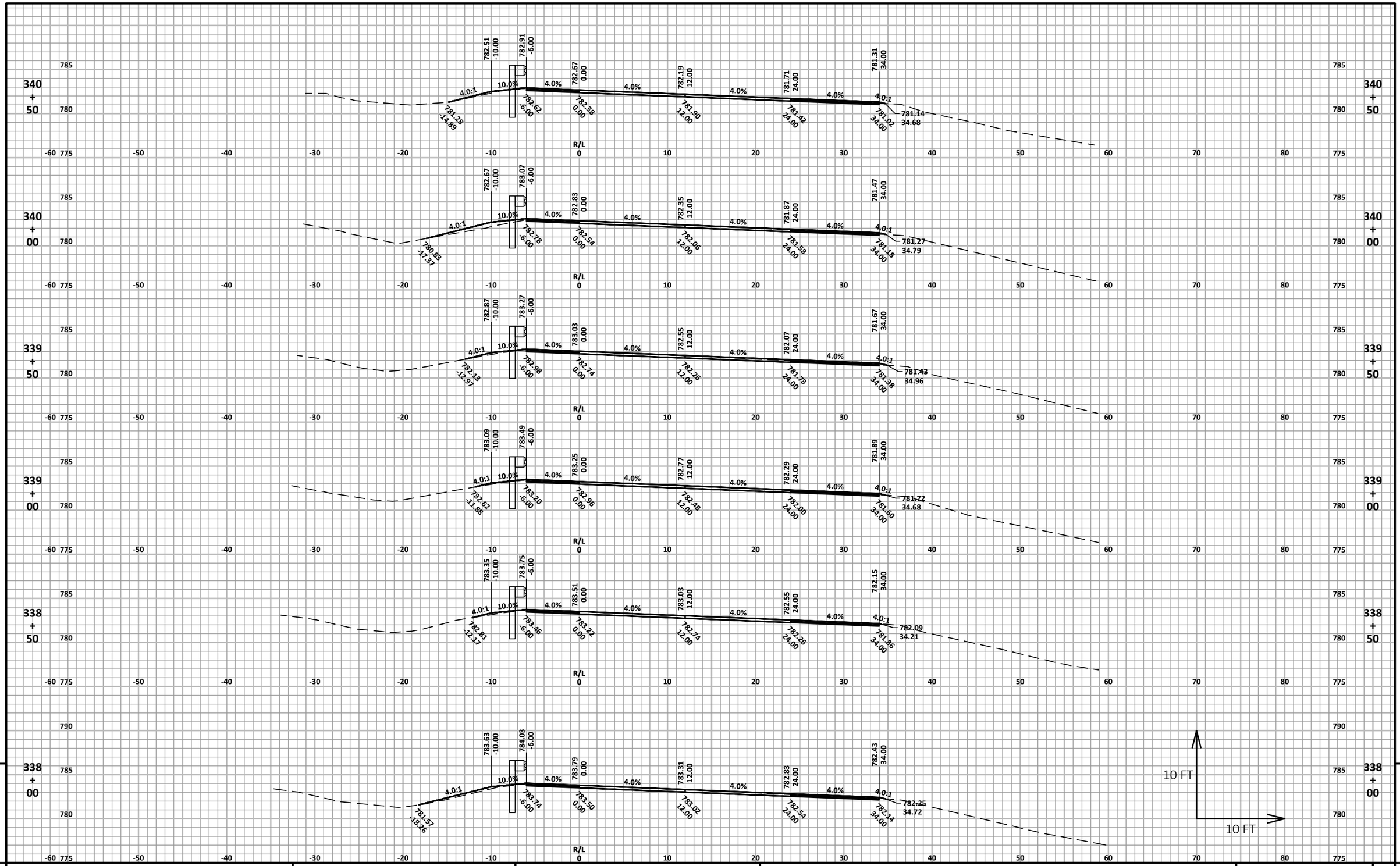
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: S BARRIER GUARDRAIL	SHEET 287	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090241-xs

PLOT DATE : 4/22/2021 11:15 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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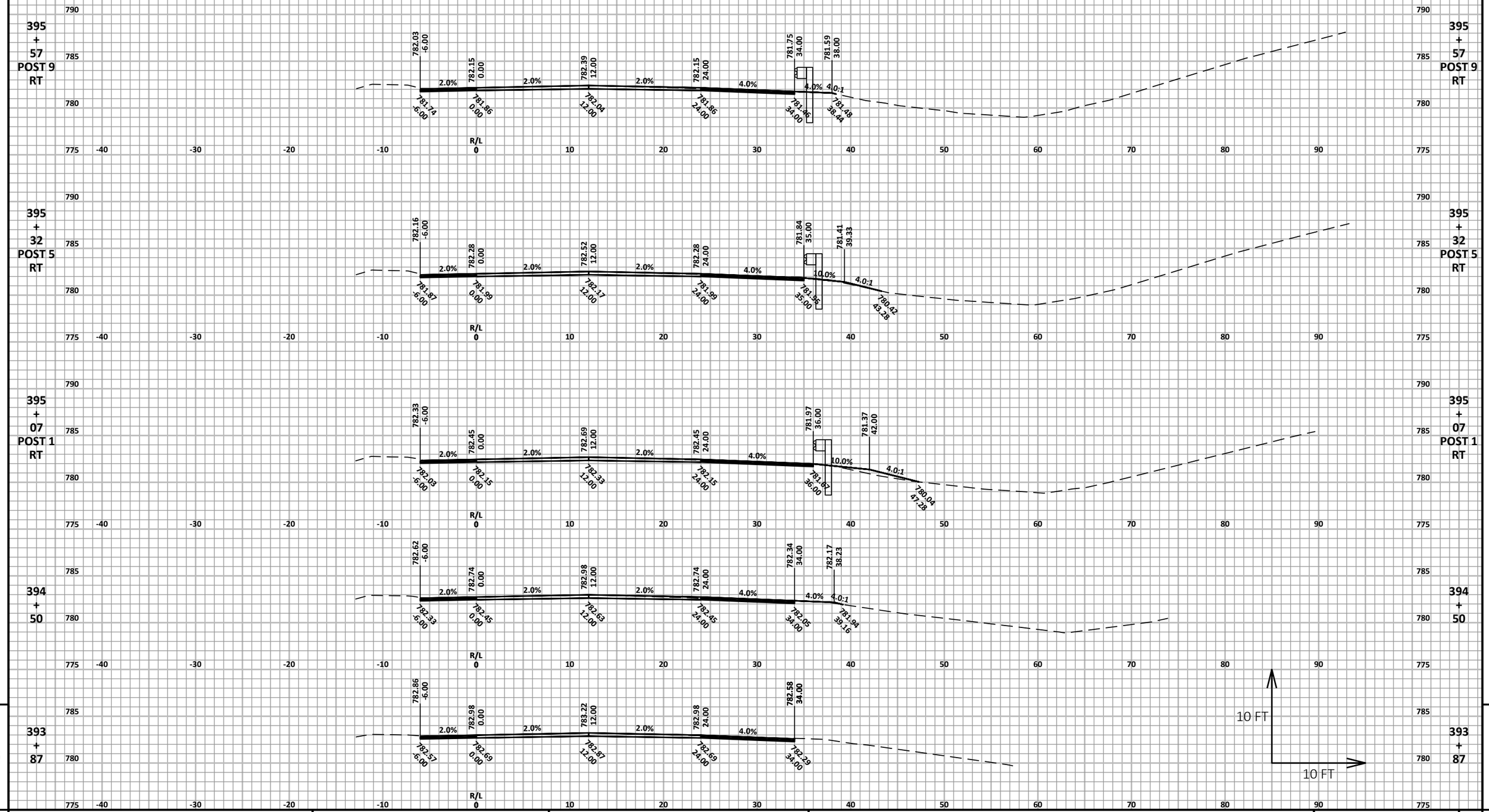
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: S BARRIER GUARDRAIL	SHEET 288	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090242-xs

PLOT DATE : 4/22/2021 11:15 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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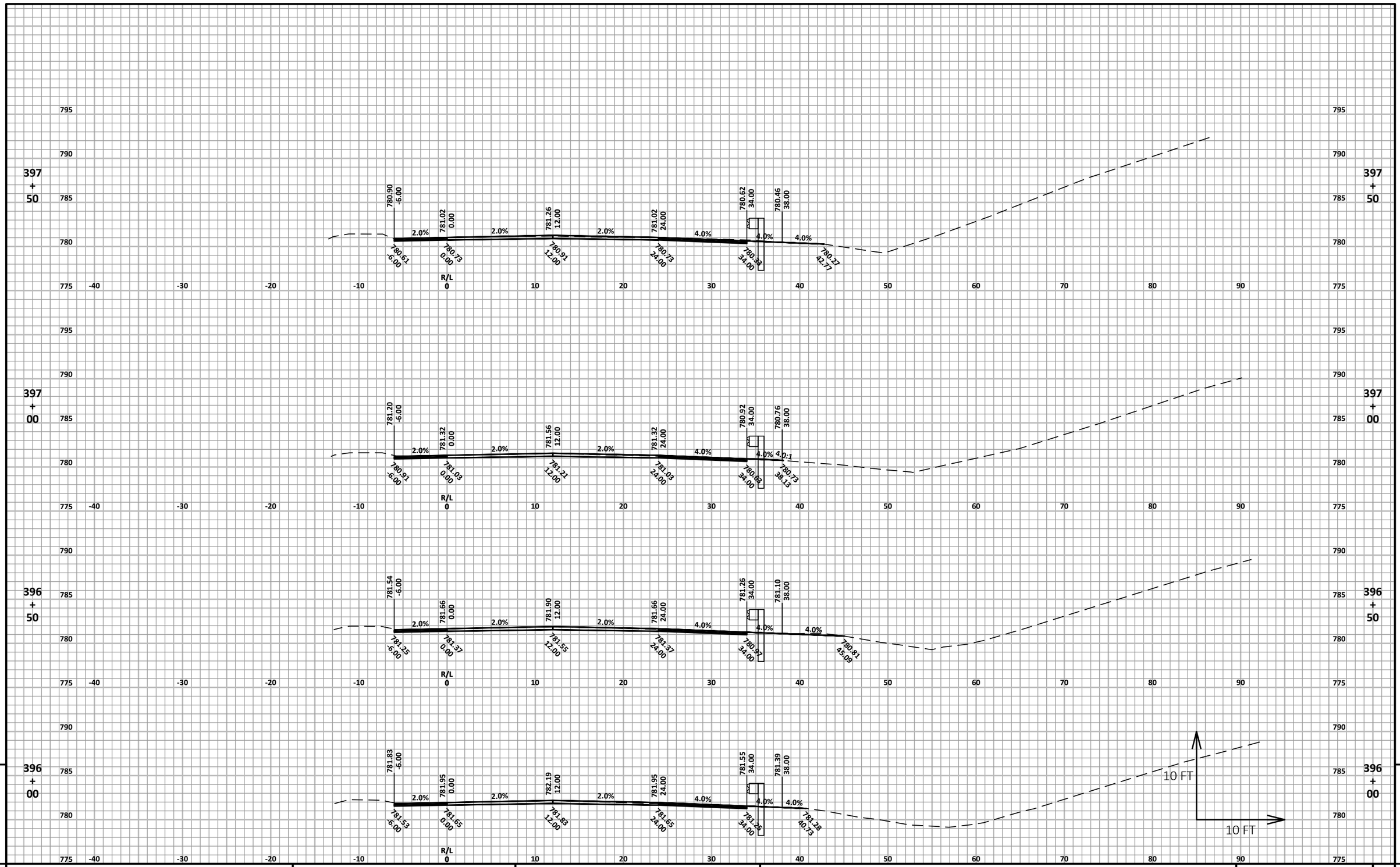
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: RAILROAD BRIDGE GUARDRAIL	SHEET 289	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090251-xs

PLOT DATE : 4/22/2021 11:16 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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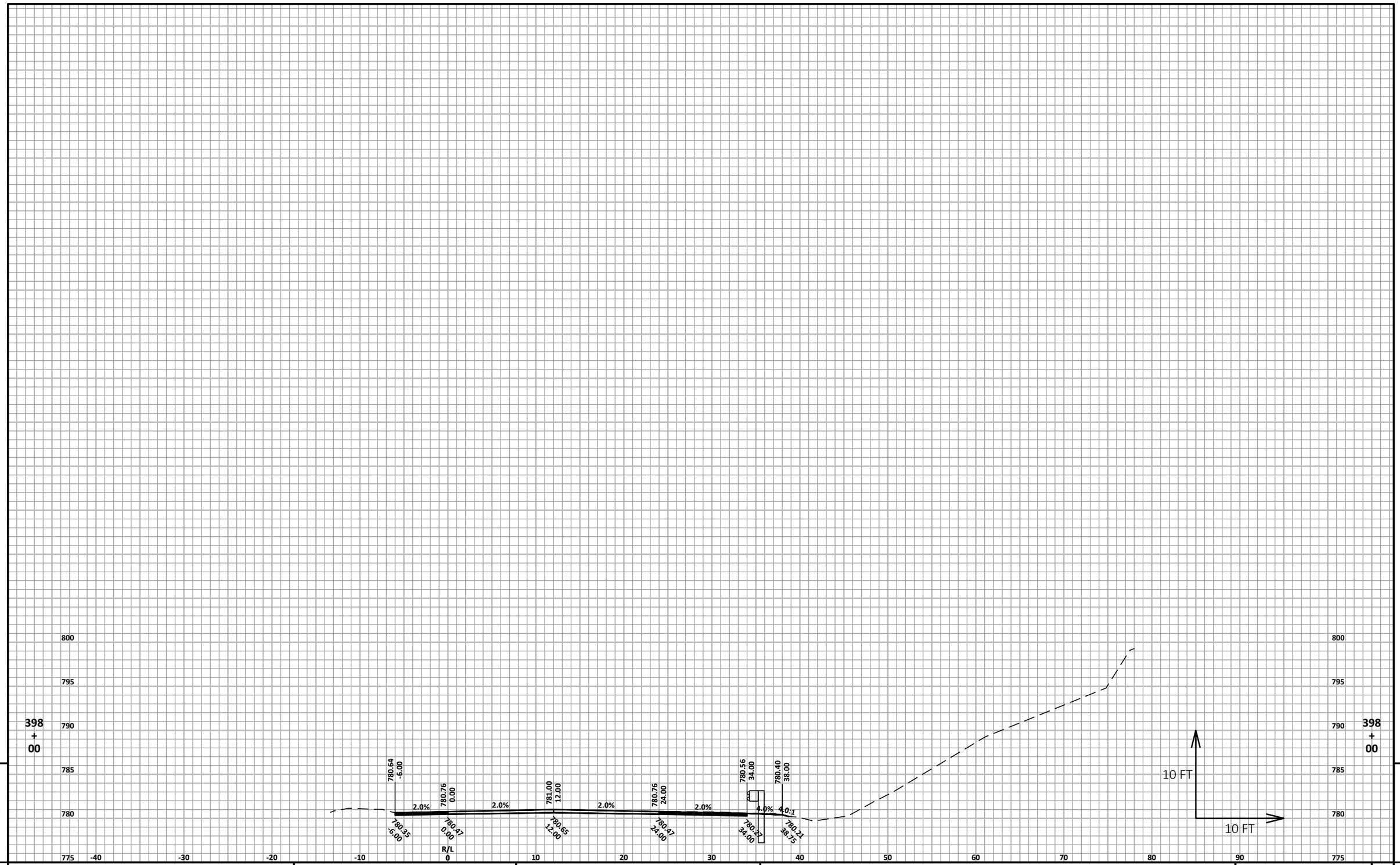
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: RAILROAD BRIDGE GUARDRAIL	SHEET 290	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090252-xs

PLOT DATE : 4/22/2021 11:16 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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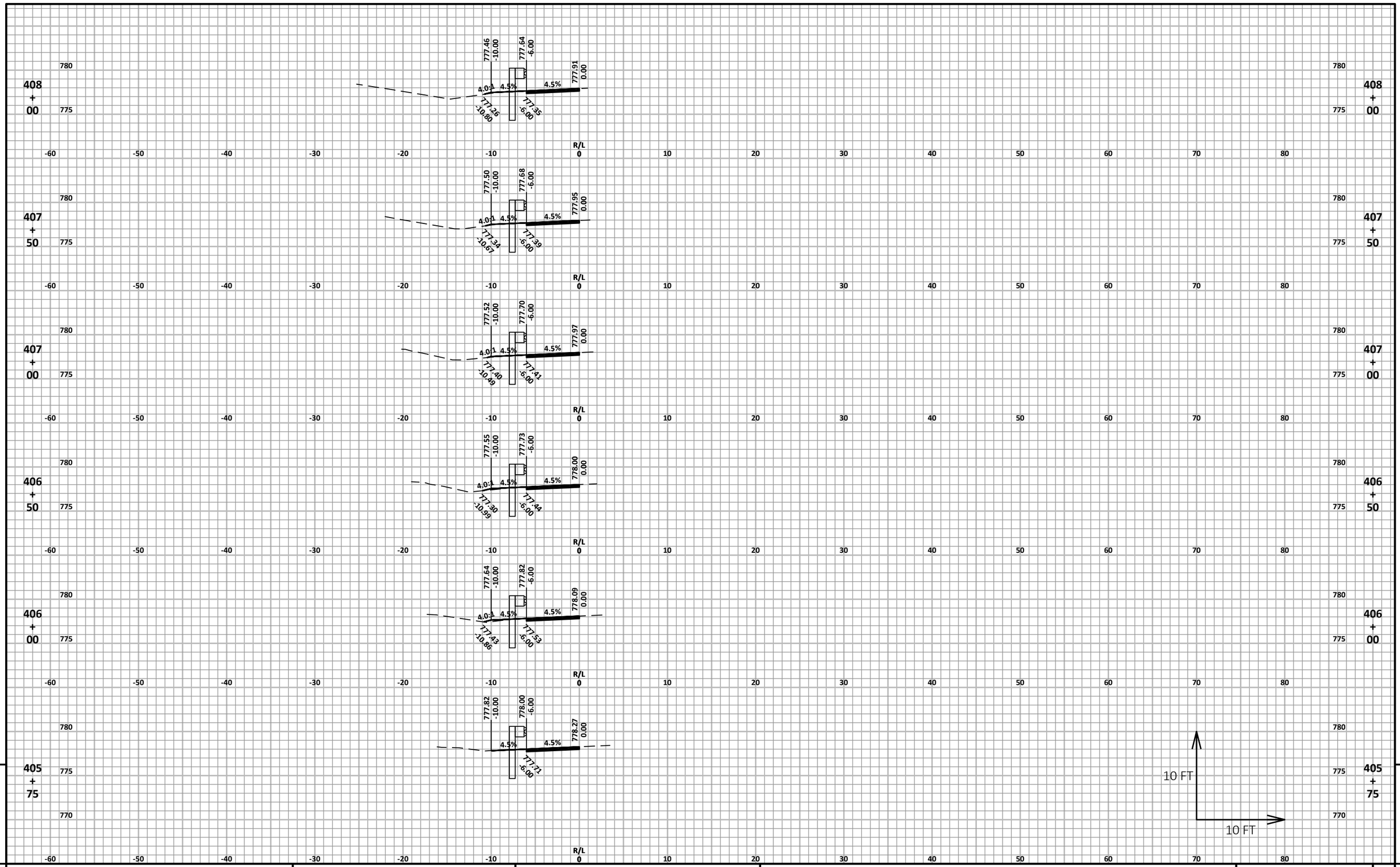
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: RAILROAD BRIDGE GUARDRAIL	SHEET 291	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090253-xs

PLOT DATE : 4/22/2021 11:16 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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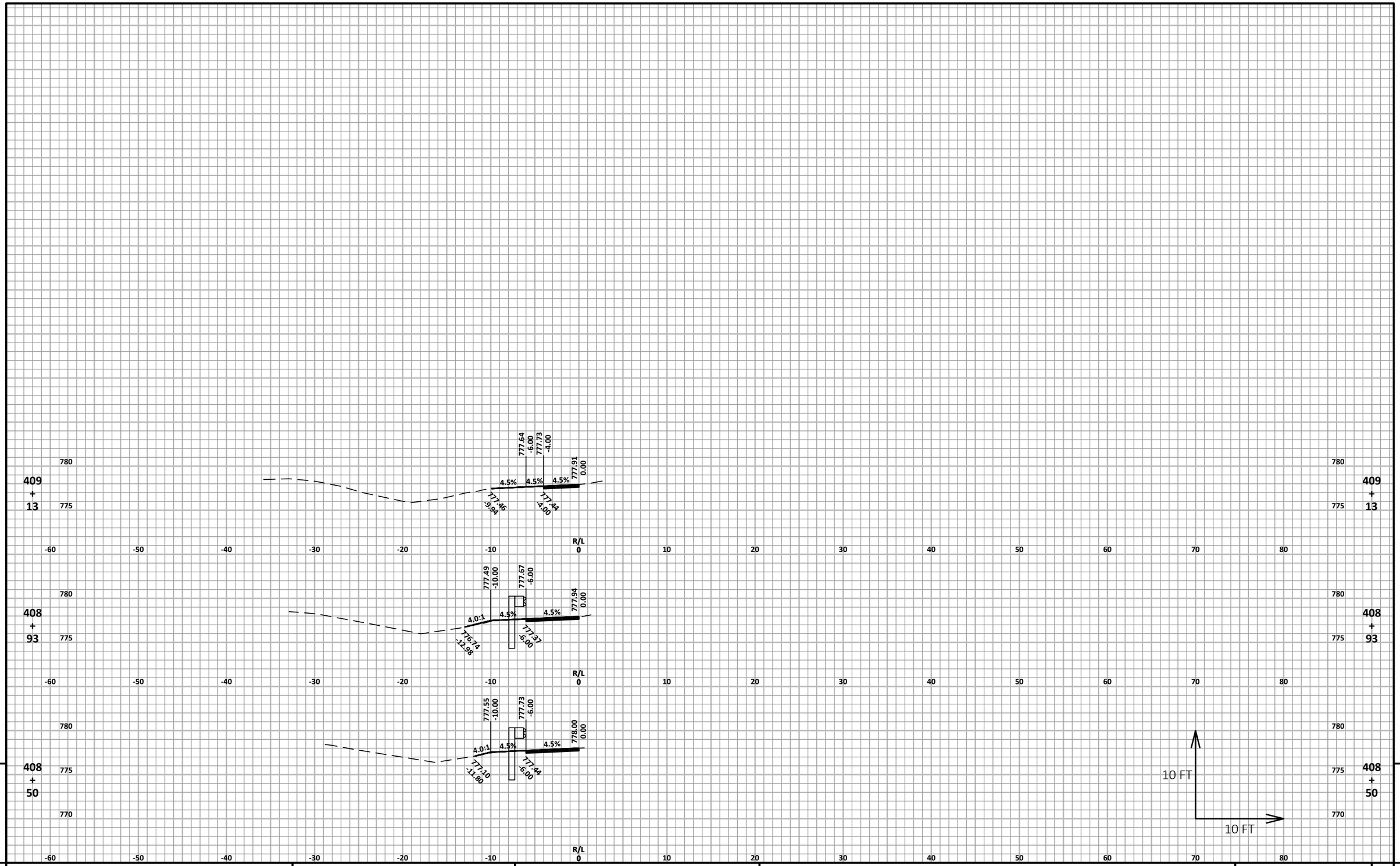
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: N BARRIER GUARDRAIL	SHEET 292	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090261-xs

PLOT DATE : 4/22/2021 11:16 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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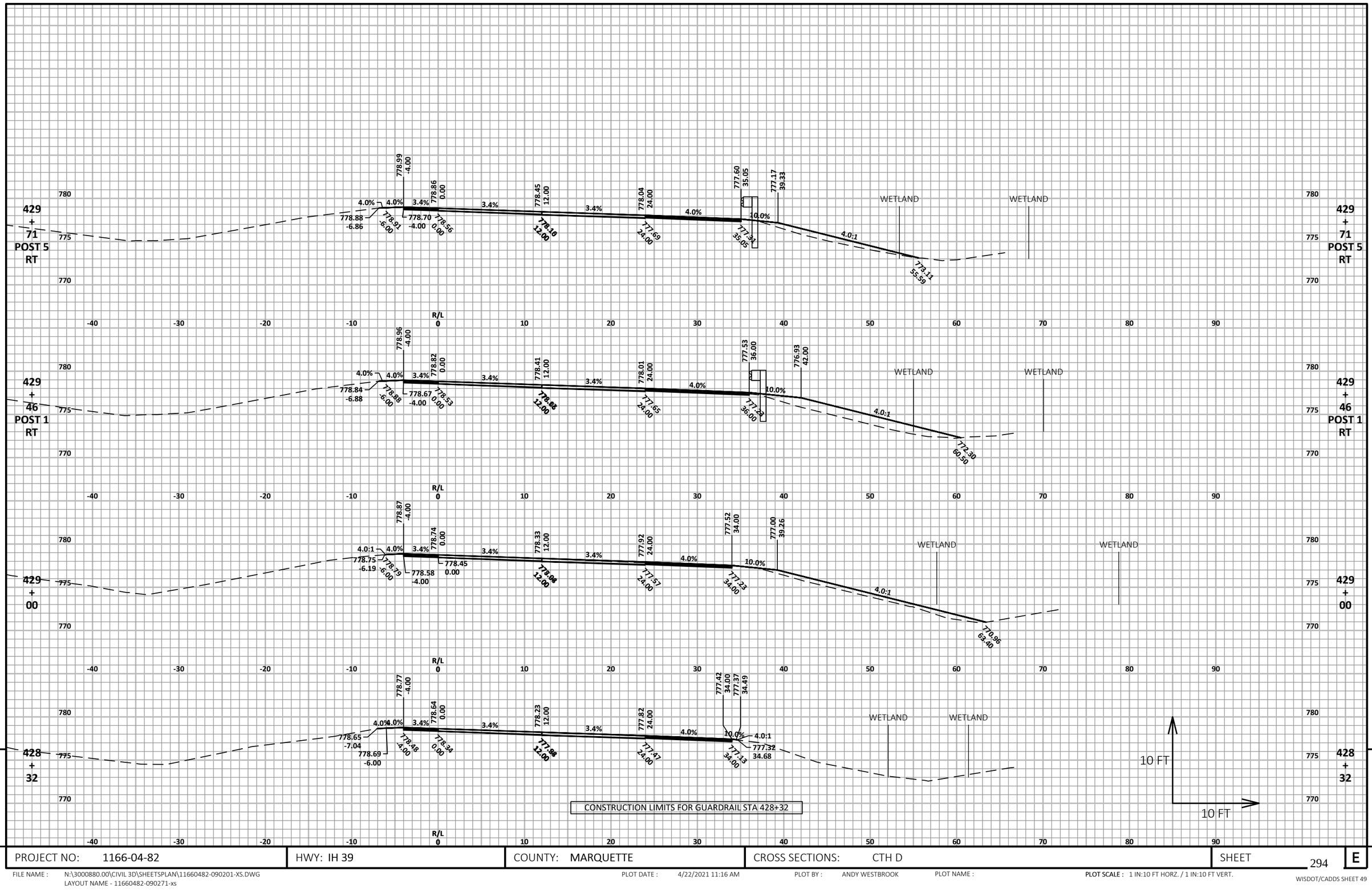
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: N BARRIER GUARDRAIL	SHEET 293	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090262-xs

PLOT DATE : 4/22/2021 11:16 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH D	SHEET 294	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090271-xs

PLOT DATE : 4/22/2021 11:16 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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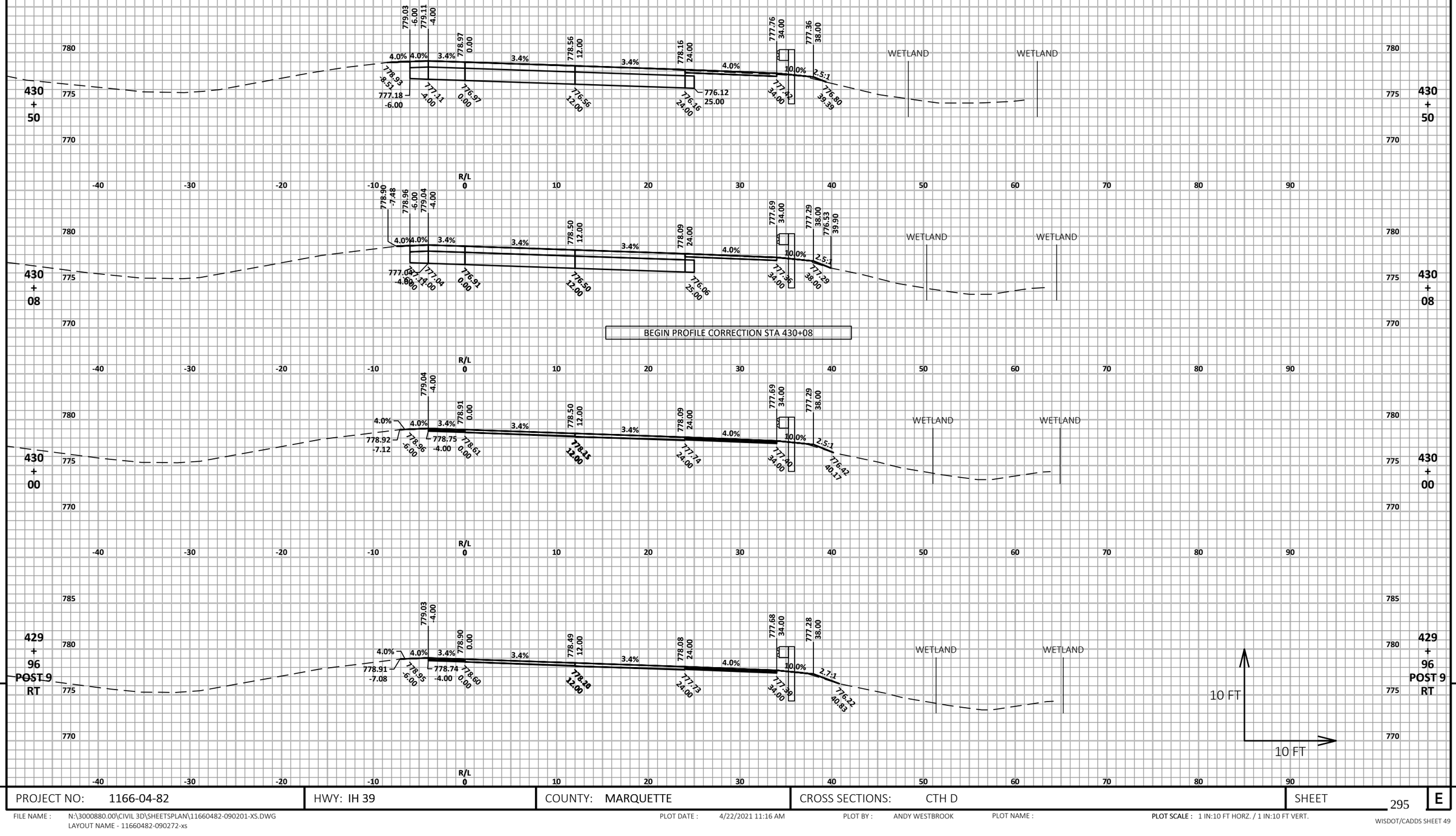
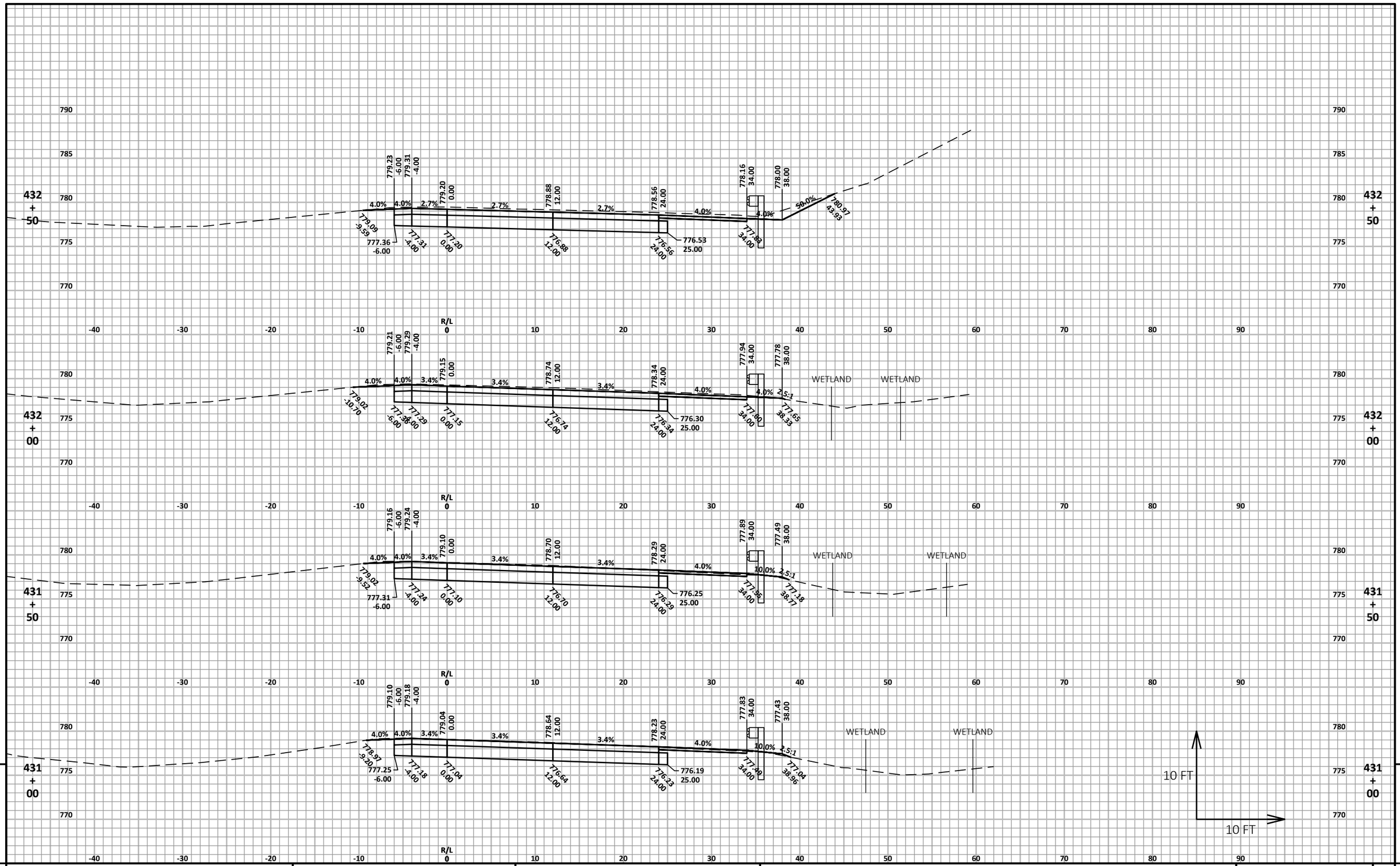


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH D	SHEET 295	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090272-xs

PLOT DATE : 4/22/2021 11:16 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH D	SHEET 296	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090273-xs

PLOT DATE : 4/22/2021 11:16 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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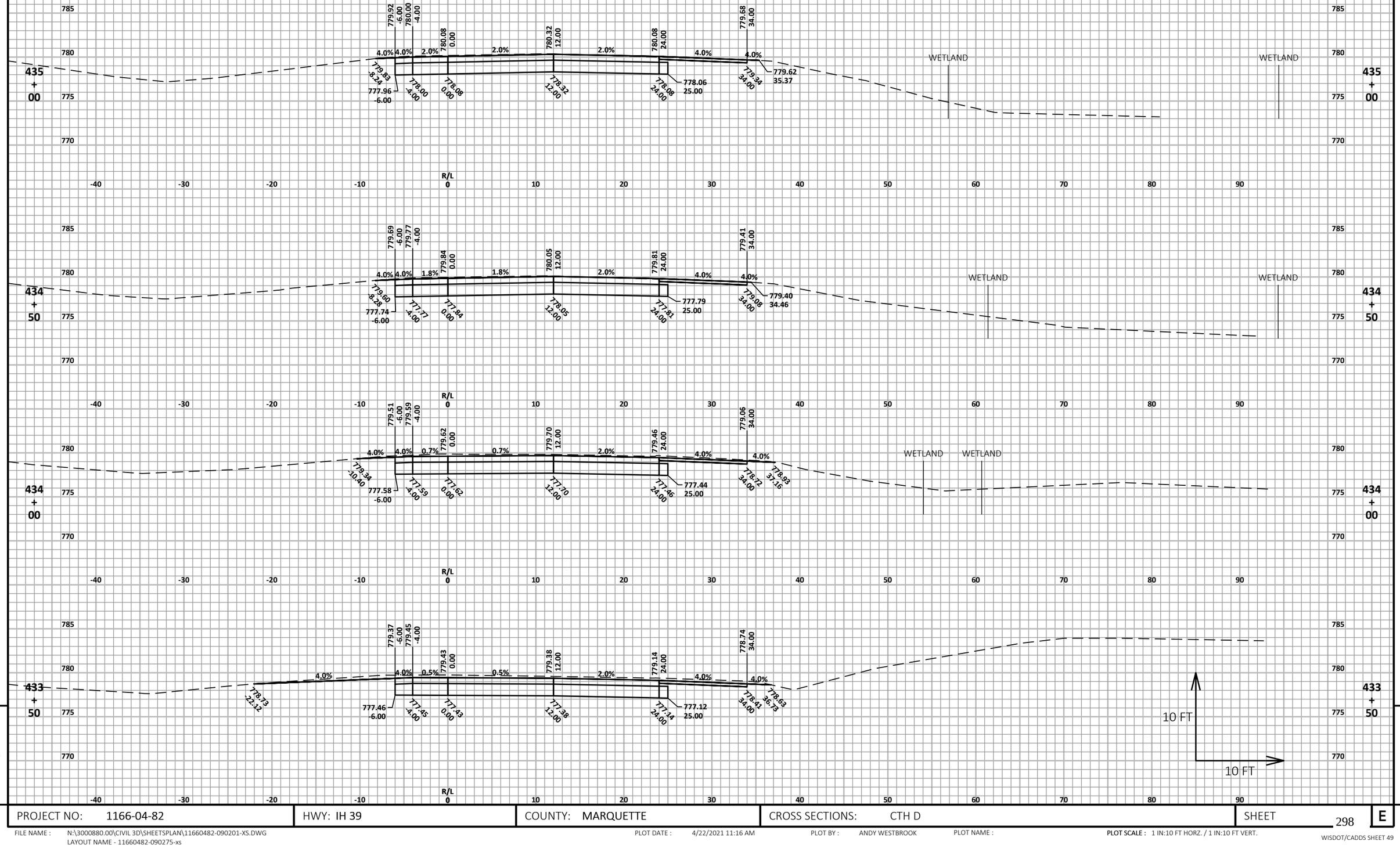
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH D	SHEET 297	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090274-xs

PLOT DATE : 4/22/2021 11:16 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH D	SHEET 298	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090275-xs

PLOT DATE : 4/22/2021 11:16 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

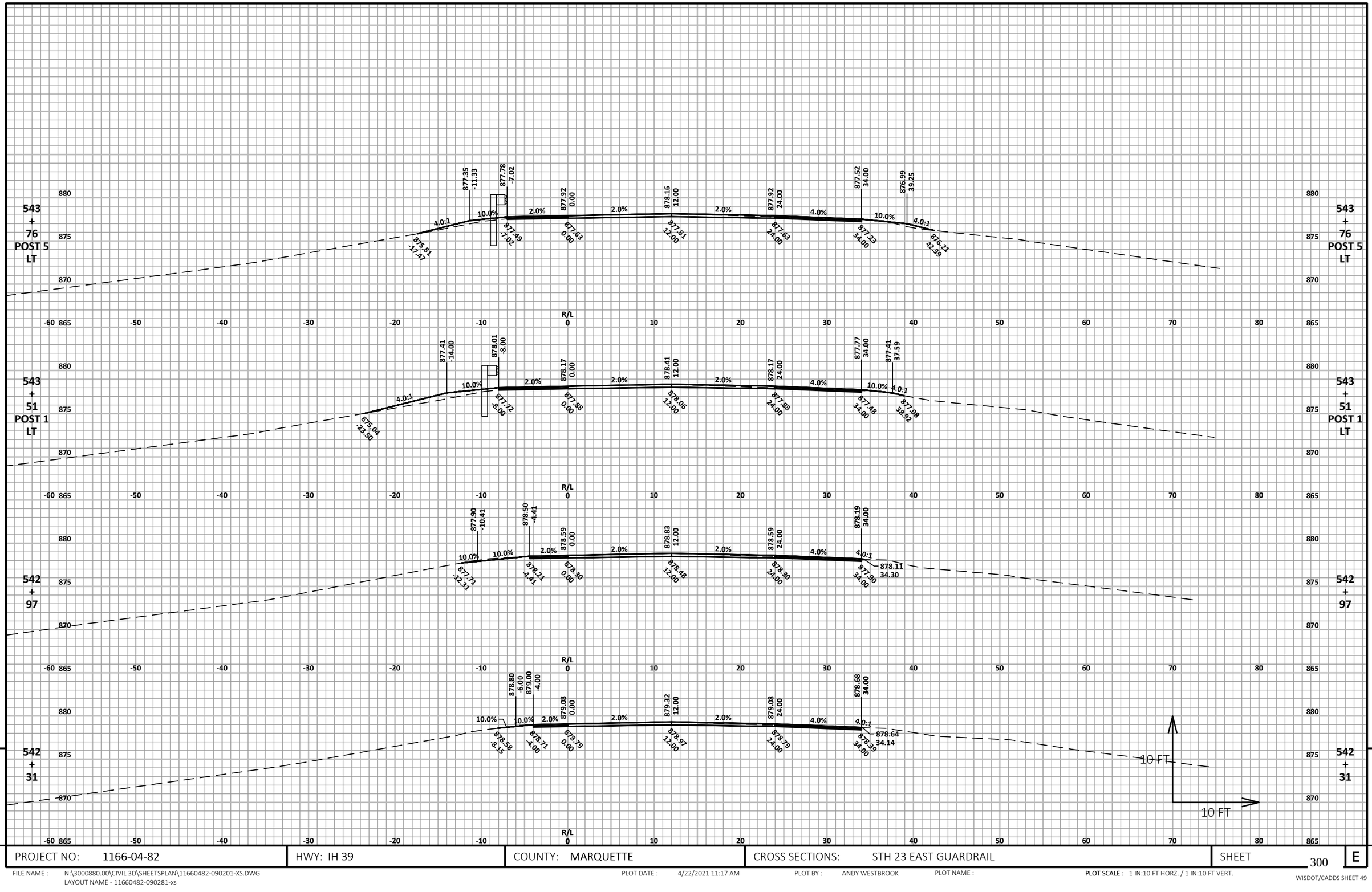
9

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH D	SHEET 299	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090276-xs

PLOT DATE : 4/22/2021 11:16 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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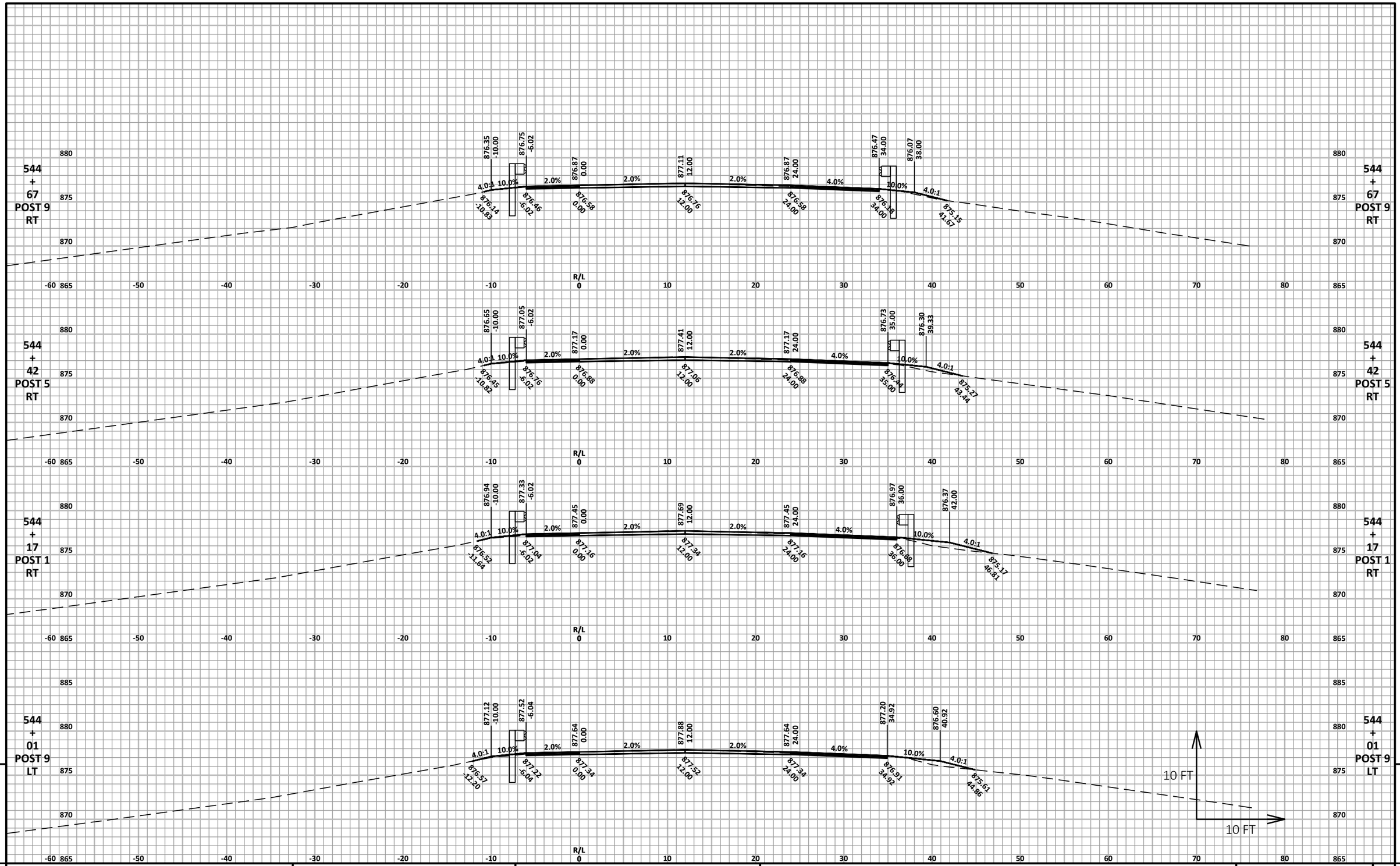
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: STH 23 EAST GUARDRAIL	SHEET 300	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090281-xs

PLOT DATE : 4/22/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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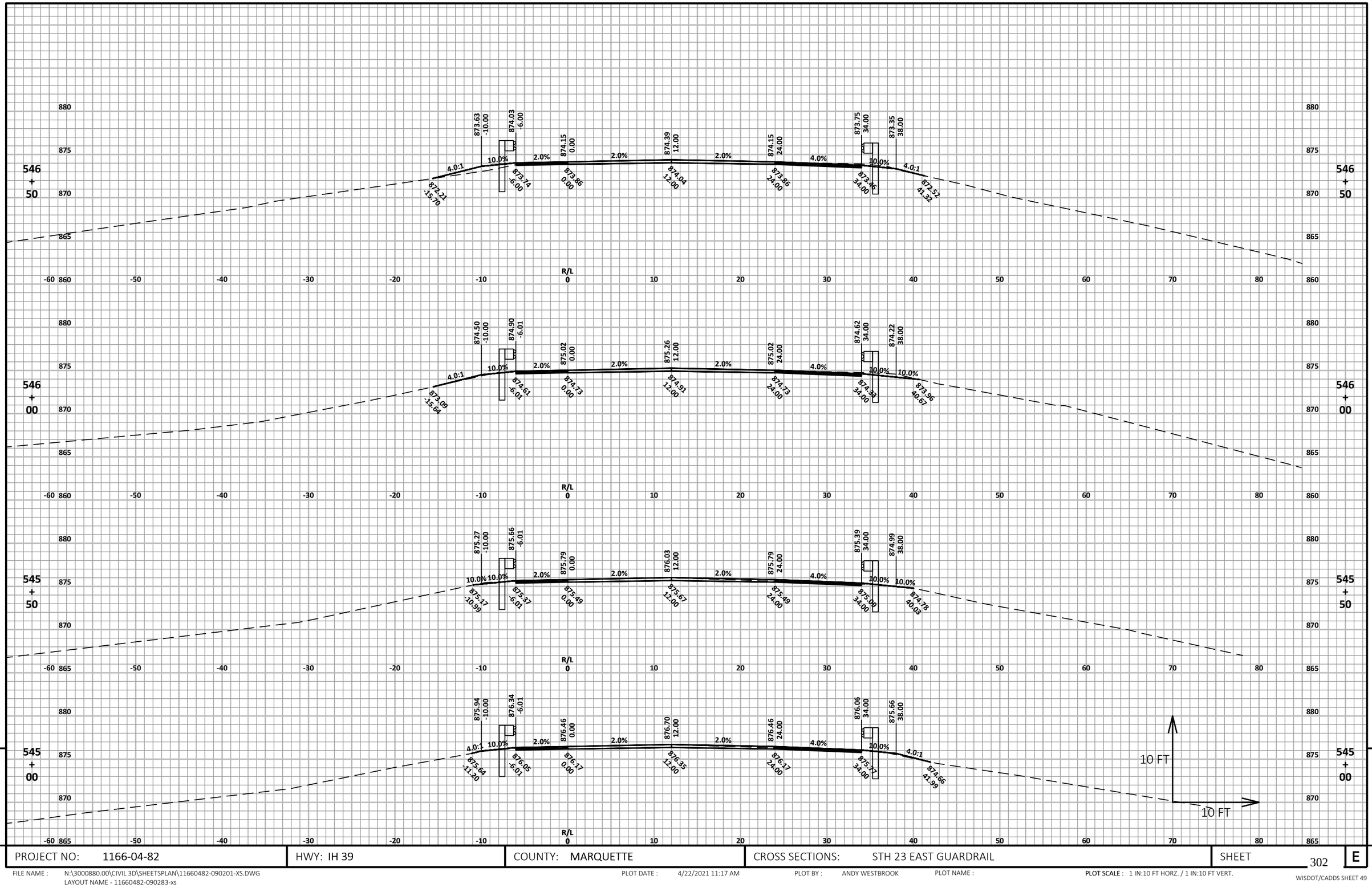
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: STH 23 EAST GUARDRAIL	SHEET 301	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090282-xs

PLOT DATE : 4/22/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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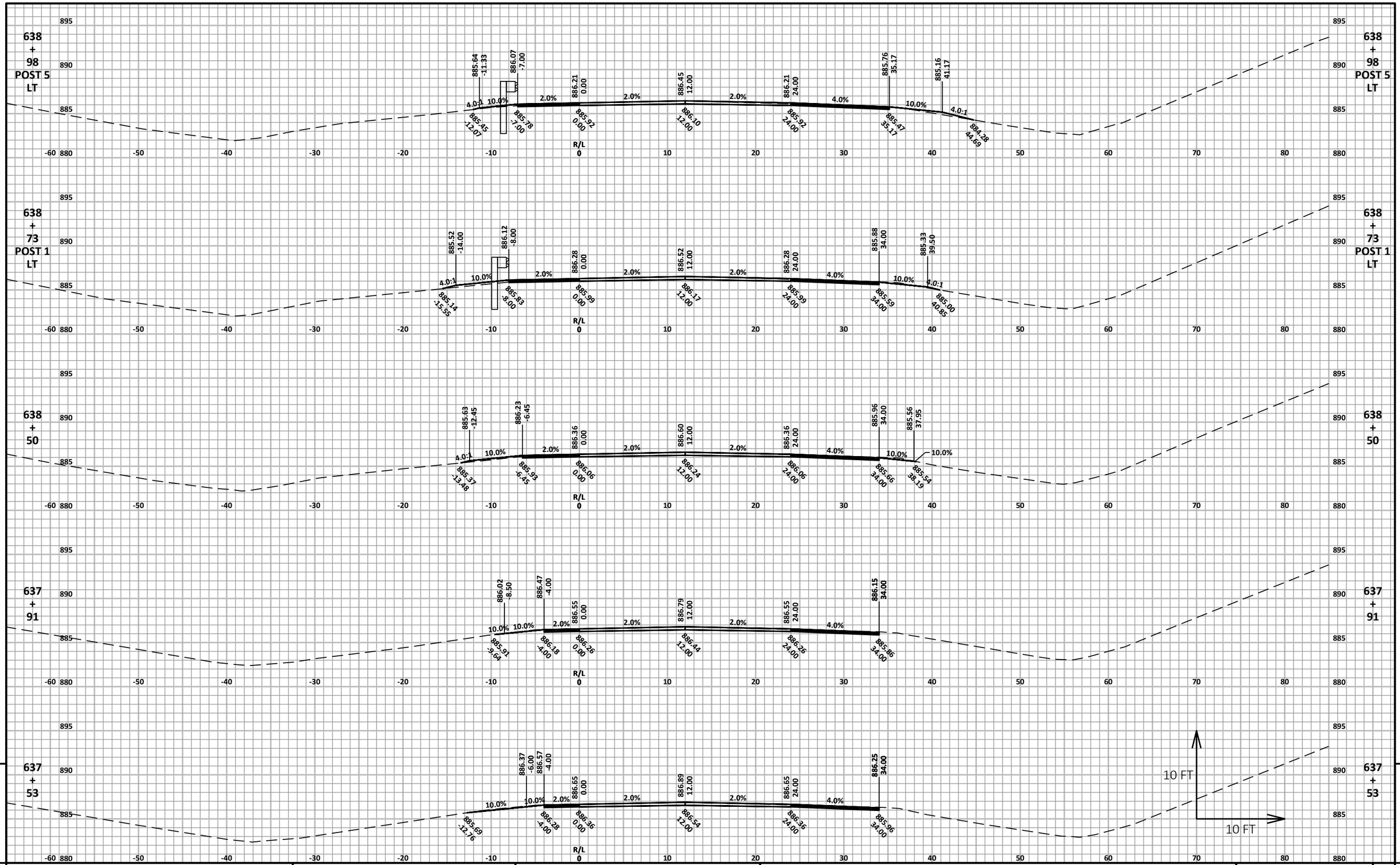
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: STH 23 EAST GUARDRAIL	SHEET 302	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090283-xs

PLOT DATE : 4/22/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: FAWN CT GUARDRAIL	SHEET 303	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090291-xs

PLOT DATE : 4/22/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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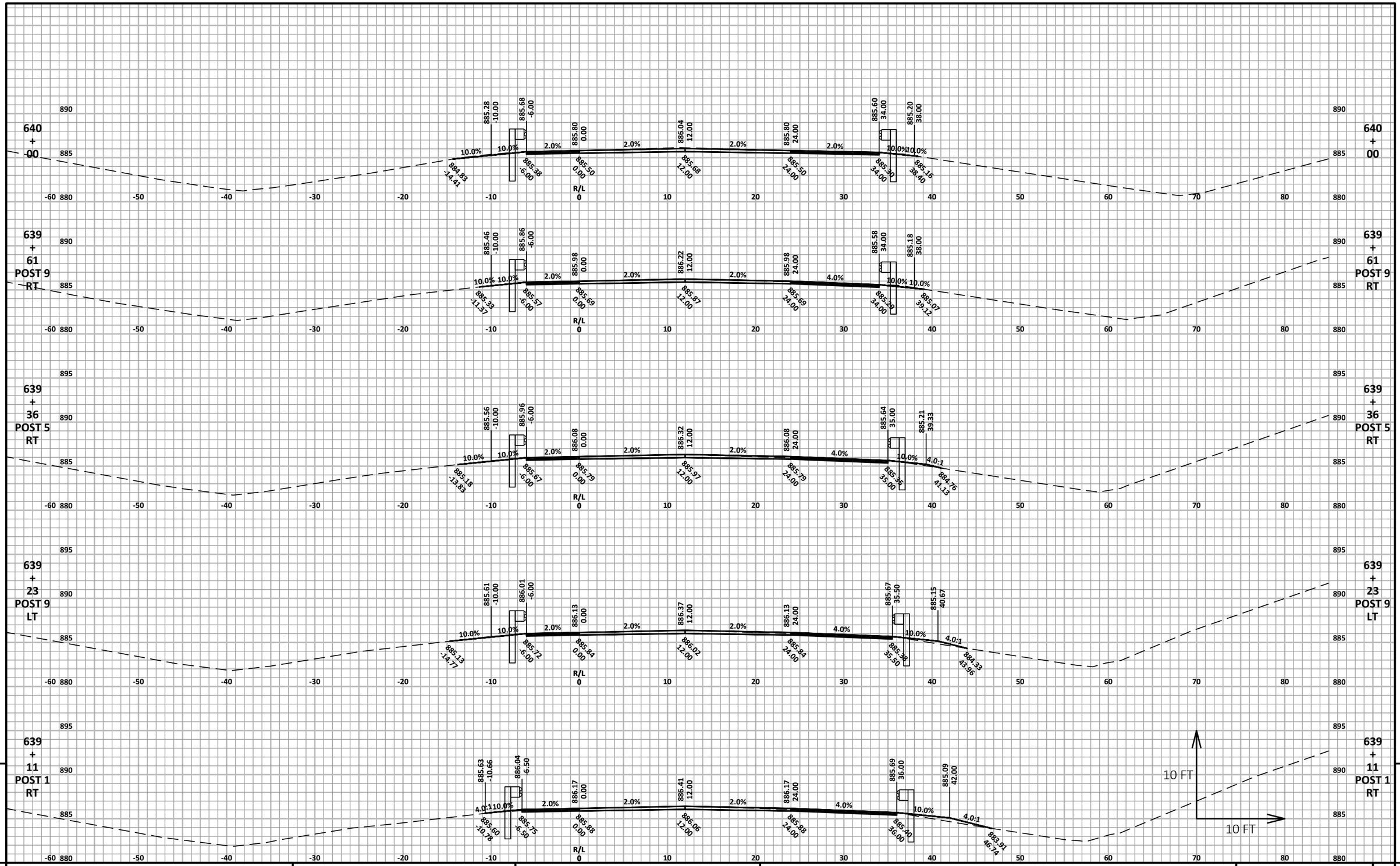

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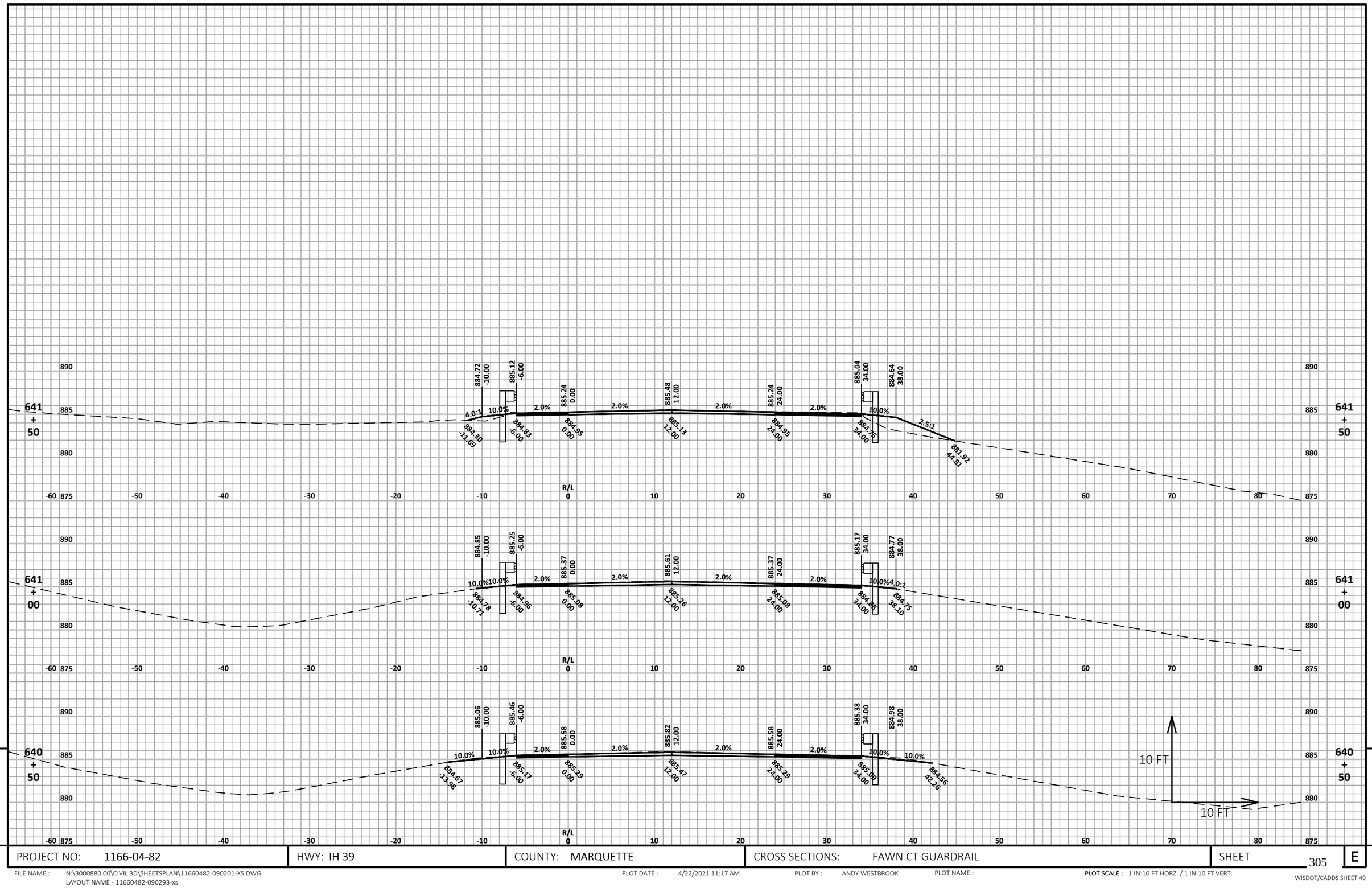
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: FAWN CT GUARDRAIL	SHEET 304	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090292-xs

PLOT DATE : 4/22/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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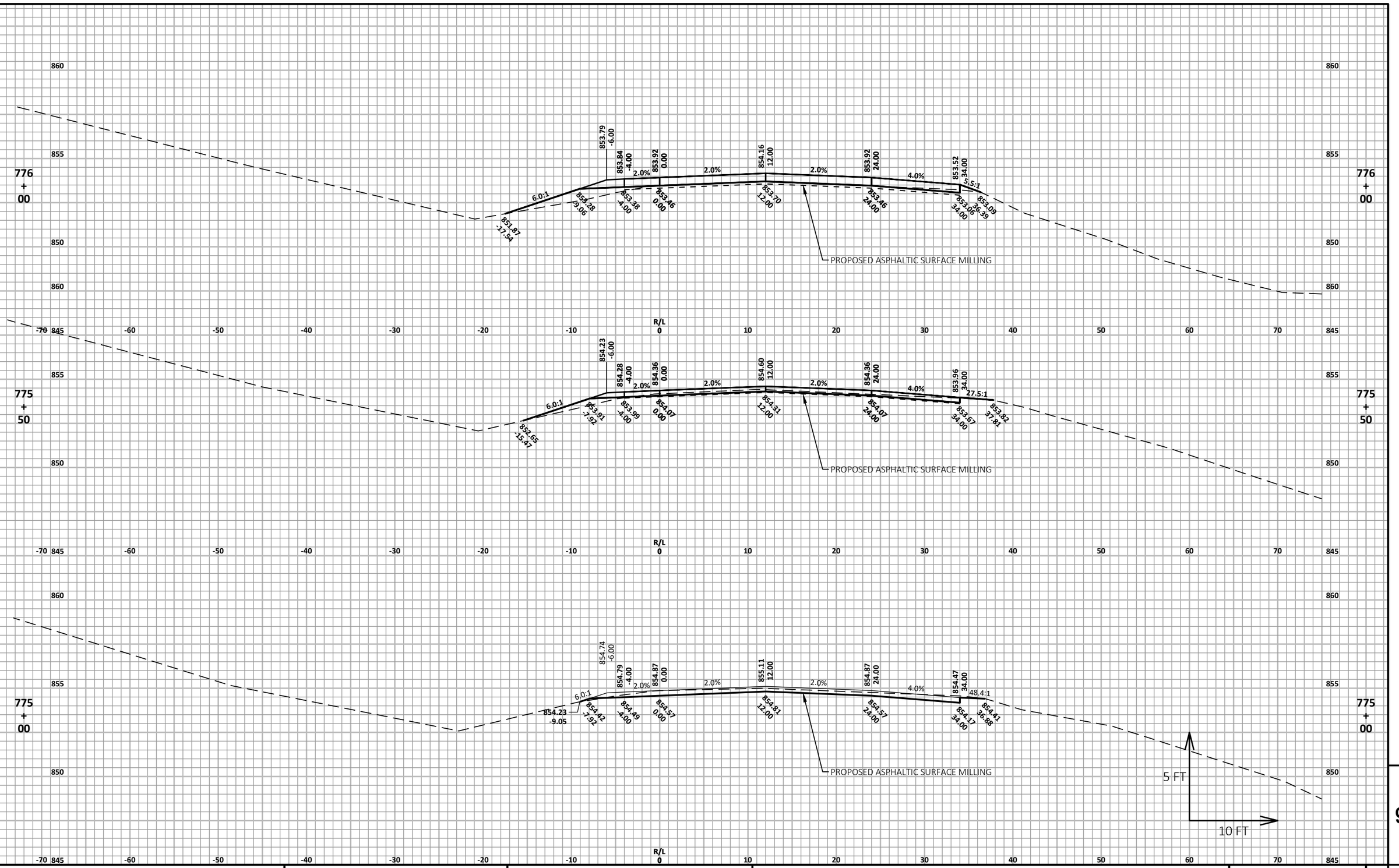
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: FAWN CT GUARDRAIL	SHEET 305	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090293-xs

PLOT DATE : 4/22/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

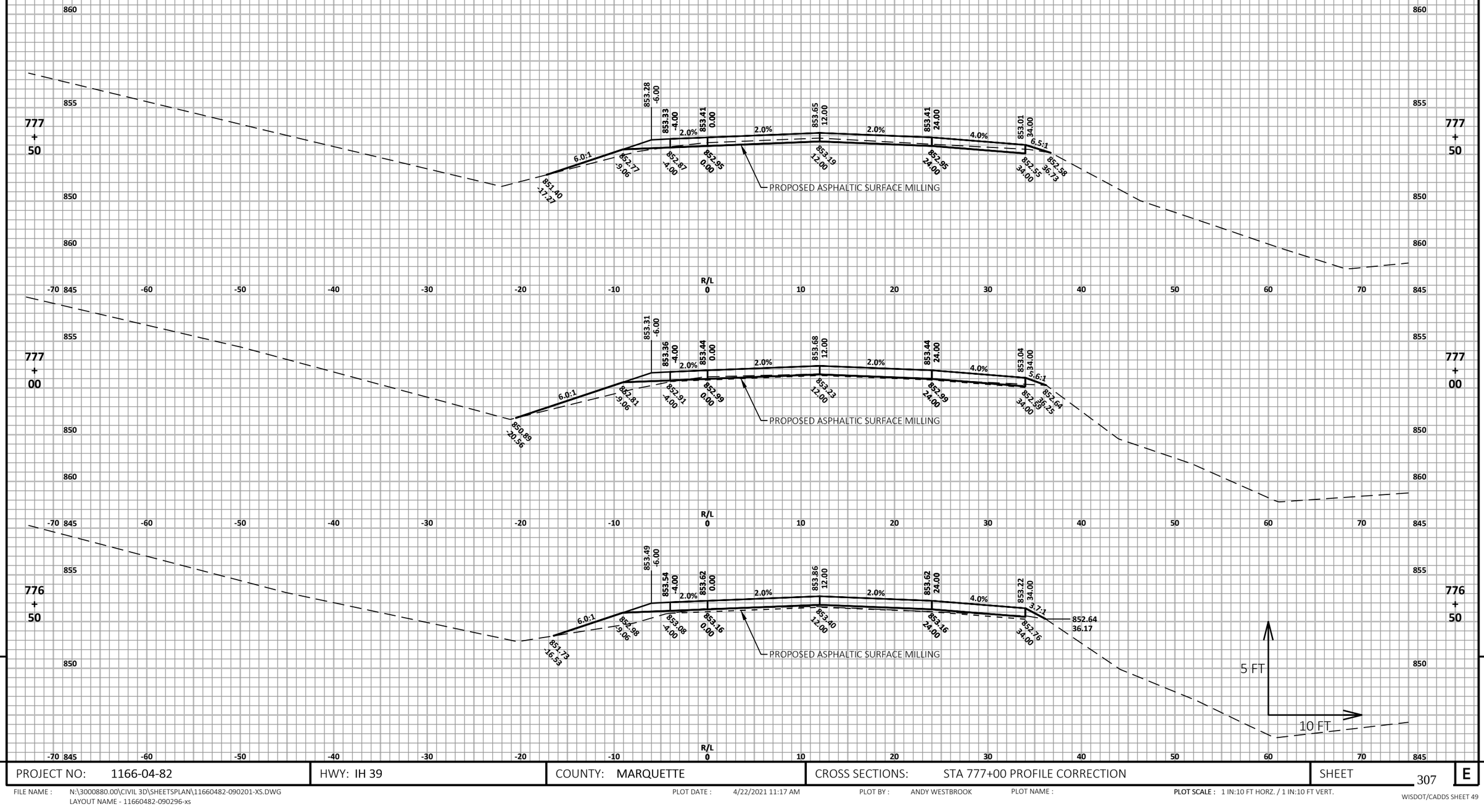


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: STA 777+00 PROFILE CORRECTION	SHEET 306 E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090295-xs

PLOT DATE : 4/22/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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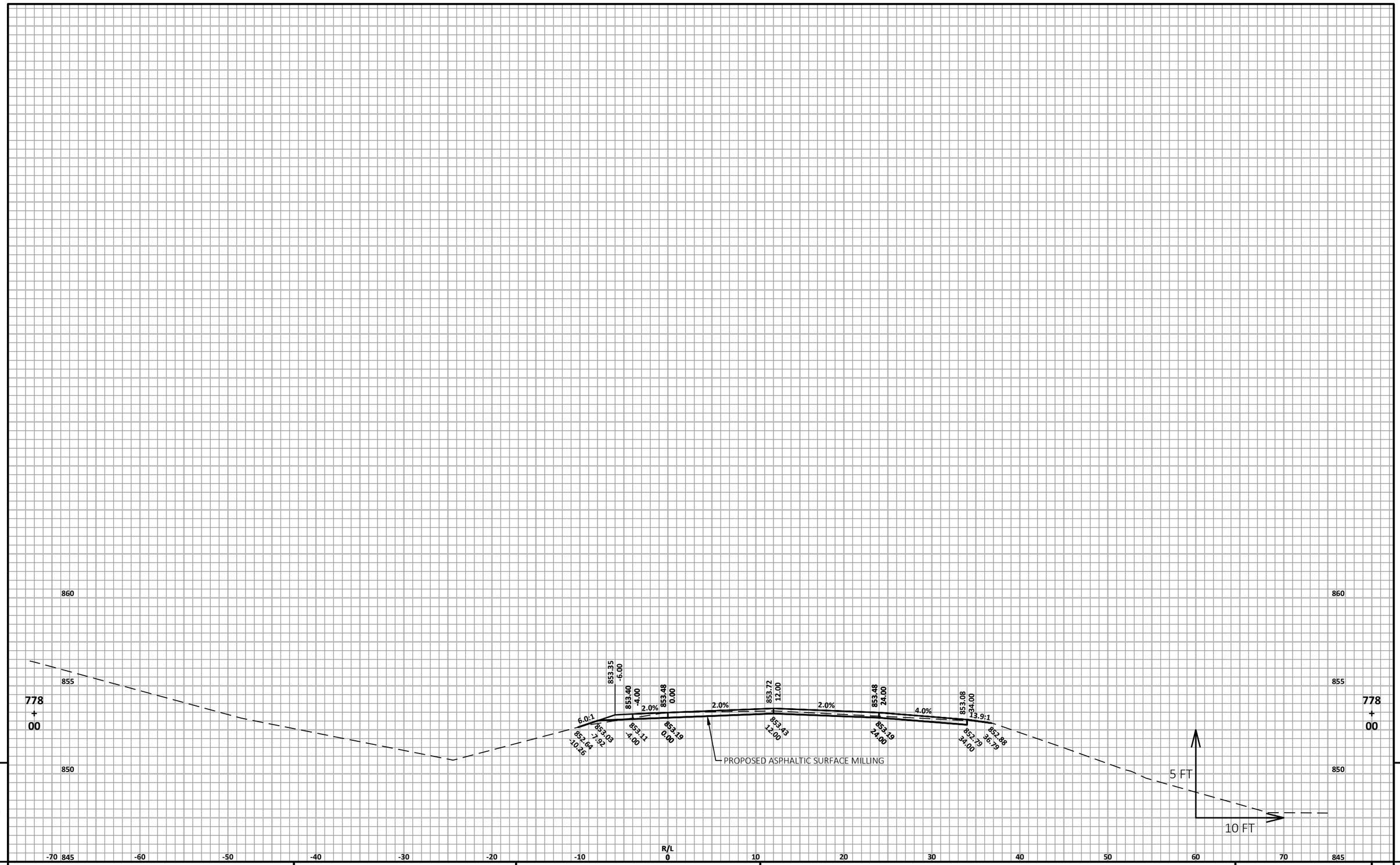
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: STA 777+00 PROFILE CORRECTION	SHEET 307	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090296-xs

PLOT DATE : 4/22/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

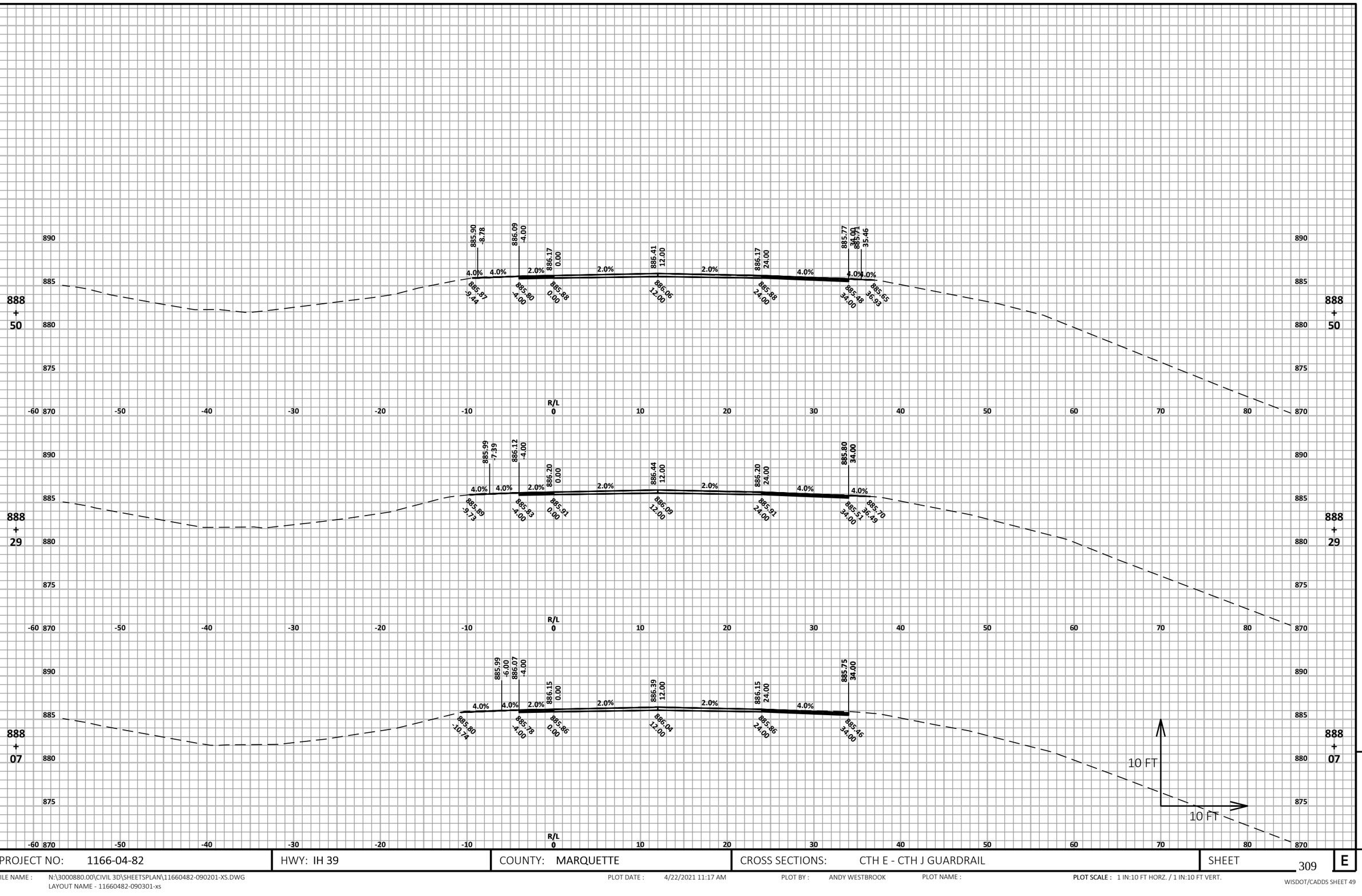


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: STA 777+00 PROFILE CORRECTION	SHEET 308	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090297-xs

PLOT DATE : 4/22/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



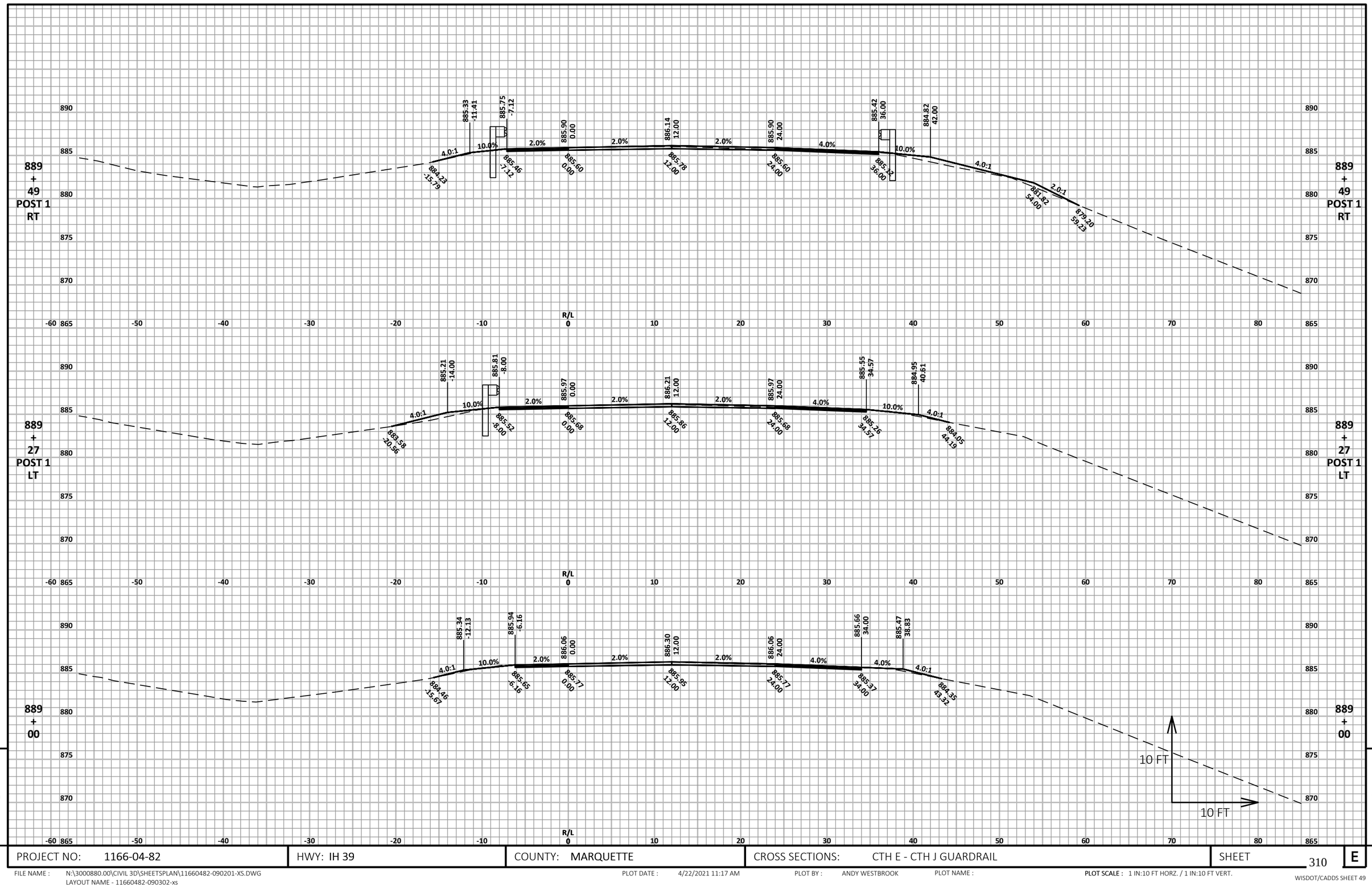
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH E - CTH J GUARDRAIL	SHEET 309	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090301-xs

PLOT DATE : 4/22/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

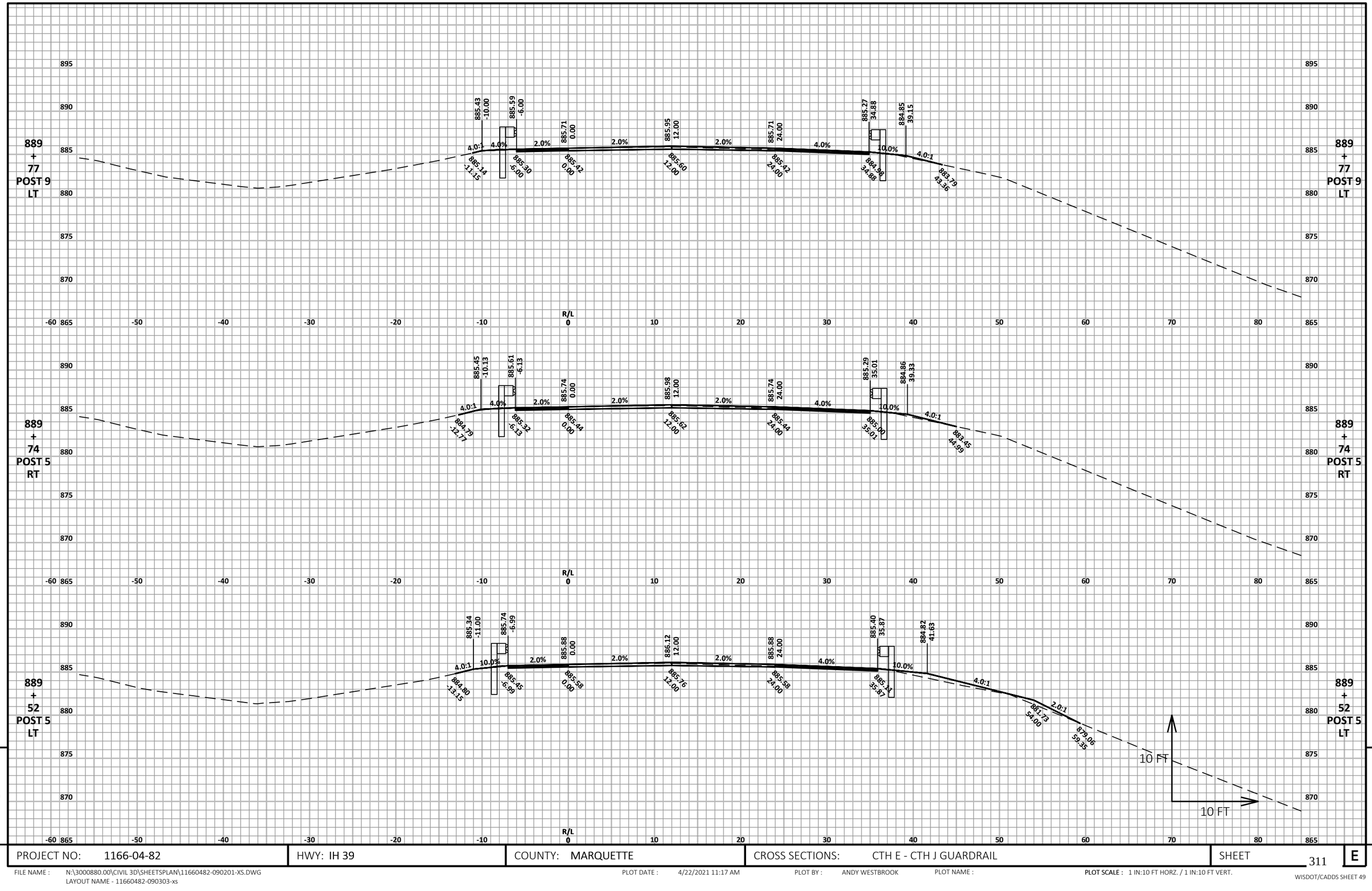


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH E - CTH J GUARDRAIL	SHEET 310	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090302-xs

PLOT DATE : 4/22/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

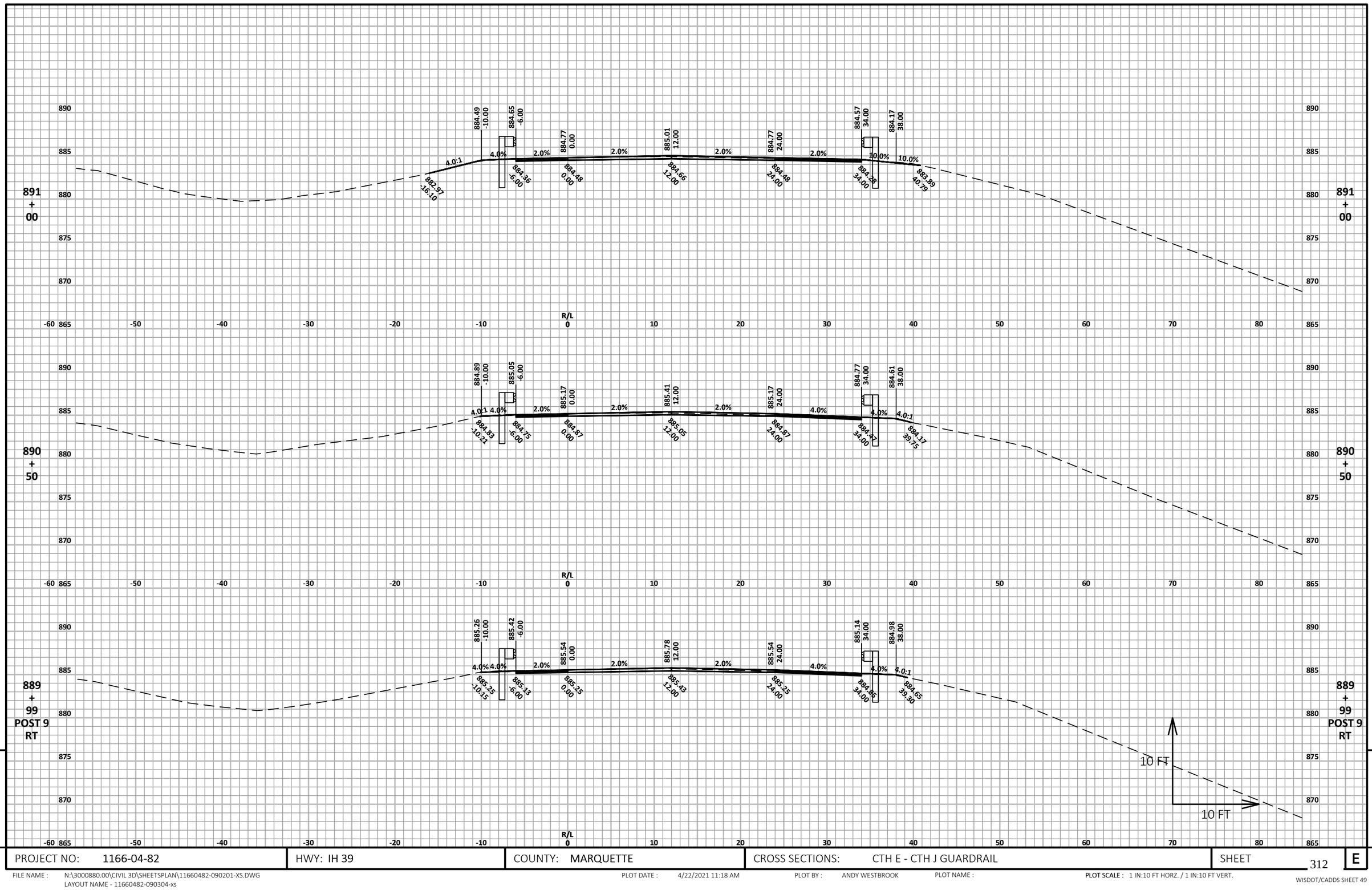


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH E - CTH J GUARDRAIL	SHEET 311	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090303-xs

PLOT DATE : 4/22/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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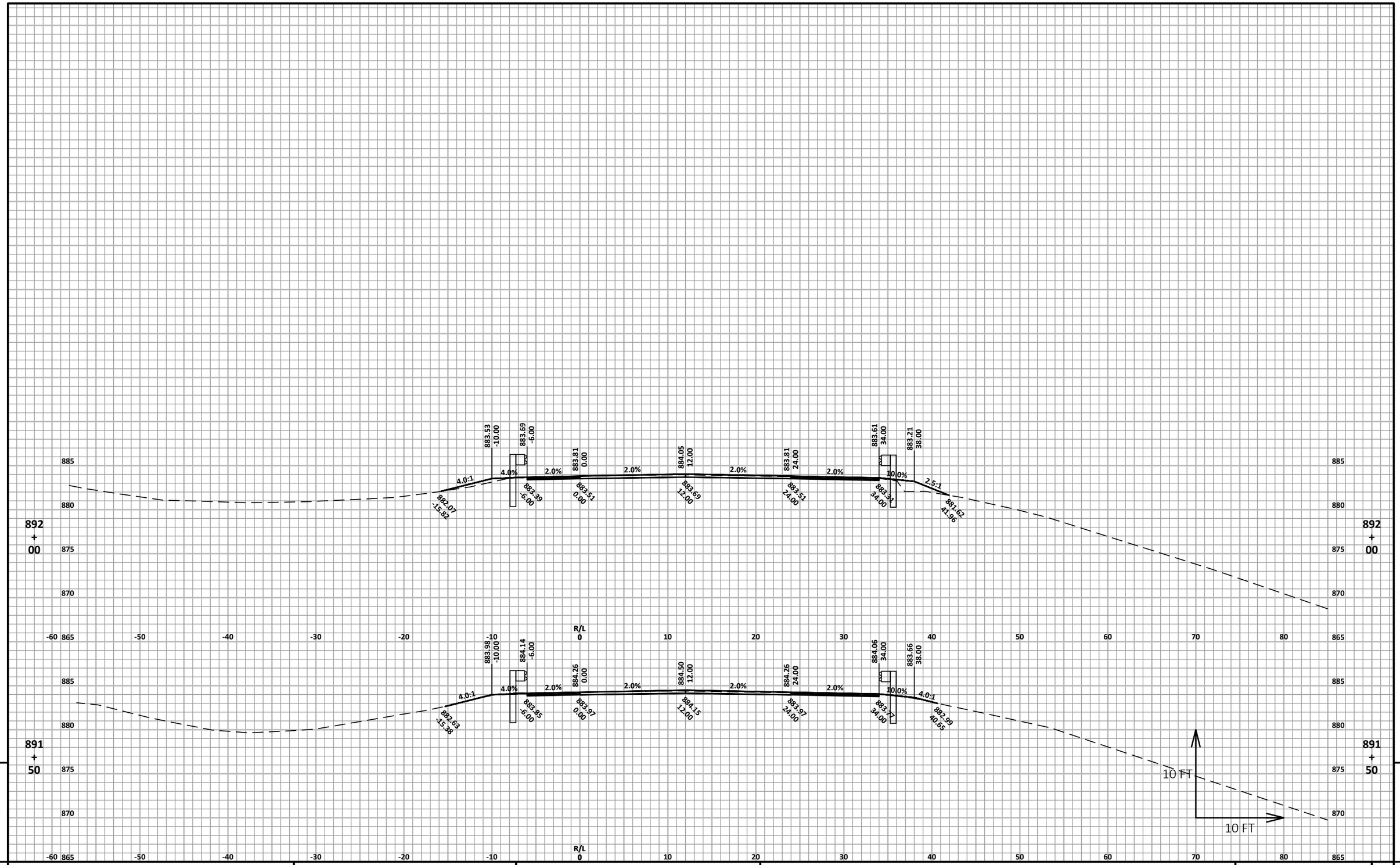
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH E - CTH J GUARDRAIL	SHEET 312	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090304-xs

PLOT DATE : 4/22/2021 11:18 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

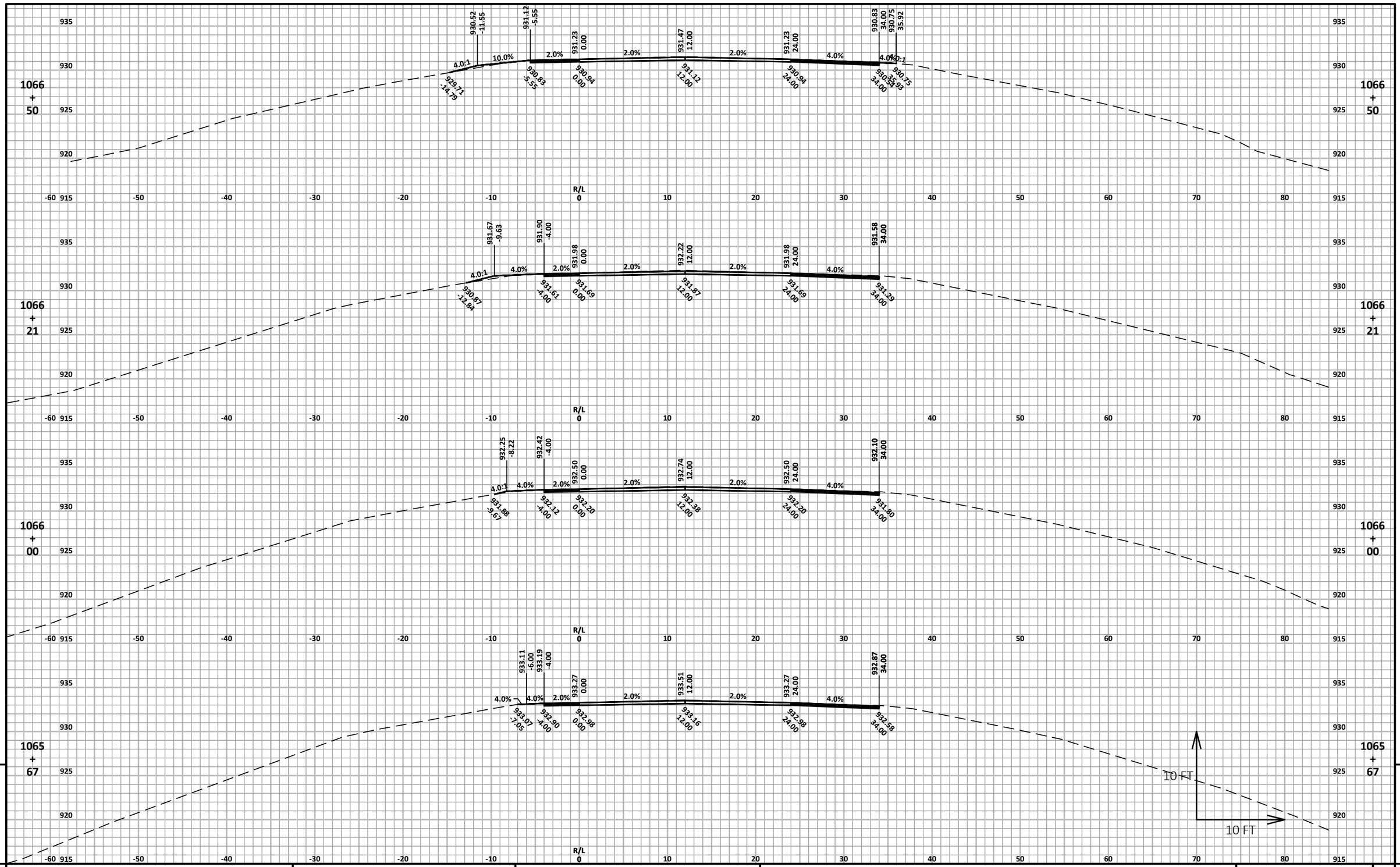


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH E - CTH J GUARDRAIL	SHEET 313	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090305-xs

PLOT DATE : 4/22/2021 11:18 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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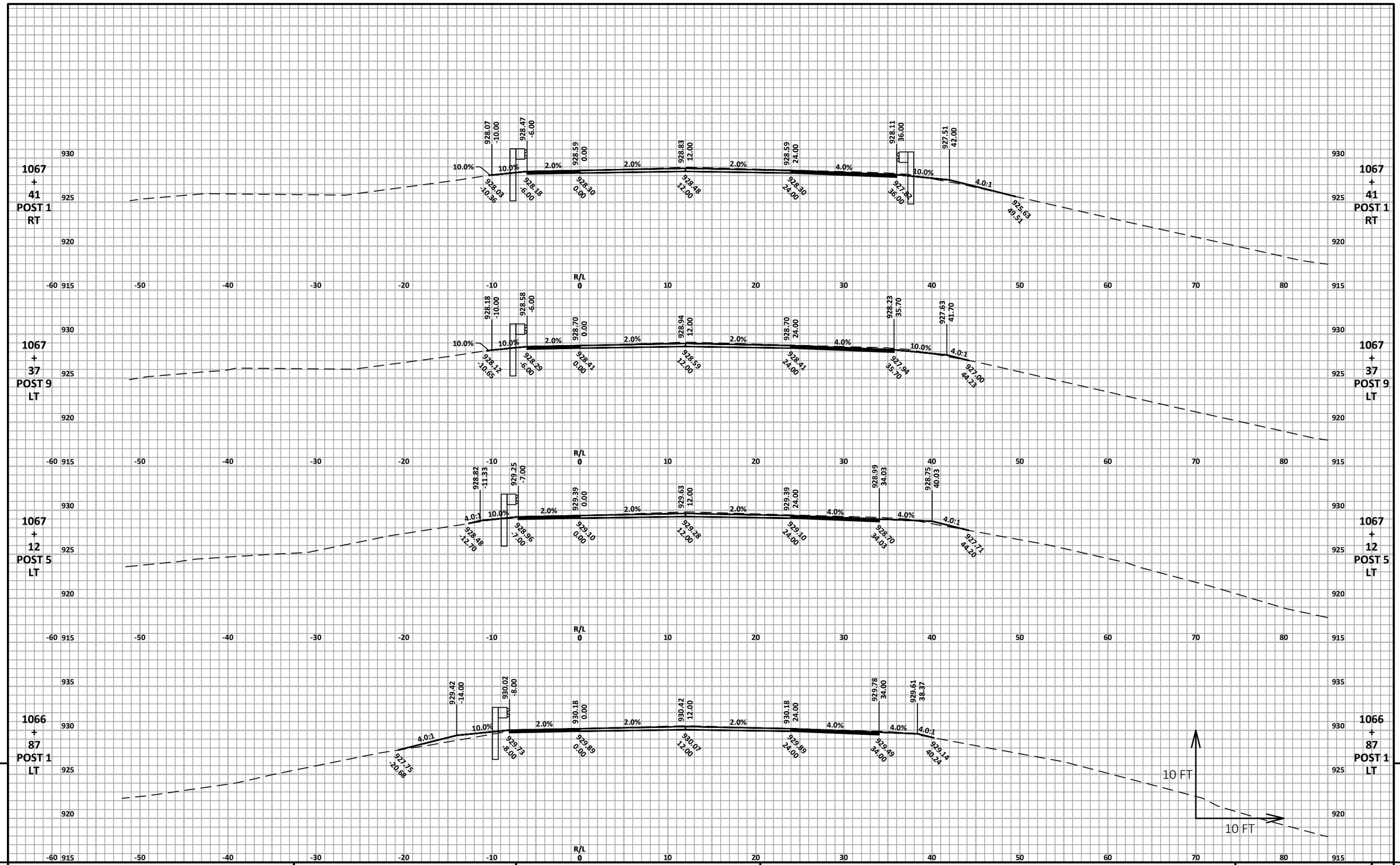
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: DOVER CT GUARDRAIL	SHEET 314	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090311-xs

PLOT DATE : 4/22/2021 11:18 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

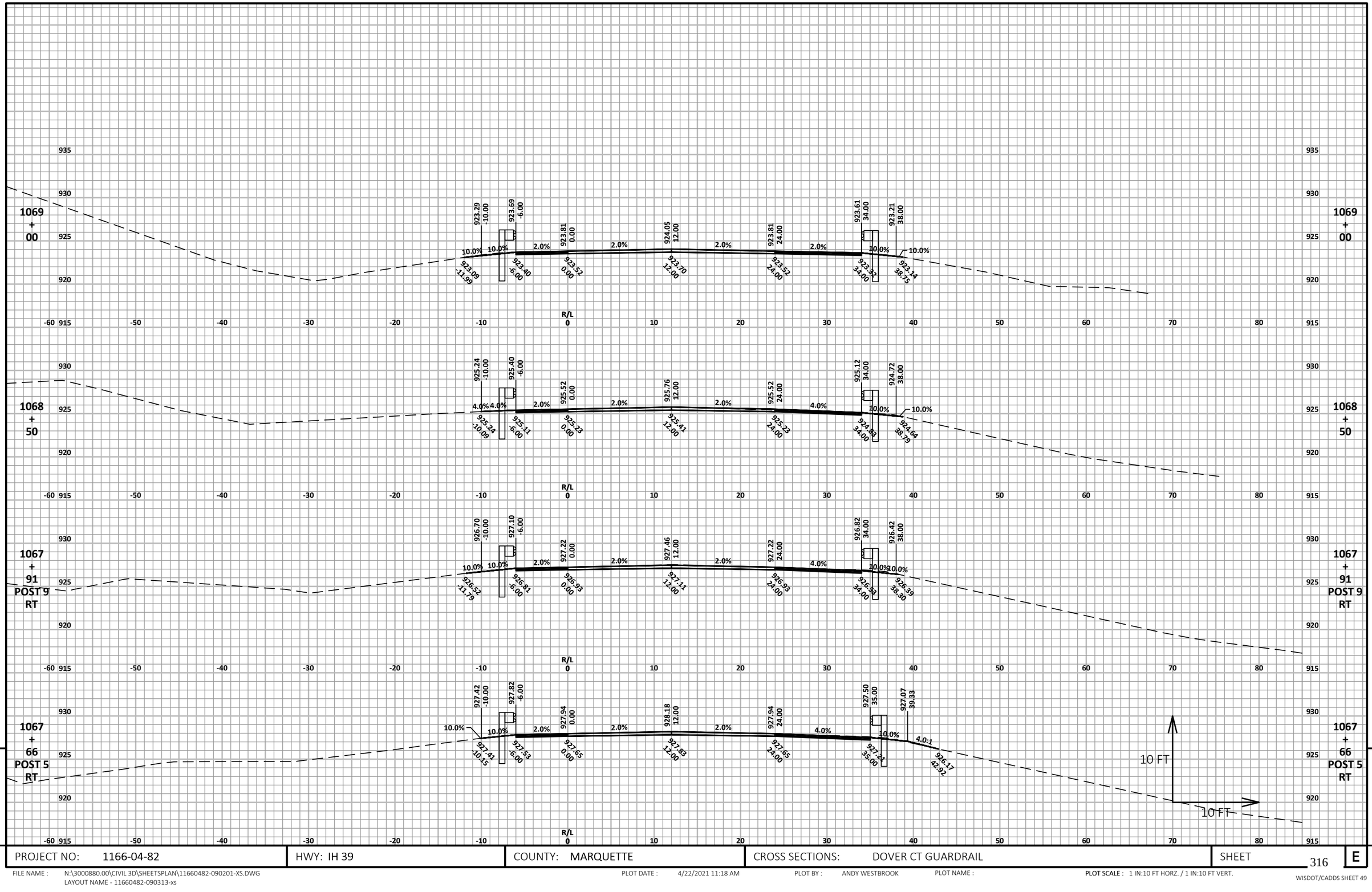


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: DOVER CT GUARDRAIL	SHEET 315	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090312-xs

PLOT DATE : 4/22/2021 11:18 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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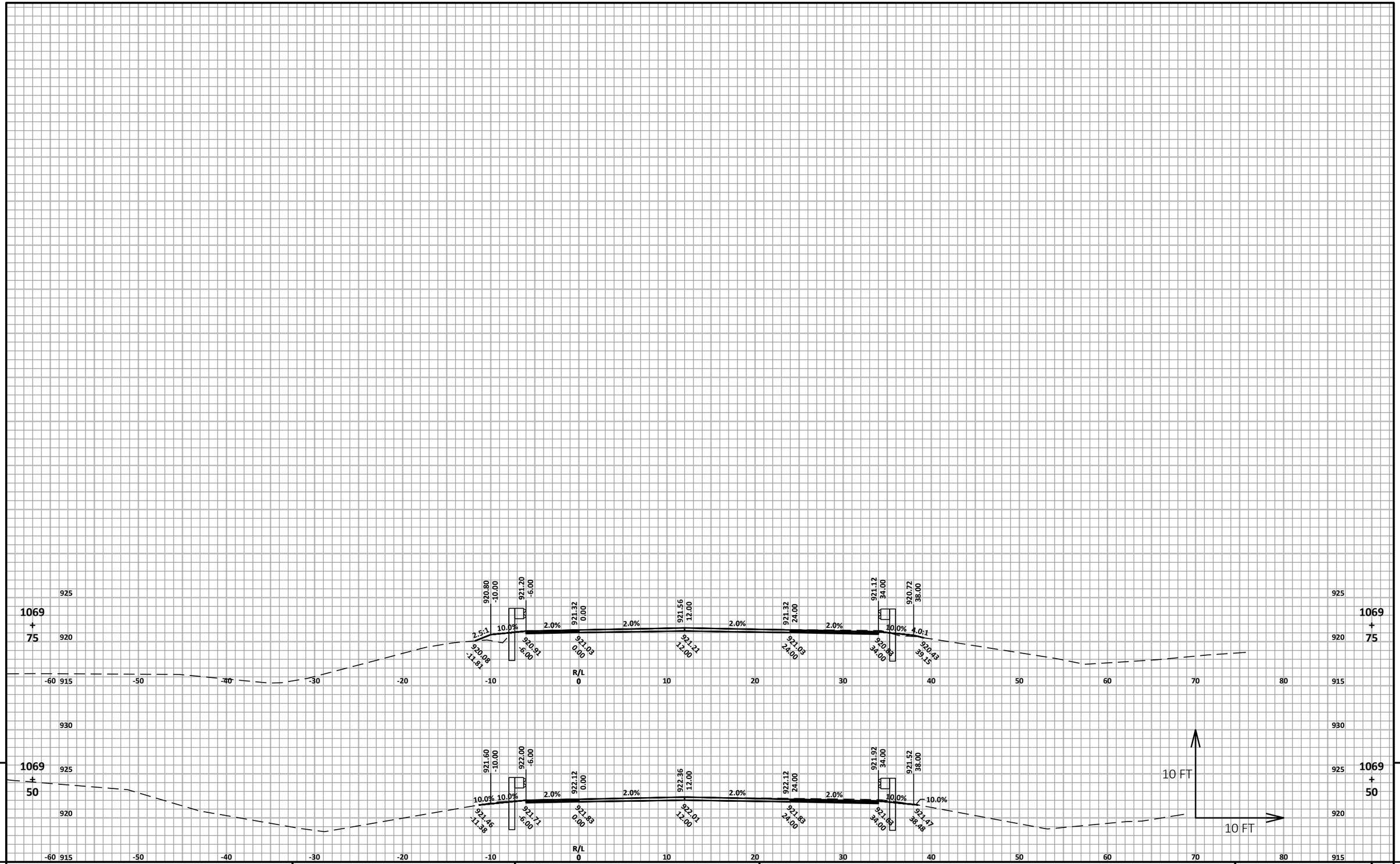
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: DOVER CT GUARDRAIL	SHEET 316	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090313-xs

PLOT DATE : 4/22/2021 11:18 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

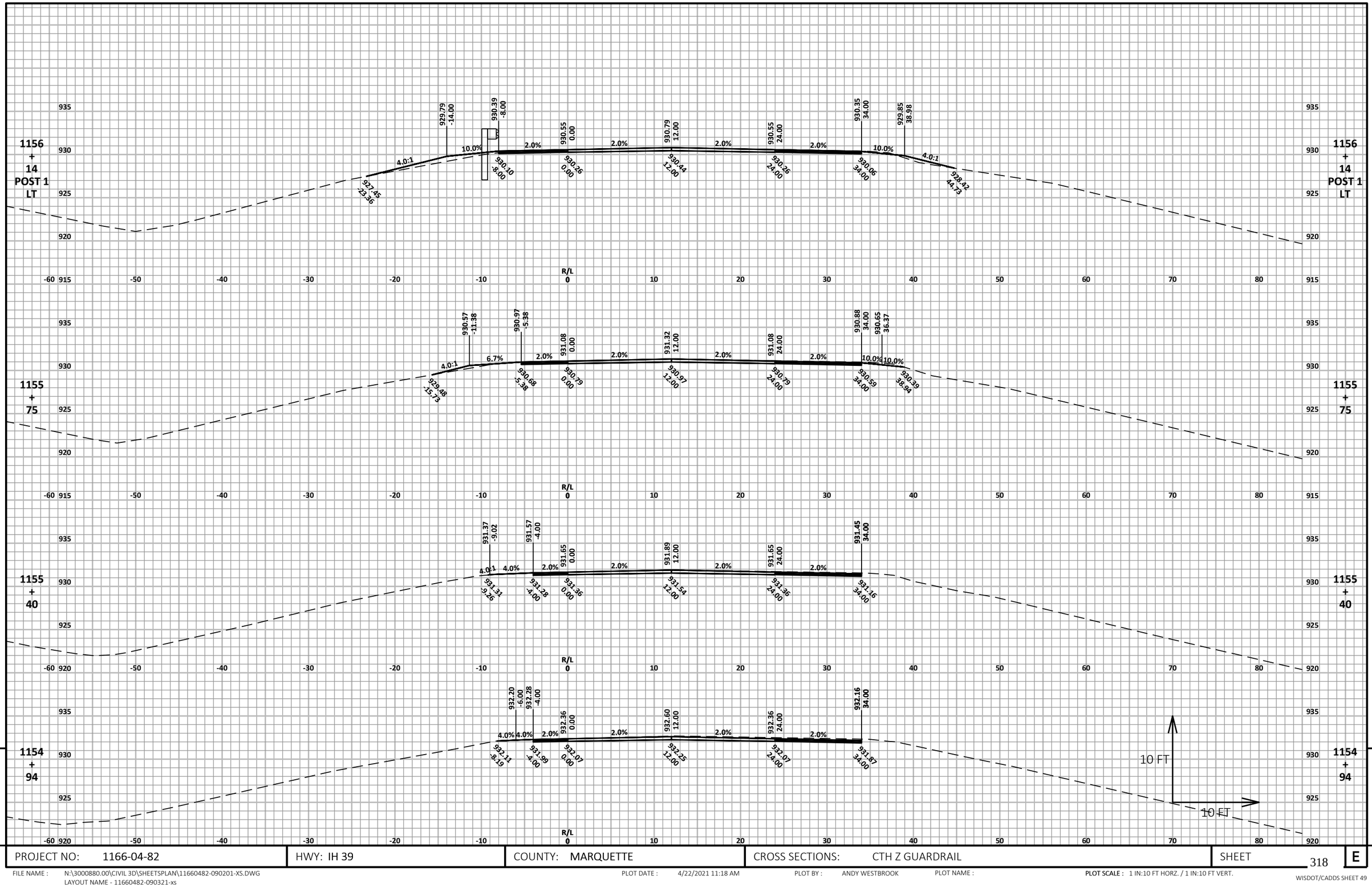


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: DOVER CT GUARDRAIL	SHEET 317	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090314-xs

PLOT DATE : 4/22/2021 11:18 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

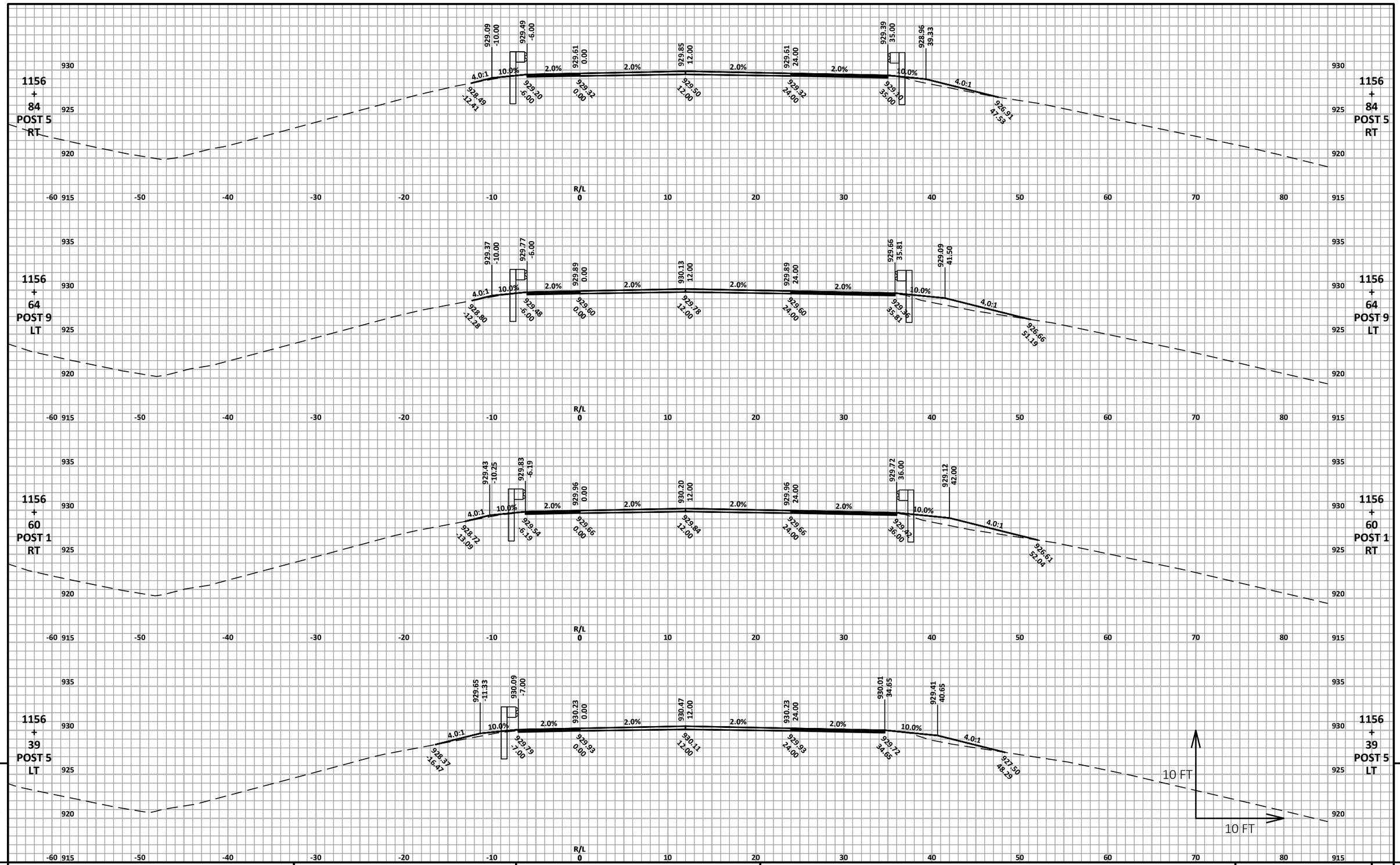


PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH Z GUARDRAIL	SHEET 318	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090321-xs

PLOT DATE : 4/22/2021 11:18 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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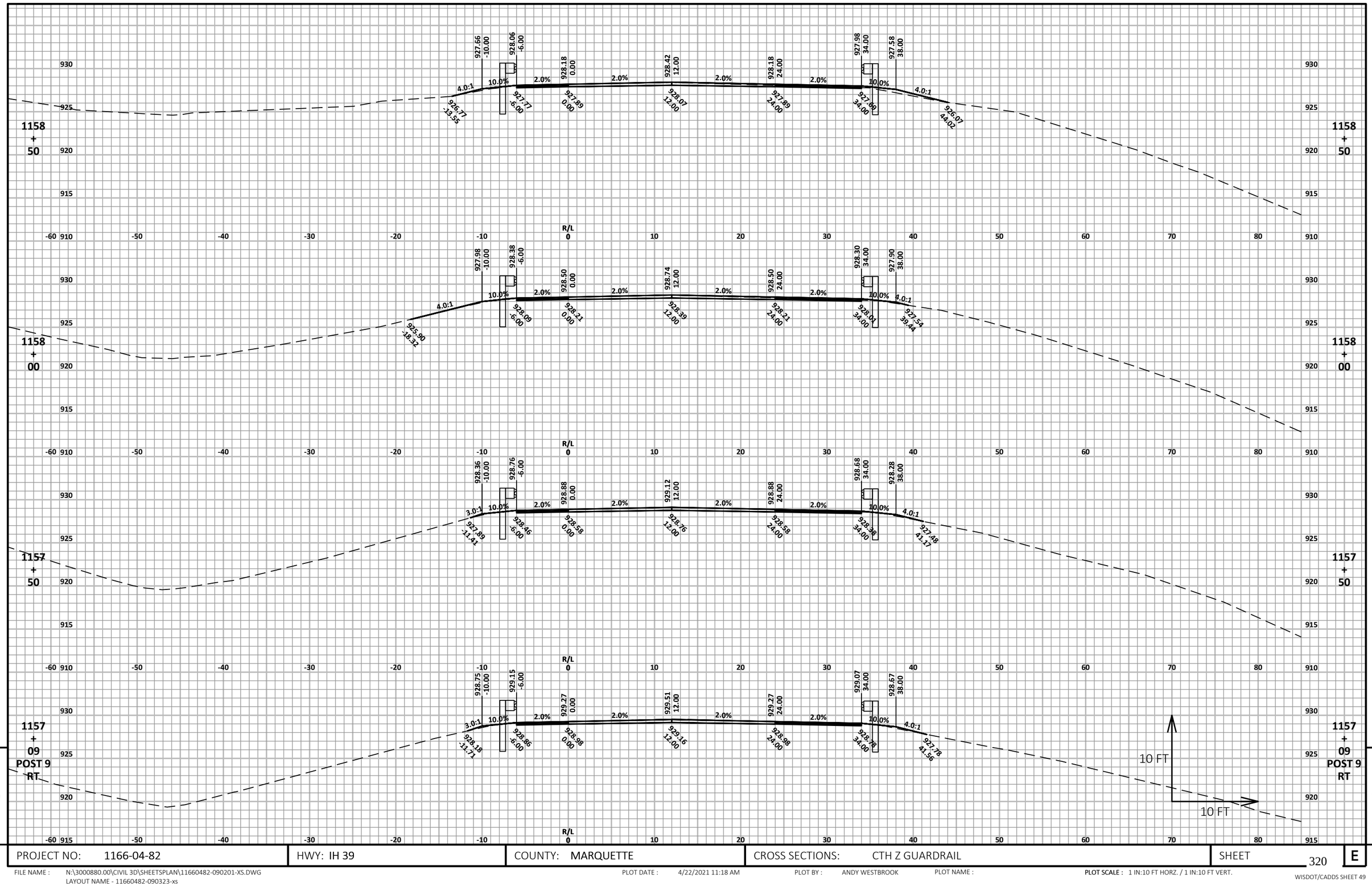
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH Z GUARDRAIL	SHEET 319	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090322-xs

PLOT DATE : 4/22/2021 11:18 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

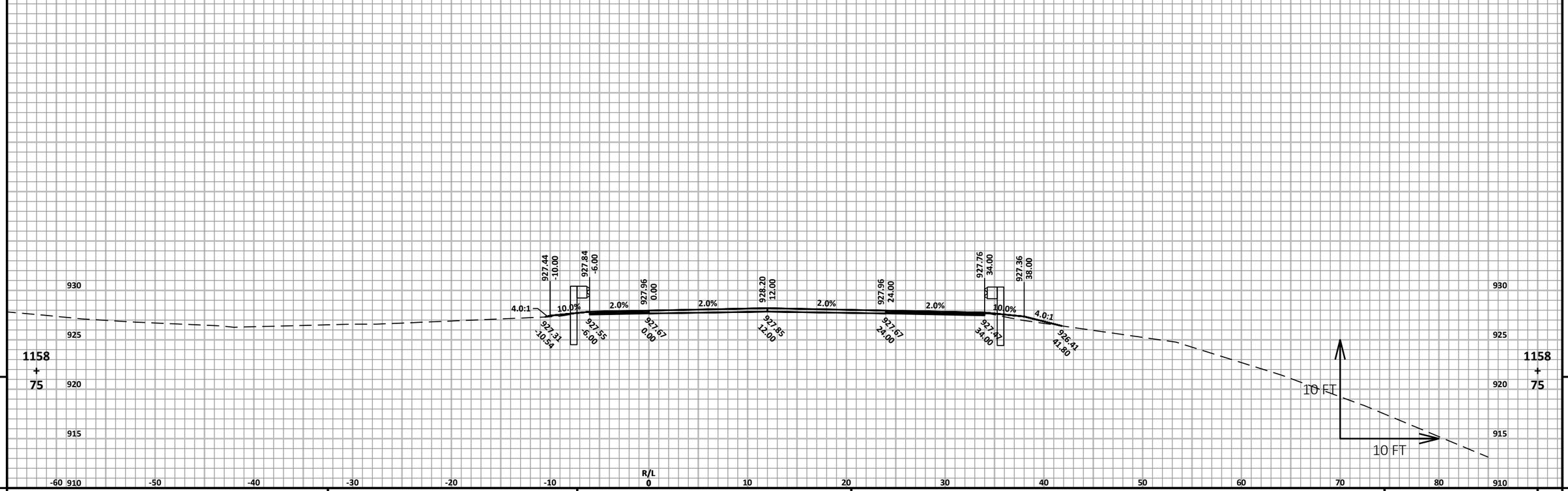
WISDOT/CADDS SHEET 49



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH Z GUARDRAIL	SHEET 320	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090323-xs

PLOT DATE : 4/22/2021 11:18 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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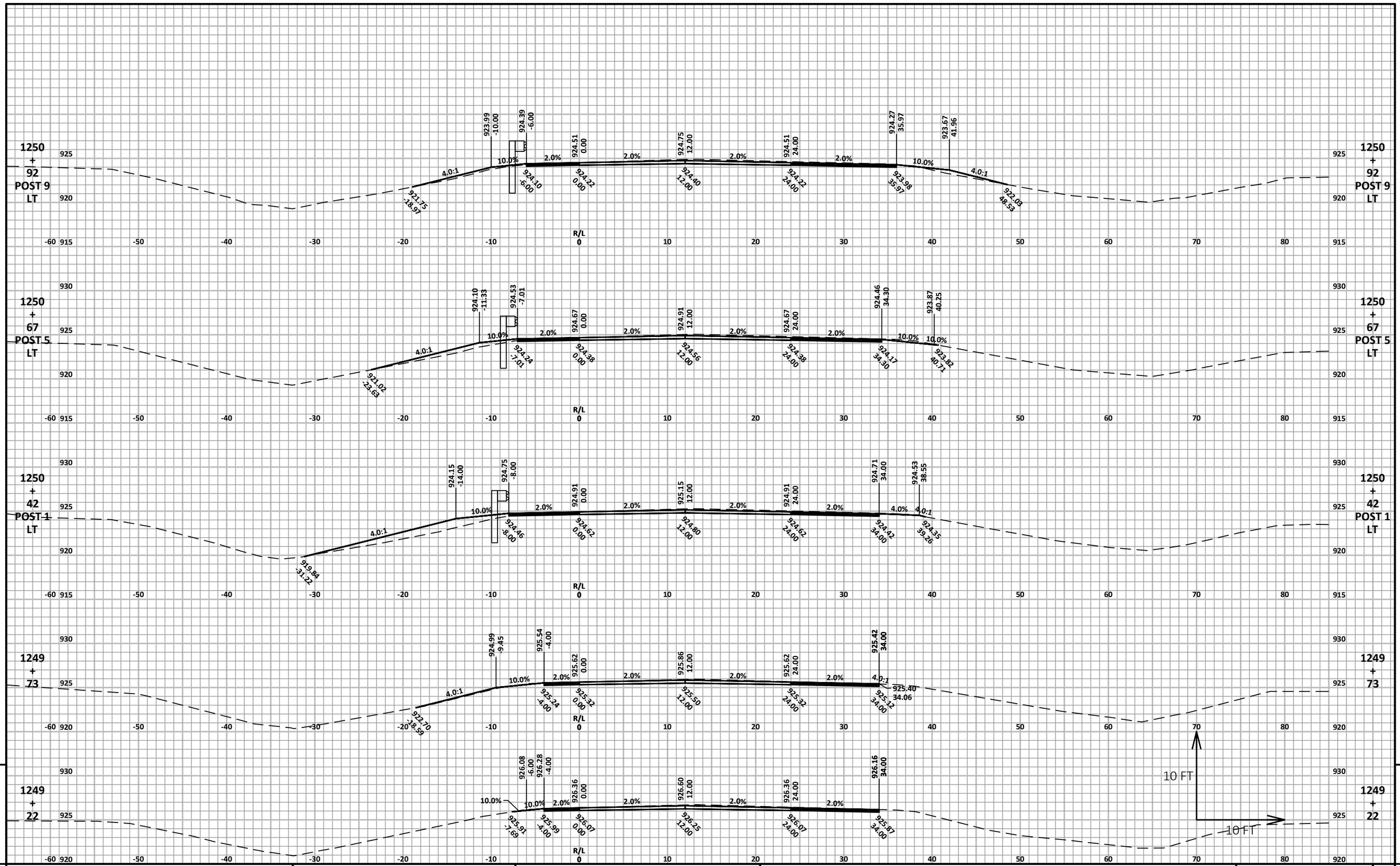
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CTH Z GUARDRAIL	SHEET 321	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090324-xs

PLOT DATE : 4/22/2021 11:18 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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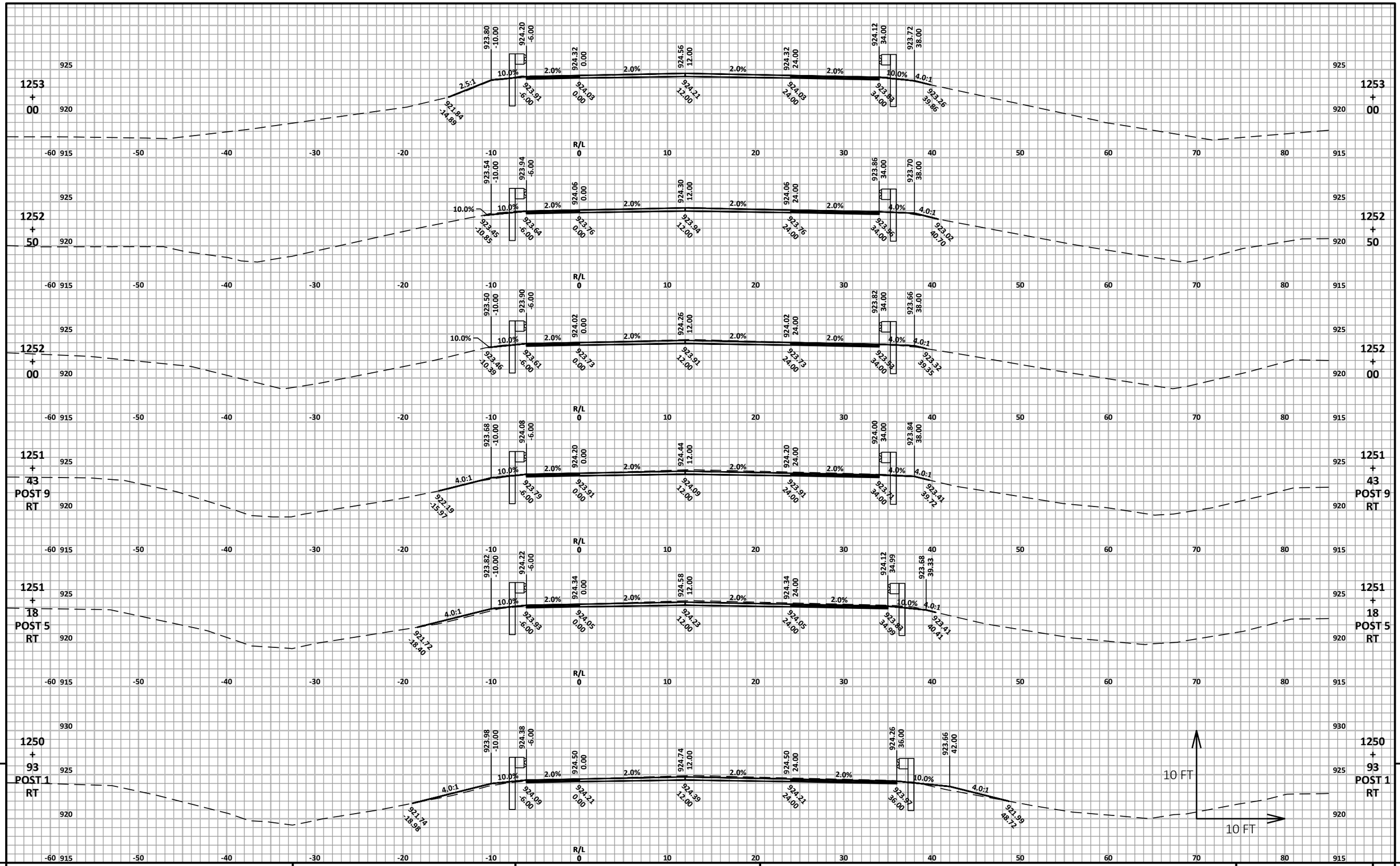
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CHAFFEE CREEK GUARDRAIL	SHEET 322	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090331-xs

PLOT DATE : 4/22/2021 11:19 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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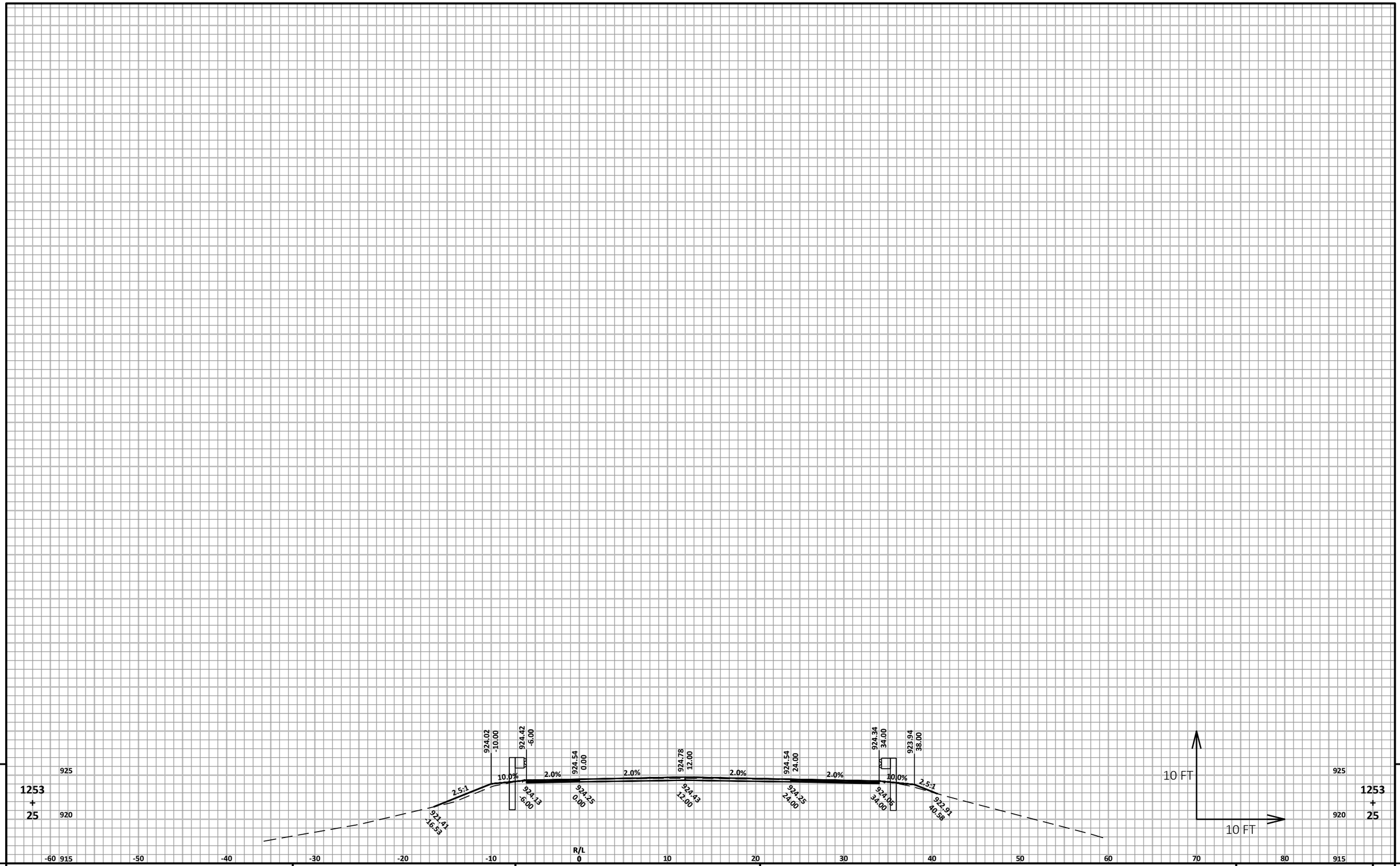
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CHAFFEE CREEK GUARDRAIL	SHEET 323	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090332-xs

PLOT DATE : 4/22/2021 11:19 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

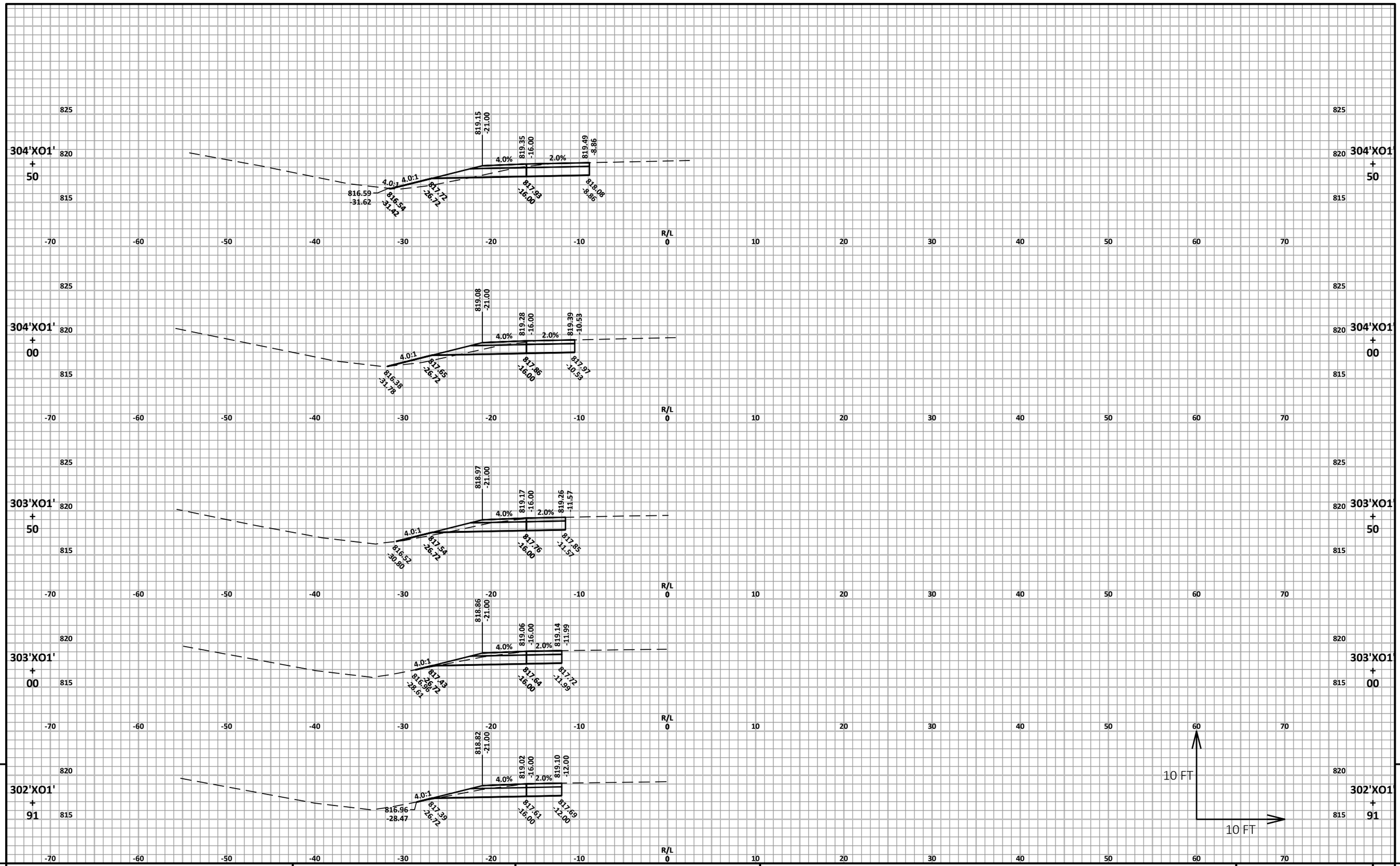
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CHAFFEE CREEK GUARDRAIL	SHEET 324	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090333-xs

PLOT DATE : 4/22/2021 11:19 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

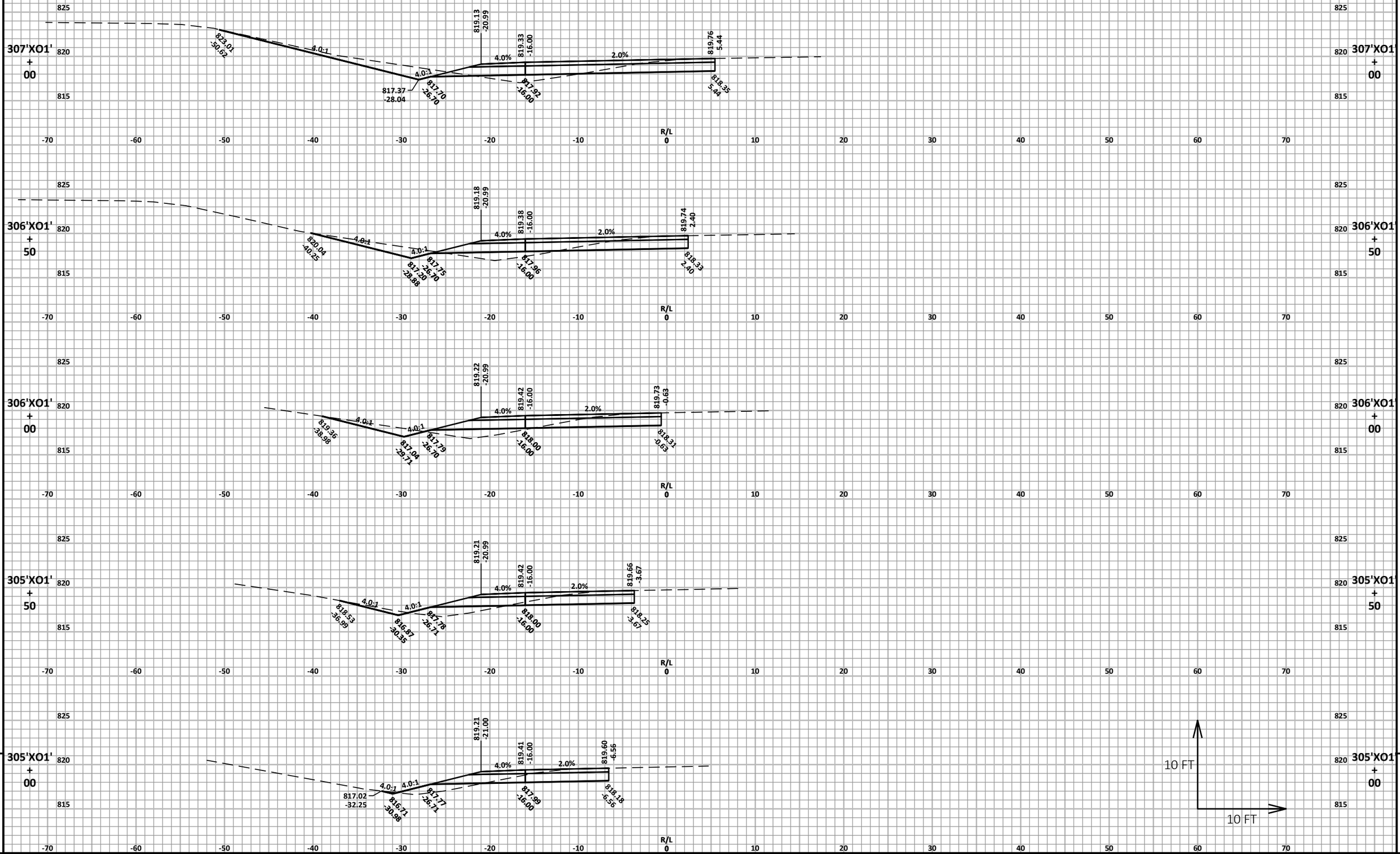
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1	SHEET 325	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090341-xs

PLOT DATE : 4/22/2021 11:19 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9



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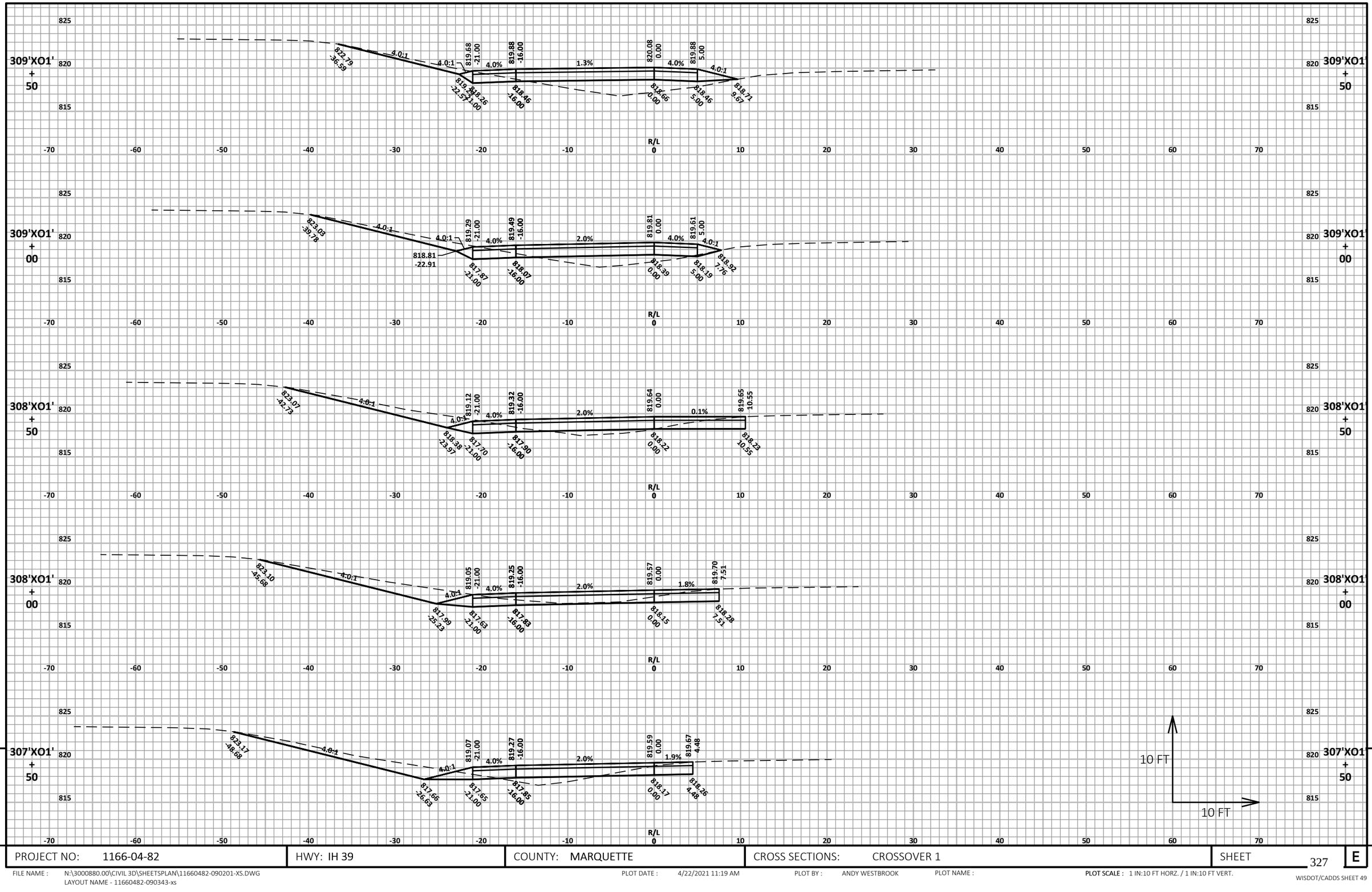
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1	SHEET 326	E



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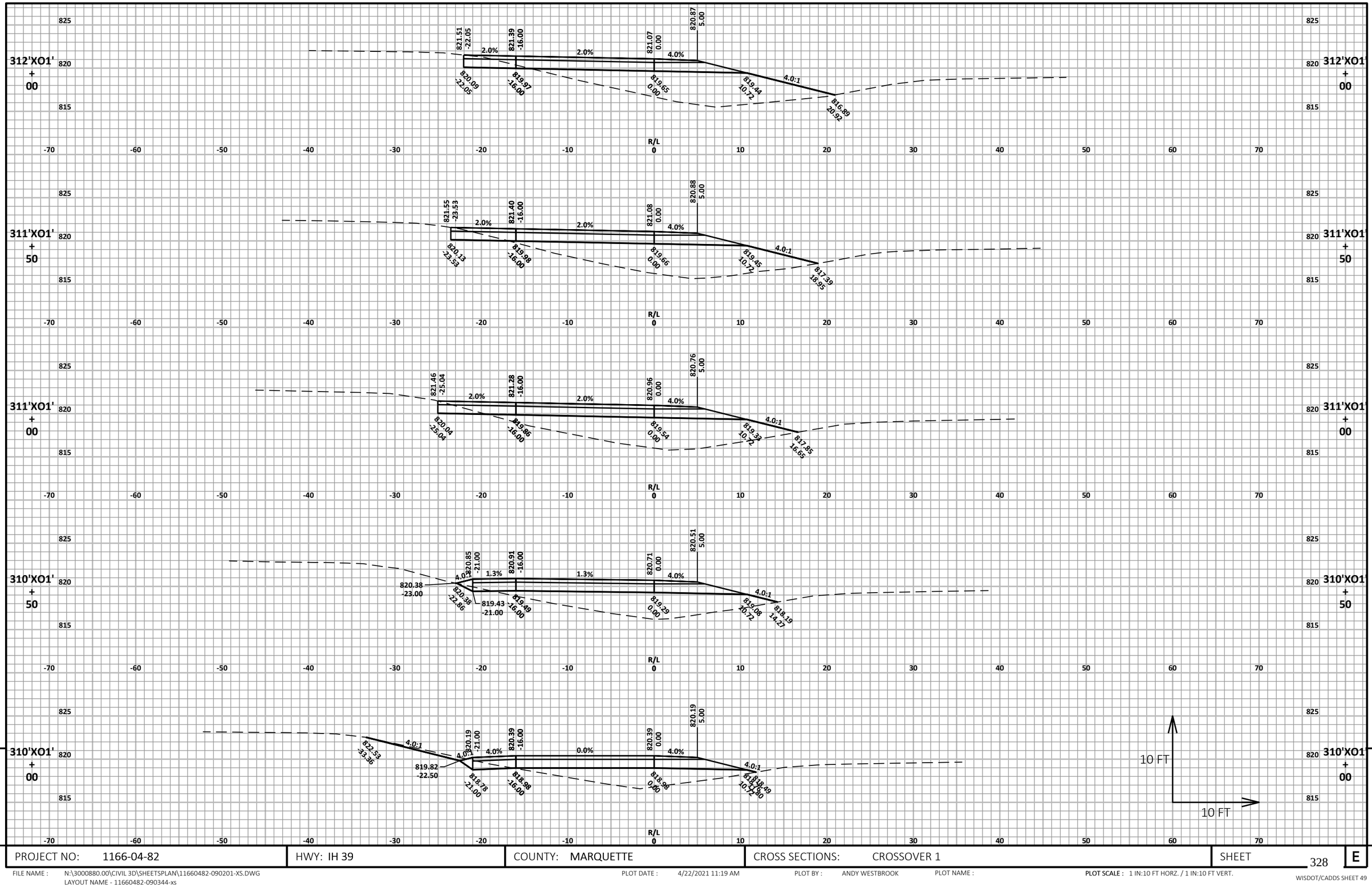
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1	SHEET 327	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090343-xs

PLOT DATE : 4/22/2021 11:19 AM PLOT BY : ANDY WESTBROOK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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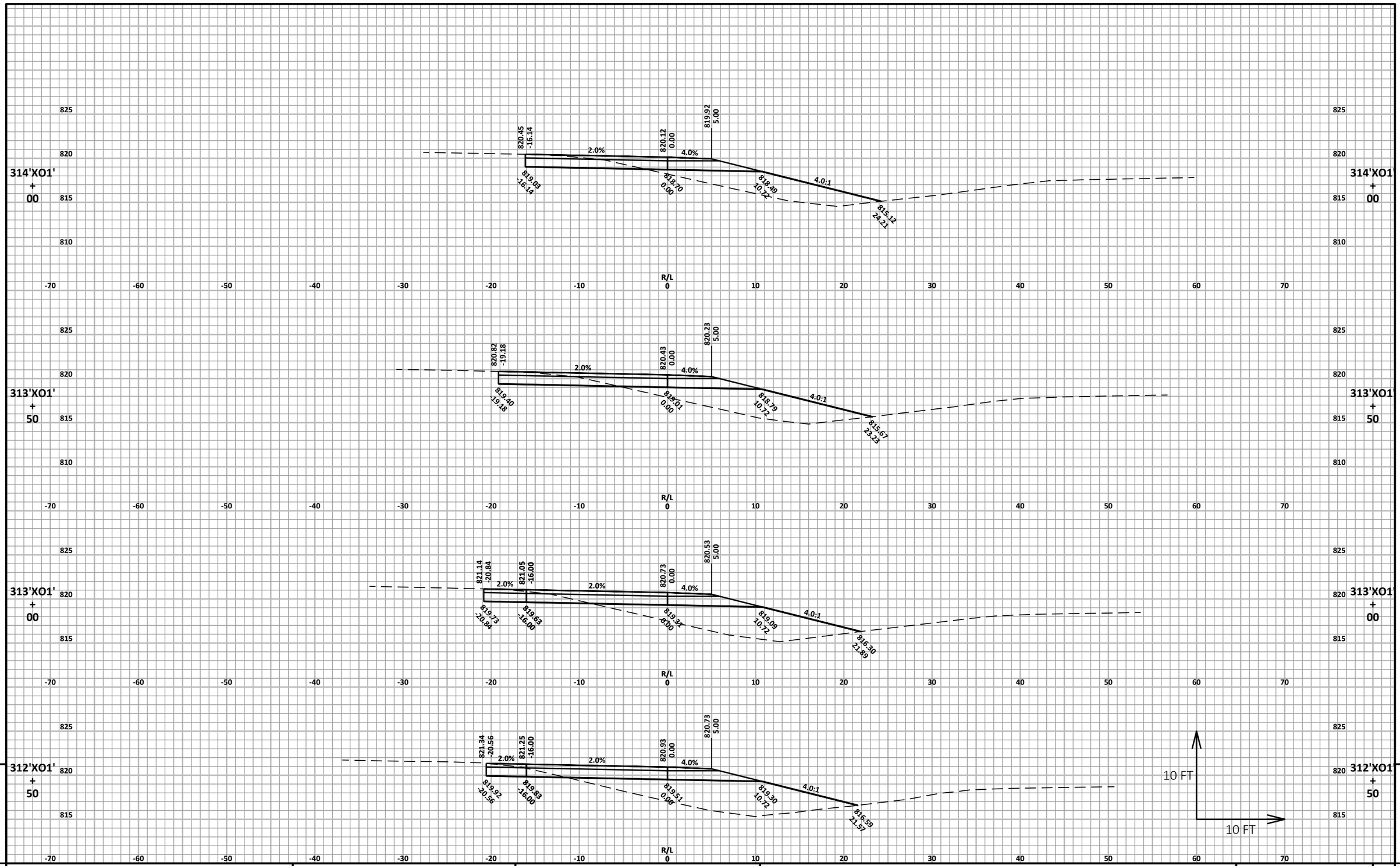
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1	SHEET 328	E

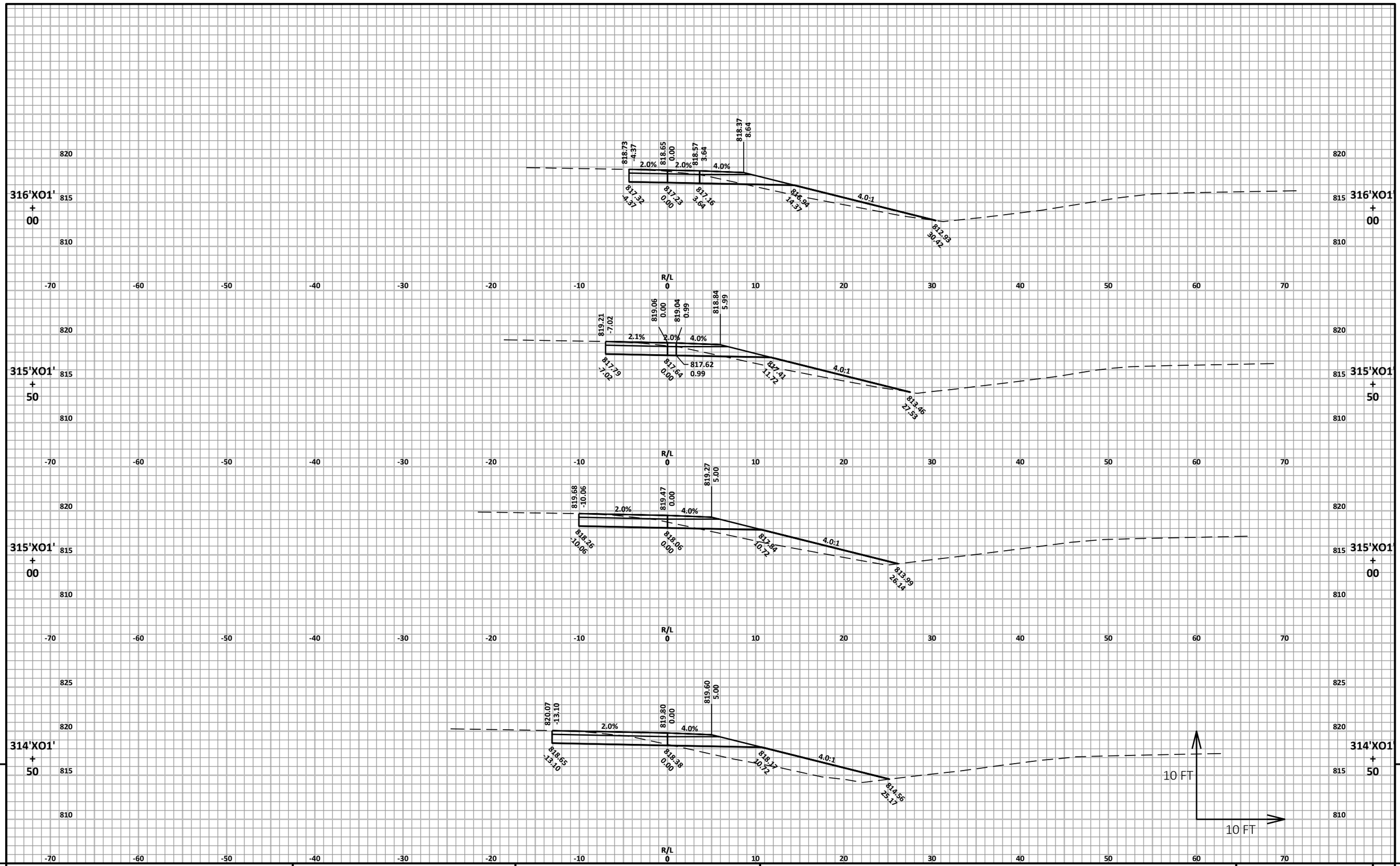
FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090344-xs

PLOT DATE : 4/22/2021 11:19 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1	SHEET 329	E



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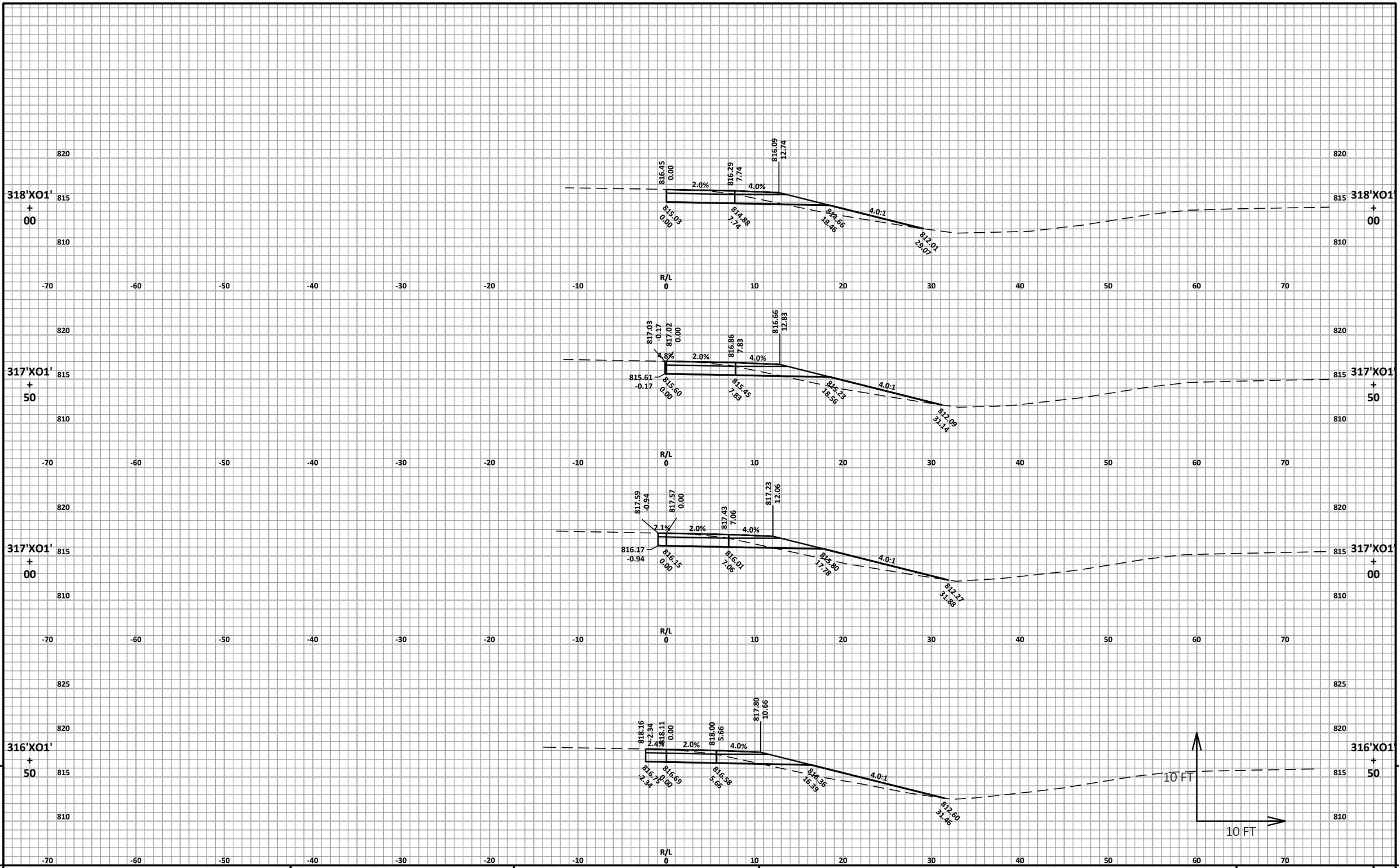
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1	SHEET 330	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090346-xs

PLOT DATE : 4/22/2021 11:19 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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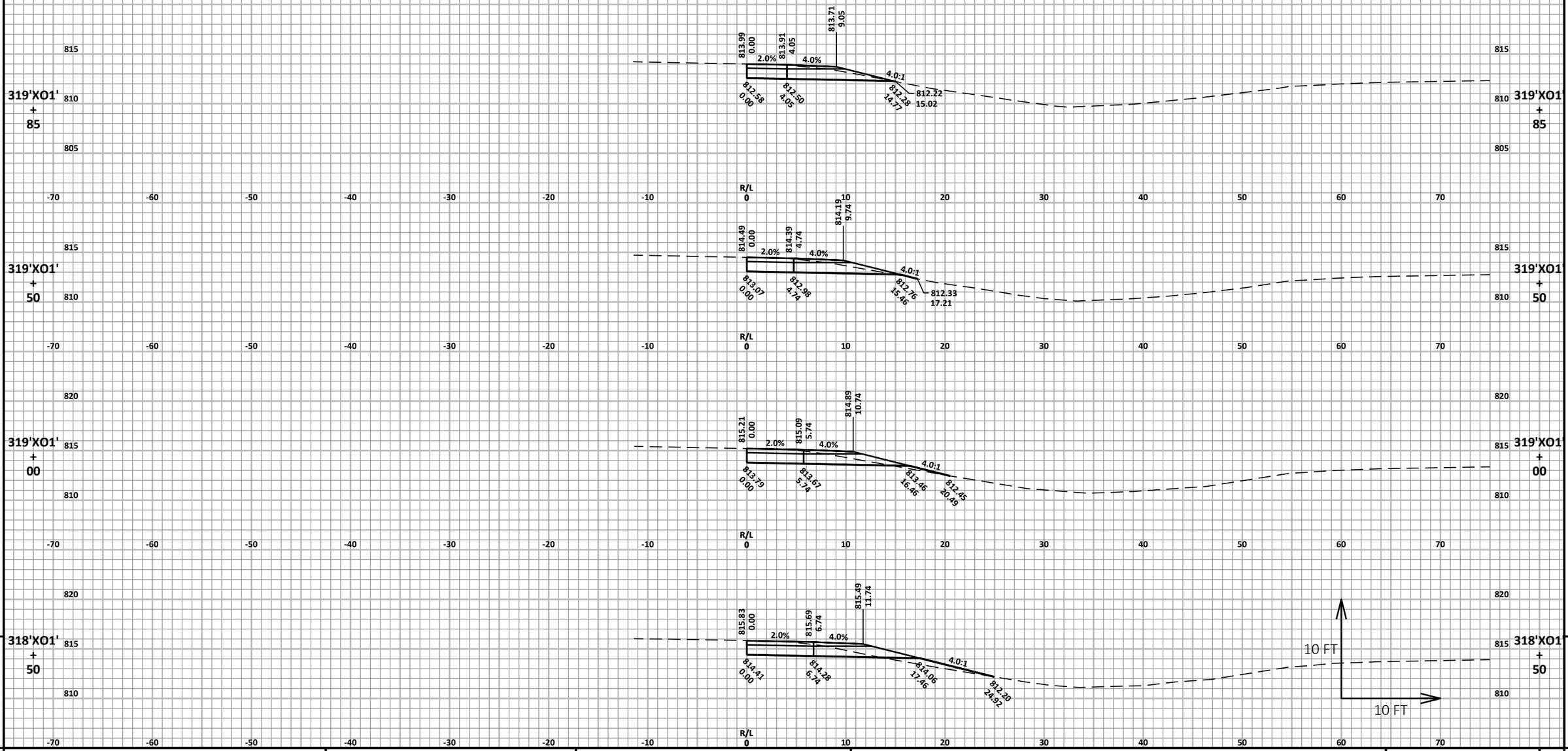
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1	SHEET 331	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090347-xs

PLOT DATE : 4/22/2021 11:19 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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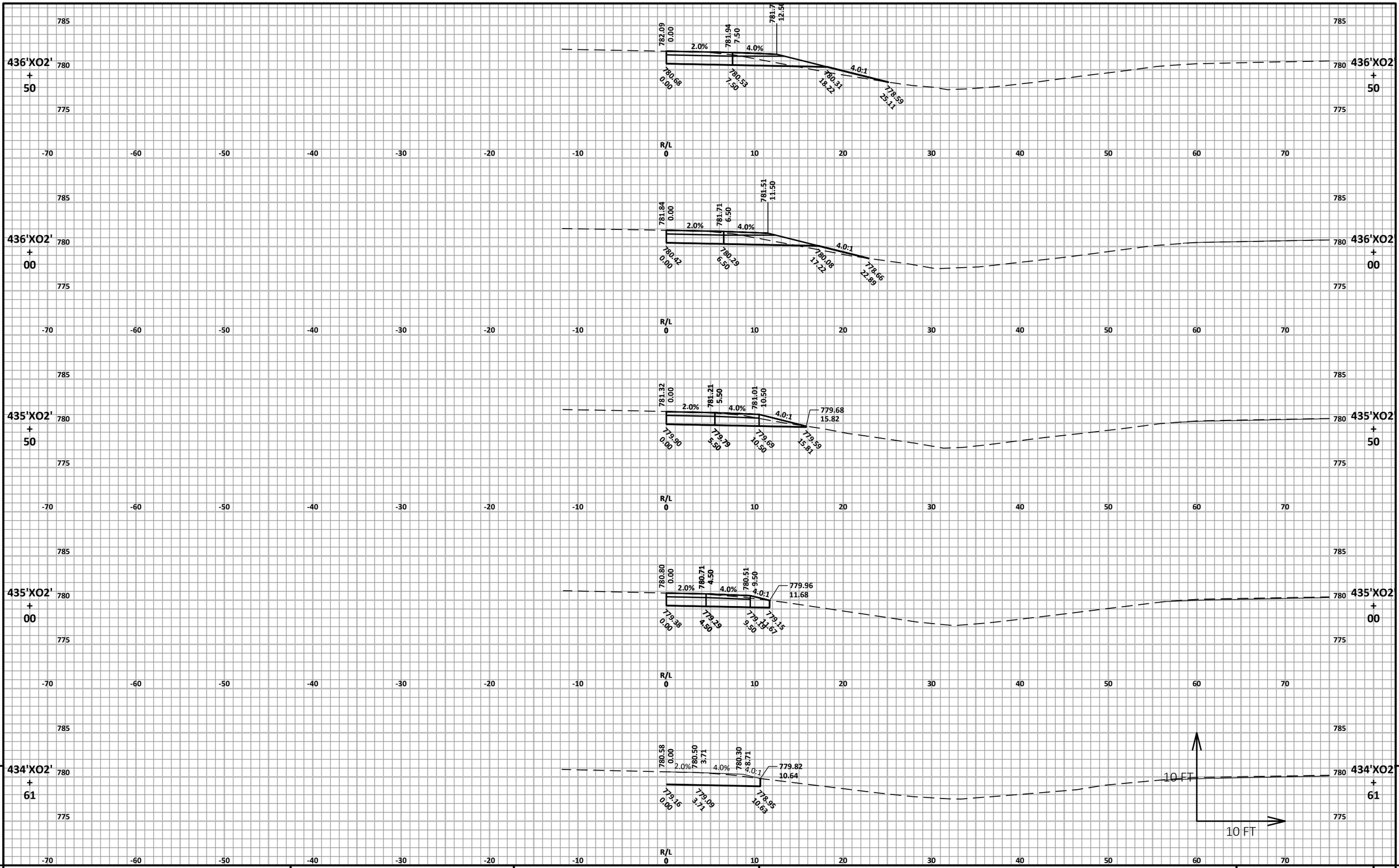
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1	SHEET 332	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090348-xs

PLOT DATE : 4/22/2021 11:19 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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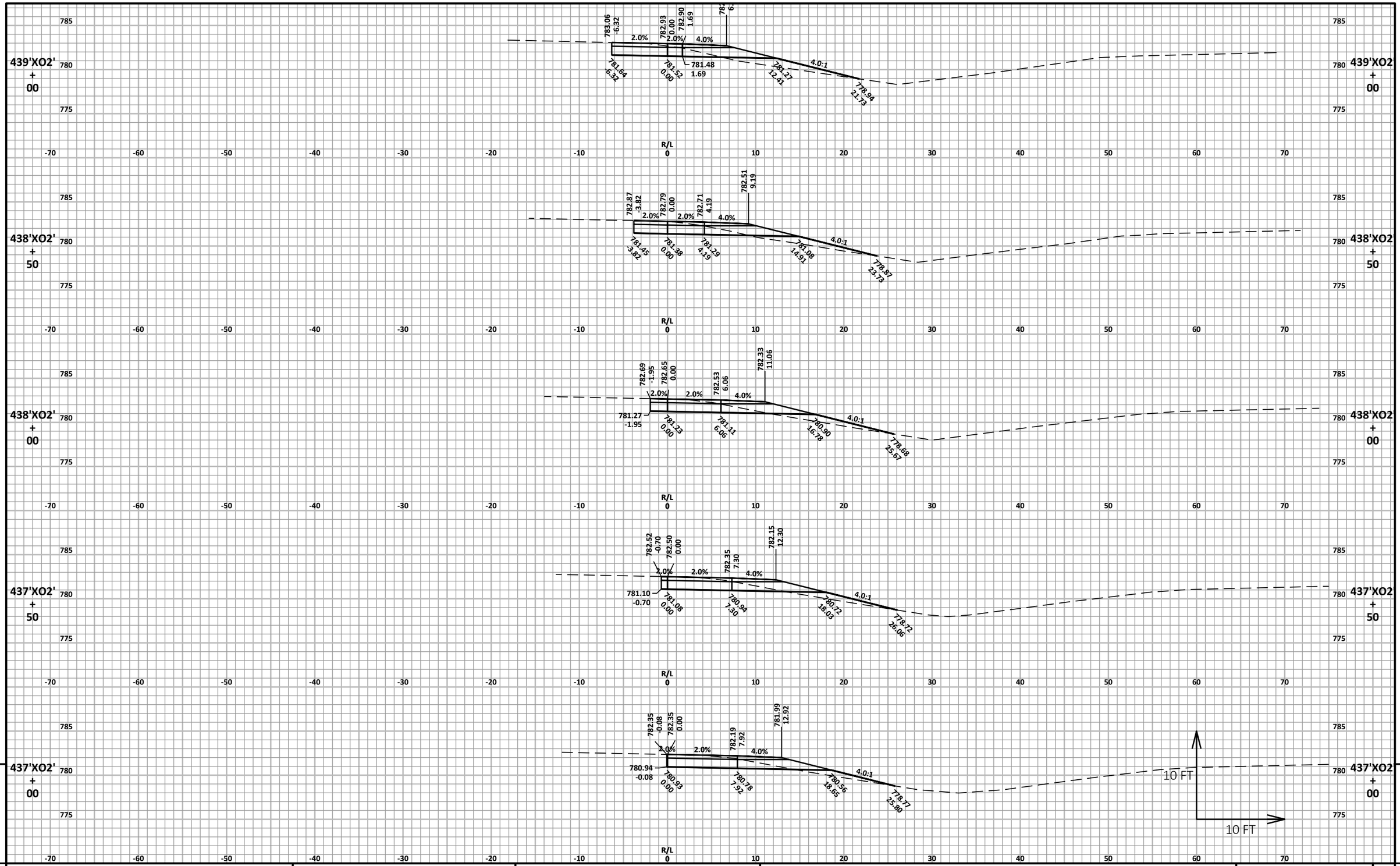
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2	SHEET 333	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090351-xs

PLOT DATE : 4/22/2021 11:20 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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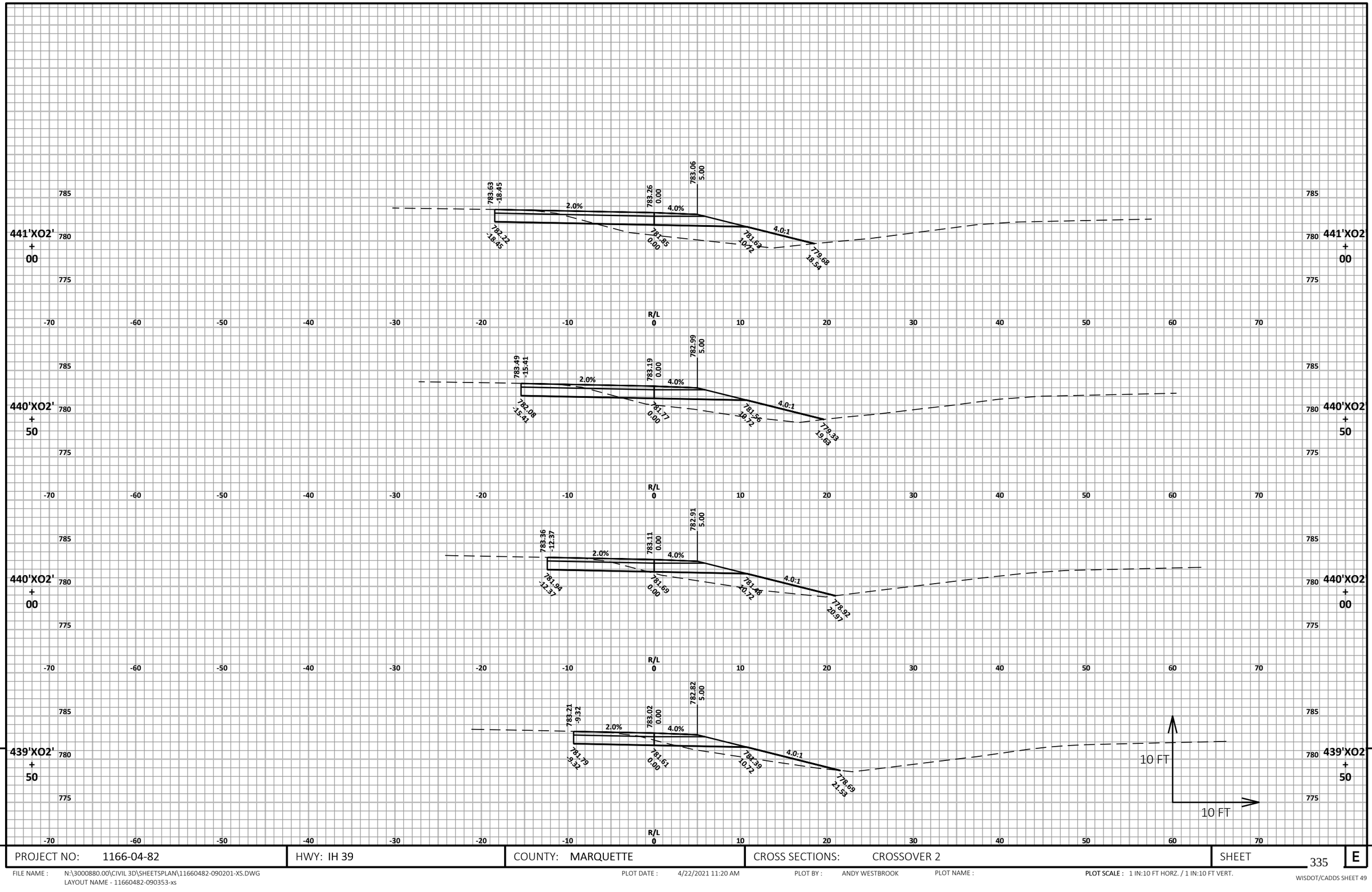
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2	SHEET 334	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090352-xs

PLOT DATE : 4/22/2021 11:20 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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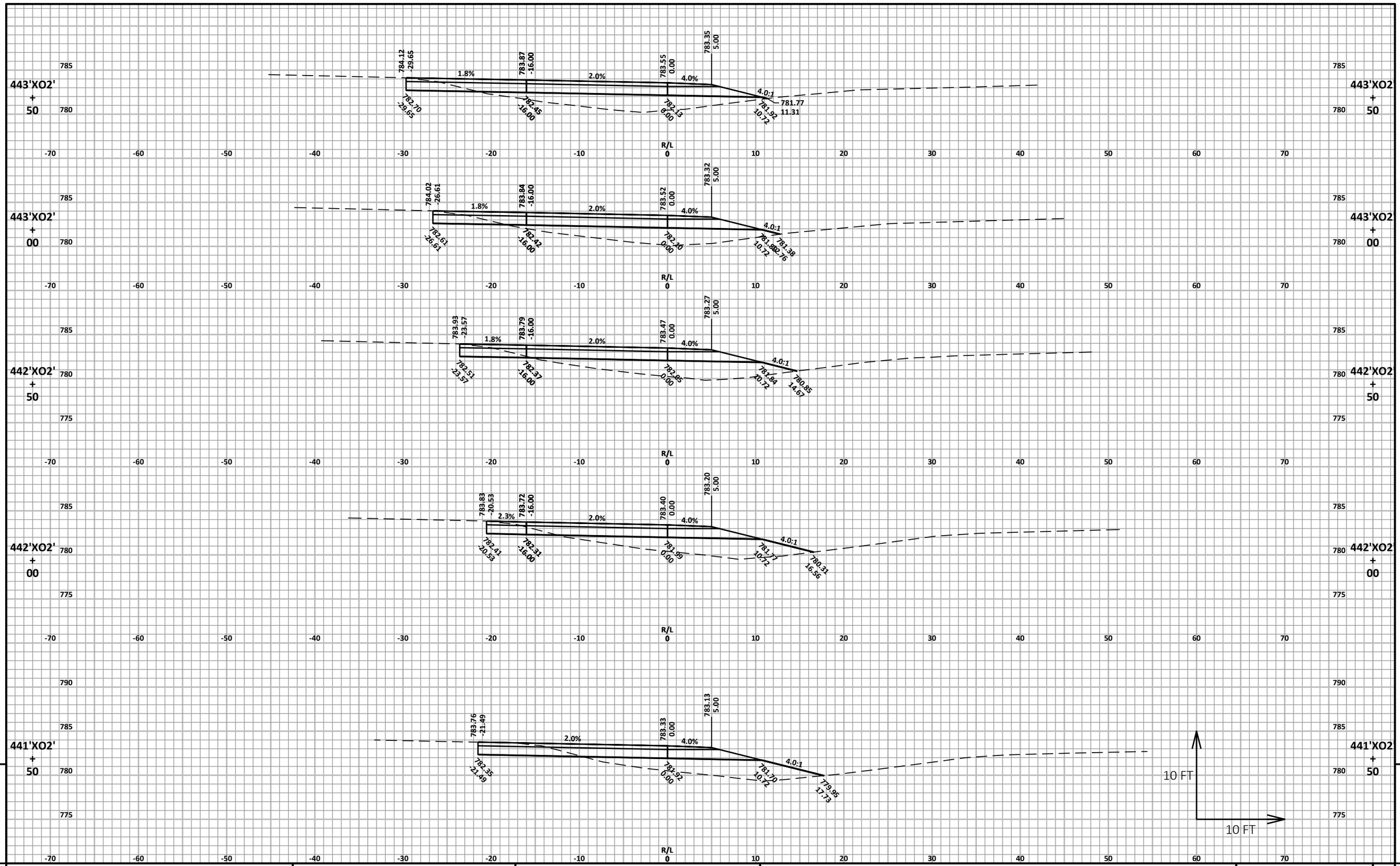
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2	SHEET 335	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090353-xs

PLOT DATE : 4/22/2021 11:20 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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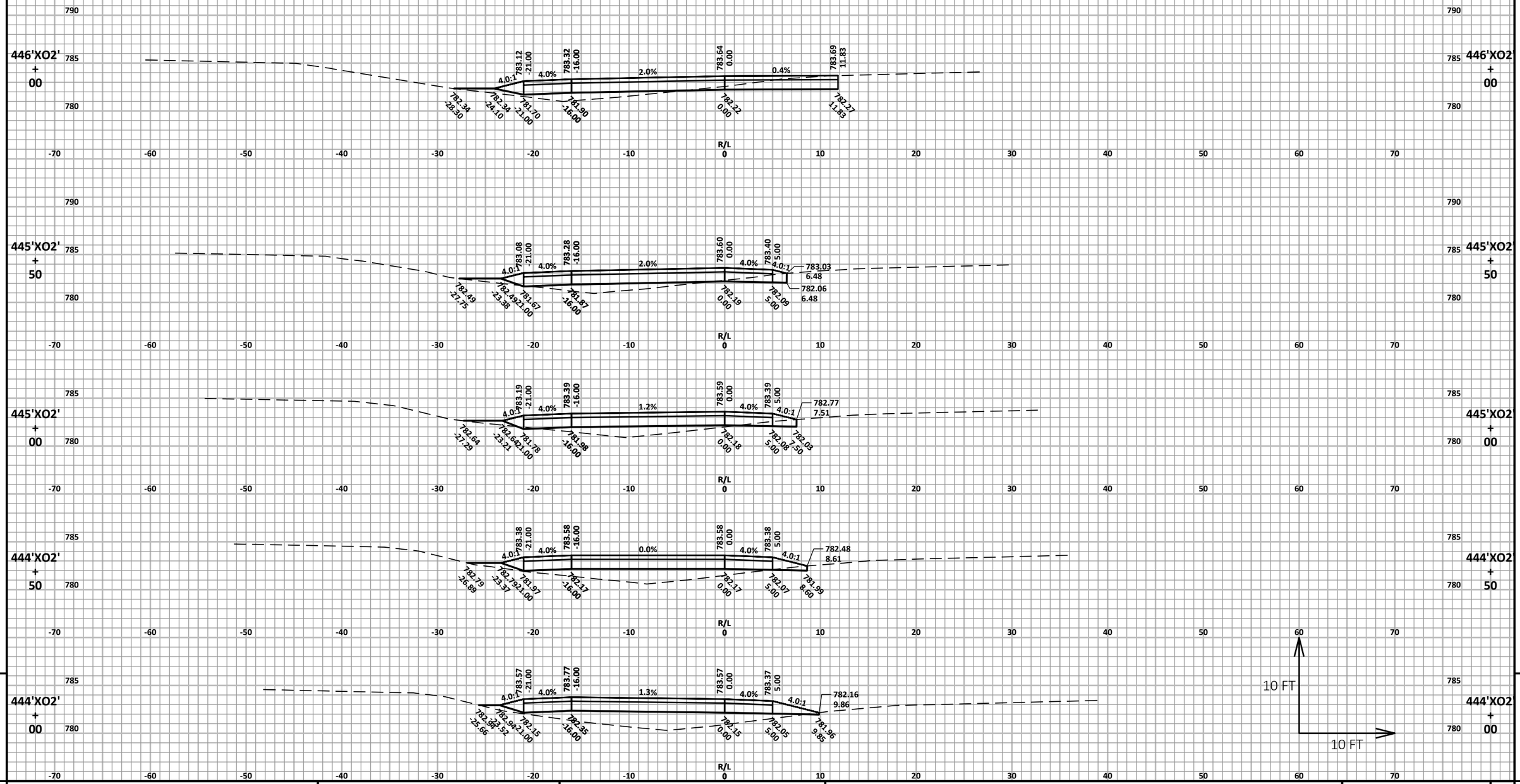
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2	SHEET 336	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090354-xs

PLOT DATE : 4/22/2021 11:20 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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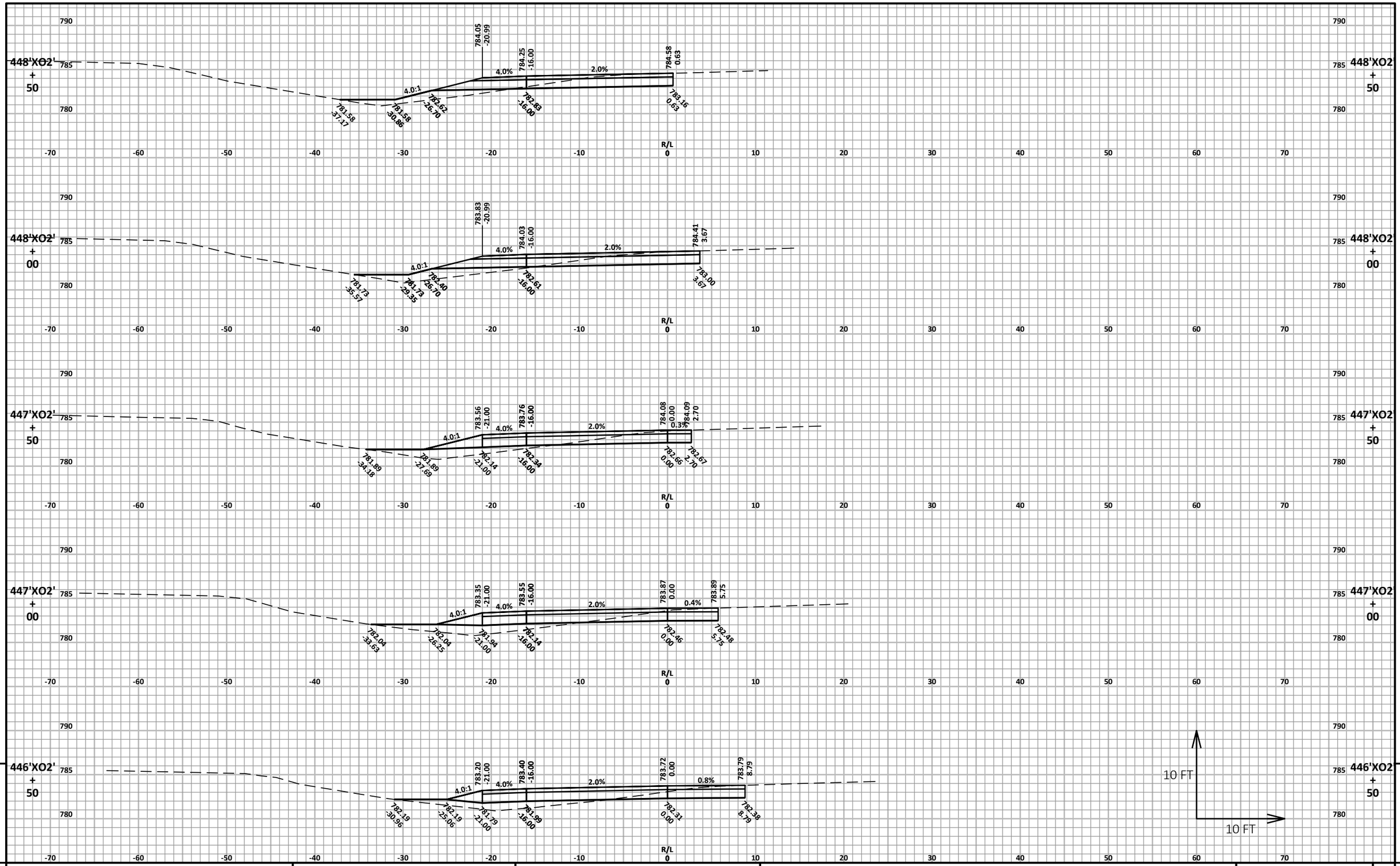
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2	SHEET 337	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090355-xs

PLOT DATE : 4/22/2021 11:20 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

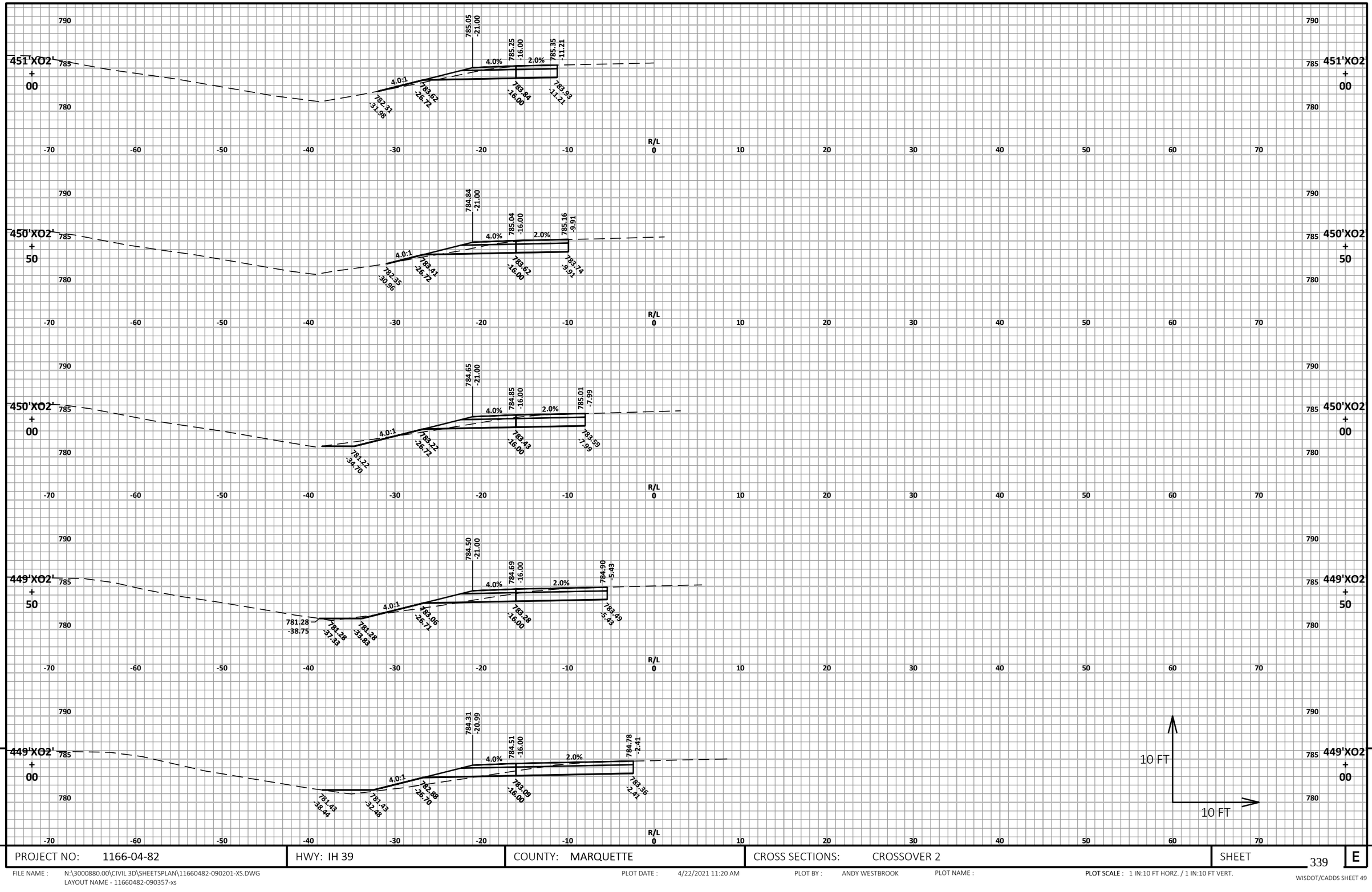
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2	SHEET 338 E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090356-xs

PLOT DATE : 4/22/2021 11:20 AM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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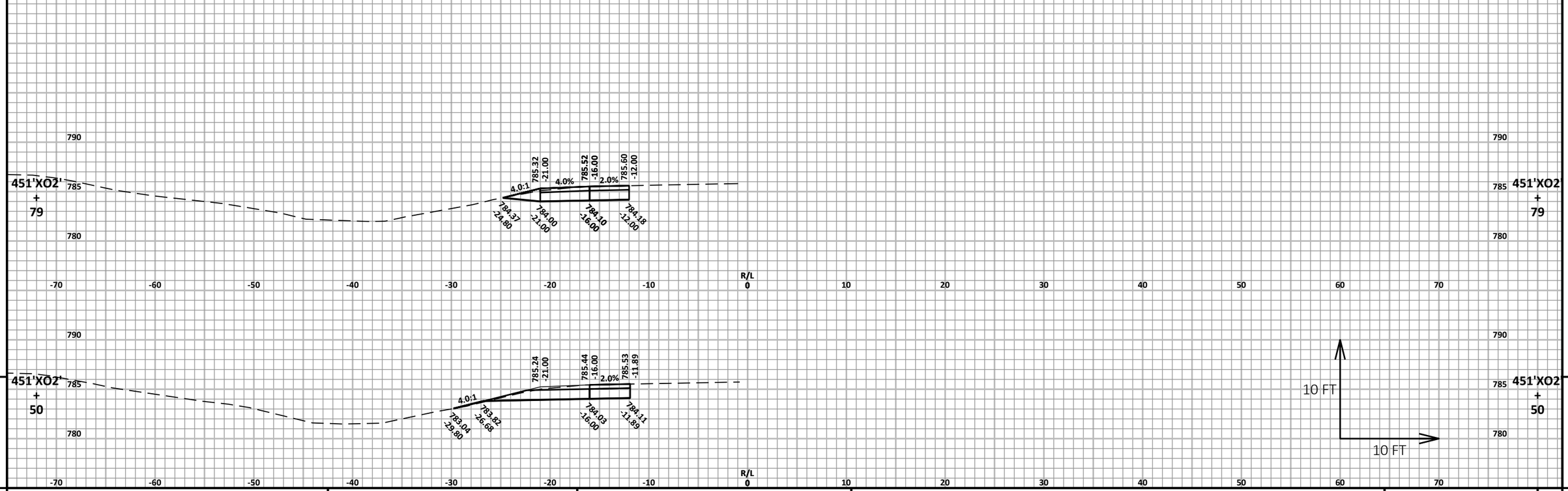
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2	SHEET 339	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090357-xs

PLOT DATE : 4/22/2021 11:20 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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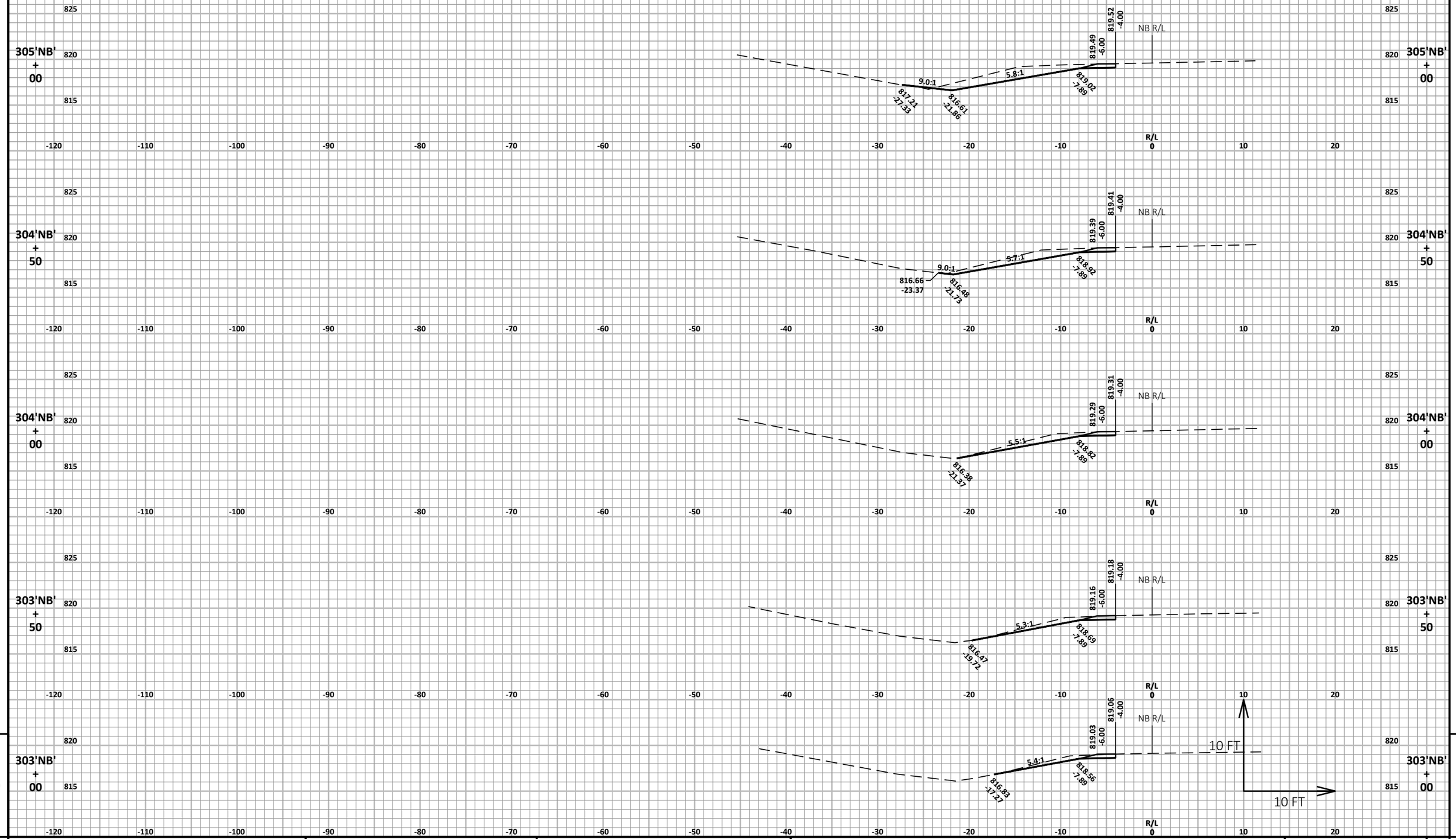
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2	SHEET 340	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090201-XS.DWG
LAYOUT NAME - 11660482-090358-xs

PLOT DATE : 4/22/2021 11:20 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

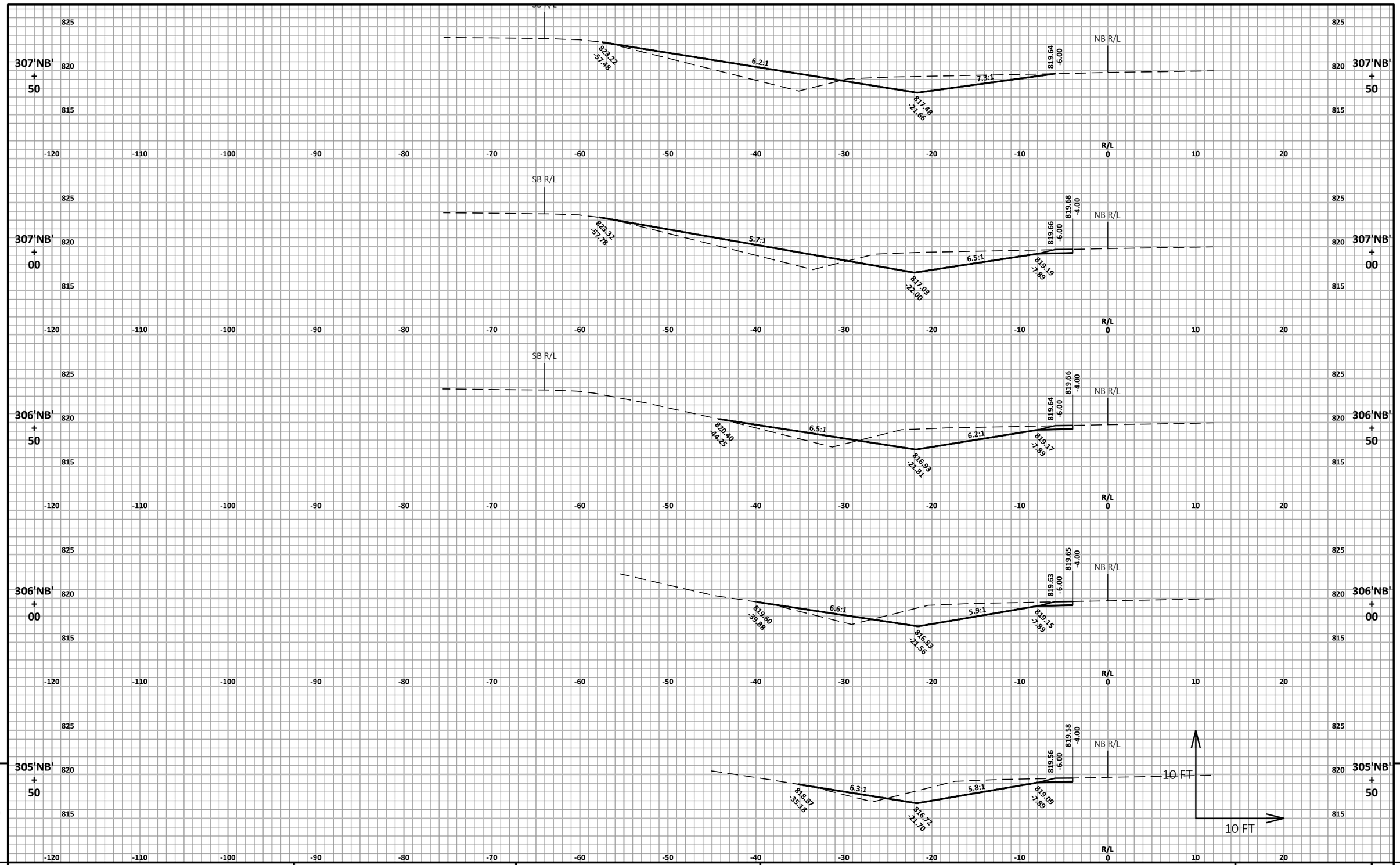
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1 REMOVAL	SHEET 341	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090400-xs

PLOT DATE : 4/22/2021 12:36 PM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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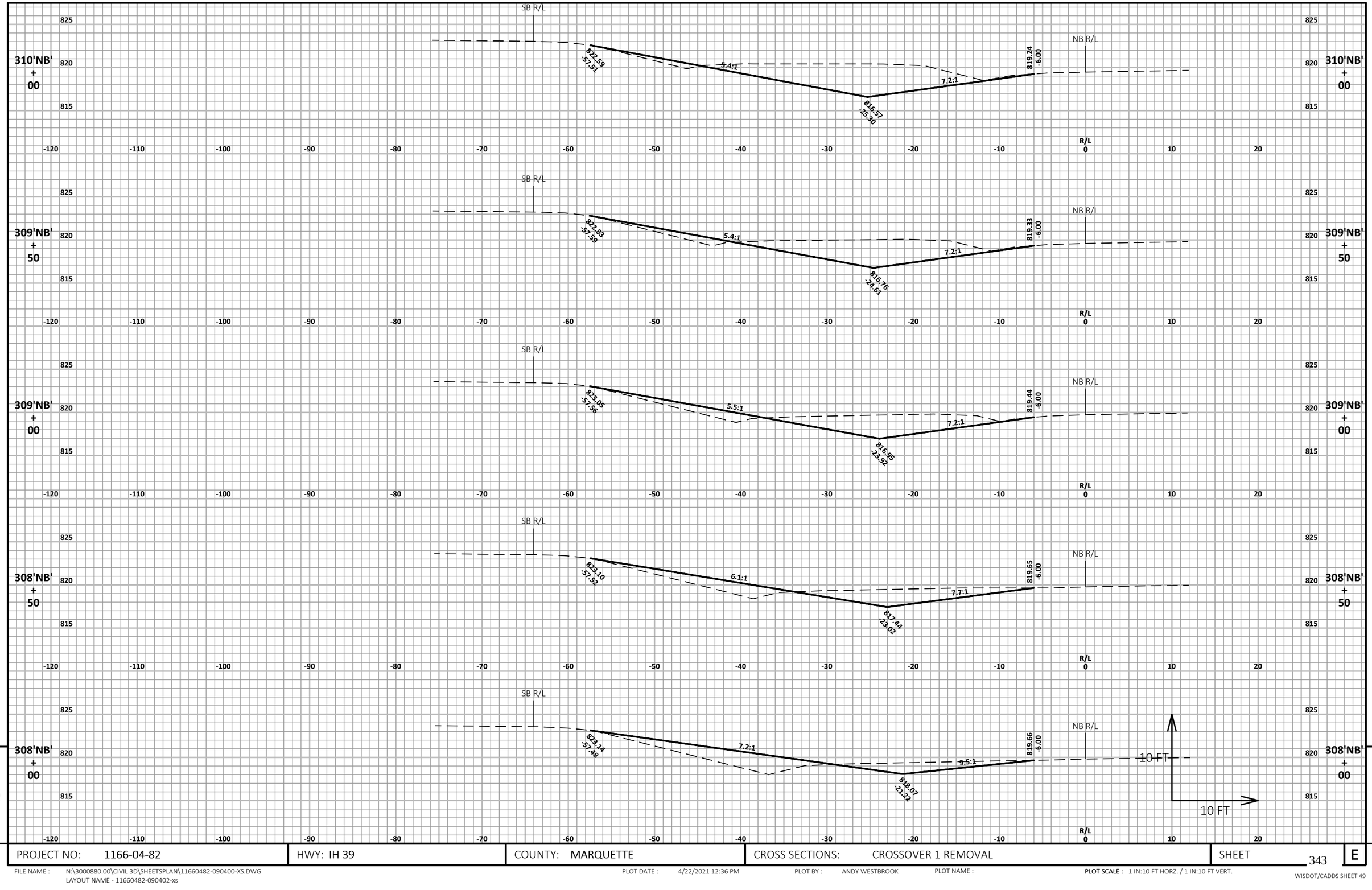
9

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1 REMOVAL	SHEET 342	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090401-xs

PLOT DATE : 4/22/2021 12:36 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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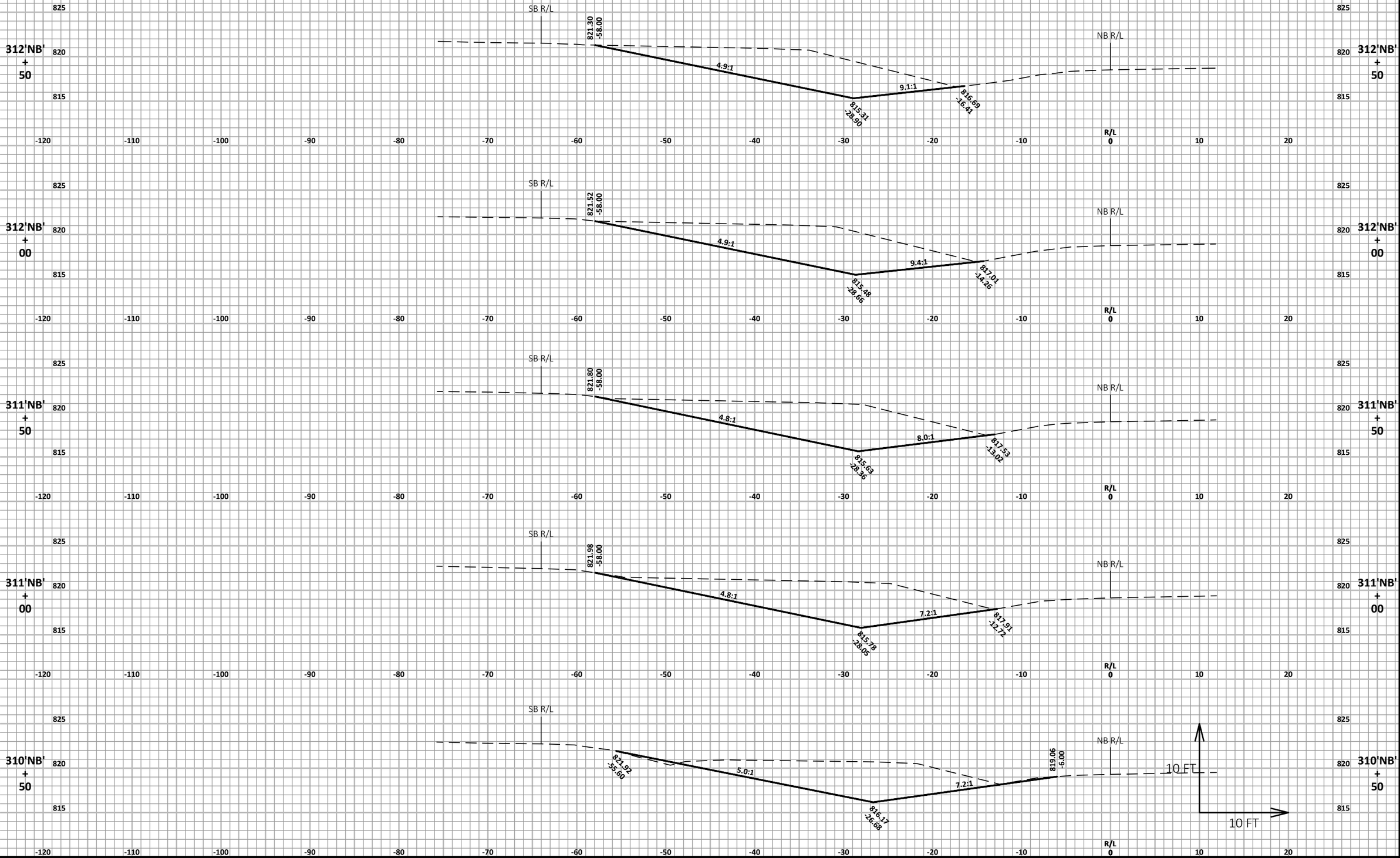
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1 REMOVAL	SHEET 343	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090402-xs

PLOT DATE : 4/22/2021 12:36 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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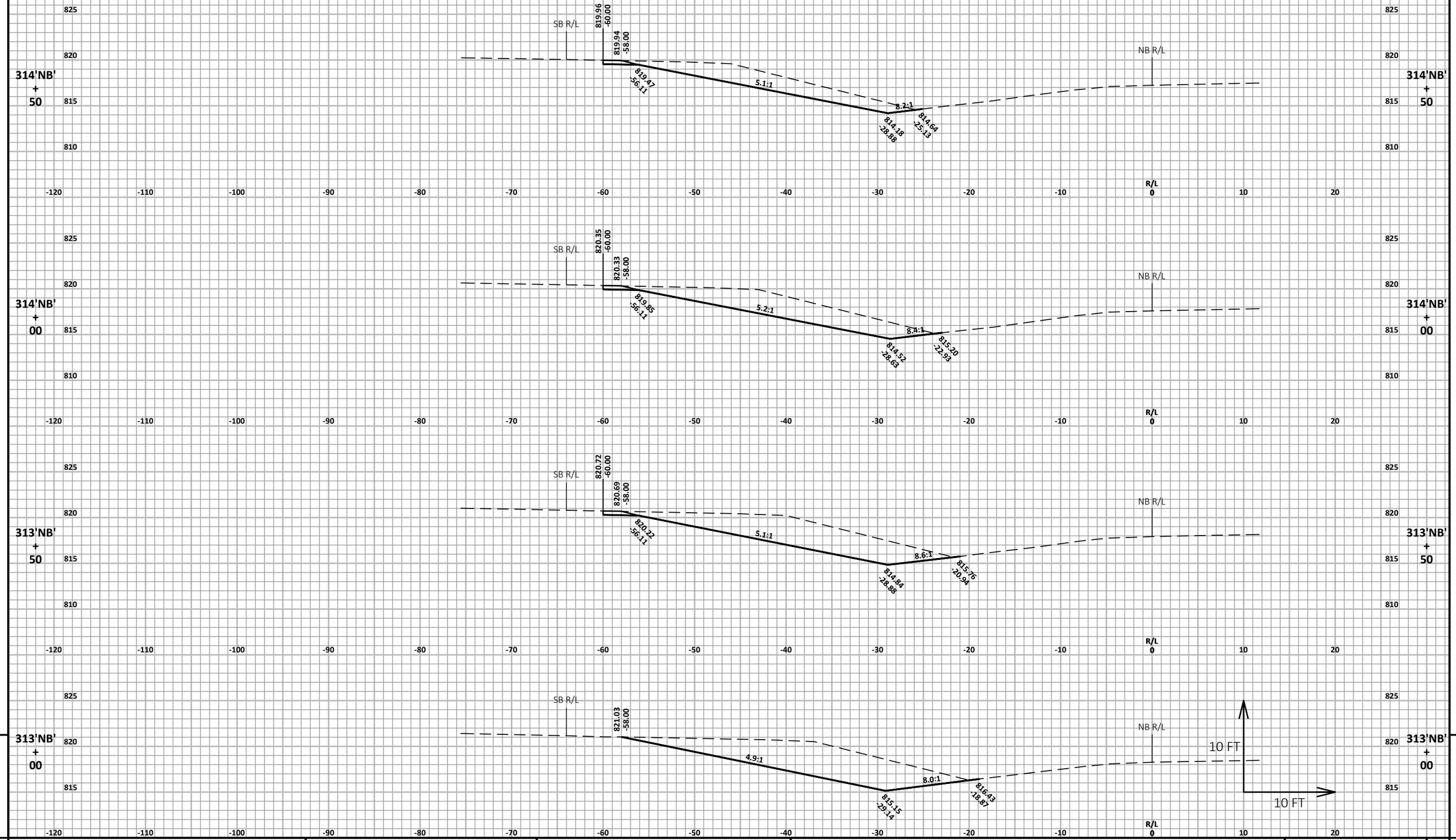
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1 REMOVAL	SHEET 344	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090403-xs

PLOT DATE : 4/22/2021 12:36 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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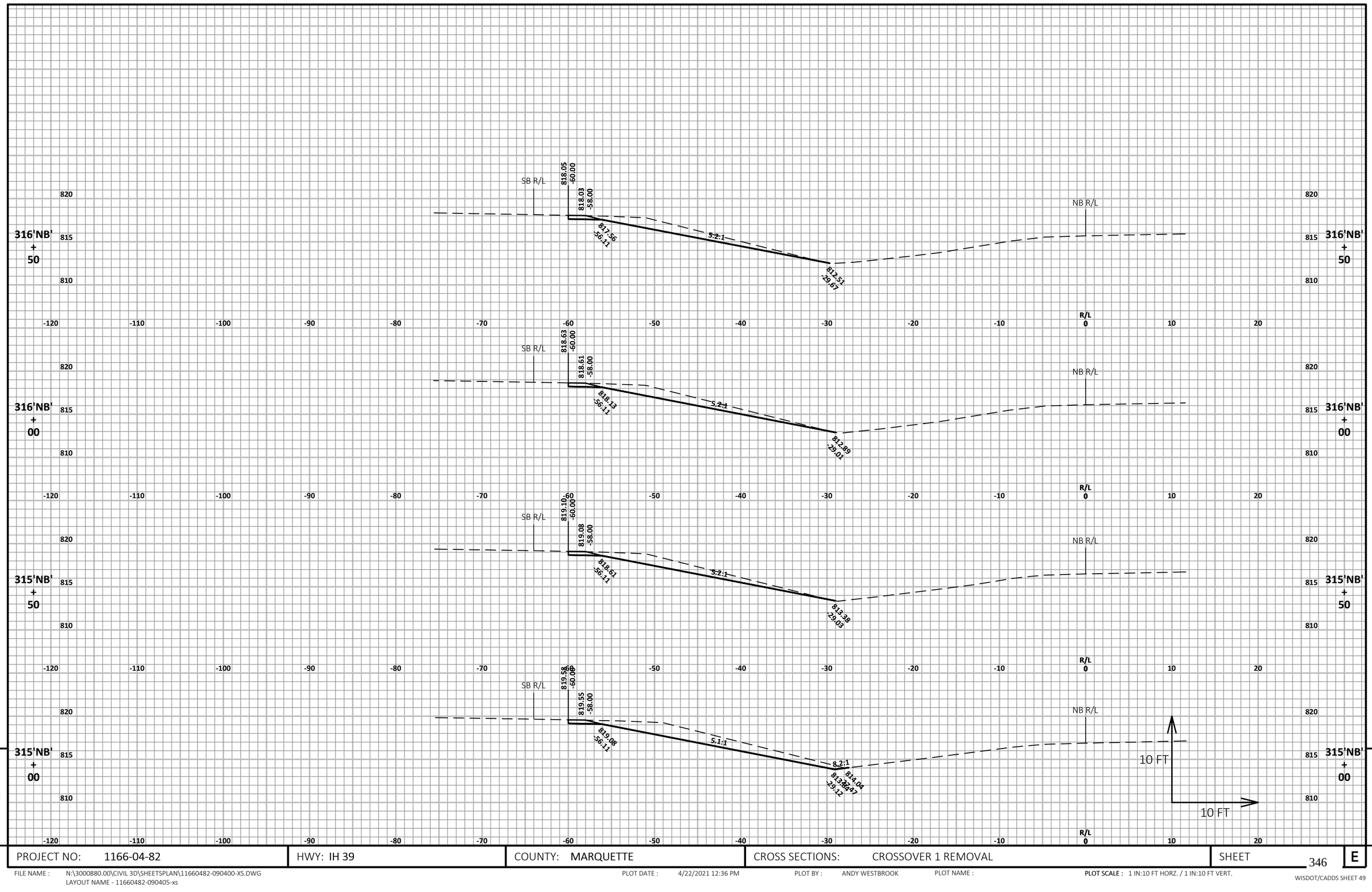
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1 REMOVAL	SHEET 345	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090404-xs

PLOT DATE : 4/22/2021 12:36 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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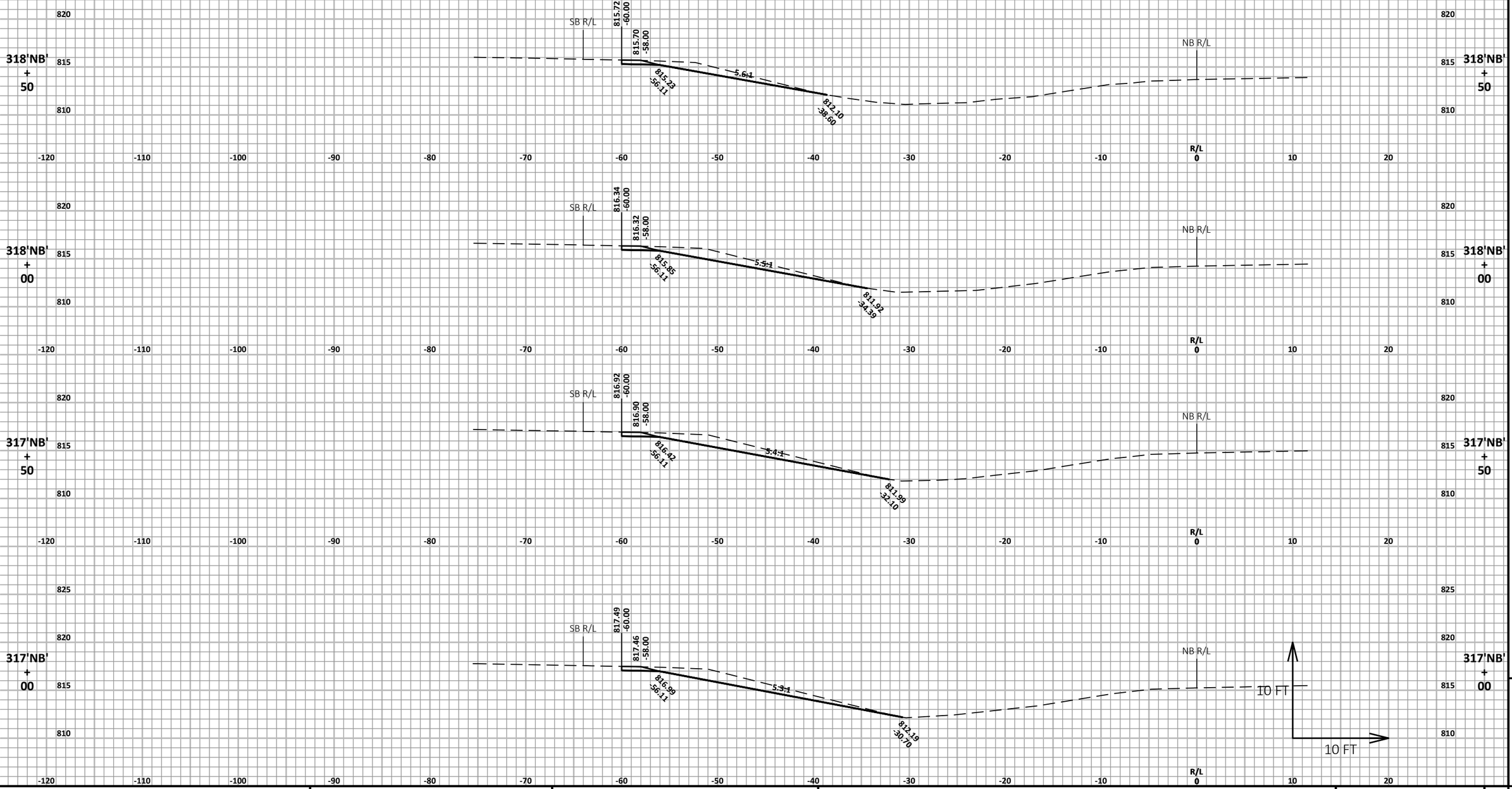
9

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1 REMOVAL	SHEET 346	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090405-xs

PLOT DATE : 4/22/2021 12:36 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

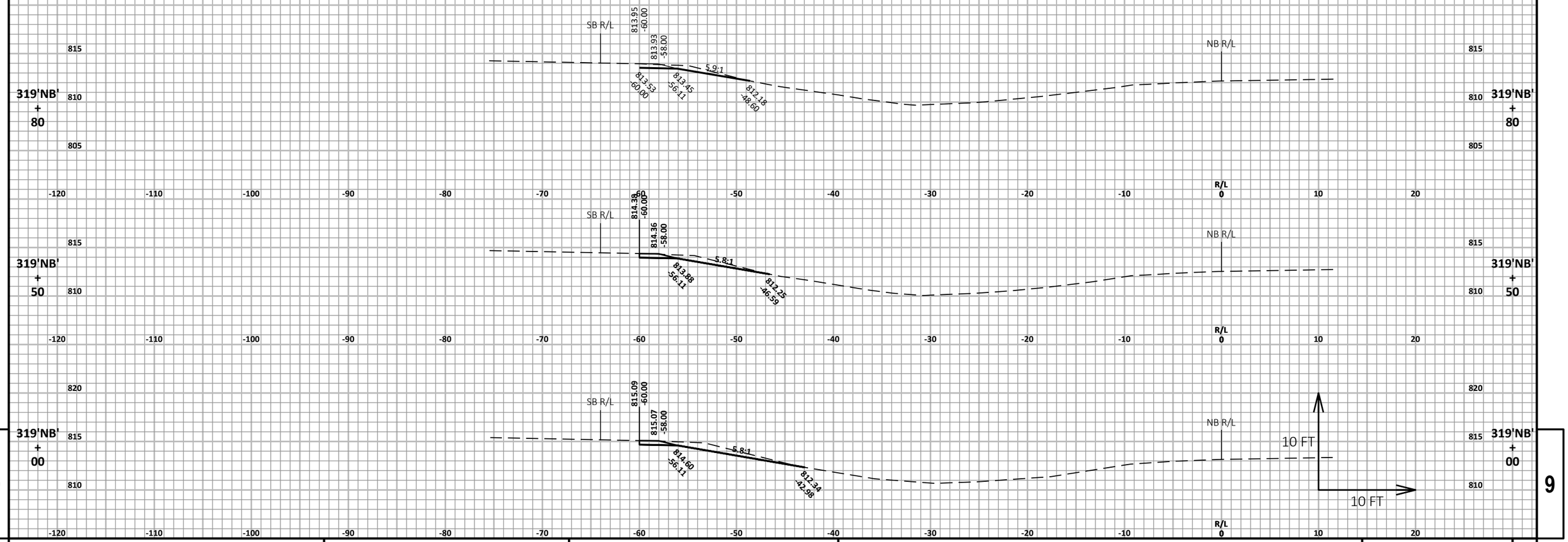
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1 REMOVAL	SHEET 347	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090406-xs

PLOT DATE : 4/22/2021 12:36 PM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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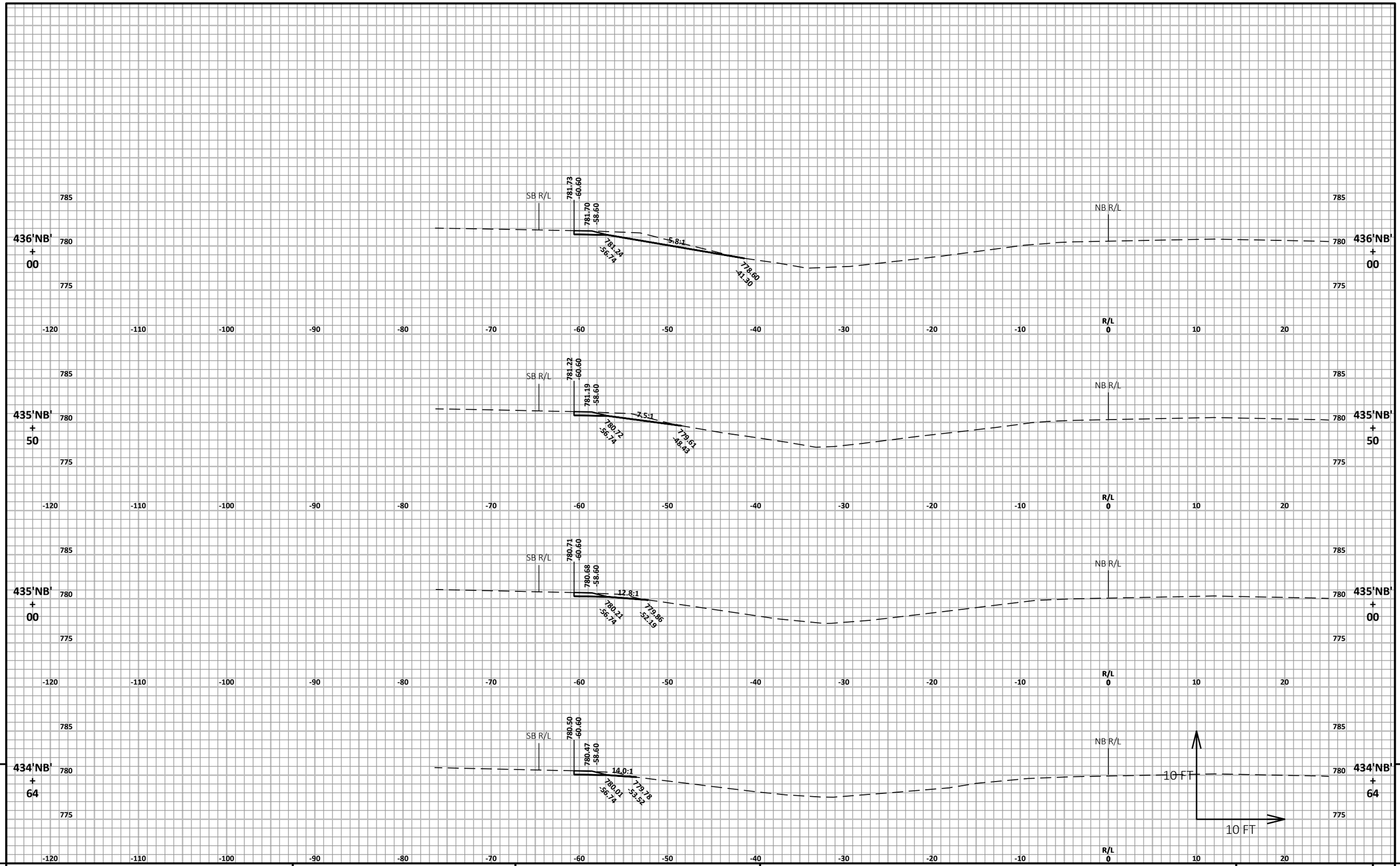
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 1 REMOVAL	SHEET 348	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090407-xs

PLOT DATE : 4/22/2021 12:37 PM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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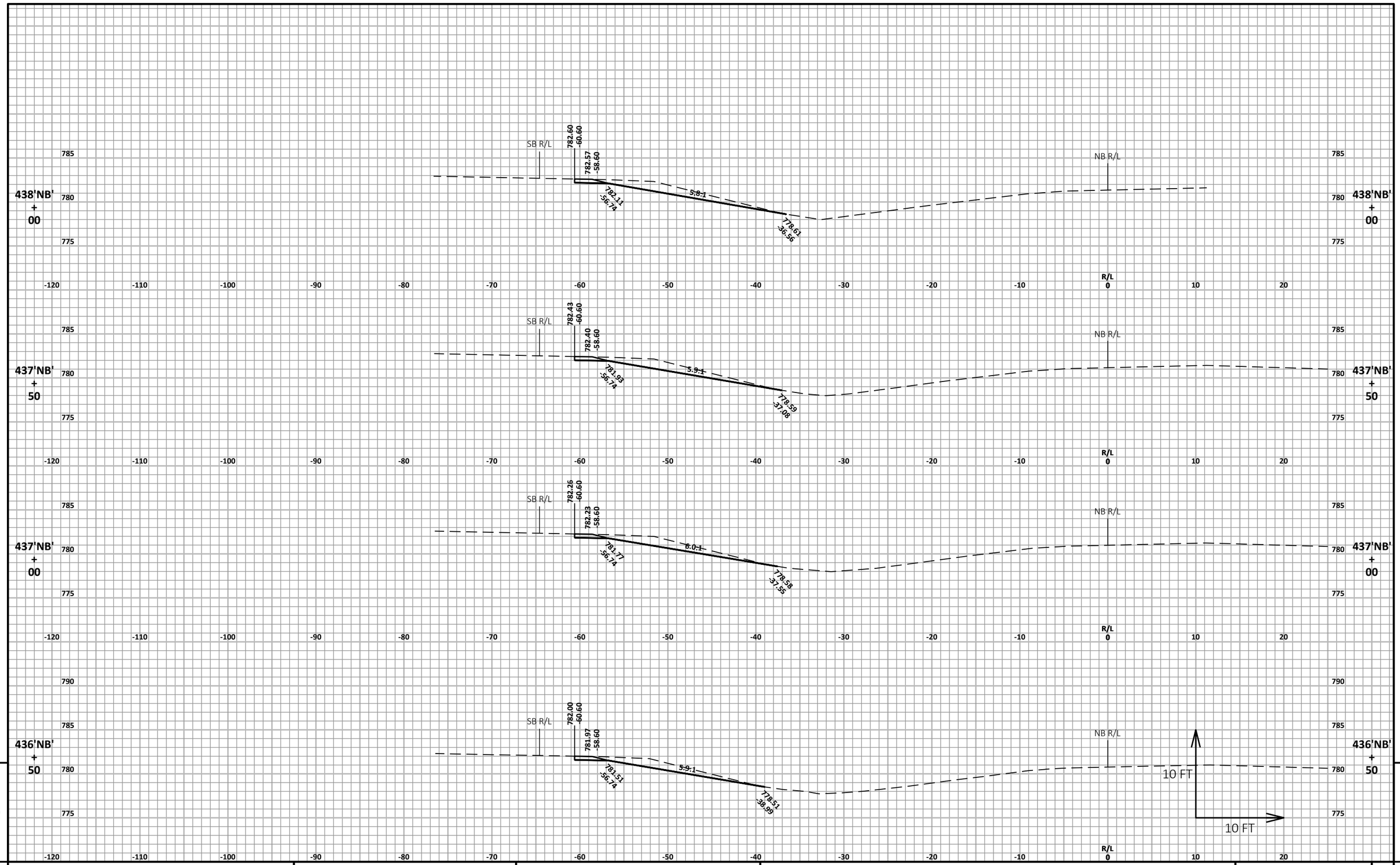
9

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2 REMOVAL	SHEET 349	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090415-xs

PLOT DATE : 4/22/2021 12:37 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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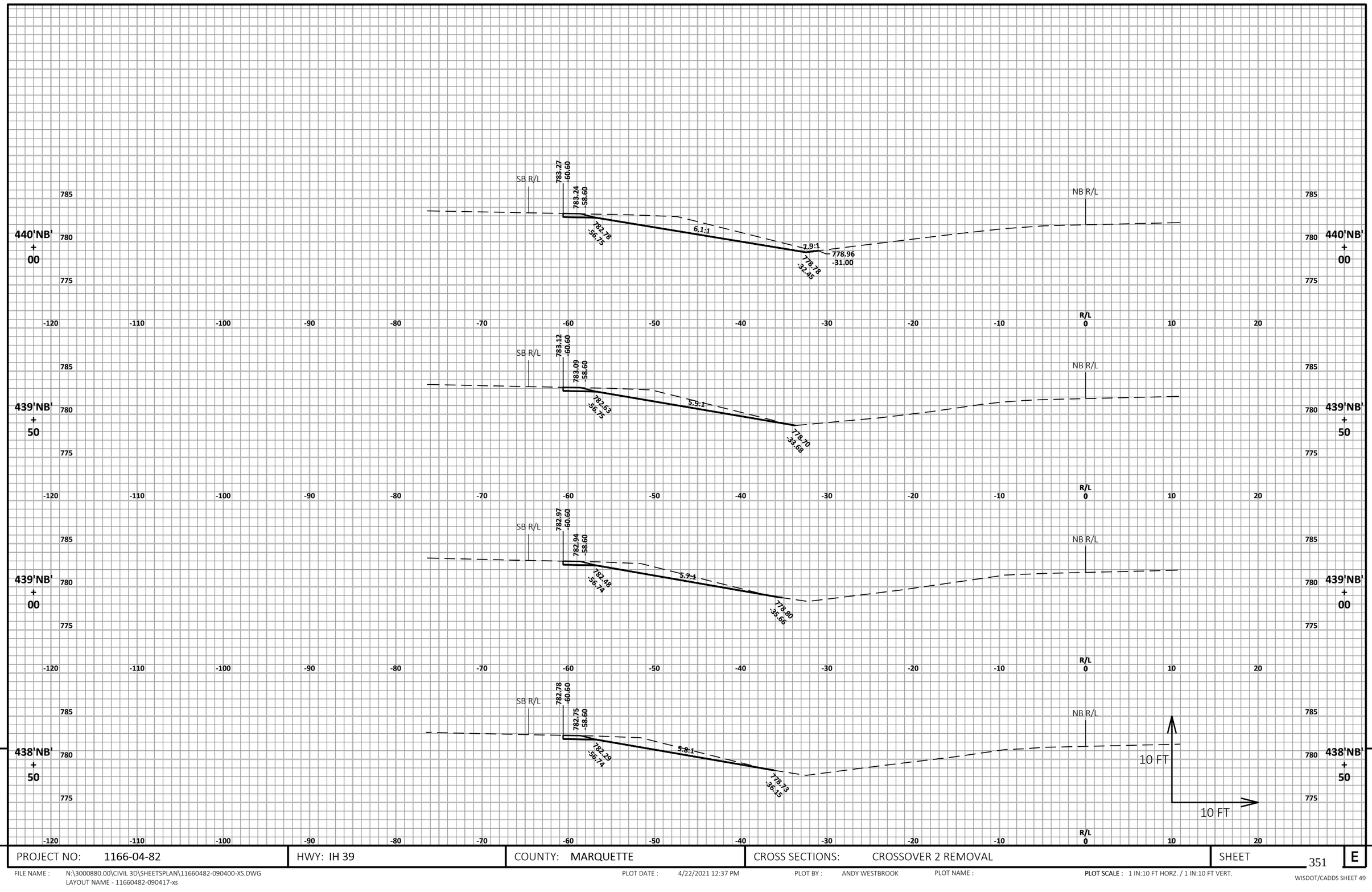
9

PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2 REMOVAL	SHEET 350	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090416-xs

PLOT DATE : 4/22/2021 12:37 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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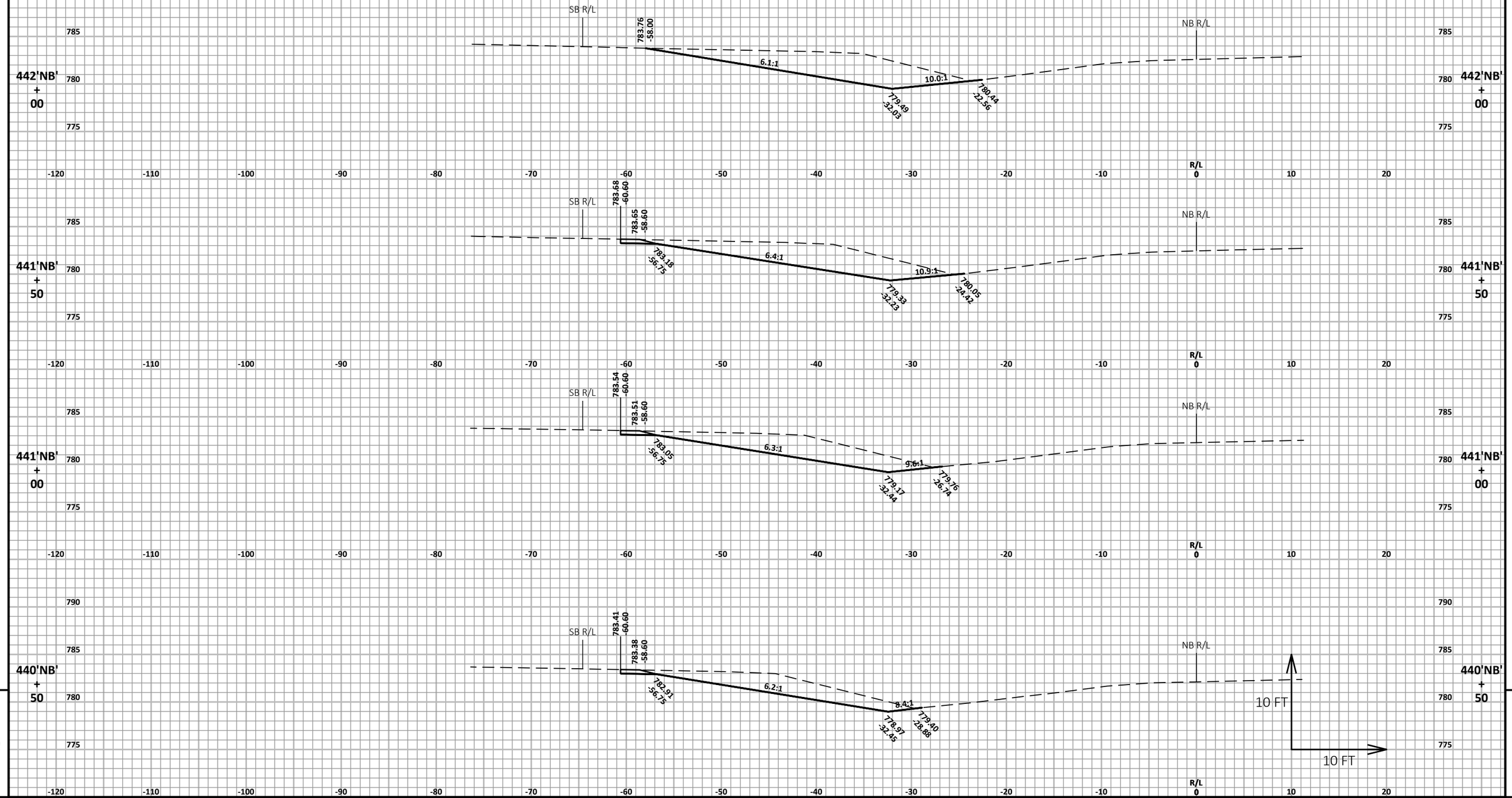
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2 REMOVAL	SHEET 351	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090417-xs

PLOT DATE : 4/22/2021 12:37 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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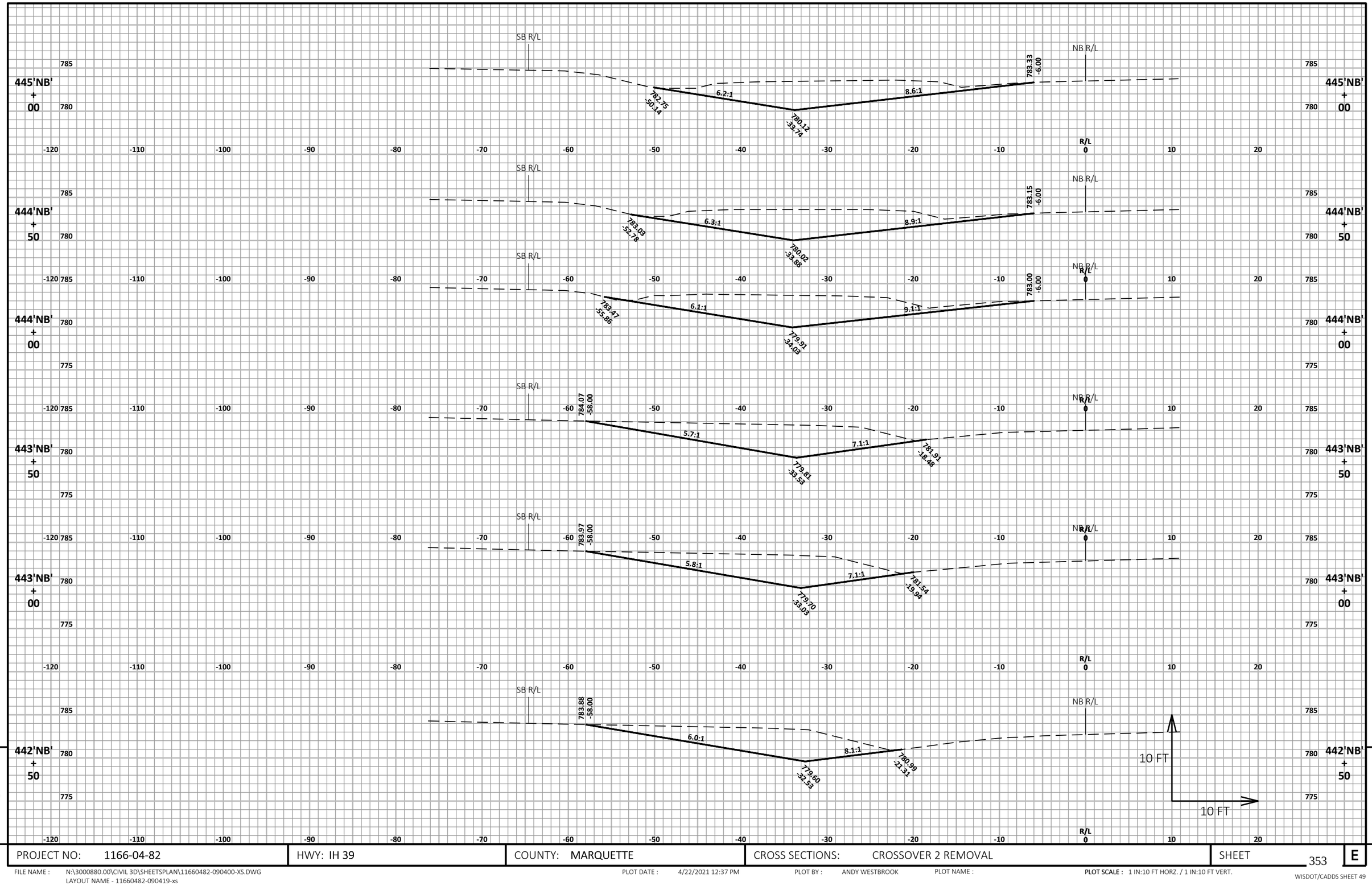
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2 REMOVAL	SHEET 352	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090418-xs

PLOT DATE : 4/22/2021 12:37 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



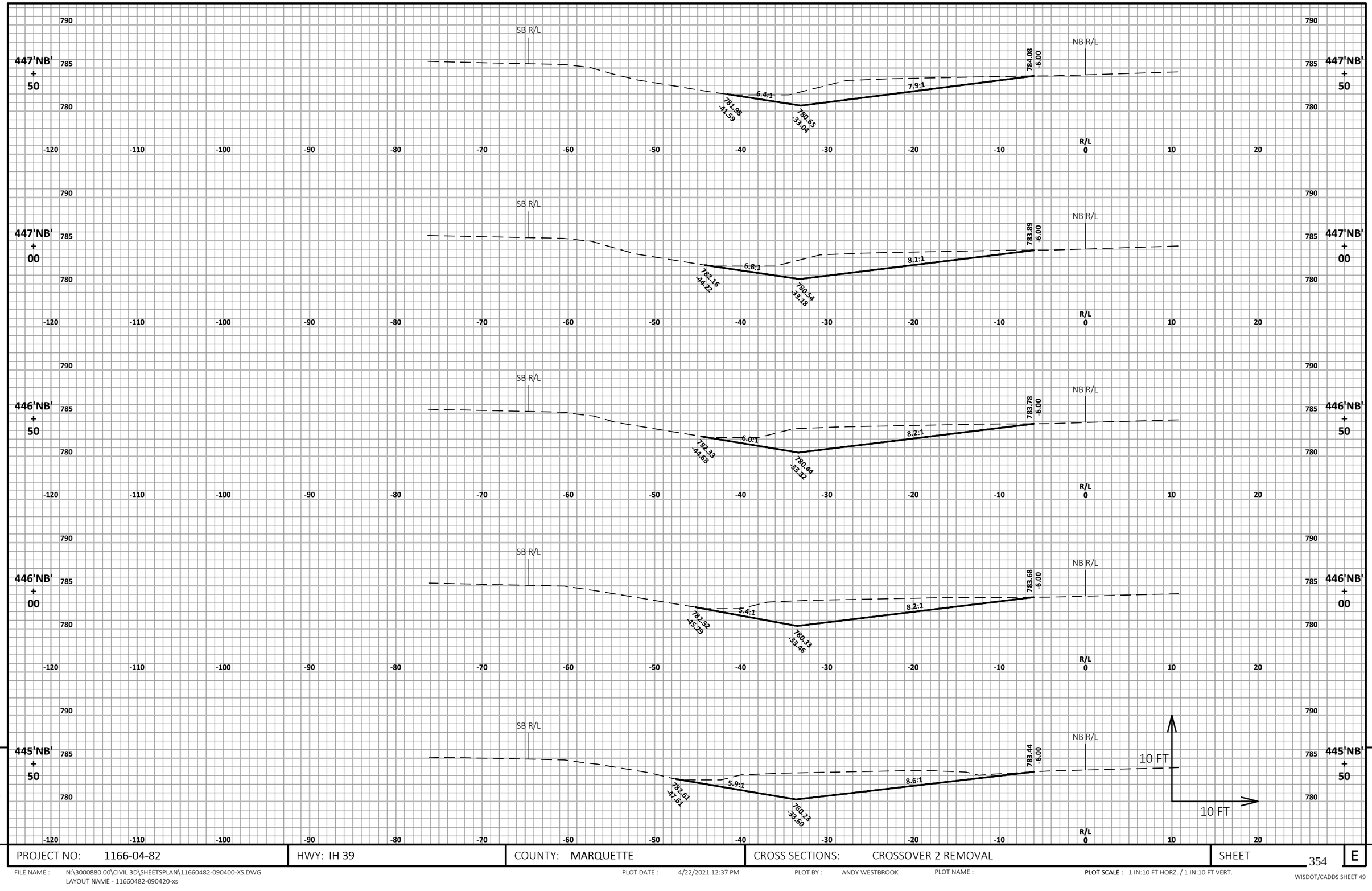
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2 REMOVAL	SHEET 353 E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090419-xs

PLOT DATE : 4/22/2021 12:37 PM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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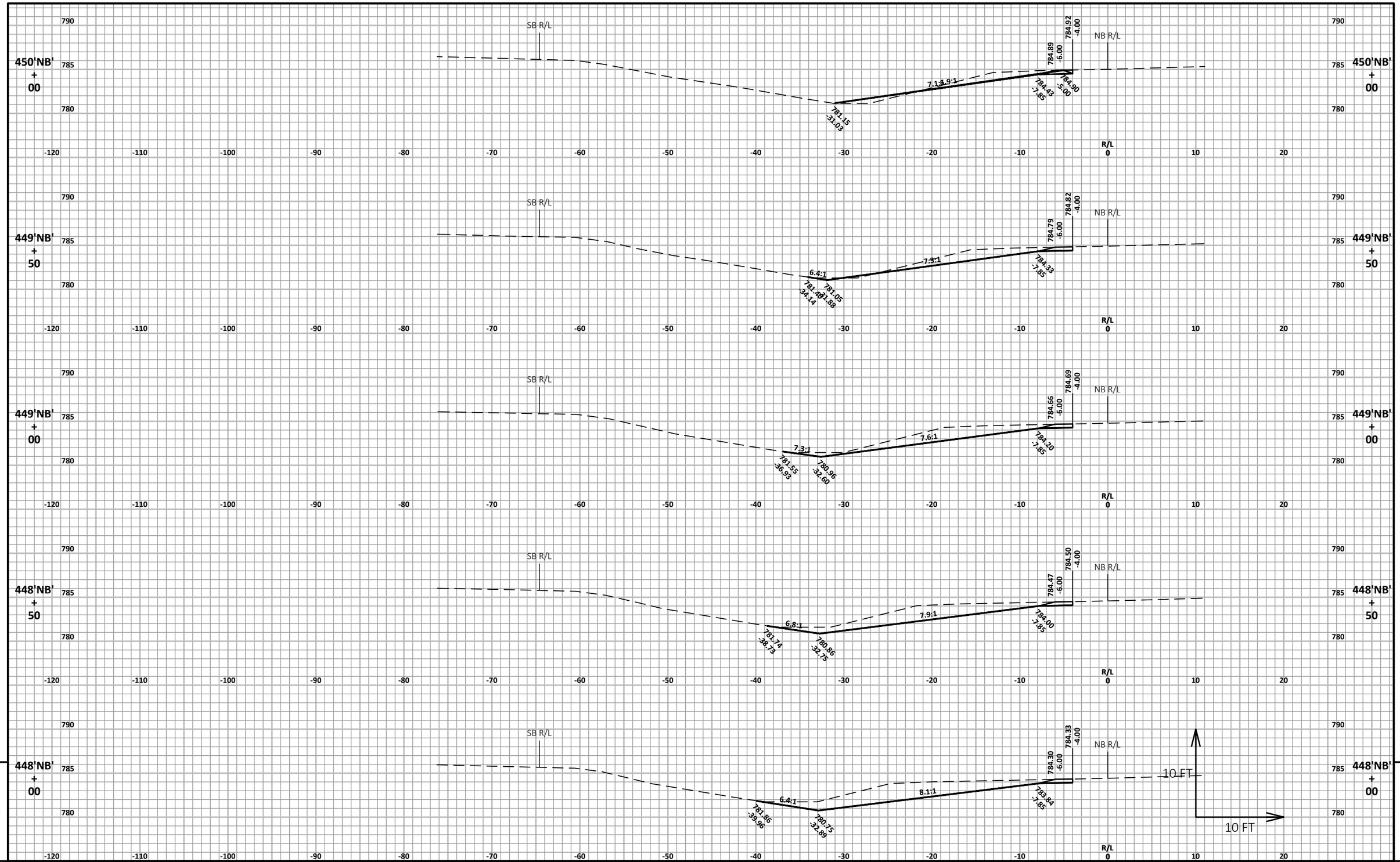
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2 REMOVAL	SHEET 354	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090420-xs

PLOT DATE : 4/22/2021 12:37 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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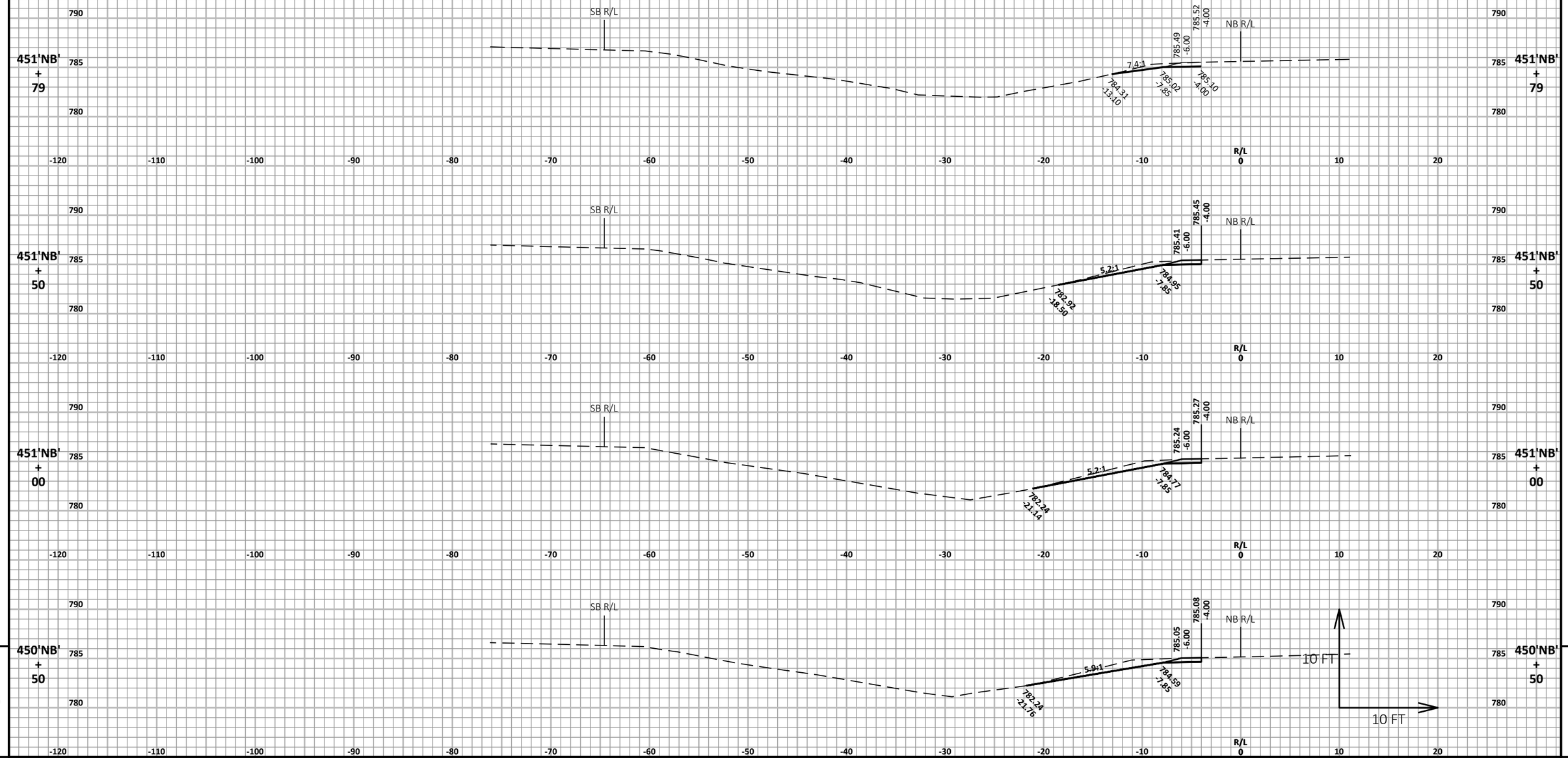
PROJECT NO: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2 REMOVAL	SHEET 355	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090421-xs

PLOT DATE : 4/22/2021 12:37 PM PLOT BY : ANDY WESTBROOK 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: 1166-04-82	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: CROSSOVER 2 REMOVAL	SHEET 356	E

FILE NAME : N:\3000880.00\CIVIL 3D\SHEETSPLAN\11660482-090400-XS.DWG
LAYOUT NAME - 11660482-090422-xs

PLOT DATE : 4/22/2021 12:37 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

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