GRE | OCTOBER 2026

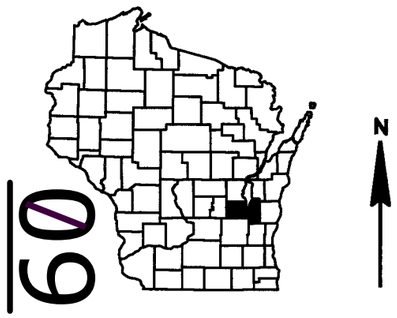
PROJECT ID: 1100-56-70/71
WITH: N/A

COUNTY: FOND DU LAC

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 = 434



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

FOND DU LAC - OSHKOSH

USH 151 - CTH D

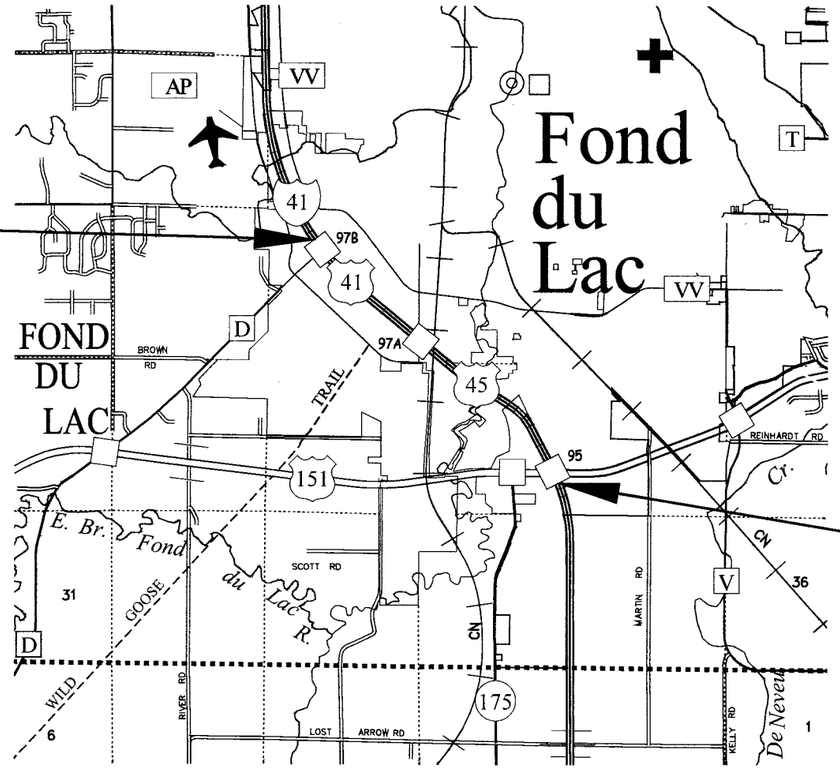
IH 41

FOND DU LAC COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1100-56-70		
1100-56-71	WISC 2027019	1

STATE PROJECT NUMBER
1100-56-70

STATE PROJECT NUMBER
1100-56-71



END PROJECT 1100-56-70
STA 2328+40

BEGIN PROJECT 1100-56-70
STA 2160+50
Y=368011.179
X=818234.408

DESIGN DESIGNATION

A.A.D.T.	2027	=	46,230
A.A.D.T.	2047	=	54,020
D.H.V.		=	5,600
D.D.		=	56/44
T.		=	21.7%
DESIGN SPEED		=	70 MPH
ESALS		=	45,000,000 PCC

CONVENTIONAL SYMBOLS

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

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

LAYOUT
SCALE 0 1 MI

1100-56-70 NET LENGTH OF CENTERLINE = 3.180 MI
1100-56-71 NET LENGTH OF CENTERLINE = 0.000 MI
TOTAL NET LENGTH OF CENTERLINE = 3.180 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), FOND DU LAC 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

GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS

WISCONSIN
BENJAMIN L. OITZINGER
E-36149
NEENAH, WI
PROFESSIONAL ENGINEER

DATE: 7-23-2026
BENJAMIN L. OITZINGER, PE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	GREMMER & ASSOCIATES, INC.
Designer	GREMMER & ASSOCIATES, INC.
Project Manager	RYAN ERDMANN, PE
Regional Examiner	NORTHEAST REGION
Regional Supervisor	SCOTT EBEL, PE

APPROVED FOR THE DEPARTMENT

DATE: 7/27/2026 (Signature)

E

FILE NAME : S:\CURRPROJ\FONDDUCO\141-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-010101-TI.DWG PLOT DATE : 7/23/2026 2:37 PM PLOT BY : BENJAMIN OITZINGER PLOT NAME :

GENERAL NOTES

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

PAVEMENT LIMITS AT RAMPS ARE TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

STATION AND OFFSET OF BEAM GUARD WHEN CONNECTING TO EXISTING STRUCTURE ARE APPROXIMATE AND SHALL BE ADJUSTED TO MATCH INTO THE EXISTING CONDITION.

ROTATE MANHOLE COVERS TO MATCH LANE LINES OR CENTER OF LANE AS DIRECTED BY THE ENGINEER IN THE FIELD.

NO WORK SHALL BE DONE OUTSIDE OF THE SLOPE INTERCEPTS WITHIN WETLAND AREAS.

ALIGNMENT SHOWN IN THE PLAN IS FOR REFERENCE ONLY. THE CENTERLINE OF ROADWAY TO BE DETERMINED IN THE FIELD BASED ON THE EXISTING ROADWAY

ABBREVIATIONS

AGG	AGGREGATE
AH	AHEAD
ASPH	ASPHALT
BK	BACK
BAD	BASE AGGREGATE DENSE
BM	BENCHMARK
CC	CENTER OF CURVATURE
CE	COMMERCIAL ENTRANCE
C&G	CURB AND GUTTER
C/L	CENTER LINE
CONC	CONCRETE
CY	CUBIC YARD
D	DEGREE OF CURVE
Δ	DELTA
E	EXTERNAL DISTANCE FROM MIDPOINT OF CIRCULAR CURVE FROM ANGLE INTERSECTION
ELEV	ELEVATION
FE	FIELD ENTRANCE
HMA	HOT MIX ASPHALT
L	LENGTH OF CURVE
LON	LENGTH OF NEED
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
M/L	MATCHLINE
PAVT	PAVEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
R	RADIUS OF CURVE
R/L	REFERENCE LINE
REQ'D	REQUIRED
RO	RUN OFF LENGTH
RT	RIGHT
SALV	SALVAGED
SDD	STANDARD DETAIL DRAWING
SE	SUPERELEVATION
SEG	SEGMENT
SF	SQUARE FOOT
STA	STATION
SY	SQUARE YARD
T	TANGENT LENGTH
TYP	TYPICAL
V	VELOCITY OR DESIGN SPEED

REFERENCE LINE CALL OUTS

'A'	USH 151 NORTHBOUND OFF RAMP
'B'	USH 151 NORTHBOUND ON RAMP
'C'	USH 151 SOUTHBOUND OFF RAMP
'D'	USH 151 SOUTHBOUND ON RAMP
'E'	HICKORY ST NORTHBOUND OFF RAMP
'F'	HICKORY ST NORTHBOUND ON RAMP
'G'	HICKORY ST SOUTHBOUND OFF RAMP
'H'	HICKORY ST SOUTHBOUND ON RAMP
'I'	MILITARY RD NORTHBOUND OFF RAMP
'J'	MILITARY RD NORTHBOUND ON RAMP
'K'	MILITARY RD SOUTHBOUND OFF RAMP
'L'	MILITARY RD SOUTHBOUND ON RAMP
'HK'	HICKORY STREET
'HS'	HORSESHOE LANE
'MT'	MILITARY ROAD
'SS'	STORM SEWER ALIGNMENT
'US'	USH 151

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
PLAN DETAILS
EROSION CONTROL PLAN
STORM SEWER LAYOUT
PAVEMENT MARKING PLAN
TRAFFIC CONTROL
DETOUR
ALIGNMENT DIAGRAM

DESIGN CONTACT

BENJAMIN OITZINGER, P.E.
GREMMER & ASSOCIATES, INC.
93 S. PIONEER ROAD, SUITE 300
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EMAIL: b.oitzinger@gremmerassociates.com

DNR AREA LIAISON

MARTY DILLENBURG
WISCONSIN DEPT. OF NATURAL RESOURCES
NORTHEAST REGIONAL HEADQUARTERS
2984 SHAWANO AVENUE
GREEN BAY, WI 54313-6727
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EMAIL: marty.dillenburg@wisconsin.gov

NE REGION PROJECT MANAGER

RYAN ERDMANN, P.E.
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EMAIL: ryand.erdmann@dot.wi.gov

NE REGION SURVEY COORDINATOR

PHILLIP RISNER
WISCONSIN DEPARTMENT OF TRANSPORTATION
944 VANDERPERREN WAY
GREEN BAY, WI 54304
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EMAIL: phillip.risner@dot.wi.gov

FOND DU LAC COUNTY CONTACT

RYAN SOMMER
HIGHWAY ENGINEER
1820 SOUTH HICKORY STREET
P.O.BOX 1234
FOND DU LAC, WI 54937
PHONE: (920) 929-3408
EMAIL: ryan.sommer@fdlco.wi.gov

NE REGION TRAFFIC SIGNALS CONTACT

KIMBERLY BRADLEY
WISCONSIN DEPARTMENT OF TRANSPORTATION
944 VANDERPERREN WAY
GREEN BAY, WI 54304
PHONE: (920) 366-7521
EMAIL: Kimberly.Bradley@dot.wi.gov

UTILITIES

ELECTRIC

ALLIANT ENERGY
883 WEST SCOTT STREET
FOND DU LAC, WI 54937
ATTN: BILL BASTIAN
PHONE: (920) 322-6716
EMAIL: williambastian@alliantenergy.com

GAS

ALLIANT ENERGY
883 WEST SCOTT STREET
FOND DU LAC, WI 54937
ATTN: BILL BASTIAN
PHONE: (920) 322-6716
EMAIL: williambastian@alliantenergy.com

HIGH PRESSURE GAS

ANR PIPELINE CO
10255 SOUTH WASHINGTON AVENUE
MARSHFIELD, WI 54449
ATTN: RYAN CAROLFI
PHONE: (920) 344-4653
EMAIL: ryan_carolfi@tcenergy.com

COMMUNICATIONS

AT&T WISCONSIN
70 EAST DIVISION STREET
FOND DU LAC, WI 54935
ATTN: CHARLES BARTLET
PHONE: (920) 410-5104
EMAIL: cb1461@att.com

ELECTRIC

ATC MANAGEMENT, INC.
P.O. BOX 47
WAUKESHA, WI 53186
ATTN: CHRIS DAILEY
PHONE: (262) 506-6884
EMAIL: cdailey@atcllc.com

SEWER

CITY OF FOND DU LAC
DEPARTMENT OF PUBLIC WORKS
160 SOUTH MACY STREET
P.O. BOX 150
FOND DU LAC, WI 54935-0150
ATTN: CHRIS JOHNSON
PHONE: (920) 322-3449
MOBILE: (920) 204-5111
EMAIL: cjohnson@fdl.wi.gov

WATER

CITY OF FOND DU LAC
DEPARTMENT OF PUBLIC WORKS
109 NORTH MACY STREET
FOND DU LAC, WI 54935
ATTN: TROY KRUZICK
PHONE: (920) 322-3694
MOBILE: (920) 539-4673
EMAIL: tkruzick@fdl.wi.gov

COMMUNICATIONS

PAETEC COMMUNICATIONS, LLC
969 WAUBE LANE
GREEN BAY, WI 54304
ATTN: LORI KETTER
PHONE: (920) 410-6902
EMAIL: Lori.Ketter@windstream.com

COMMUNICATIONS

NET LEC LLC
470 SECURITY BOULEVARD
GREEN BAY WI, 54313
ATTN: RICK VINCENT
PHONE: (920) 617-7316
EMAIL: rick.vincent@nsight.com

COMMUNICATIONS

SPECTRUM
N3760 COUNTY ROAD DJ
JUNEAU, WI 53039
ATTN: RON FRASE
PHONE: (608) 438-9648
EMAIL: ronald.frase@spectrum.com

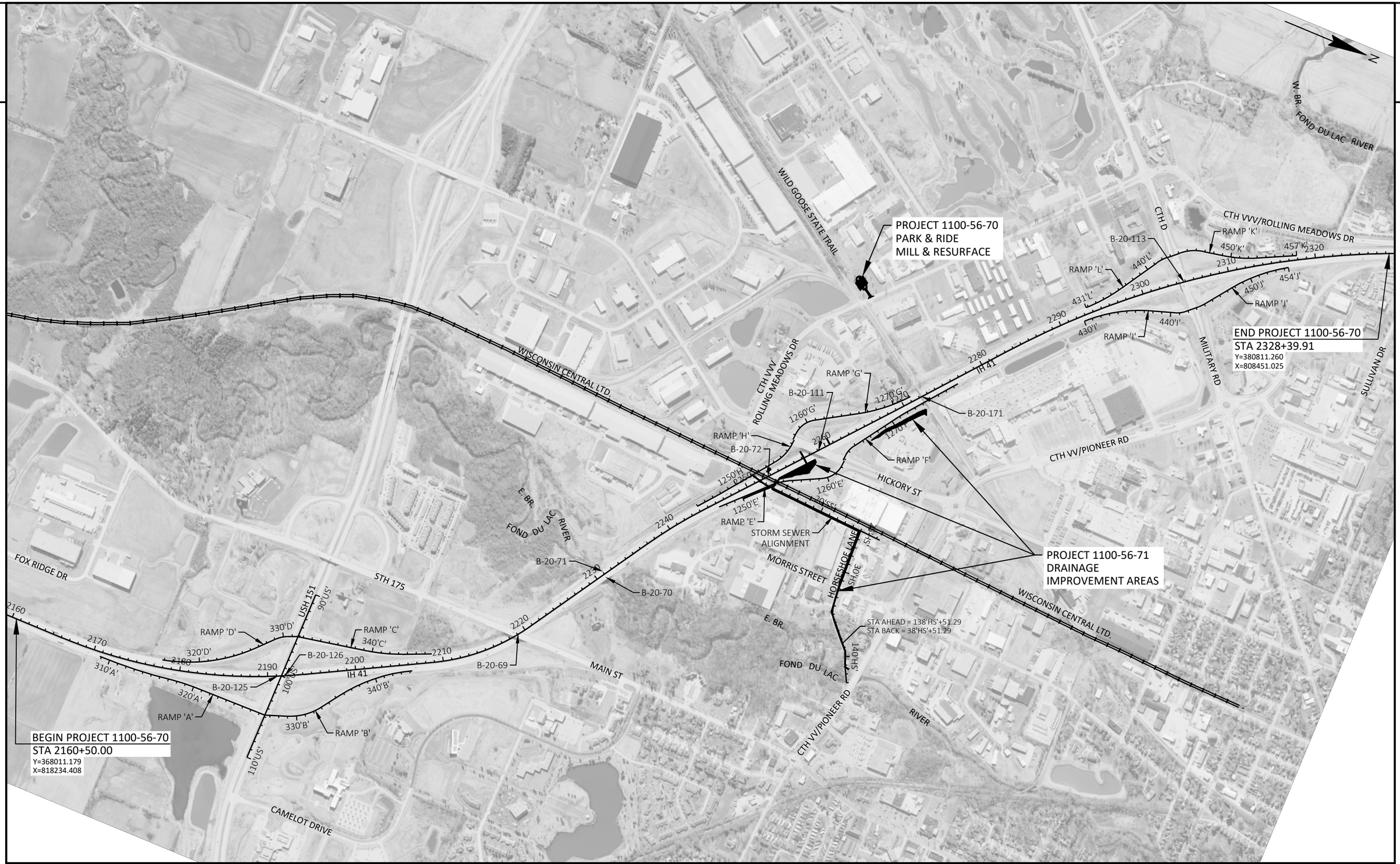
COMMUNICATIONS

TDS TELECOM
525 JUNCTION ROAD
MADISON, WI 53717
ATTN: RUSS KENNY
PHONE: (906) 282-6434
EMAIL: Russ.Kenny@tdstelecom.com

COMMUNICATIONS

WIN, LLC
4955 BULLIS FARM ROAD
EAU CLAIRE, WI 54701
ATTN: ERIC BECKER
PHONE: (715) 797-2724
EMAIL: eric.becker@wintechnology.com

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



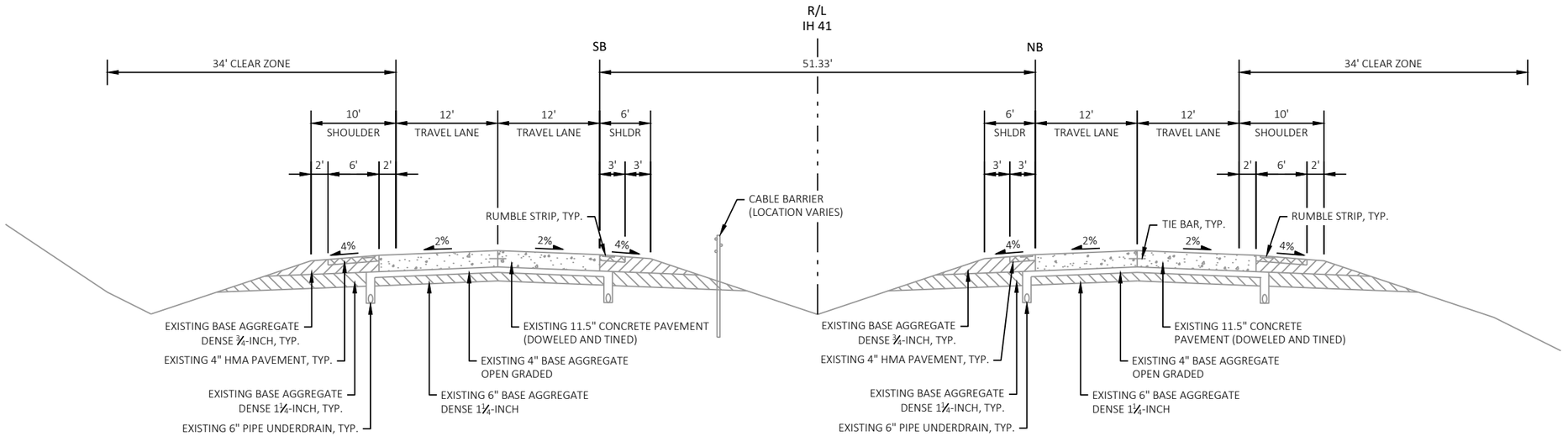
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FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-020201-PO.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 8/24/2026 9:47 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : NTS

WISDOT/CADDS SHEET 42

2



TYPICAL EXISTING SECTION

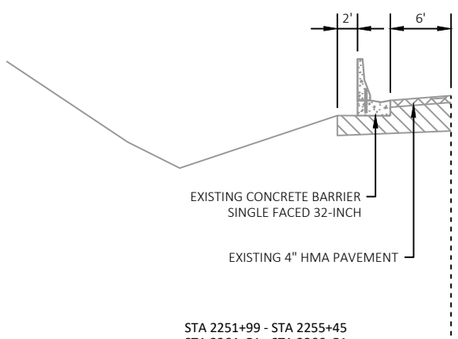
IH 41
STA 2160+50 - STA 2233+35

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 4	E

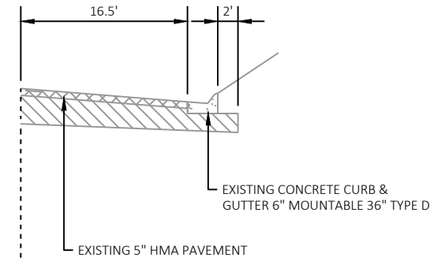
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LAYOUT NAME - Sheet-01

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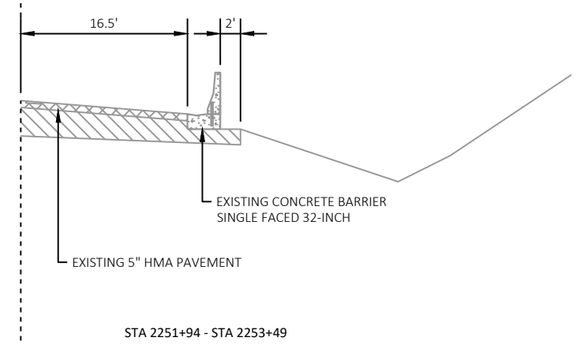
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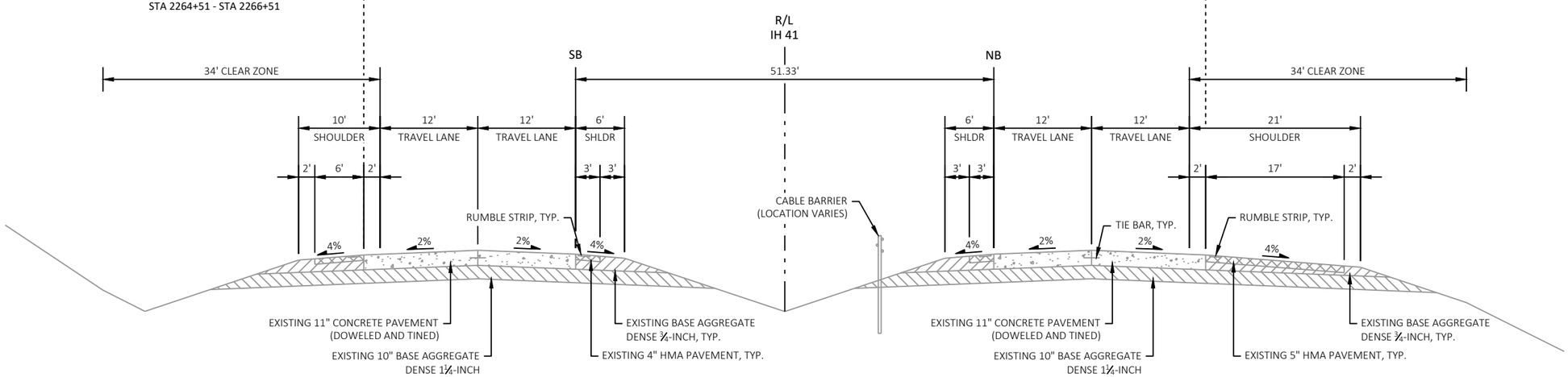
STA 2251+99 - STA 2255+45
STA 2264+51 - STA 2266+51



STA 2258+36 - STA 2268+05



STA 2251+94 - STA 2253+49



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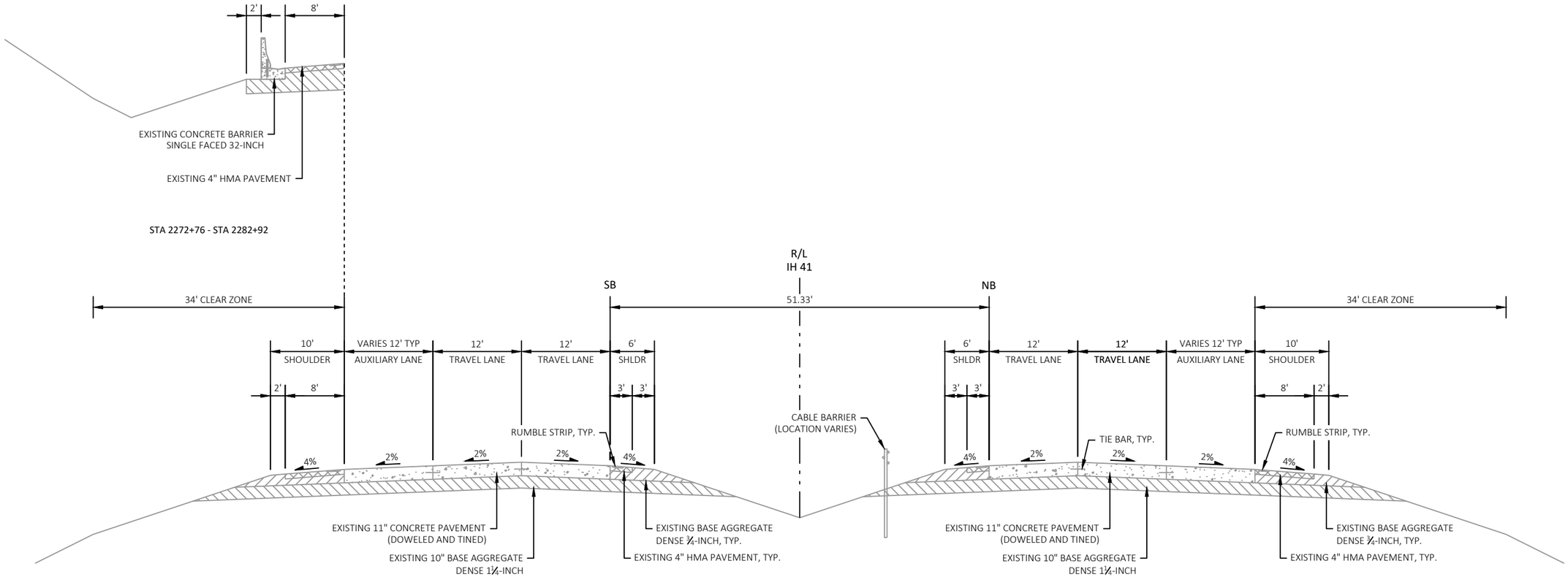
IH 41
STA 2233+35 - STA 2272+06

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 5	E

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LAYOUT NAME - Sheet-02

PLOT DATE : 8/24/2026 9:47 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:15 FT

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TYPICAL EXISTING SECTION

IH 41

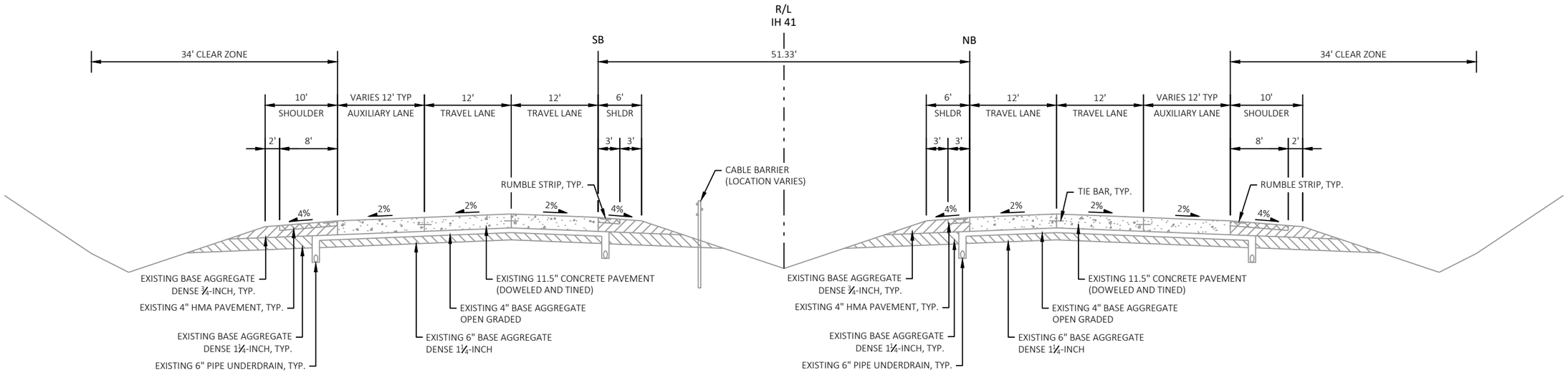
STA 2272+06 - STA 2285+85

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LAYOUT NAME - Sheet-03

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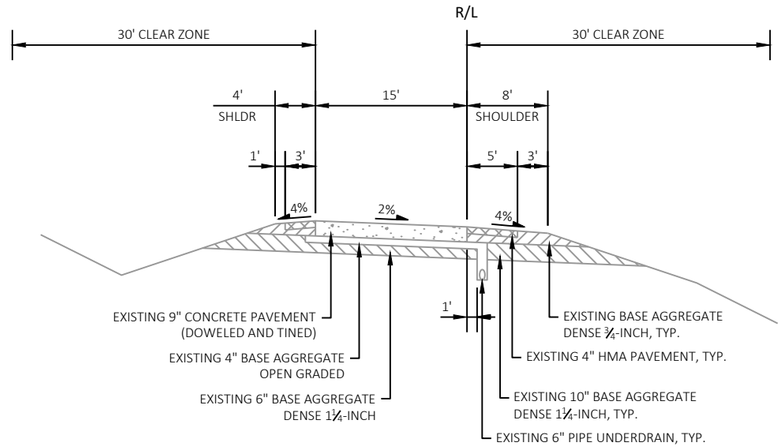
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TYPICAL EXISTING SECTION

IH 41
STA 2285+85 - STA 2328+40

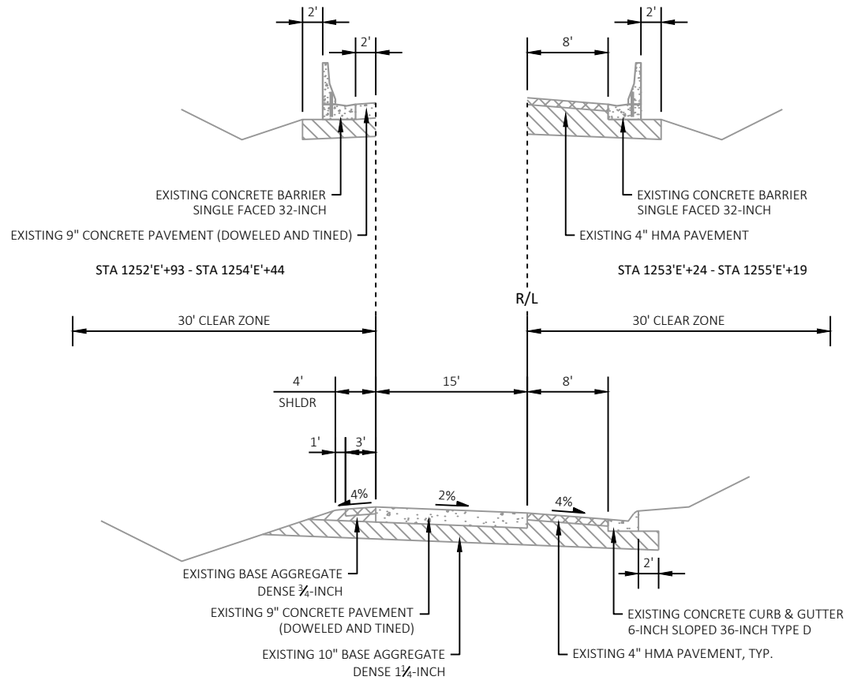
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 7	E



TYPICAL EXISTING SECTION

USH 151 RAMPS 'A', 'B', 'C', & 'D'

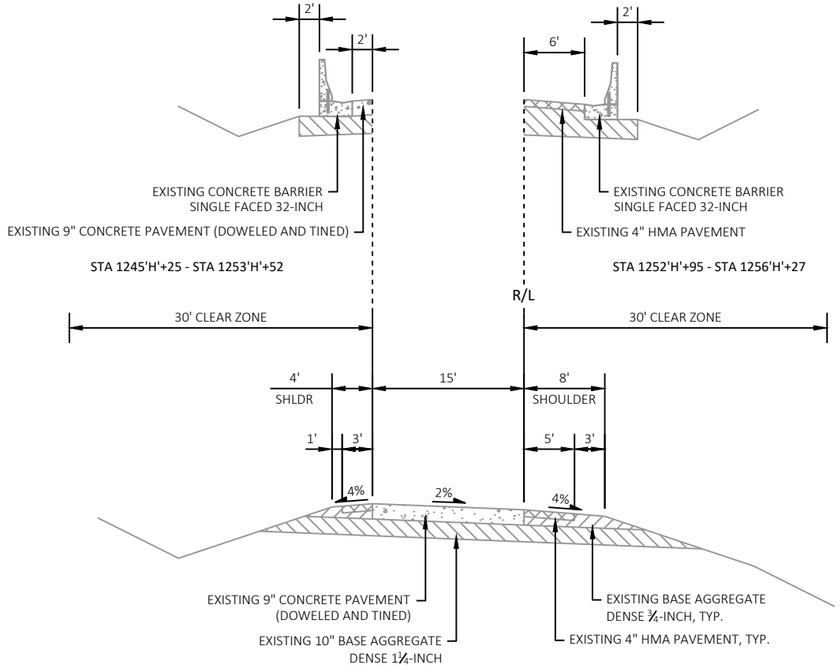
LOOKING IN DIRECTION OF TRAVEL



TYPICAL EXISTING SECTION

HICKORY STREET RAMP 'E'

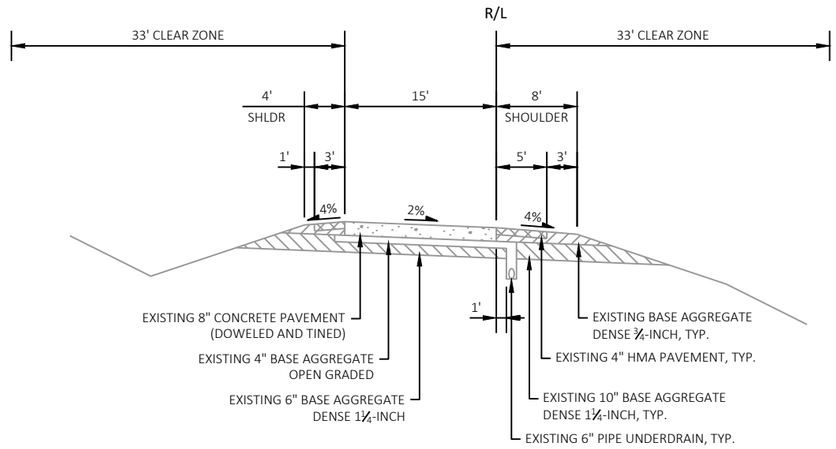
LOOKING IN DIRECTION OF TRAVEL



TYPICAL EXISTING SECTION

HICKORY STREET RAMPS 'F', 'G', & 'H'

LOOKING IN DIRECTION OF TRAVEL



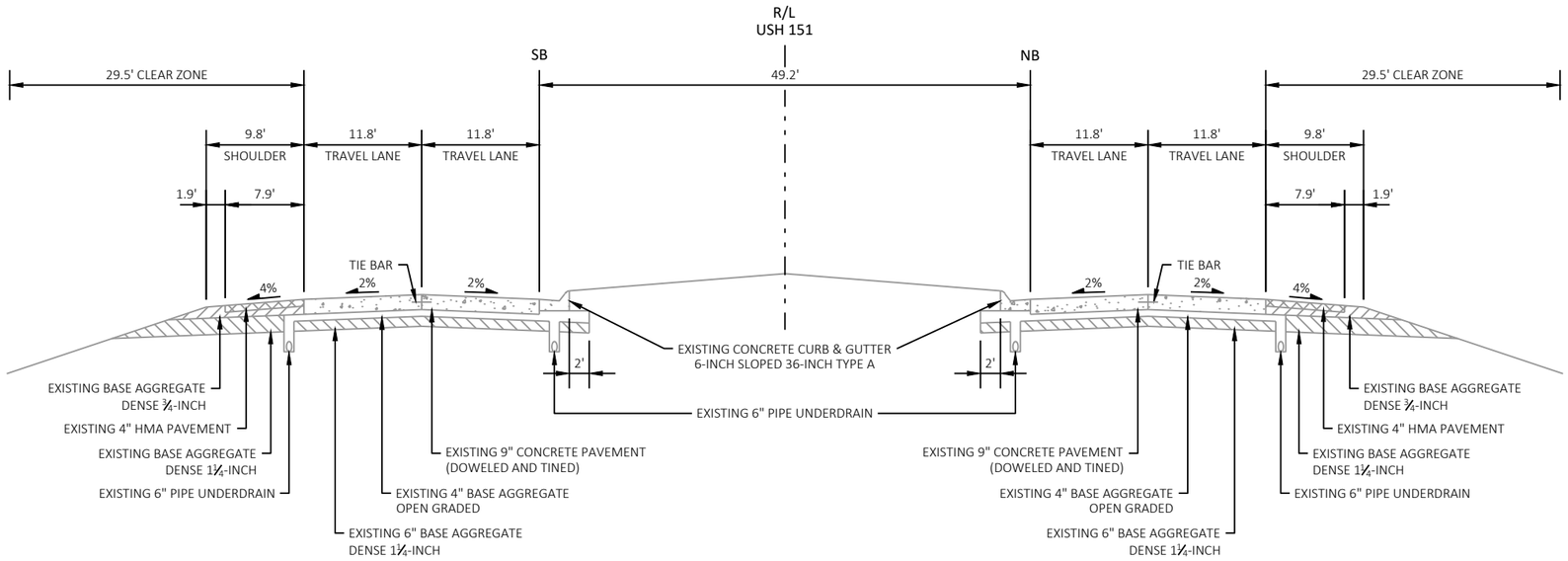
TYPICAL EXISTING SECTION

MILITARY ROAD RAMPS 'I', 'J', 'K', & 'L'

LOOKING IN DIRECTION OF TRAVEL

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 8	E

2



TYPICAL EXISTING SECTION

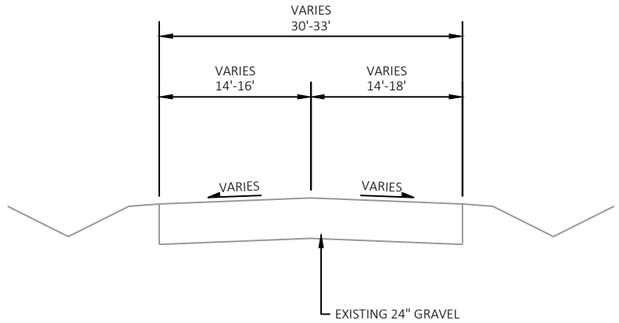
USH 151
STA 91'US'+97.14 - STA 94'US'+75.04

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 9	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-020301-TS.DWG
LAYOUT NAME - Sheet-06

PLOT DATE : 8/24/2026 9:47 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:15 FT

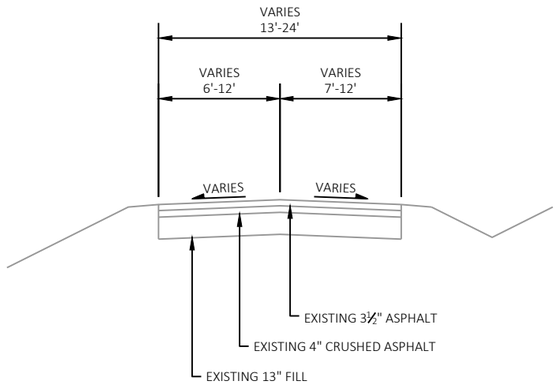
2



TYPICAL EXISTING SECTION

HORSESHOE LANE

STA 25'HS'+07 - STA 31'HS'+50



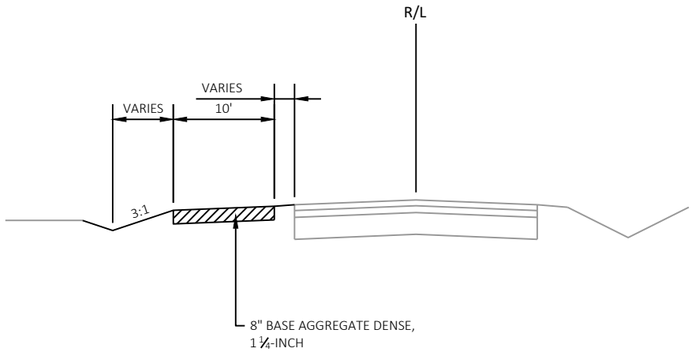
TYPICAL EXISTING SECTION

HORSESHOE LANE

STA 31'HS'+50 - STA 141'HS'+60

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 10	E

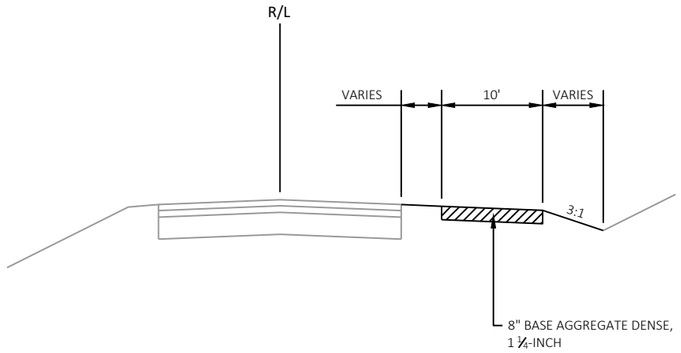
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TYPICAL TEMPORARY SECTION

HORSESHOE LANE

STA 32'HS'+10 - STA 34'HS'+85



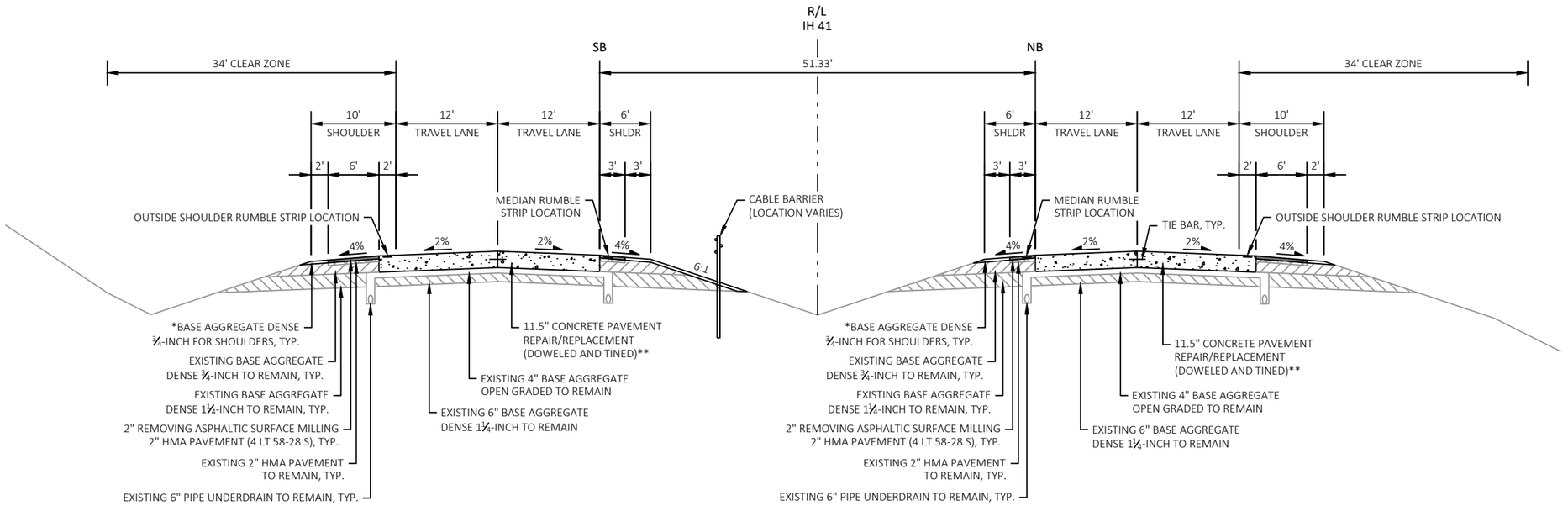
TYPICAL TEMPORARY SECTION

HORSESHOE LANE

STA 35'HS'+30 - STA 38'HS'+00

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 11	E

2



* BASE AGGREGATE DENSE ¾-INCH FOR SHOULDERS AS NECESSARY TO RE-ESTABLISH SHOULDER SLOPES

** SEE PLAN SHEETS FOR LOCATIONS

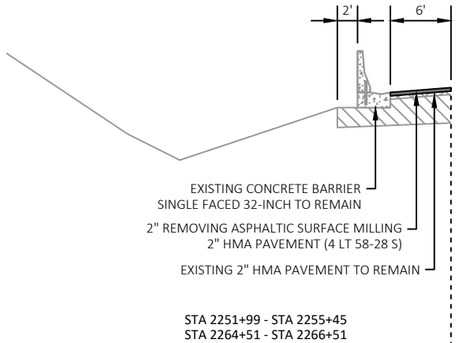
TYPICAL FINISHED SECTION

IH 41
STA 2160+50 - STA 2233+35

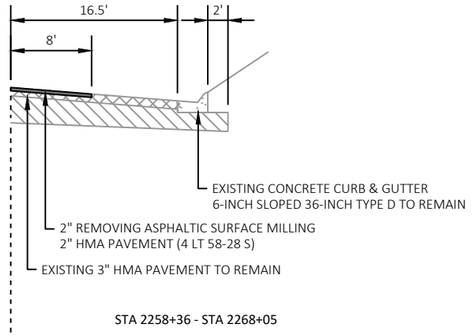
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 12	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-020301-TS.DWG
LAYOUT NAME - Sheet-09

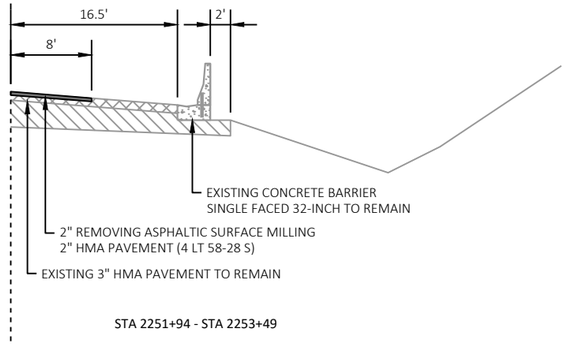
PLOT DATE : 8/24/2026 9:47 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:15 FT



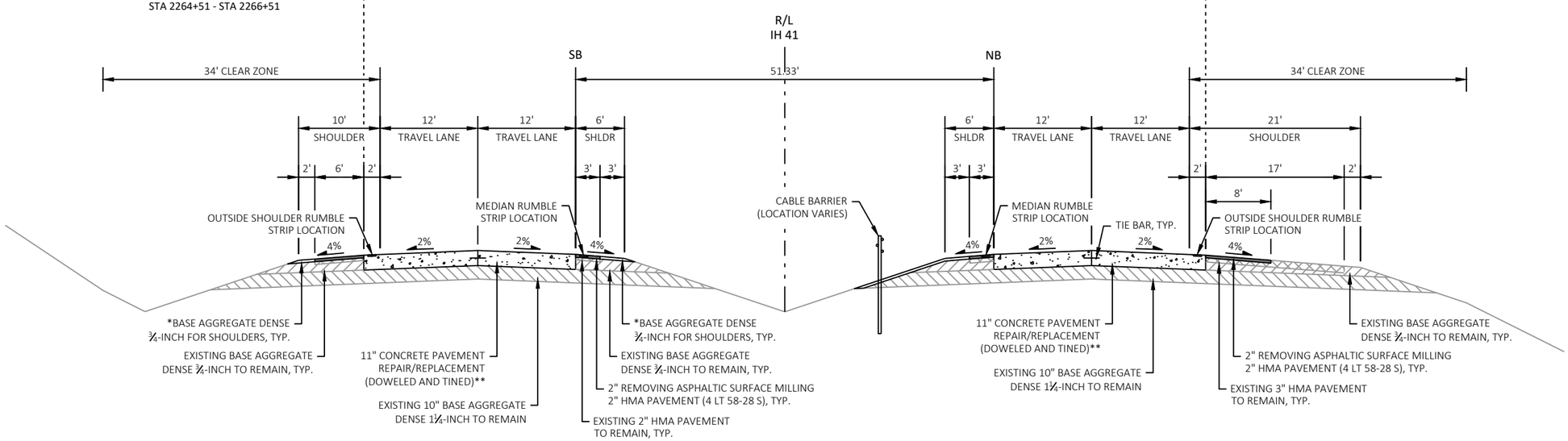
STA 2251+99 - STA 2255+45
STA 2264+51 - STA 2266+51



STA 2258+36 - STA 2268+05



STA 2251+94 - STA 2253+49



* BASE AGGREGATE DENSE ¾-INCH FOR SHOULDERS AS NECESSARY TO RE-ESTABLISH SHOULDER SLOPES

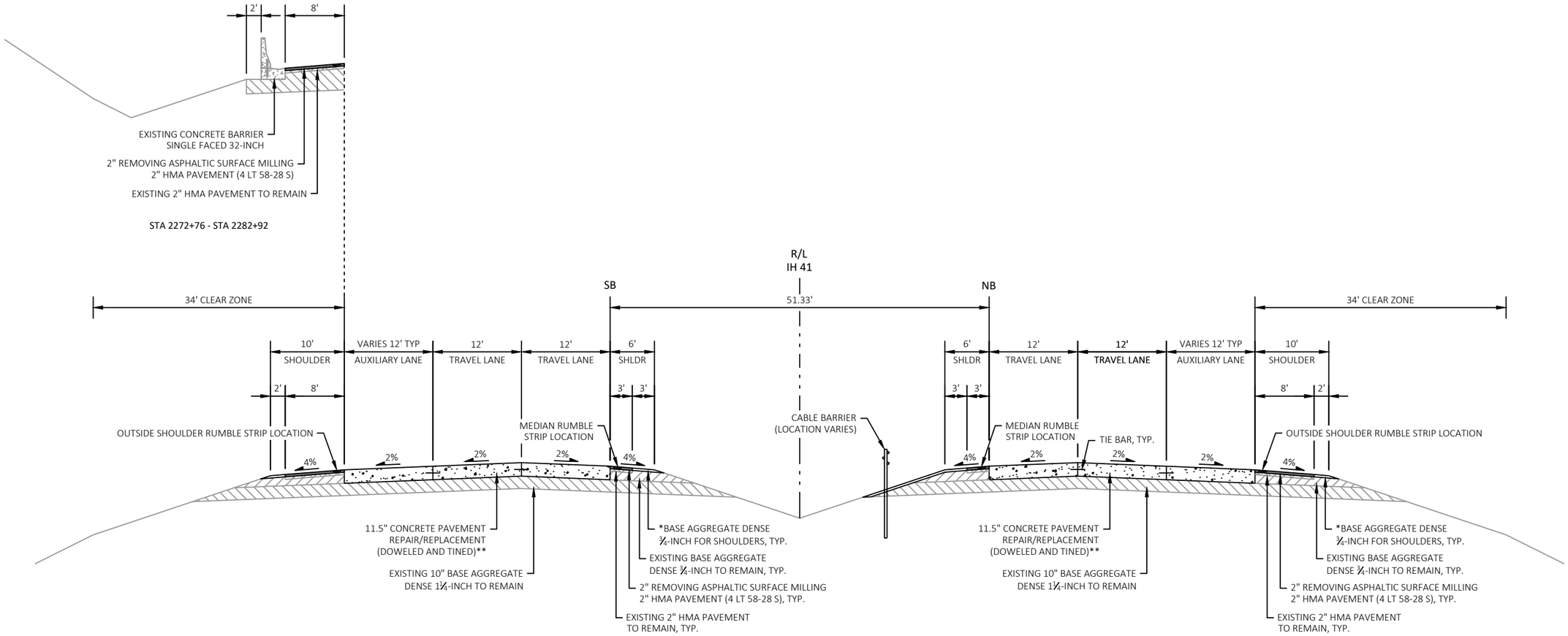
** SEE PLAN SHEETS FOR LOCATIONS

TYPICAL FINISHED SECTION

IH 41
STA 2233+35 - STA 2272+06

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 13	E

2



* BASE AGGREGATE DENSE ¾-INCH FOR SHOULDERS AS NECESSARY TO RE-ESTABLISH SHOULDER SLOPES

** SEE PLAN SHEETS FOR LOCATIONS

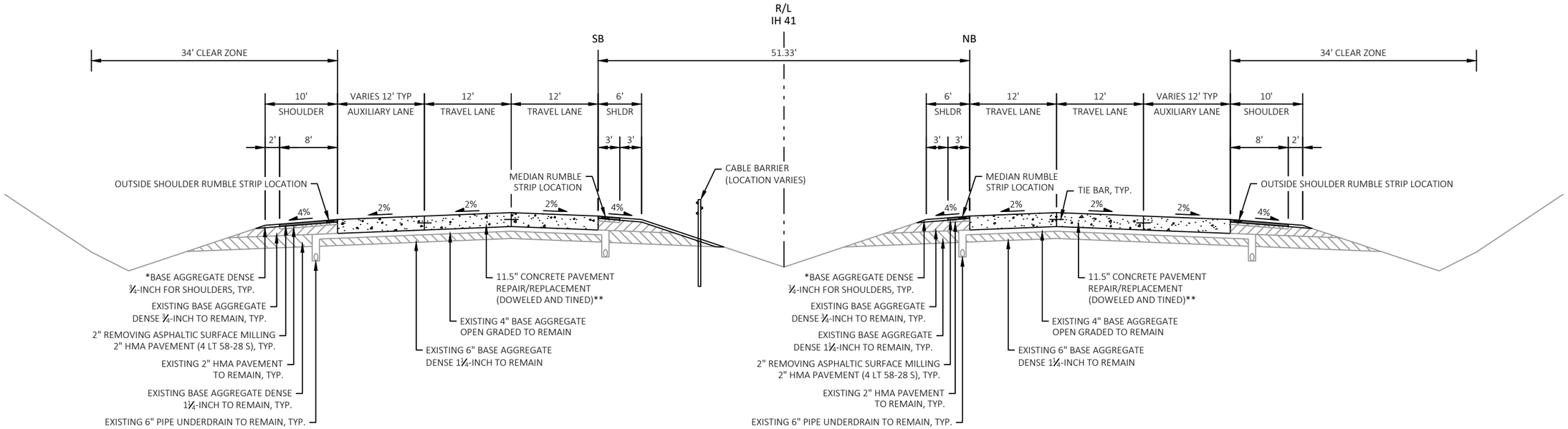
TYPICAL FINISHED SECTION

IH 41

STA 2272+06 - STA 2285+85

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 14	E

2



* BASE AGGREGATE DENSE ¾-INCH FOR SHOULDERS AS NECESSARY TO RE-ESTABLISH SHOULDER SLOPES

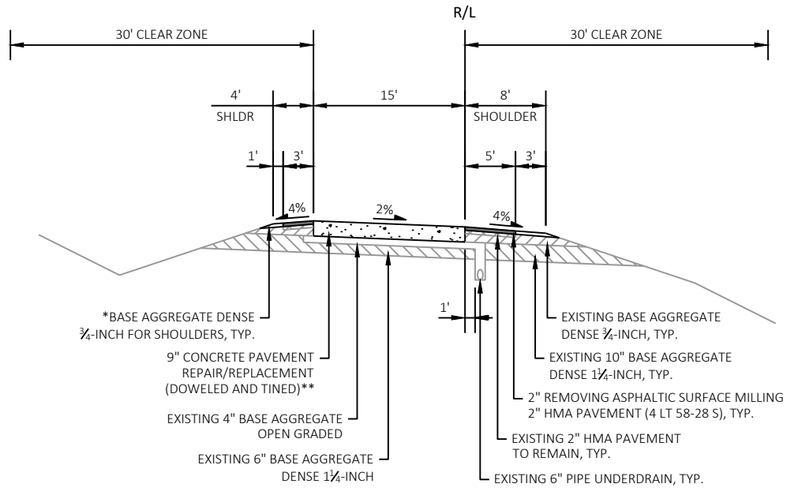
** SEE PLAN SHEETS FOR LOCATIONS

TYPICAL FINISHED SECTION

IH 41

STA 2285+85 - STA 2328+40

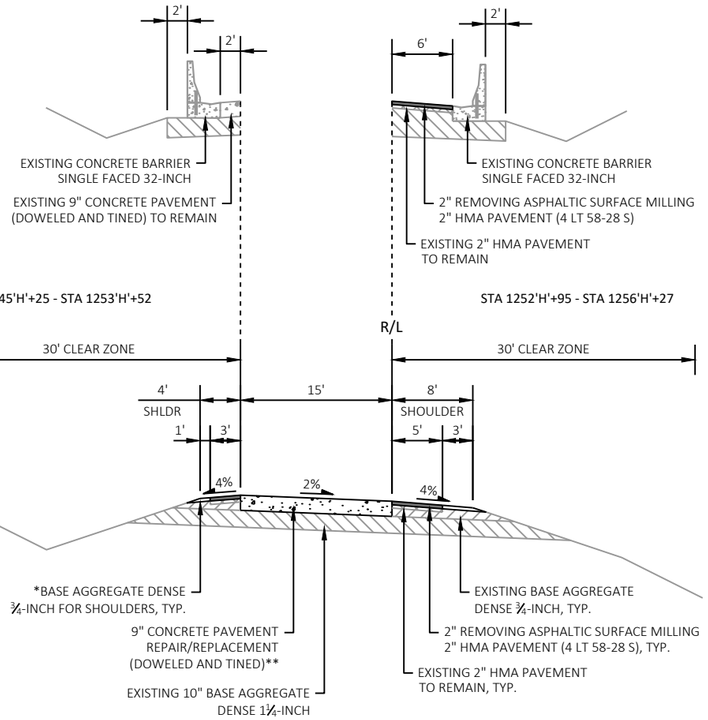
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 15	E



TYPICAL FINISHED SECTION

USH 151 RAMPS 'A', 'B', 'C', & 'D'

LOOKING IN DIRECTION OF TRAVEL



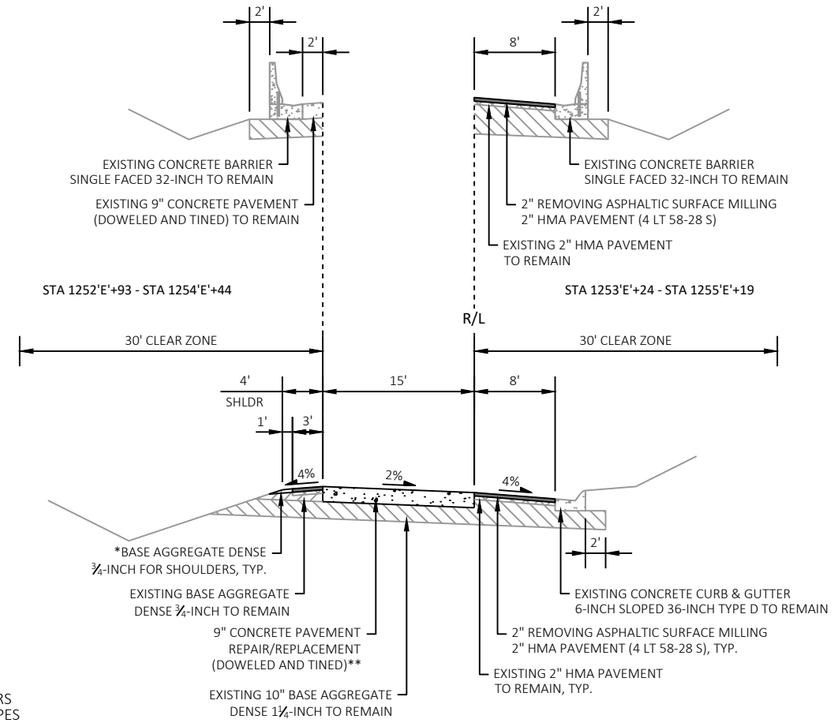
TYPICAL FINISHED SECTION

HICKORY STREET RAMPS 'F', 'G', & 'H'

LOOKING IN DIRECTION OF TRAVEL

* BASE AGGREGATE DENSE ¾-INCH FOR SHOULDERS AS NECESSARY TO RE-ESTABLISH SHOULDER SLOPES

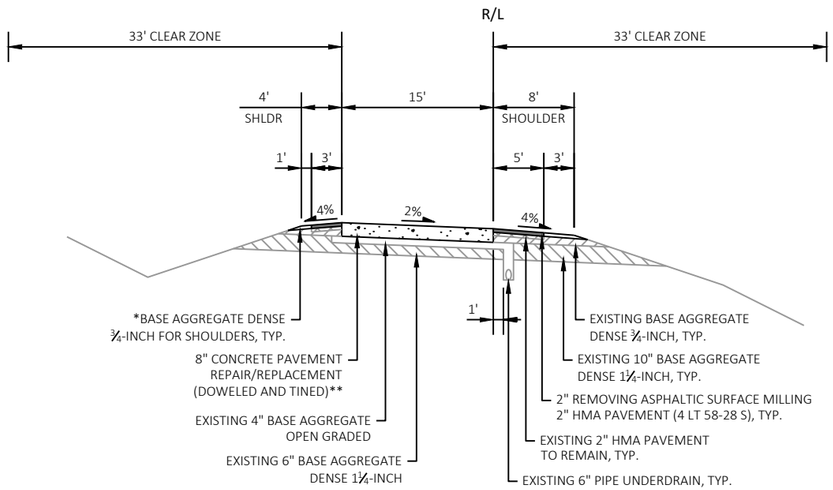
** SEE PLAN SHEETS FOR LOCATIONS



TYPICAL FINISHED SECTION

HICKORY STREET RAMP 'E'

LOOKING IN DIRECTION OF TRAVEL



TYPICAL FINISHED SECTION

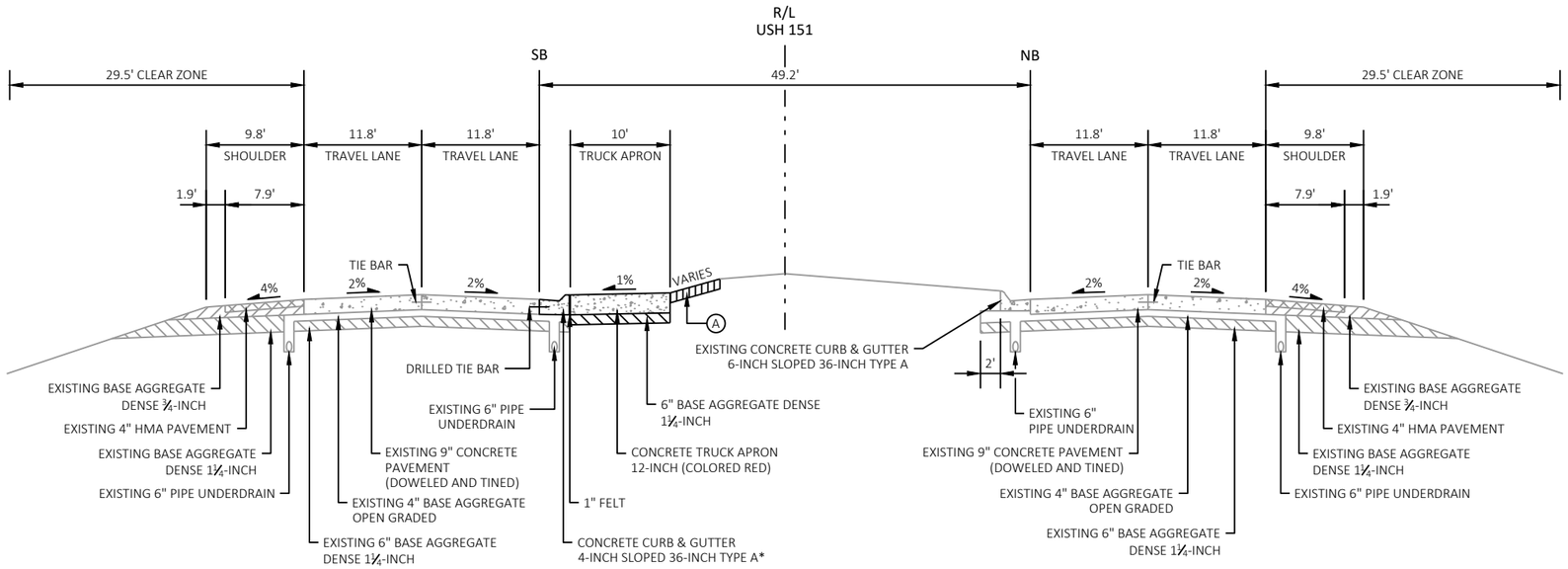
MILITARY ROAD RAMPS 'I', 'J', 'K', & 'L'

LOOKING IN DIRECTION OF TRAVEL

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 16	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-020301-TS.DWG
LAYOUT NAME - Sheet-13
PLOT DATE : 8/24/2026 9:47 AM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:15 FT
WISDOT/CADDS SHEET 42

2



Ⓐ SEED MIX NO. 30, AND EROSION MAT CLASS I TYPE B, TYP

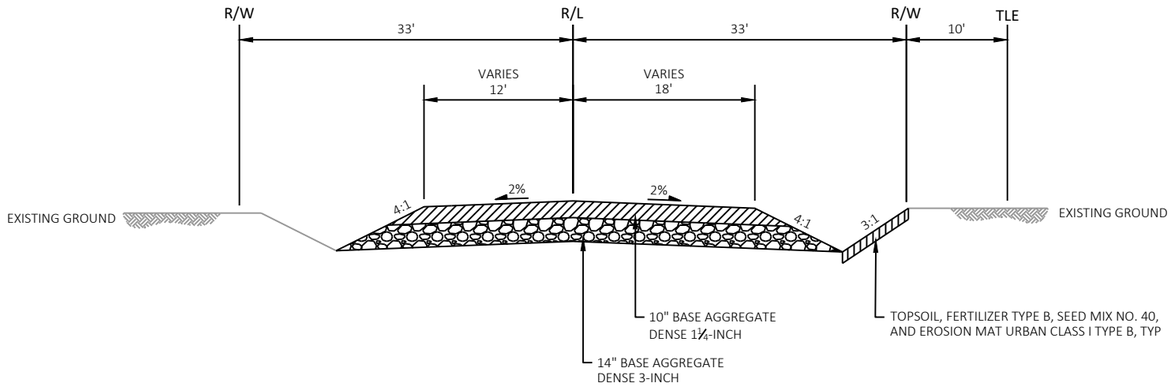
* SEE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION

TYPICAL FINISHED SECTION

USH 151
STA 91'US'+97.14 - STA 94'US'+75.04

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 17	E

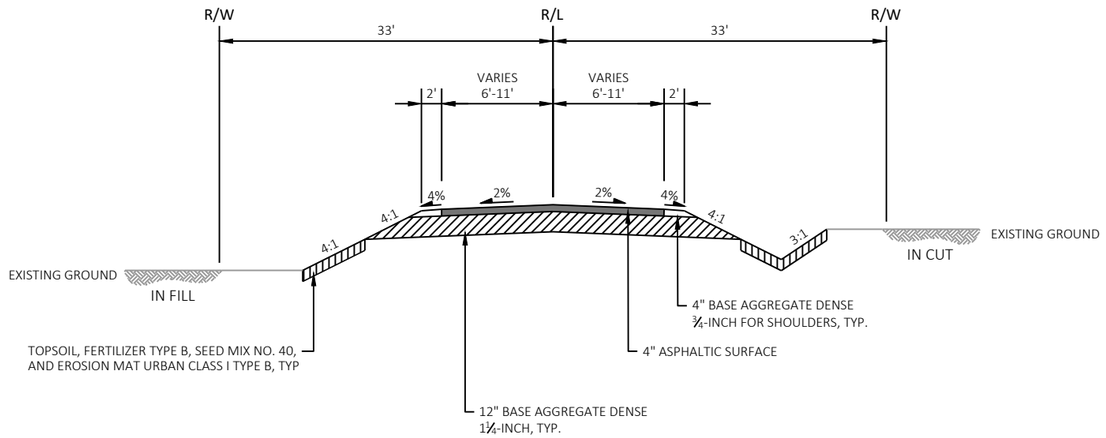
2



TYPICAL FINISHED SECTION

HORSESHOE LANE

STA 25'HS'+07 - STA 31'HS'+50

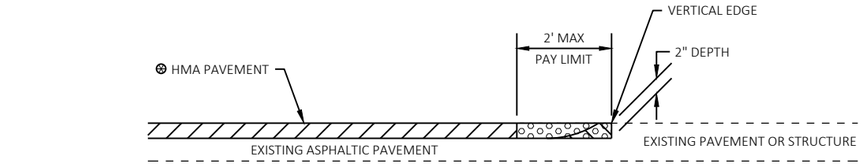


TYPICAL FINISHED SECTION

HORSESHOE LANE

STA 31'HS'+50 - STA 141'HS'+60

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 18	E



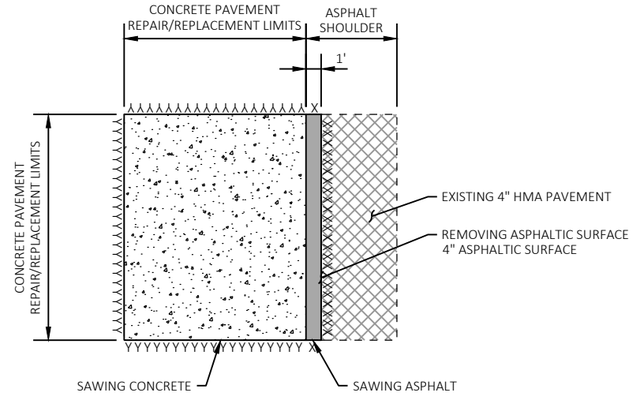
SEE TYPICAL CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

REMOVING ASPHALTIC SURFACE, MILLING

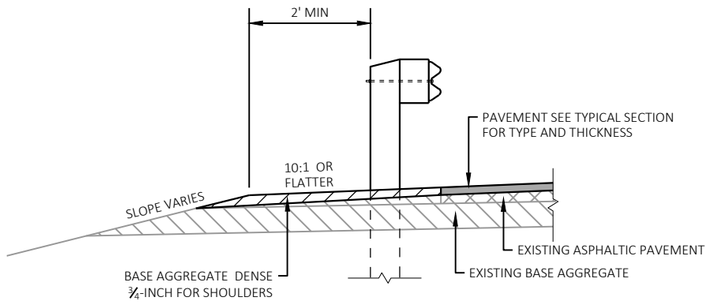
REMOVING ASPHALTIC SURFACE, BUTT JOINTS

REMOVE ASPHALTIC SURFACE WEDGE AT BUTT JOINT TO CREATE VERTICAL EDGE

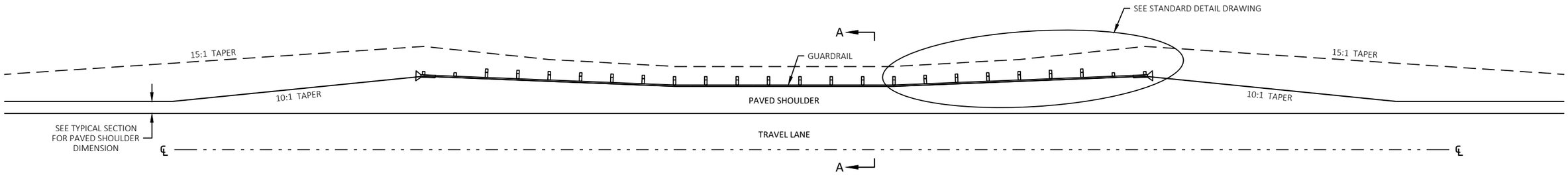
BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)



DETAIL FOR CONCRETE PAVMENT REPAIR/REPLACEMENT AT ASPHALT SHOULDER

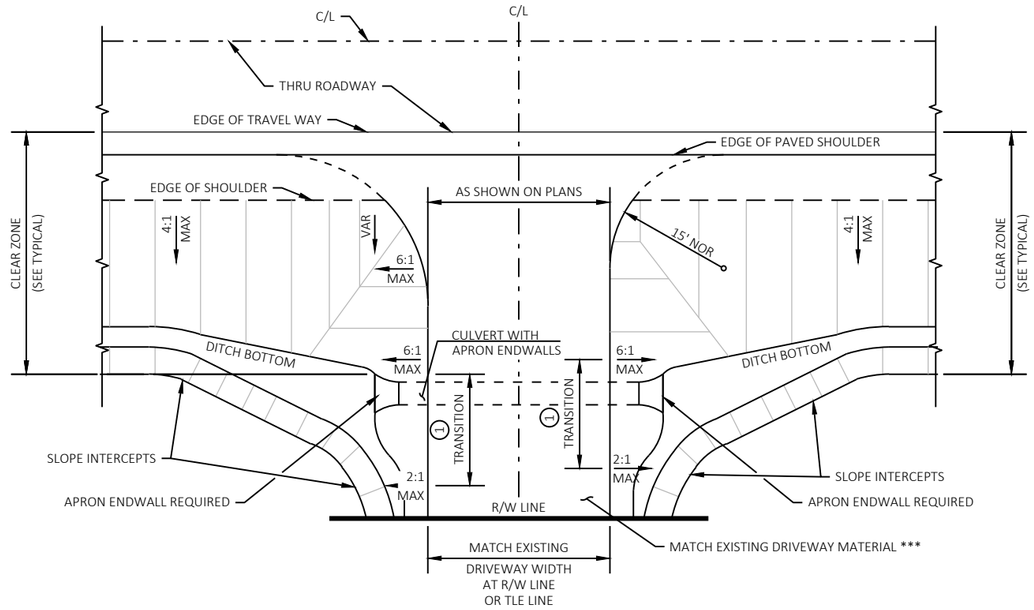


SECTION A-A



DETAIL FOR PAVED SHOULDER AT GUARDRAIL

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 19	E



① TRANSITION TO BE ACCOMPLISHED WITHIN THE RIGHT OF WAY

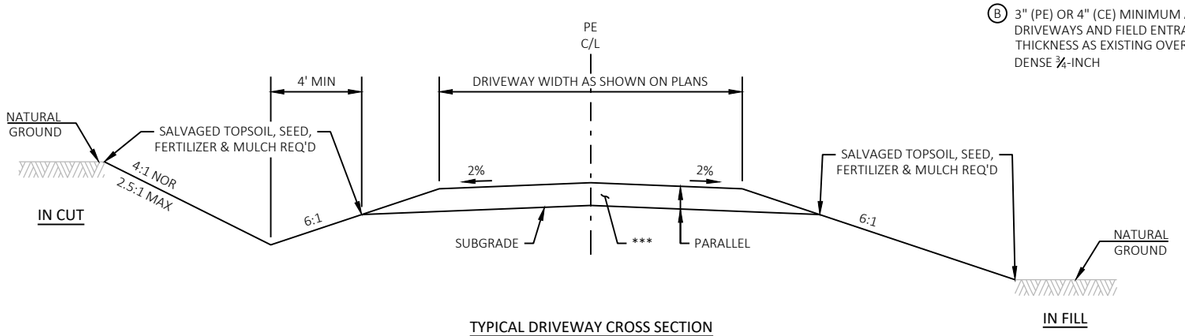
FOR CULVERTS OUTSIDE CLEAR ZONE

FOR CULVERTS WITHIN CLEAR ZONE

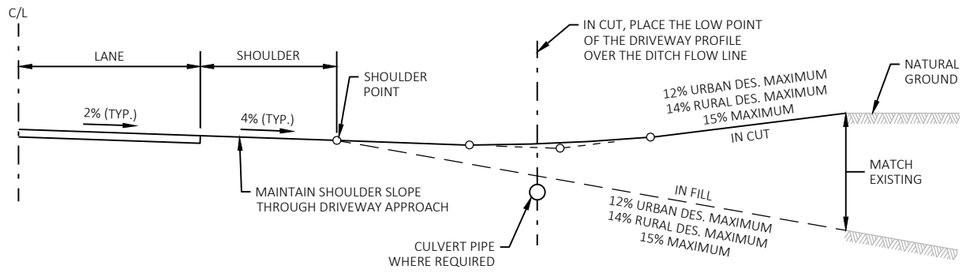
*** (A) 6" BASE AGGREGATE DENSE ¾-INCH

(B) 3" (PE) OR 4" (CE) MINIMUM ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES OR SAME THICKNESS AS EXISTING OVER 6" BASE AGGREGATE DENSE ¾-INCH

RURAL DRIVEWAY PLAN VIEW



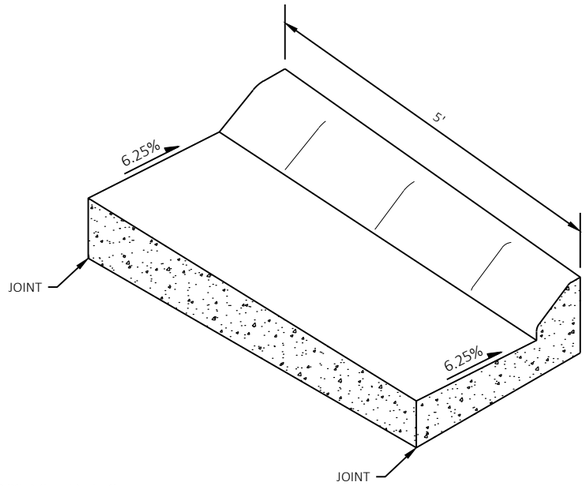
TYPICAL DRIVEWAY CROSS SECTION



TYPICAL DRIVEWAY PROFILE

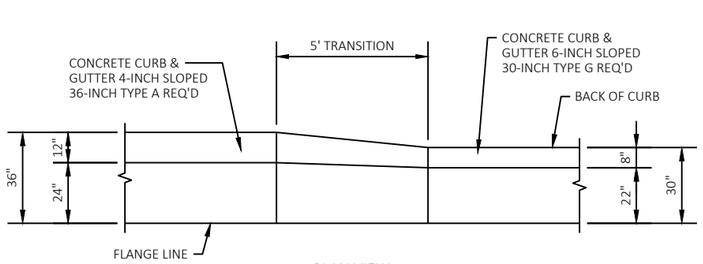
RURAL ENTRANCE DETAIL

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 20	E

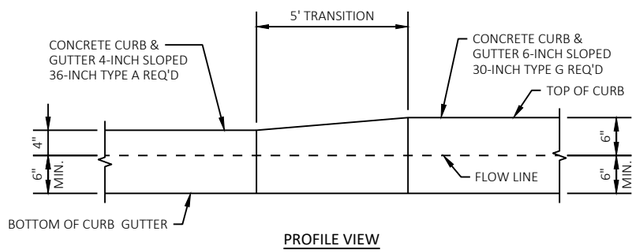


CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A TO
CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G
(TO BE MEASURED AND PAID FOR AS CONCRETE CURB &
GUTTER 4-INCH SLOPED 36-INCH TYPE A)

ISOMETRIC VIEW



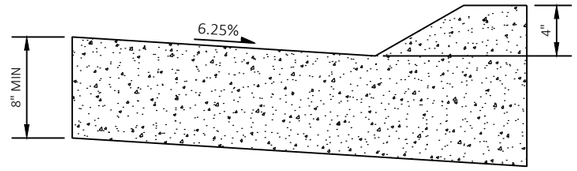
PLAN VIEW



PROFILE VIEW

DETAIL OF CURB & GUTTER TRANSITION

SEE SDD "CONCRETE CURB AND GUTTER"
FOR ALL OTHER PERTINENT INFORMATION

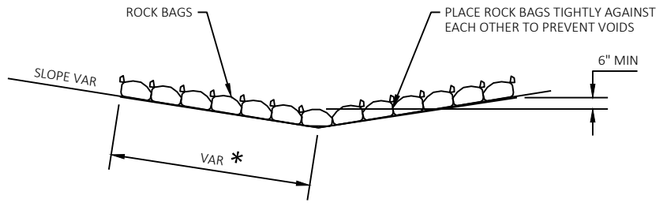


DETAIL OF CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH

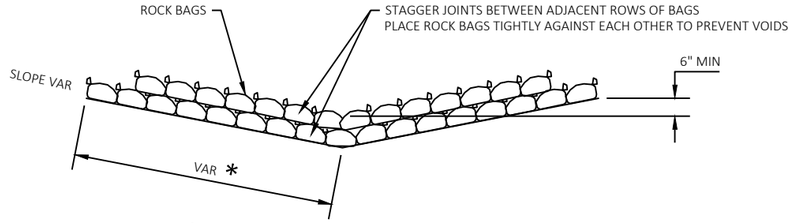
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP- TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .227	.25 .32	.30 .40
SIDE SLOPE- TURF			.25 .32			.27 .34			.28 .36			.25 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 181.440 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 6.948 ACRES (1100-56-70)
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 5.080 ACRES (1100-56-71)

RUNOFF COEFFICIENT TABLE



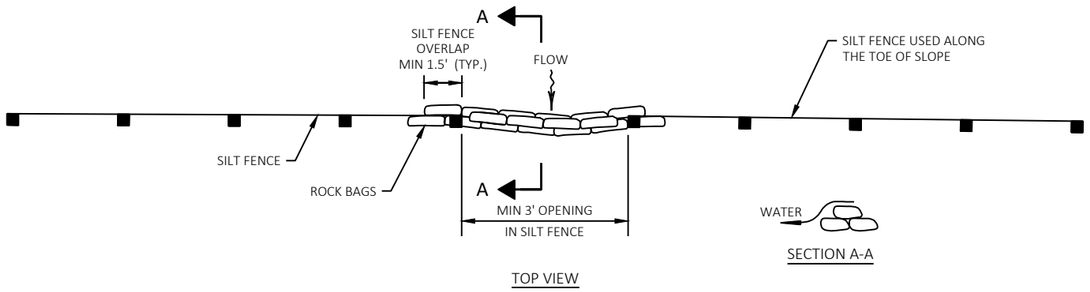
SIDE VIEW (SINGLE LAYER)



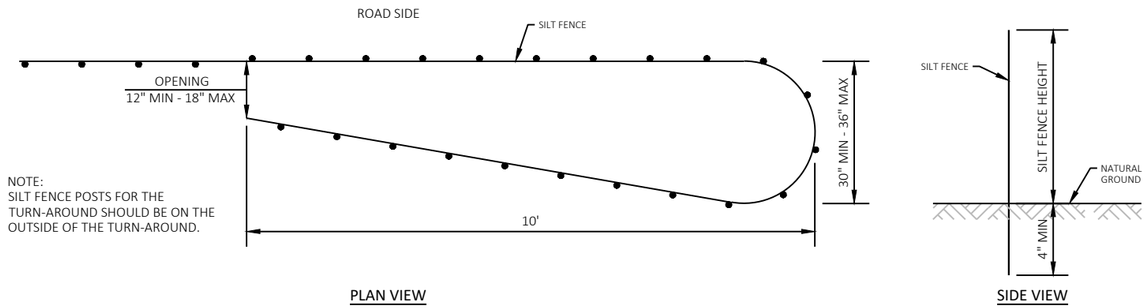
SIDE VIEW (MULTIPLE LAYER)

ROCK BAGS DITCH CHECK

PAID AS ROCK BAGS



ROCK BAGS USED FOR SILT FENCE RELIEF DETAIL

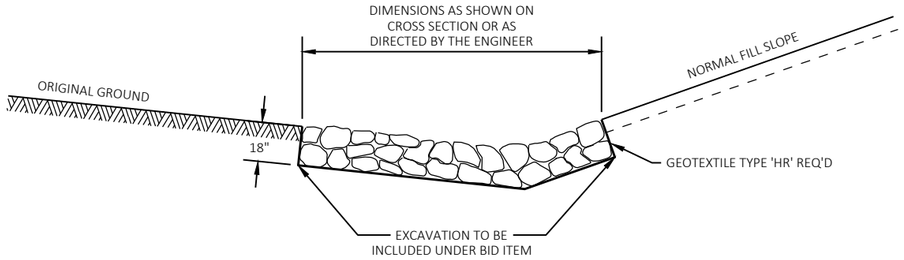


SILT FENCE TURN-AROUND DETAIL

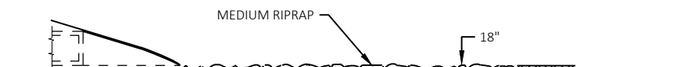
PROJECT NO: 1100-56-70/71	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 22	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021001-CD.DWG
LAYOUT NAME - Sheet-04
PLOT DATE : 8/24/2026 9:47 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : NTS

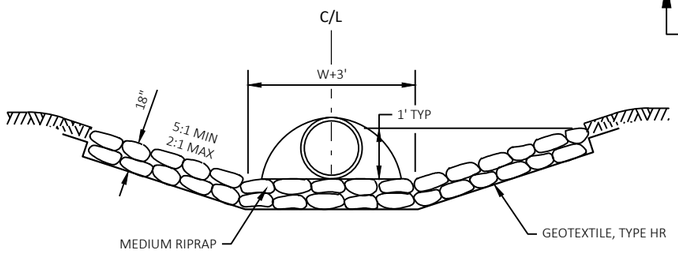
2



DETAIL FOR RIPRAP MEDIUM IN DITCHES

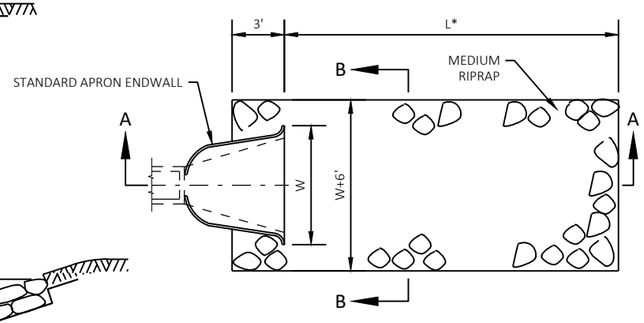


SECTION A-A



SECTION B-B

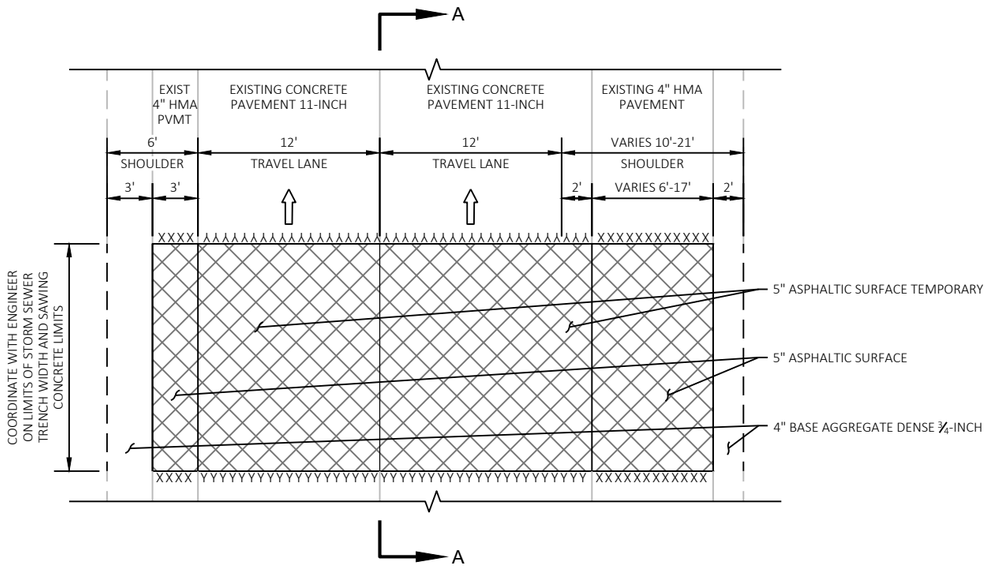
* L = 3 TIMES DIAMETER (NOR) OR 10' MINIMUM OR AS DIRECTED BY THE ENGINEER



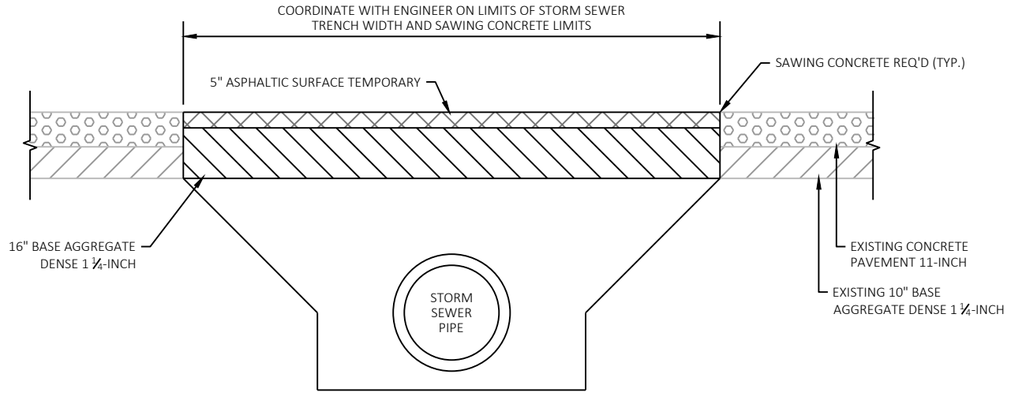
PLAN VIEW

MEDIUM RIPRAP AND GEOTEXTILE DETAIL AT
APRON ENDWALLS

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 23	E

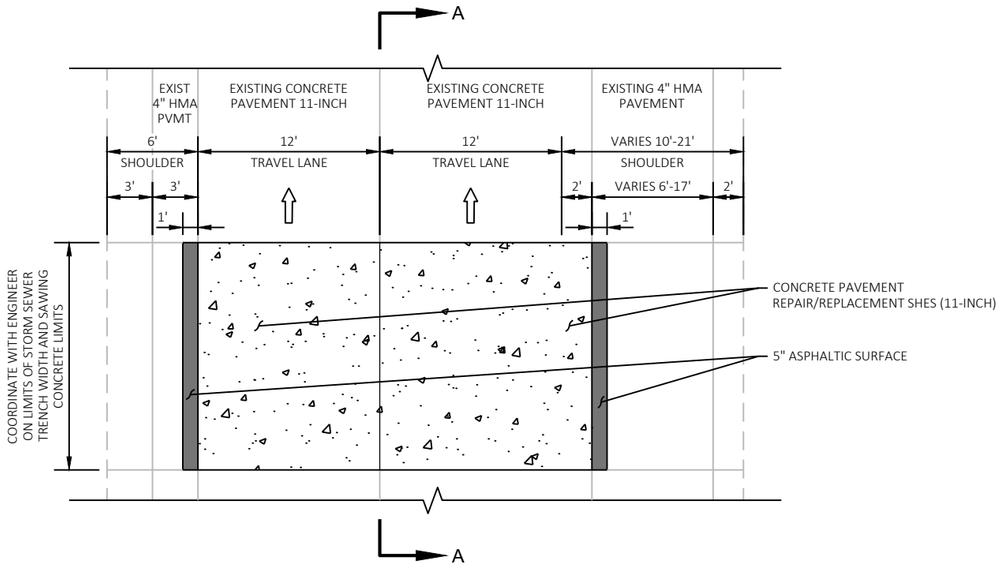


PLAN VIEW

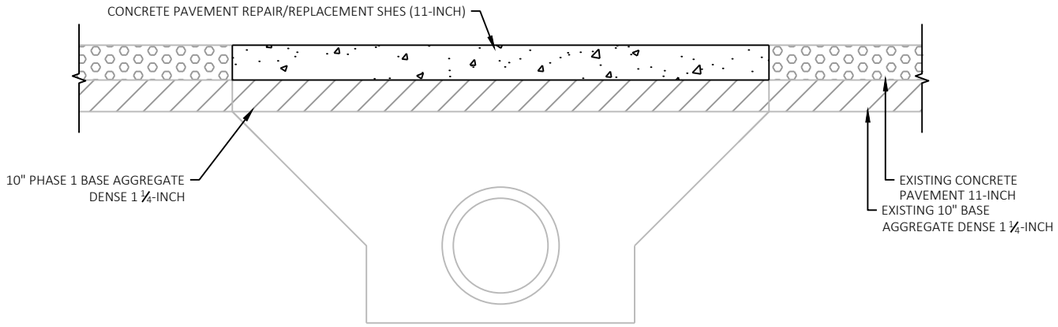


SECTION A-A

PHASE 1 - ASPHALTIC SURFACE TEMPORARY



PLAN VIEW



SECTION A-A

PHASE 2 - CONCRETE PAVEMENT REPLACEMENT SHES

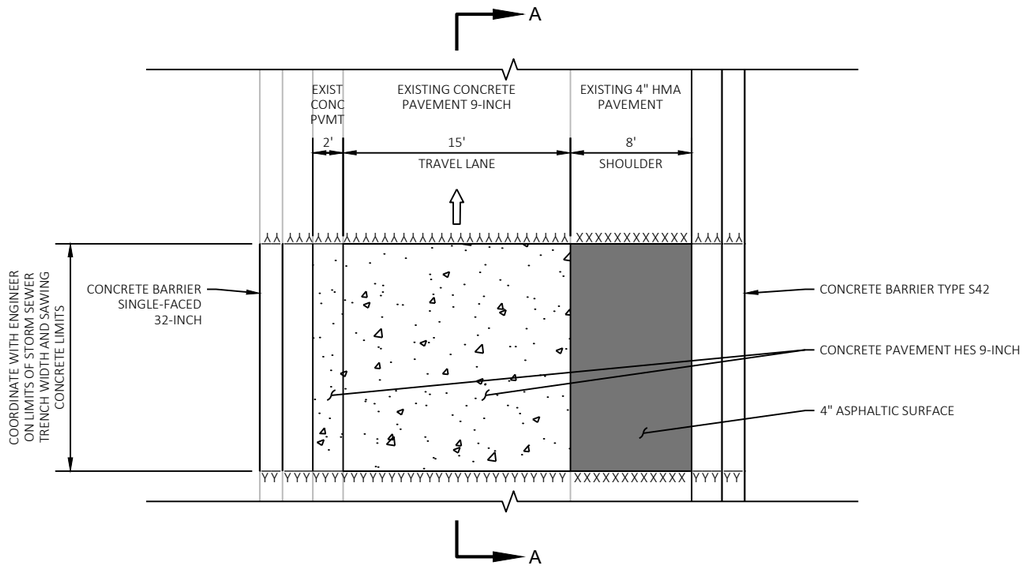
NOTES

PHASE 1 ASPHALTIC SURFACE TEMPORARY TO BE PLACED ON NIGHTS OF STORM SEWER INSTALLATION.

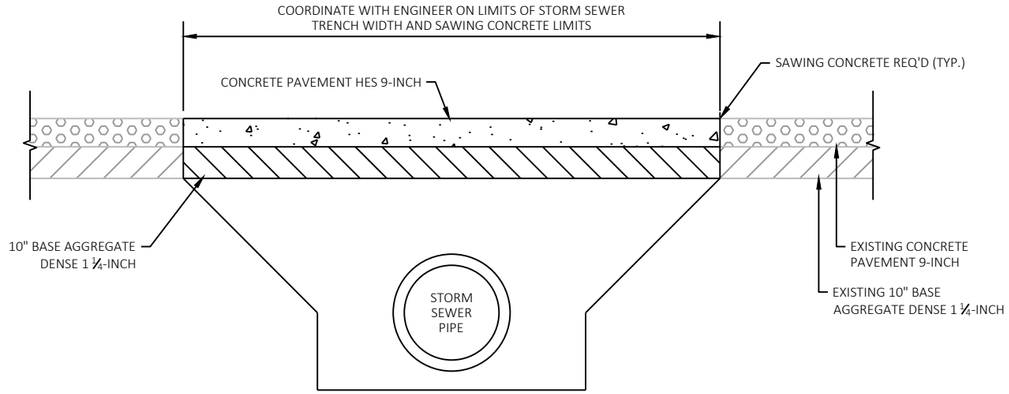
PHASE 2 CONCRETE PAVEMENT REPLACEMENT SHES TO BE PLACED IN RESPECTIVE STAGES.

STORM SEWER CROSSING DETAIL - IH 41

PROJECT NO: 1100-56-70/71	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 24	E

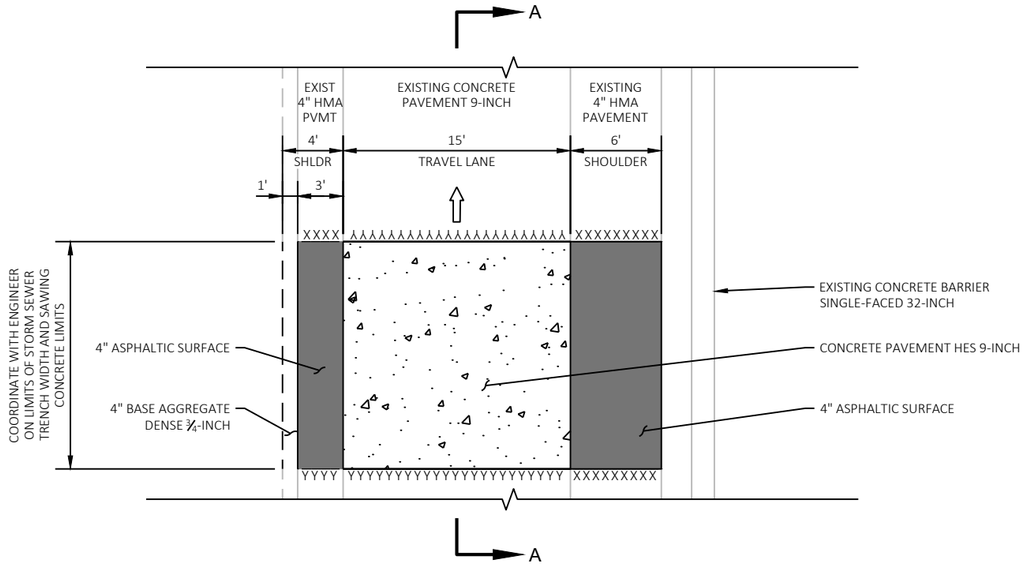


PLAN VIEW

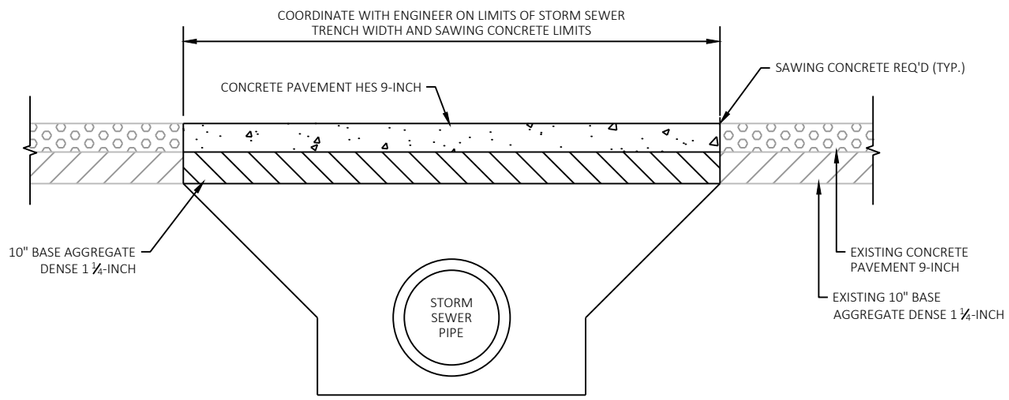


SECTION A-A

RAMP 'E'



PLAN VIEW

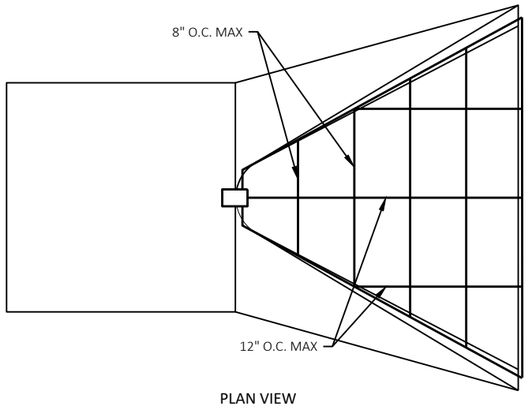


SECTION A-A

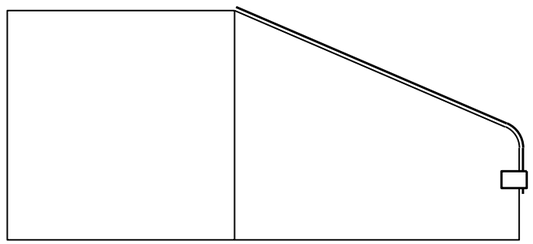
RAMP 'H'

STORM SEWER CROSSING DETAIL - RAMPS

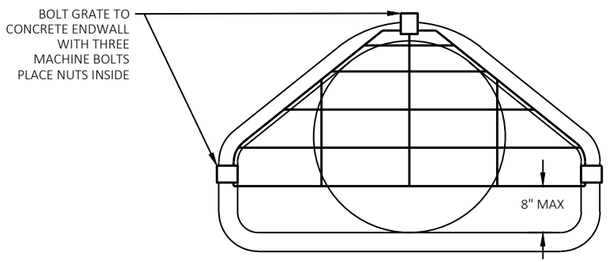
PROJECT NO: 1100-56-70/71	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 25	E



PLAN VIEW



SIDE VIEW



END VIEW

PIPE GRATE

GRATE CLEARANCE HEIGHT

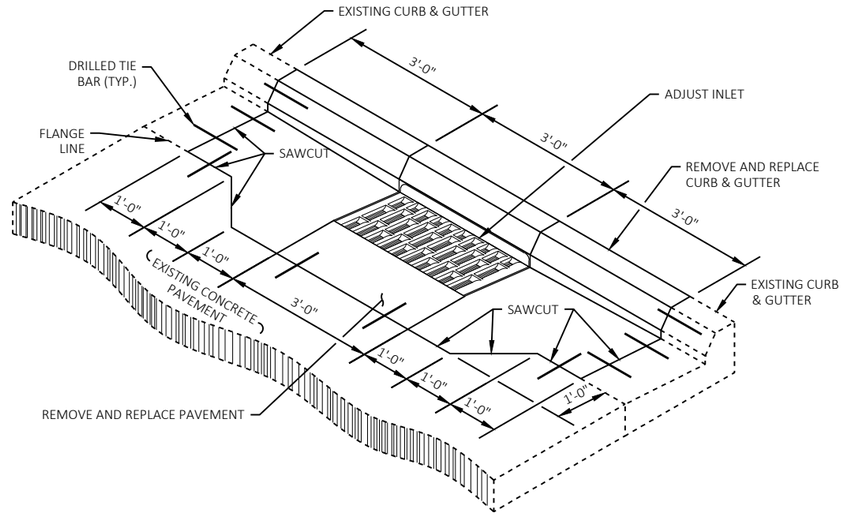
ROUND PIPE		ARCH PIPE	
PIPE SIZE	H	PIPE SIZE	H
12"	2 1/2"	22" - 29"	4"
15"	3"	36" - 44"	5"
18" - 24"	4"	51" - 65"	6"
27" - 36"	5"	73" - 85"	7"
42" - 54"	6"		
60" - 72"	7"		
78" - 90"	8"		

GRATE BAR SIZES

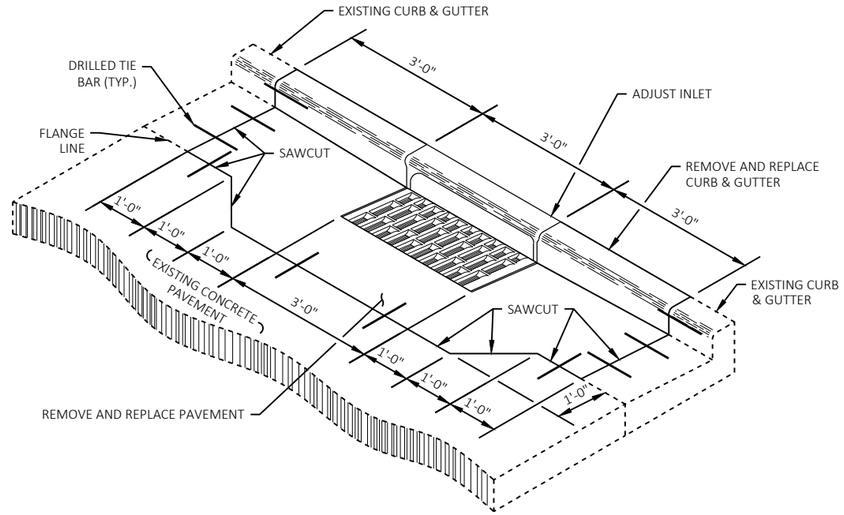
(STANDARD DESIGN)

		HOLE DIAMETER REQUIRED	BOLT DIAMETER	BAR SIZE
ROUND PIPE	12" - 24"	3/4"	5/8"	5/8"
	27" - 48"	7/8"	3/4"	3/4"
	54" - 90"	1 1/8"	1"	1"
ARCH PIPE	22" - 29"	3/4"	5/8"	5/8"
	36" - 59"	7/8"	3/4"	3/4"
	65" - 85"	1 1/8"	1"	1"

BOLT LENGTH = PIPE WALL THICKNESS + 2 1/2"

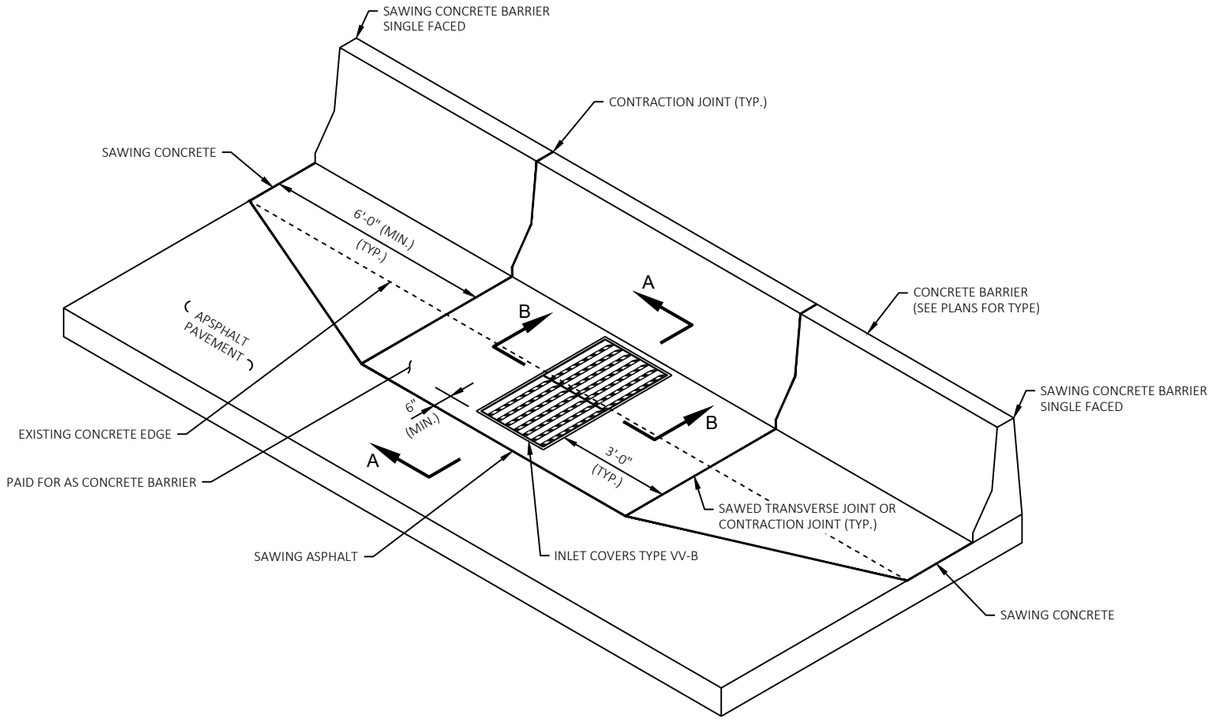


TYPPE 'HM-GJ' INLET COVER

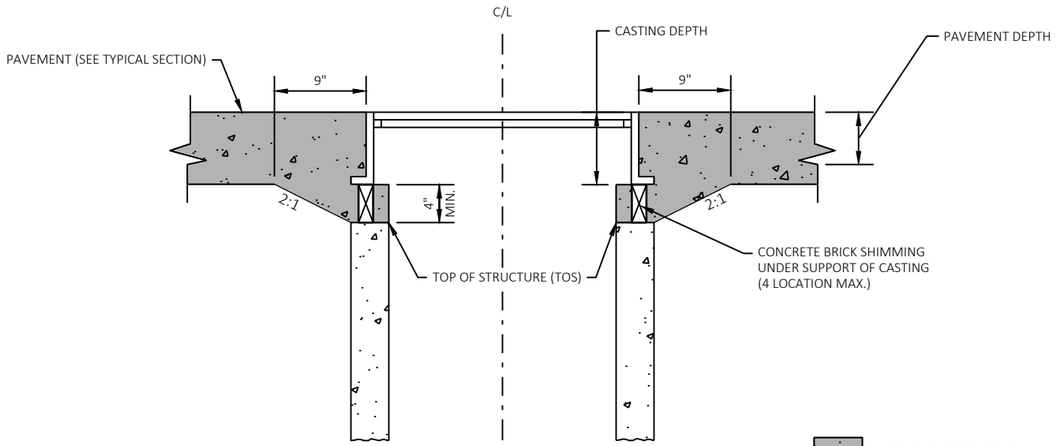


TYPE 'H' INLET COVER

INLET ADJUSTMENT DETAIL



ISOMETRIC VIEW

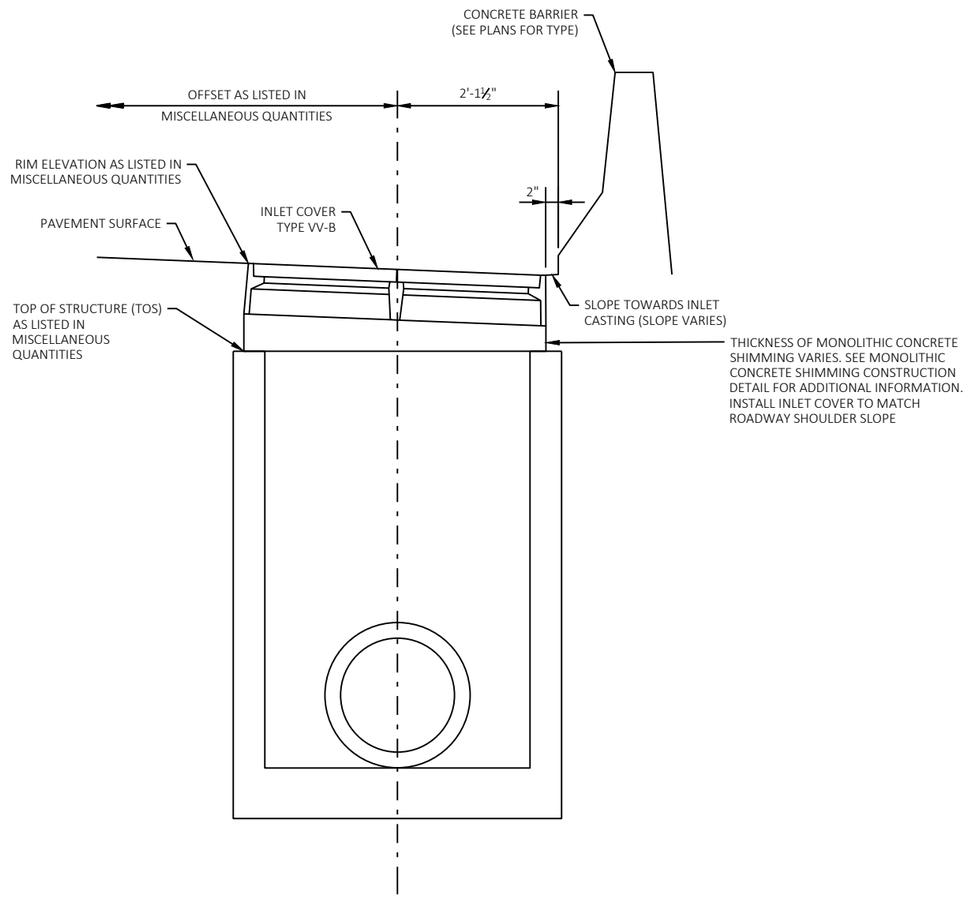


SECTION B-B: MONOLITHIC CONCRETE SHIMMING DETAIL

MONOLITHIC CONCRETE

NOTES

(1) PROVIDE MONOLITHIC CONCRETE SHIMMING FOR FINAL ADJUSTMENT OF DRAINAGE STRUCTURES LOCATED WITHIN THE ROADWAY CONCRETE PAVEMENT AND CONCRETE BARRIER.



SECTION A-A

(INLET 2'X3.5' WITH INLET COVER TYPE VV-B SHOWN)

SEE SDD 'INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT' FOR ADDITIONAL INFORMATION.

NOTES

SEE SDD "CONCRETE BARRIER SINGLE SLOPE (CBSS)" DRAINAGE DETAIL AND EXPANSION JOINT DETAIL FOR ADDITIONAL INFORMATION.

SEE SDD "INLET COVERS TYPE V, V-B, AND VV-B" FOR INLET COVER DETAILS

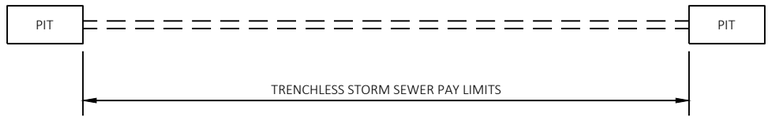
SEE SDD "CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES" FOR ADDITIONAL INFORMATION ON PLACEMENT OF TIE BARS.

SEE SDD "RURAL DOWELED CONCRETE PAVEMENT" FOR ADDITIONAL INFORMATION.

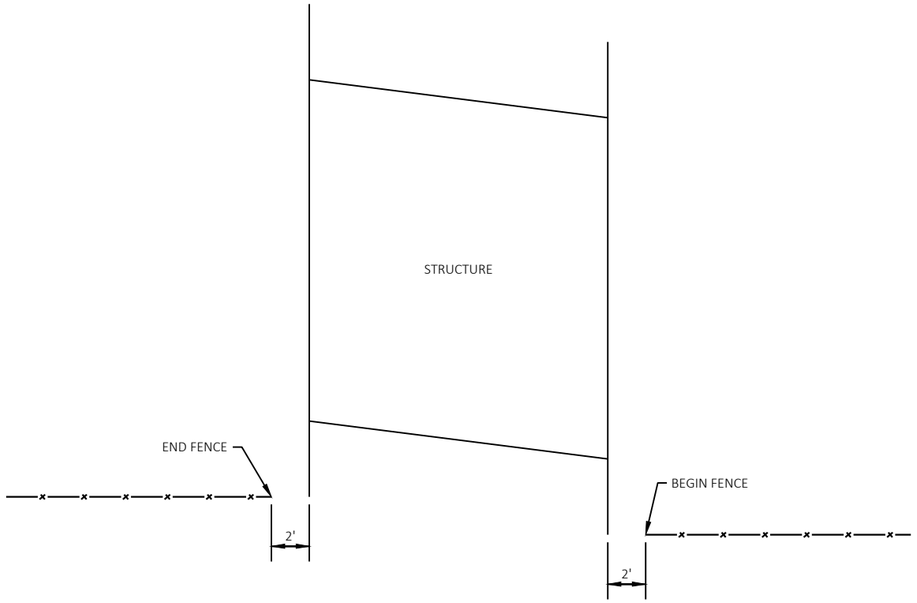
LOCATE TRANSVERSE JOINT A MINIMUM OF 6' FROM THE NEAREST CONTRACTION JOINT. DO NOT EXCEED THE MAXIMUM SPACING OF CONTRACTION JOINTS IDENTIFIED IN SDD "RURAL DOWELED CONCRETE PAVEMENT"

MONOLITHIC CONCRETE SHIMMING IS ONLY REQUIRED FOR VV-B INLETS ON IH-41.

DOUBLE GRATE INLET SECTION



DETAIL OF TRENCHLESS STORM SEWER PAY LIMITS



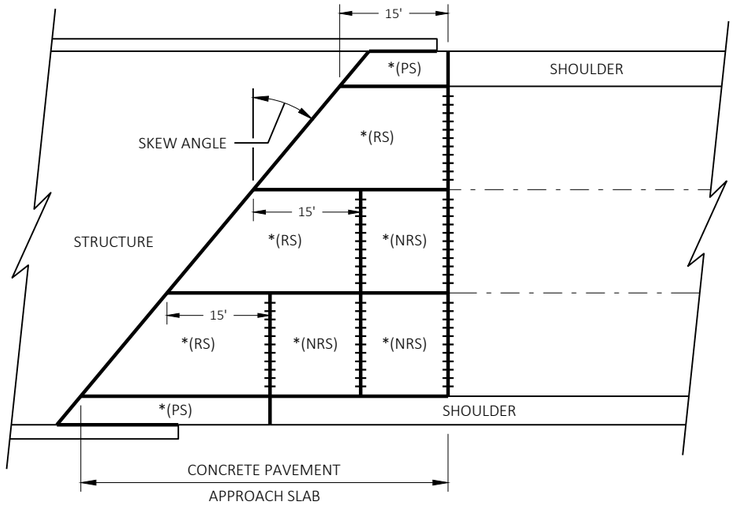
PLAN VIEW

PRERMANENT FENCE DETAIL AT STRUCTURES

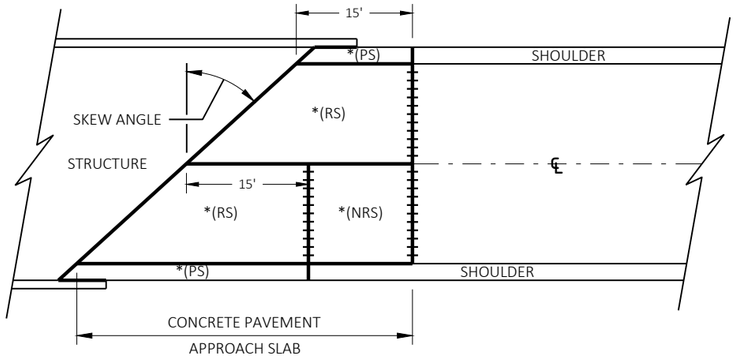
NOT TO SCALE

2

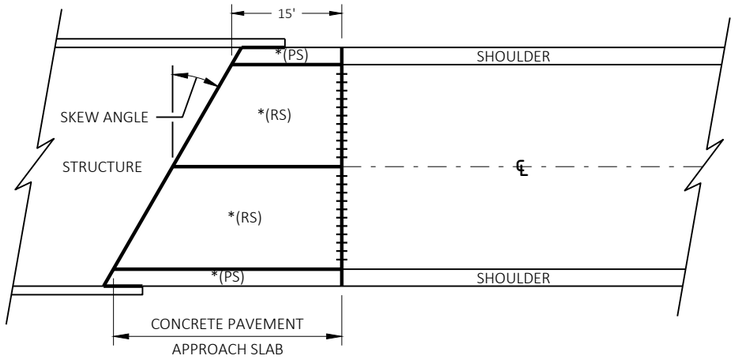
NOTE: SEAL ANY CRACKS GREATER THAN 1/4-INCH WITHIN THE APPROACH SLAB TO BE PAID FOR AS "JOINT SEALING"



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



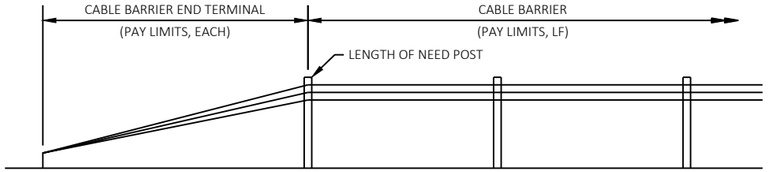
SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')

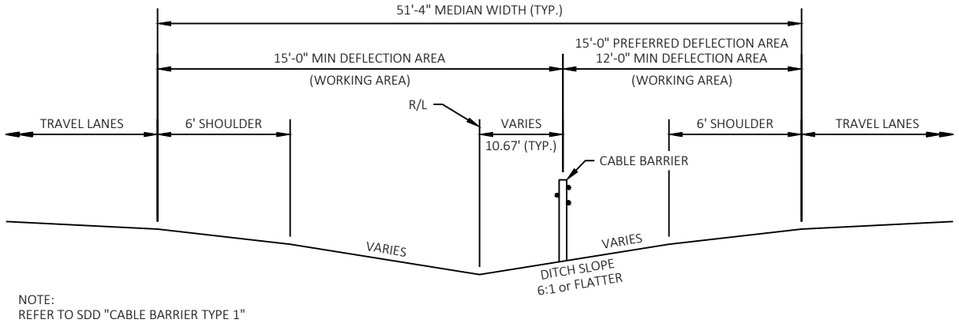


SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

LEGEND	
———	TRANSVERSE AND LONGITUDINAL JOINTS TO BE CLEANED AND SEALED
*(RS)	REINFORCED CONCRETE SLAB
*(NRS)	NON REINFORCED CONCRETE SLAB
*(PS)	PAVED CONCRETE/ASPHALT SHOULDER OR CONCRETE SURFACE DRAIN

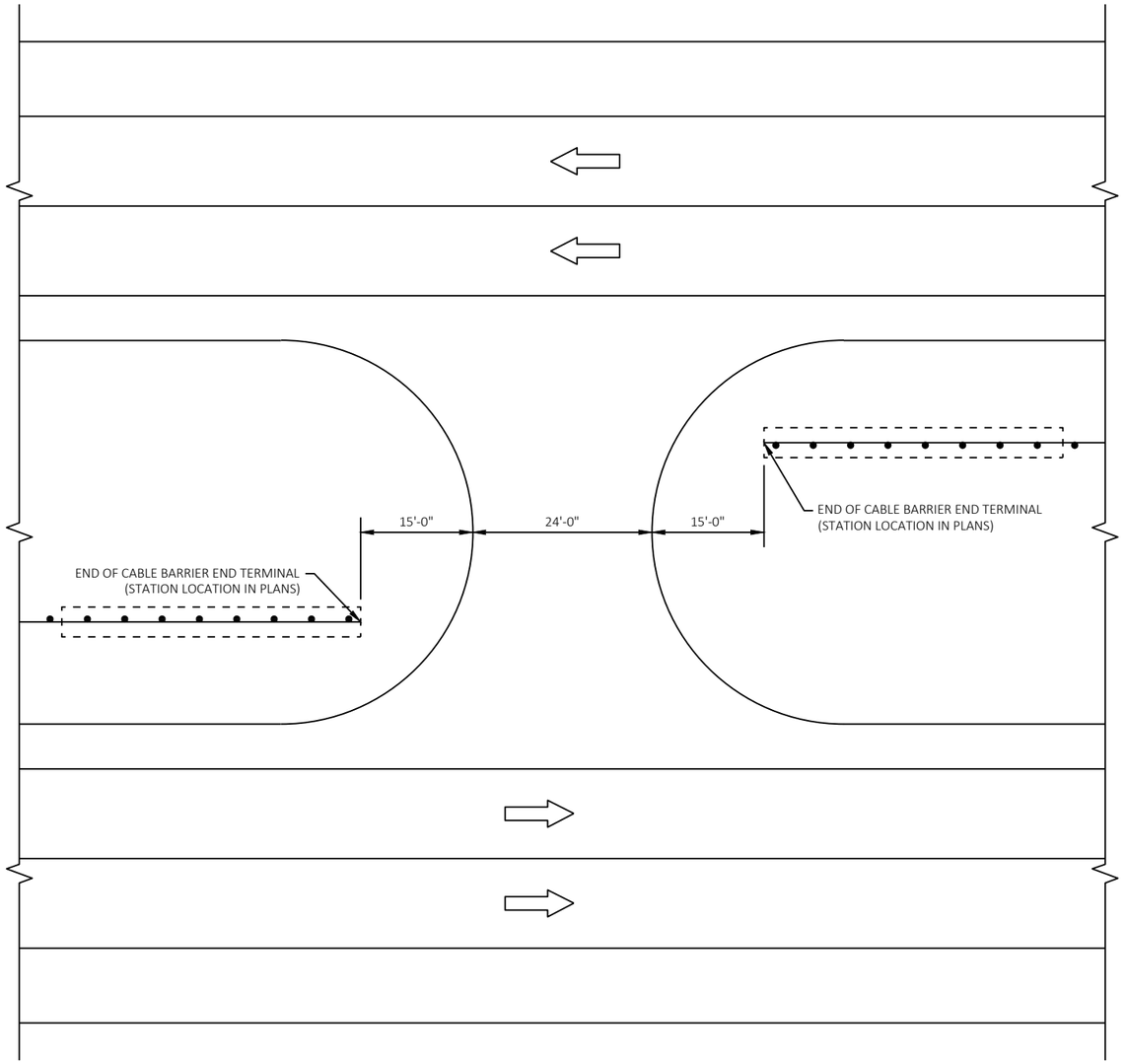
BRIDGE JOINT/APPROACH RUBBERING FOR CONCRETE PAVEMENT APPROACH SLAB





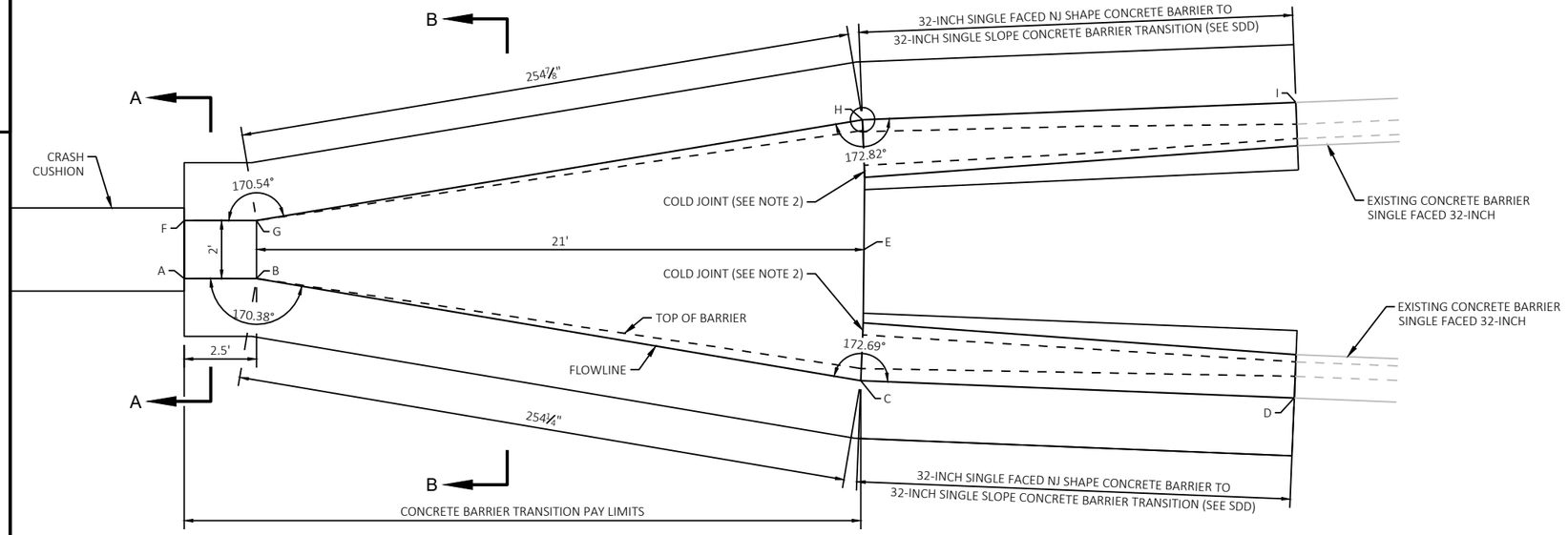
NOTE:
REFER TO SDD "CABLE BARRIER TYPE 1"

CABLE BARRIER OFFSET LOCATIONS



CABLE BARRIER END TERMINAL

AT MAINTENANCE CROSSOVERS

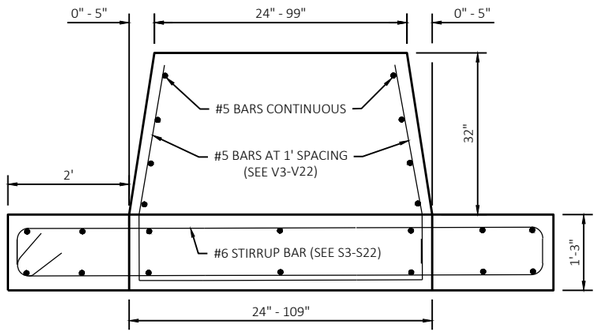


NOTES:

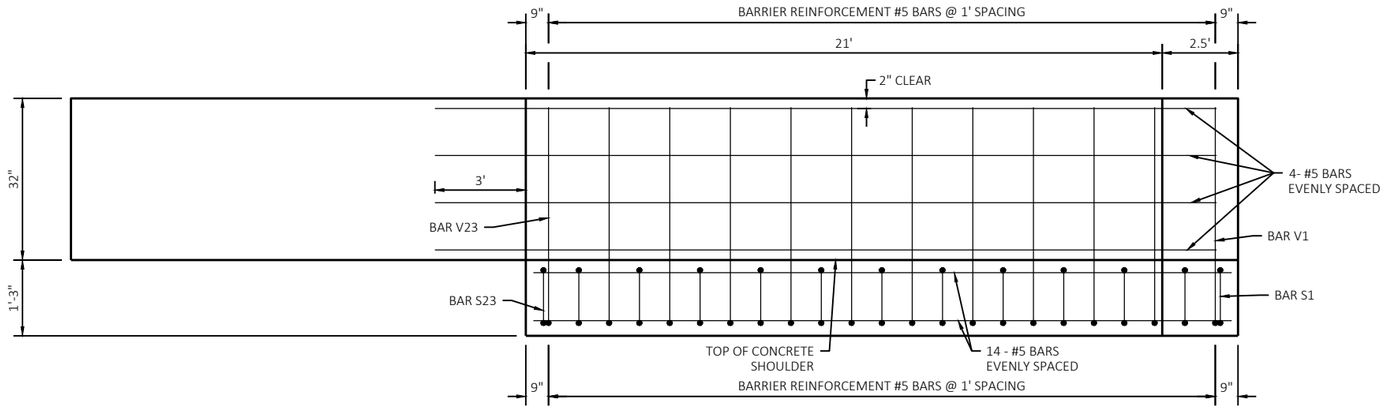
1. DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
2. WHEN SWITCHING BETWEEN SLIP FORM AND STANDARD FORM OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT, WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED, LAPS TO BE FIRMLY TIED.
3. EMBED BAR STEEL REINFORCEMENT AT LEAST 2 INCHES UNLESS OTHERWISE SHOWN ON PLANS.

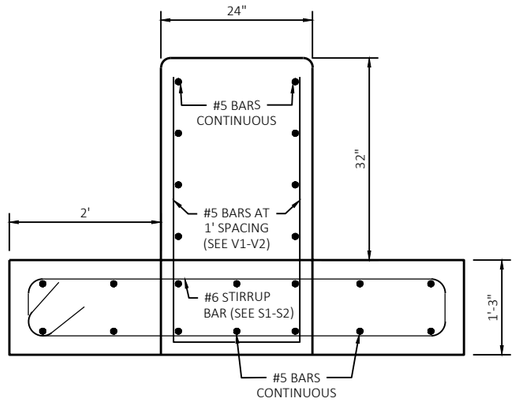
BARRIER STA/OFF TABLE

	ALIGNMENT	STATION	OFFSET
A	RAMP 'E'	1252+69.50	21.59' LT
B	RAMP 'E'	1252+71.99	21.70' LT
C	RAMP 'E'	1252+93.01	19.00' LT
D	RAMP 'E'	1253+08.01	19.00' LT
E	IH 41	2251+94.06	74.82' RT
F	IH 41	2251+70.62	72.89' RT
G	IH 41	2251+73.11	72.99' RT
H	IH 41	2251+94.18	70.33' RT
I	IH 41	2252+09.18	70.33' RT

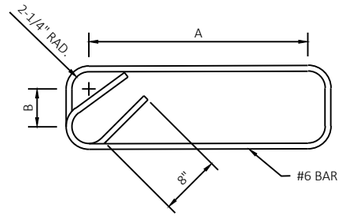


SECTION B-B





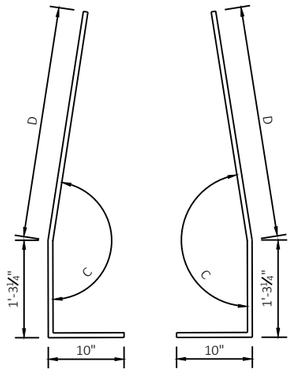
SECTION A-A



"S" STIRRUP BAR

BAR POSITION	A	B
S1	5'-2"	5"
S2	5'-2"	5"
S3	5'-3¾"	5"
S4	5'-7¾"	5"
S5	5'-11¾"	5"
S6	6'-3¾"	5"
S7	6'-8"	5"
S8	7'-4"	5"
S9	7'-4"	5"
S10	7'-8"	5"
S11	8'-0"	5"
S12	8'-4¼"	5"

BAR POSITION	A	B
S13	8'-8¼"	5"
S14	9'-0¼"	5"
S15	9'-4¼"	5"
S16	9'-8½"	5"
S17	10'-0½"	5"
S18	10'-4½"	5"
S19	10'-8½"	5"
S20	11'-0½"	5"
S21	11'-4¾"	5"
S22	11'-8¾"	5"
S23	12'-0¾"	5"



"V" VERTICAL BAR

BAR POSITION	C	D
V1	180°	2'-4"
V2	180°	2'-4"
V3	179°	2'-4"
V4	178°	2'-4"
V5	178°	2'-4"
V6	178°	2'-4"
V7	177°	2'-4"
V8	177°	2'-4"
V9	176°	2'-4"
V10	176°	2'-4"
V11	175°	2'-4"
V12	175°	2'-4"

BAR POSITION	C	D
V13	175°	2'-4"
V14	174°	2'-4"
V15	174°	2'-4"
V16	173°	2'-4"
V17	173°	2'-4"
V18	172°	2'-4"
V19	172°	2'-4"
V20	172°	2'-4"
V21	171°	2'-4"
V22	171°	2'-4"
V23	170°	2'-4"

CONCRETE BARRIER TRANSITION DETAIL

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 31	E

WISCONSIN CENTRAL LTD.

REACH 1

RAMP 'H'

IH 41 SB

IH 41 NB

RAMP 'E'

EXIST R/W

ASPHALT

CONC

BUILDING

EXIST SS EASEMENT

TRENCHLESS STORM SEWER

TRENCHLESS STORM SEWER

EXIST R/W

HORSESHOE LANE

TLE

TLE

54"SS

15"SS

EX 30" SS

784.10 BORE 11

804.62 BORE 1

803.50 BORE 12

797.74 BORE 2

800.20 BORE 13

799.40 BORE 14

794.47 BORE 3

101

101.1

102

103

104

26'HS'

27'HS'

FIELD POCKET PENTROMETER (TSF)	FIELD N-VALUE (BPF)	BORING #, EL, STA., OFFSET	MOISTURE CONTENT (%)
2.00	8		21.6
4.50	13		24.7
3.00	8		24.6
4.00	11		23.4
4.00	13		24.9

LITHOLOGY GROUP

LITHOLOGY GRAPHICS

- ASPHALT
- GRAVEL
- TOPSOIL
- FILL
- LEAN CLAY
- FAT CLAY
- SAND
- SILT

LEGEND

- LL LIQUID LIMIT (%)
- PL PLASTIC LIMIT (%)
- WATER ELEVATION AT TIME OF EXPLORATION
- WATER ELEVATION AT TIME OF COMPLETION

OPEN CUT | TRENCHLESS | OPEN CUT | TRENCHLESS | OPEN CUT

REACH 1

BORING B-01, EL. = 804.6, STA. 14+55', 22.21, 31.9' RT

BORING B-12, EL. = 803.5, STA. 16+55', 499.35', 15.0' RT

BORING B-02, EL. = 797.7, STA. 19+55', 480.47', 11.6' RT

BORING B-13, EL. = 800.2, STA. 21+55', 405.06', 14.1' RT

BORING B-14, EL. = 799.4, STA. 23+55', 74.21', 24.7' RT

BORING B-03, EL. = 794.5, STA. 25+05', 34.06', 3.9' LT

EXISTING GROUND ABOVE STORM SEWER

11.3' of SSPRC CLASS IV 15-INCH @ 1.00%

31.1' of SSPRC CLASS V 54-INCH @ 0.39%

520.7' of SSPRC CLASS V 54-INCH @ 0.38%

569.6' of SSPRC CLASS V 54-INCH @ 0.38%

LL 66.3/PL 22.1

LL 56.2/PL 22.6

LL 56.2/PL 22.6

LL 67/PL 19

LL 57/PL 17

LL 57/PL 17

LL 55/PL 17

LL 57.4/PL 19.9

LL 58.5/PL 22.3

LL 53.0/PL 19.4

LL 57/PL 17

LL 64/PL 19

LL 51/PL 17

LL 72/PL19

LL 55/PL16

LL 61.8/PL 26.9

LL 56.4/PL 20.9

LL 57.9/PL 21.5

101.1
RIM: 783.78
NE INV OUT: 778.28

101
RIM: 784.19
NW INV IN: 777.12
SE INV IN: 776.54
SW INV IN: 778.17
NE INV OUT: 776.12

102
RIM: 795.26
SW INV IN: 776.00
N INV OUT: 776.00

103
RIM: 802.69
S INV IN: 774.01
N INV OUT: 774.01

104
RIM: 795.38
S INV IN: 771.84
E INV OUT: 771.84

820 810 800 790 780 770 760 750 740 730

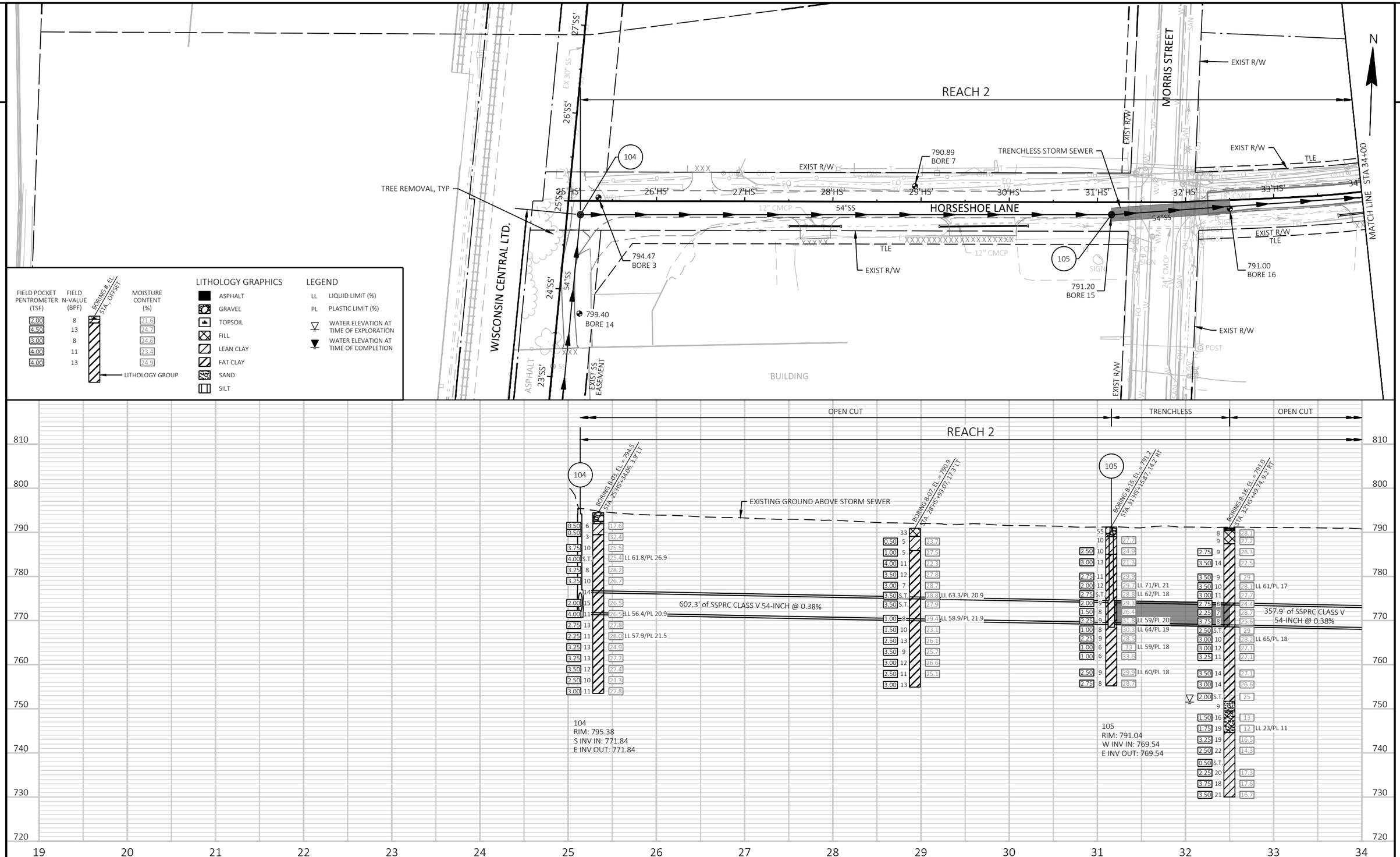
12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - SOIL BORINGS	SHEET 32	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021003-CD.DWG
LAYOUT NAME - Sheet-01

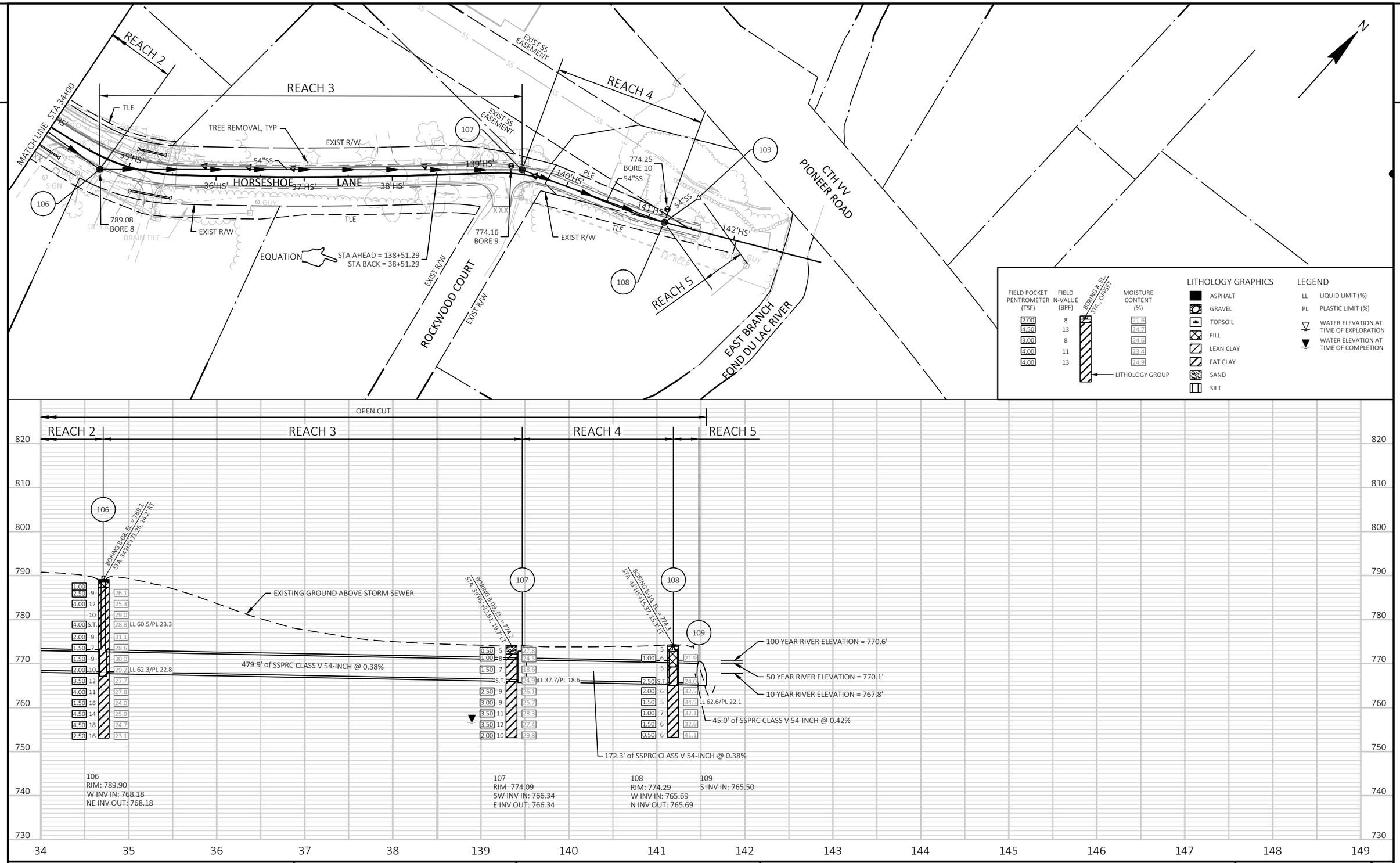
PLOT DATE : 7/28/2026 5:31 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - SOIL BORINGS	SHEET 33 E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021004-CD.DWG
LAYOUT NAME - Sheet-01
PLOT DATE : 7/28/2026 5:34 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - SOIL BORINGS	SHEET 34	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021004-CD.DWG
LAYOUT NAME - Sheet-02

PLOT DATE : 7/28/2026 5:34 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



GEOTECHNICAL INSTRUMENTATION LOCATION DETAIL

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 35	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021005-CD.DWG
LAYOUT NAME - Sheet-01
PLOT DATE : 7/28/2026 5:41 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - TEMPORARY ACCESS	SHEET 36	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021006-CD.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 7/30/2026 10:11 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

USH 151 NB

SIGN

UT

INL

INL

STEEL THRIE BEAM
BULLNOSE TERMINAL

STEEL THRIE BEAM

STEEL THRIE BEAM
BULLNOSE TERMINAL

B-20-125

IH 41 SB

STA 2190+23.80
5.08' LT
POST 1

STA 2190+36.13
7.38' LT
POST 5

STA 2190+73.63
7.38' LT
POST 12

STA 2192+36.13
7.38' LT
POST 12

STA 2192+73.63
7.38' LT
POST 5

STA 2192+85.96
5.08' LT
POST 1

WETLAND LIMITS

2189

2190

2191

2192

2193

2194

SLOPE INTERCEPT

CABLE BARRIER

STA 2190+23.82
5.11' RT
POST 1

STA 2190+36.13
7.37' RT
POST 5

STA 2190+73.63
7.37' RT
POST 12

REMOVE & REPLACE
BEAM GUARD

STA 2192+36.13
7.37' RT
POST 12

STA 2192+73.63
7.37' RT
POST 5

STA 2192+85.94
5.11' RT
POST 1

CABLE BARRIER

IH 41 NB

B-20-126

MP

EL

SIGN

USH 151 SB

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - GUARDRAIL LOCATIONS	SHEET 37	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021011-CD.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 8/24/2026 9:48 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

STEEL THRIE BEAM
BULLNOSE TERMINAL

STEEL THRIE BEAM

STEEL THRIE BEAM
BULLNOSE TERMINAL

IH 41 SB

STA 2218+02.59
4.35' LT
POST 1

STA 2218+14.93
6.66' LT
POST 5

STA 2218+52.42
6.66' LT
POST 12

STA 2219+64.88
6.66' LT
POST 12

STA 2220+02.37
6.66' LT
POST 5

STA 2220+14.71
4.35' LT
POST 1

WETLAND LIMITS

2216

2217

2218

2219

2220

2221

WETLAND LIMITS

2222

SLOPE INTERCEPT

CABLE BARRIER

CABLE BARRIER

IH 41 NB

STA 2218+02.64
5.84' RT
POST 1

STA 2218+14.93
8.09' RT
POST 5

STA 2218+52.42
8.09' RT
POST 12

REMOVE & REPLACE
BEAM GUARD

STA 2219+64.88
8.09' RT
POST 12

STA 2220+02.37
8.09' RT
POST 5

STA 2220+14.66
5.84' RT
POST 1

B-20-69

MAIN ST

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - GUARDRAIL LOCATIONS	SHEET 38	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021011-CD.DWG
LAYOUT NAME - Sheet-02

PLOT DATE : 8/24/2026 9:48 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

EXIST R/W

E. BR. FOND DU LAC RIVER

N

B-20-71

MGS THRIE BEAM TRANSITION

MGS GUARDRAIL 3

IH 41 SB

MGS GUARDRAIL TERMINAL TYPE 2

REMOVE & REPLACE BEAM GUARD

STA 2228+64.41
3.50' LT

STA 2228+78.36
3.50' LT

STA 2229+78.36
3.50' LT

STA 2229+99.01
3.50' LT

2225 2226 2227 2228 2229 2230

INL

SS

STA 2228+31.37
2.00' RT
POST 1

STA 2228+56.35
2.94' RT
POST 5

STA 2228+81.34
3.88' RT
POST 9

STA 2228+84.46
4.00' RT

STA 2229+59.46
4.00' RT

STA 2229+98.85
4.00' RT

CABLE BARRIER

IH 41 NB

STA 2227+94.12
59.78' RT
POST 9

MGS GUARDRAIL TERMINAL EAT

MGS GUARDRAIL 3

MGS THRIE BEAM TRANSITION

STA 2227+44.16
61.67' RT
POST 1

STA 2227+69.14
60.72' RT
POST 5

STA 2227+97.25
59.66' RT

STA 2229+59.75
59.66' RT

STA 2229+99.14
59.66' RT

SIGN

SLOPE INTERCEPT, TYP

SIGN

REMOVE & REPLACE BEAM GUARD

MGS GUARDRAIL TERMINAL EAT

MGS GUARDRAIL 3

MGS THRIE BEAM TRANSITION

B-20-70

REMOVE & REPLACE FENCE

MATCH LINE STA 2230+75

EXIST R/W

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - GUARDRAIL LOCATIONS	SHEET 39	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021011-CD.DWG
LAYOUT NAME - Sheet-03

PLOT DATE : 8/24/2026 9:48 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

EXIST R/W

REMOVE & REPLACE FENCE

CONCRETE SURFACE DRAIN
(SEE SDD "CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES" FOR LOCATION AND DETAILS)

ANR PIPELINE

MGS THRIE BEAM TRANSITION

MGS GUARDRAIL 3

MGS GUARDRAIL TERMINAL EAT

REMOVE & REPLACE BEAM GUARD

SLOPE INTERCEPT, TYP

B-20-71

STA 2231+59.71
59.66' LT

STA 2231+99.11
59.67' LT

SIGN

STA 2233+61.61
59.67' LT

STA 2233+64.73
60.06' LT
POST 9

STA 2234+14.69
61.67' LT
POST 1

STA 2233+89.71
60.73' LT
POST 5

IH 41 SB

CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT

CONCRETE PAVEMENT HES 9-INCH

MGS THRIE BEAM TRANSITION

MGS GUARDRAIL 3

MGS GUARDRAIL TERMINAL EAT

REMOVE & REPLACE BEAM GUARD

STA 2232+77.11
2.88' LT
POST 9

STA 2233+02.09
1.94' LT
POST 5

STA 2233+27.07
1.00' LT
POST 1

CABLE BARRIER

STA 2231+59.59
3.00' LT

STA 2231+98.98
3.00' LT

STA 2232+73.98
3.00' LT

MATCH LINE STA 2230+75

2231 2232 2233 2234 2235 2236

STA 2231+59.43
4.00' RT

STA 2231+80.31
4.00' RT

STA 2232+80.31
4.00' RT

STA 2232+94.27
4.00' RT

MGS GUARDRAIL TERMINAL TYPE 2

MGS GUARDRAIL 3

MGS THRIE BEAM TRANSITION

IH 41 NB

B-20-70

E. BR. FOND DU LAC RIVER

EXIST R/W

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - GUARDRAIL LOCATIONS	SHEET 40	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021011-CD.DWG
LAYOUT NAME - Sheet-04

PLOT DATE : 8/24/2026 9:48 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

WISCONSIN CENTRAL LTD.

MGS GUARDRAIL 3

MGS THRIE BEAM TRANSITION

MGS GUARDRAIL TERMINAL EAT

REMOVE & REPLACE BEAM GUARD

STA 1253'H'+89.14
8.50' LT

SLOPE INTERCEPT, TYP

1252'H'

1253'H'

1254'H'

1255'H'

1256'H'

1257'H'

RAMP 'H'

STA 1253'H'+49.75
8.50' LT

STA 1254'H'+01.64
8.50' LT

STA 1254'H'+04.77
8.89' LT
POST 9

STA 1254'H'+29.75
9.56' LT
POST 5

STA 1254'H'+54.73
10.50' LT
POST 1

B-20-72

REMOVE & REPLACE BARRIER WALL

EXISTING BARRIER WALL

EX 24" RCP

SIGN

STEEL THRIE BEAM BULLNOSE TERMINAL

STEEL THRIE BEAM

STEEL THRIE BEAM BULLNOSE TERMINAL

CABLE BARRIER

STA 2251+88.51
3.79' LT
POST 1

STA 2252+00.83
6.08' LT
POST 5

STA 2252+38.33
6.08' LT
POST 12

STA 2253+00.83
6.08' LT
POST 12

STA 2253+38.33
6.08' LT
POST 5

STA 2253+50.65
3.79' LT
POST 1

IH 41 SB

STA 2255+43.26
60.42' LT

STA 2255+82.65
60.15' LT

STA 2255+95.15
60.15' LT

STA 2255+98.28
60.27' LT
POST 9

STA 2256+23.26
61.21' LT
POST 5

STA 2256+48.24
62.15' LT
POST 1

2251

2252

2253

2254

2255

2256

WETLAND LIMITS

MATCH LINE STA 2257+00

STA 2251+88.51
6.39' RT
POST 1

STA 2252+00.83
8.67' RT
POST 5

STA 2252+38.33
8.67' RT
POST 12

REMOVE & REPLACE BEAM GUARD

STA 2253+00.83
8.67' RT
POST 12

STA 2253+38.33
8.67' RT
POST 5

STA 2253+50.65
6.39' RT
POST 1

IH 41 NB

CRASH CUSHION

STA 1252'E'+49.44
10.12' RT
POST 9

STA 1252'E'+24.46
11.06' RT
POST 5

1252'E'

STA 1252'E'+52.57
10.00' RT

1253'E'

STA 1253'E'+04.46
10.00' RT

RAMP 'E'

1254'E'

1255'E'

1256'E'

STA 1251'E'+99.48
12.00' RT
POST 1

STA 1252'E'+65.07
10.00' RT

REMOVE & REPLACE BEAM GUARD

REMOVE & REPLACE BARRIER WALL

MGS GUARDRAIL TERMINAL EAT

MGS THRIE BEAM TRANSITION

MGS GUARDRAIL 3

EXIST R/W

ANR PIPELINE

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - GUARDRAIL LOCATIONS	SHEET 41	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021011-CD.DWG
LAYOUT NAME - Sheet-05

PLOT DATE : 8/24/2026 9:48 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

HICKORY ST

B-20-111

STEEL THRIE BEAM BULLNOSE TERMINAL

STEEL THRIE BEAM

STEEL THRIE BEAM BULLNOSE TERMINAL

STA 2257+92.94
5.09' LT
POST 1

STA 2258+05.26
7.38' LT
POST 5

STA 2258+42.76
7.38' LT
POST 12

REMOVE & REPLACE BEAM GUARD

STA 2259+92.76
7.38' LT
POST 12

STA 2260+30.26
7.38' LT
POST 5

STA 2260+42.58
5.09' LT
POST 1

IH 41 SB

CABLE BARRIER

SLOPE INTERCEPT, TYP

CABLE BARRIER

WETLAND LIMITS

MATCH LINE STA 2257+00

MATCH LINE STA 2263+00

2258 2259 2260 2261 2262

STA 2257+92.94
5.09' RT
POST 1

STA 2258+05.26
7.37' RT
POST 5

STA 2258+42.76
7.37' RT
POST 12

STA 2259+92.76
7.37' RT
POST 12

STA 2260+30.26
7.37' RT
POST 5

STA 2260+42.58
5.09' RT
POST 1

IH 41 NB

SIGN

SIGN

SIGN

RAMP 'F'

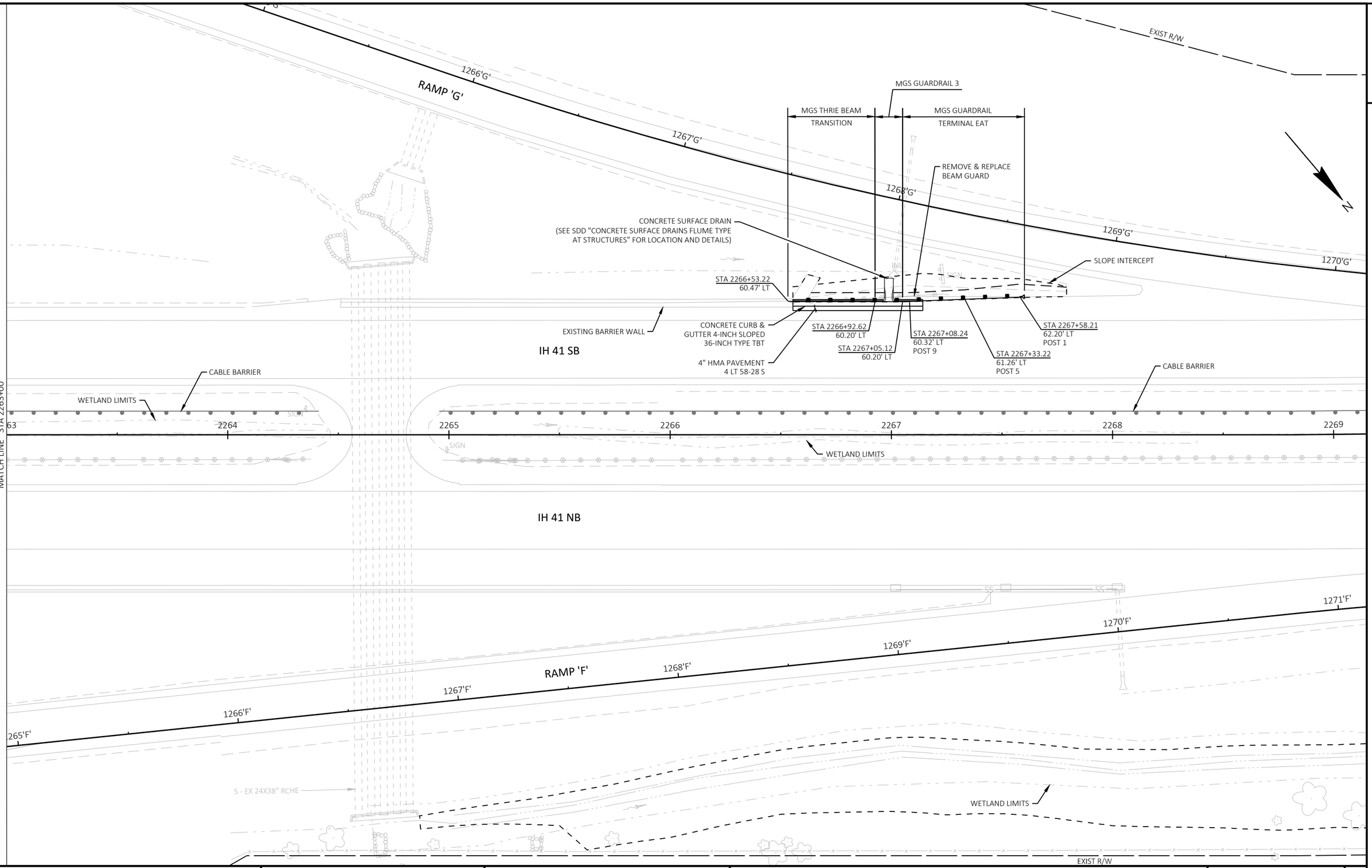
1264'F'

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - GUARDRAIL LOCATIONS	SHEET 42	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021011-CD.DWG
LAYOUT NAME - Sheet-06

PLOT DATE : 8/24/2026 9:48 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - GUARDRAIL LOCATIONS	SHEET 43	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021011-CD.DWG
LAYOUT NAME - Sheet-07
PLOT DATE : 8/24/2026 9:48 AM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

EXIST R/W

N

WILD GOOSE STATE TRAIL

B-20-171

SIGN

STEEL THRIE BEAM
BULLNOSE TERMINAL

STEEL THRIE BEAM

STEEL THRIE BEAM
BULLNOSE TERMINAL

STA 2271+65.25
1.82' LT
POST 12

STA 2271+77.57
4.10' LT
POST 5

STA 2272+15.07
4.10' LT
POST 12

STA 2272+65.07
4.10' LT
POST 12

STA 2273+02.57
4.10' LT
POST 5

STA 2273+14.89
1.82' LT
POST 1

CABLE BARRIER

IH 41 SB

CABLE BARRIER

2272

2273

2274

2275

2276

2277

STA 2271+65.25
8.37' RT
POST 1

STA 2271+77.57
10.65' RT
POST 5

STA 2272+15.07
10.65' RT
POST 12

REMOVE & REPLACE
BEAM GUARD

STA 2272+65.07
10.65' RT
POST 12

STA 2273+02.57
10.65' RT
POST 5

STA 2273+14.89
8.37' RT
POST 1

IH 41 NB

STA 1278'F'+25.68
8.87' RT
POST 5

STA 1278'F'+50.68
8.38' RT
POST 9

STA 2277+44.01
70.00' RT

STA 1278'F'+00.68
9.37' RT
POST 1

STA 1278'F'+53.80
8.32' RT

STA 2277+30.05
70.00' RT

RAMP 'F'

1274'F'

1275'F'

1276'F'

1277'F'

1278'F'

SLOPE INTERCEPT, TYP

SIGN

SIGN

EX 48" RCP

INL

EX 24" RCP

EX 48" RCP

WETLAND LIMITS

REMOVE & REPLACE BEAM GUARD

MGS GUARDRAIL
TERMINAL TYPE 2

MGS GUARDRAIL
TERMINAL EAT

MGS GUARDRAIL 3

REMOVE & REPLACE FENCE

EX 36" RCP

EX 48" RCP

EXIST R/W

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - GUARDRAIL LOCATIONS	SHEET 44	E

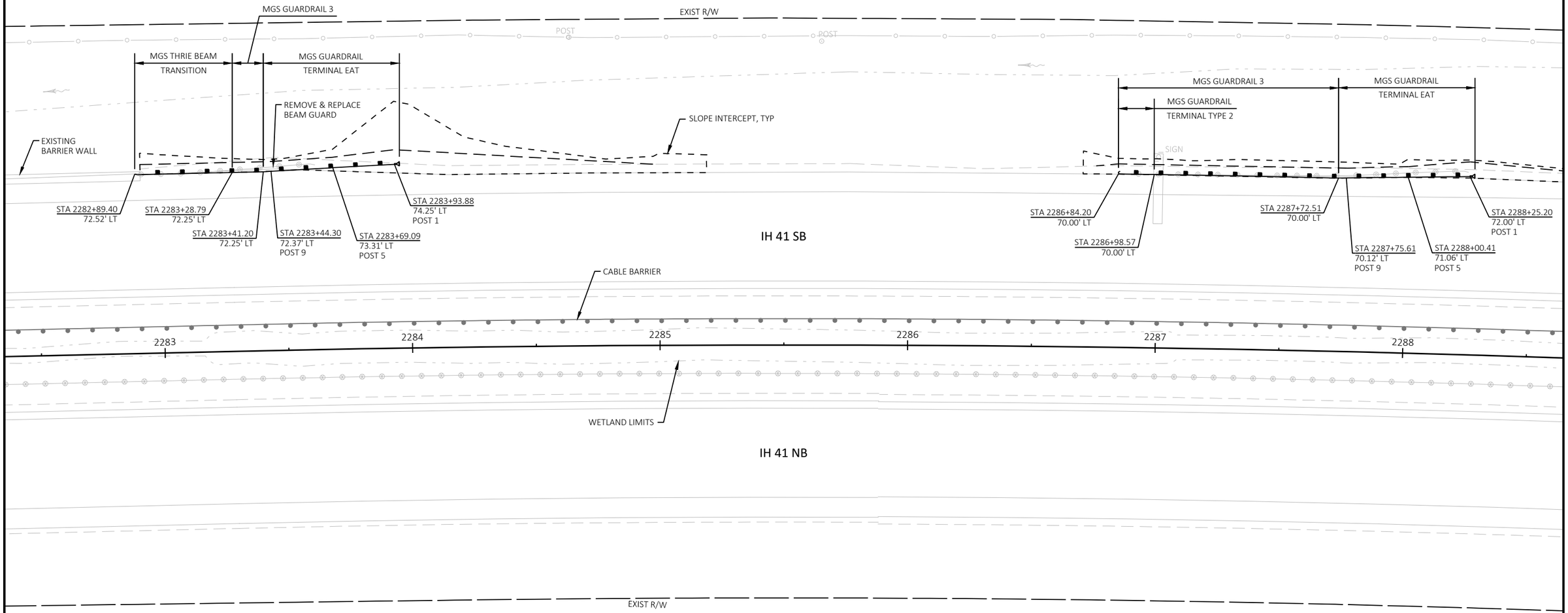
FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021011-CD.DWG
LAYOUT NAME - Sheet-08

PLOT DATE : 8/24/2026 9:48 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2



PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - GUARDRAIL LOCATIONS	SHEET 45	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021011-CD.DWG
LAYOUT NAME - Sheet-09

PLOT DATE : 8/24/2026 9:48 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

EXIST R/W

435'L'

434'L'

433'L'

432'L'

RAMP 'L'

N

IH 41 SB

CABLE BARRIER

2297

2296

2295

2294

2293

2292

1

WETLAND LIMITS

IH 41 NB

STA 430'I'+48.39
7.13' RT
POST 9

STA 430'I'+51.52
7.00' RT

STA 430'I'+23.29
8.17' RT
POST 5

STA 2292+59.89
70.45' RT
POST 1

431'I'

432'I'

STA 432'I'+26.75
7.00' RT

STA 432'I'+41.30
7.00' RT

433'I'

RAMP 'I'

434'I'

SIGN

REMOVE & REPLACE
BEAM GUARD

SLOPE INTERCEPT

EXIST R/W

MGS GUARDRAIL
TERMINAL TYPE 2

MGS GUARDRAIL
TERMINAL EAT

MGS GUARDRAIL 3

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - GUARDRAIL LOCATIONS	SHEET 46	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021011-CD.DWG
LAYOUT NAME - Sheet-10

PLOT DATE : 8/24/2026 9:48 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

CTH D

UT
SIGN

B-20-113

STEEL THRIE BEAM
BULLNOSE TERMINAL

STEEL THRIE BEAM

STEEL THRIE BEAM
BULLNOSE TERMINAL

IH 41 SB

STA 2303+77.10
5.10' LT
POST 1

STA 2303+89.41
7.38' LT
POST 5

STA 2304+26.91
7.38' LT
POST 12

STA 2305+39.41
7.38' LT
POST 12

STA 2305+76.91
7.38' LT
POST 5

STA 2305+89.23
5.10' LT
POST 1

CABLE BARRIER

CABLE BARRIER

2302

2303

INL

2304

2305

2306

SLOPE INTERCEPT

INL

2307

2308

WETLAND LIMITS

STA 2303+89.41
7.37' RT
POST 5

STA 2303+77.09
5.09' RT
POST 1

STA 2304+26.91
7.37' RT
POST 12

REMOVE & REPLACE
BEAM GUARD

STA 2305+76.91
7.37' RT
POST 5

STA 2305+39.41
7.37' RT
POST 12

STA 2305+89.24
5.09' RT
POST 1

IH 41 NB

SIGN
UT

MILITARY RD

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - GUARDRAIL LOCATIONS	SHEET 47	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021011-CD.DWG
LAYOUT NAME - Sheet-11

PLOT DATE : 8/24/2026 9:48 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

EXISTING R/W

65' RADIUS POINT
STA 93'US'+95.98; 134.93' LT
STA 332'C'+94.91; 90.82' LT
Y=371174.513
X=817080.688

43.78' RADIUS POINT
STA 94'US'+13.64; 114.21' LT
STA 332'C'+71.13; 77.57' LT
Y=371153.658
X=817098.182

STA 332'C'+56.22
33.24' LT

STA 332'C'+57.67
37.55' LT

ADJUST PULL BOX

MOVE SIGN

R65'

R43.78'

CONCRETE TRUCK APRON 12-INCH (COLORED RED)

93'US'+43.96, 22.5' LT
701
REMOVE EX HM-GJ CASTING
INSTALL NEW HM CASTING

STA 94'US'+11.37
71.78' LT

STA 94'US'+11.97
66.89' LT

STA 94'US'+60.04
66.89' LT

CONCRETE PAVEMENT HES 9-INCH

STA 94'US'+19.28
67.78' LT

CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH TYPE A

CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH TYPE A

STA 91'US'+97.14
23.50' LT

STA 91'US'+97.14
18.50' LT

STA 92'US'+77.14
10.50' LT

STA 94'US'+75.04
23.50' LT

STA 94'US'+71.59
20.50' LT

STA 94'US'+71.59
10.50' LT

CONCRETE TRUCK APRON 12-INCH
(COLORED RED)

91'US' 92'US' 93'US' 94'US' 95'US' 96'US' 97'US'

333'C'

332'C'

RAMP 'C'

ALLIANT ENERGY

USH 151 SB

USH 151 NB

CONCRETE PAVEMENT HES 9-INCH

STA 331'D'+01.61
7.79' LT

STA 95'US'+06.35
61.82' RT

STA 330'D'+69.65
7.75' LT

331'D'

STA 95'US'+05.70
66.78' RT

CONCRETE TRUCK APRON 12-INCH
(COLORED RED)

R65'

R48.25'

48.25' RADIUS POINT
STA 95'US'+00.08; 109.66' RT
STA 330'D'+69.98; 56.00' LT
Y=370929.084
X=817182.804

65' RADIUS POINT
STA 94'US'+85.17; 128.45' RT
STA 330'D'+58.43; 77.03' LT
Y=370910.419
X=817167.736

CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH TYPE A

STA 330'D'+68.09
7.75' LT

STA 330'D'+68.09
12.75' LT

RAMP 'D'

330'D'

SOLAR PANEL POST

RAMP GATE

EXISTING R/W

N

2

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	INTERSECTION DETAILS	SHEET 48	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021101-ID.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 7/28/2026 4:52 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

IH 41 NB

30"SS

24"x38" SS

1254'E'

1255'E'

1256'E'

1257'E'

1258'E'

RAMP 'E'

HICKORY ST

ATC

CITY OF FOND DU LAC

1263'F'

N

2253 2254 2255 2256 2257 2258 2259 2260 2261

780 781 782 783 784 785 786

VPI STA 2253+75.02
VPI EL 783.40

VPI STA 2254+66.05
VPI EL 782.49

VPI STA 2258+00.02
VPI EL 781.81

VPI STA 2258+28.02
VPI EL 783.80

-1.00%

-33.33%

0.71%

7.10%

EXISTING DITCH PROFILE

PROPOSED DITCH PROFILE

SSPRCHE CLASS HE-IV 24X38-INCH @ 1.11%

VPI STA 2254+75.02
VPI EL 779.50

795 790 785 780 775

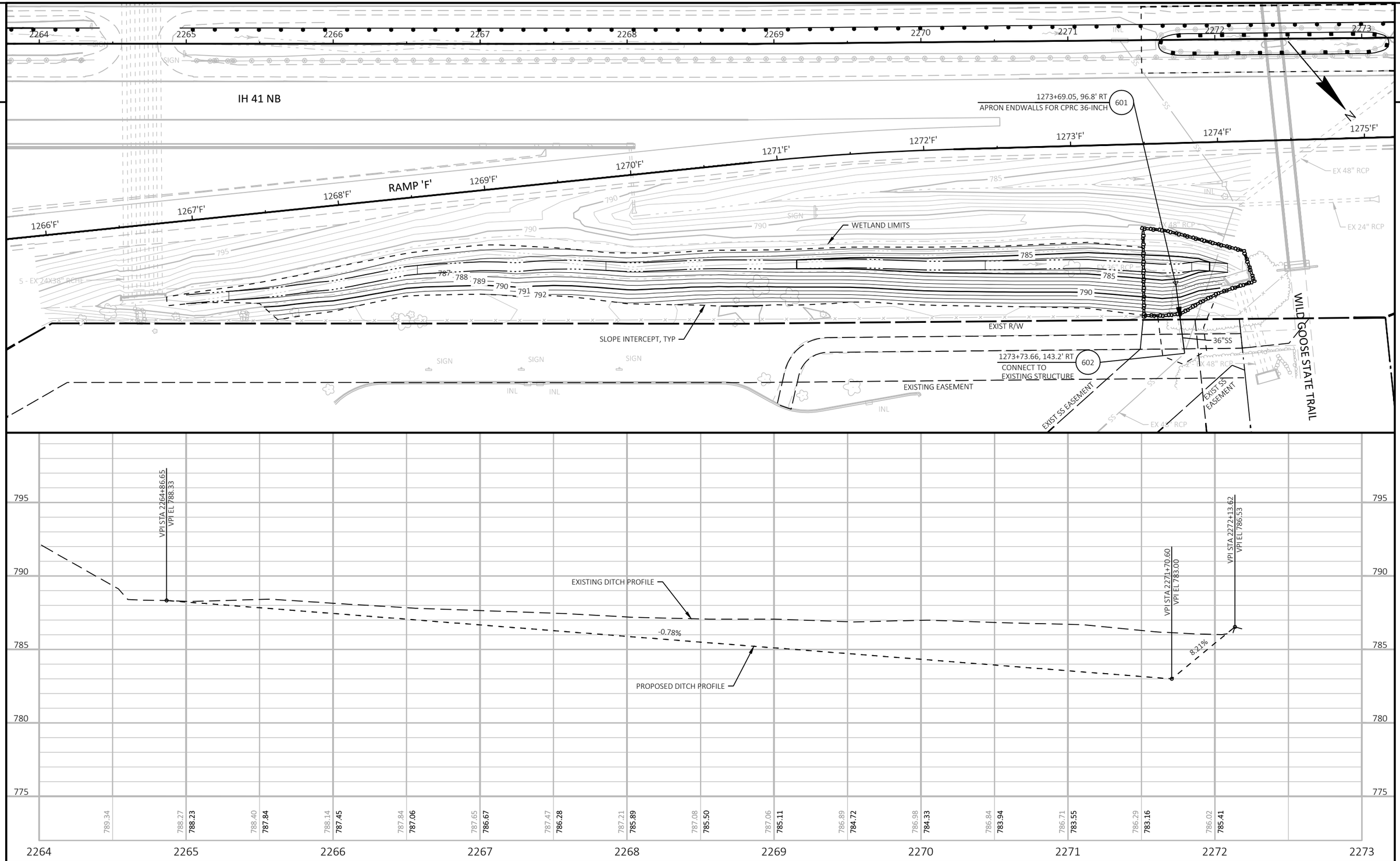
782.25	783.15	781.73	782.65	781.84	779.68	781.99	780.03	782.16	780.39	782.28	780.75	782.48	781.10	783.14	781.46	783.96	781.81

2253 2254 2255 2256 2257 2258 2259 2260 2261

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	PLAN DETAILS - HICKORY RAMP E GORE AREA GRADING	SHEET 49	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021201-PD.DWG
LAYOUT NAME - Sheet-01

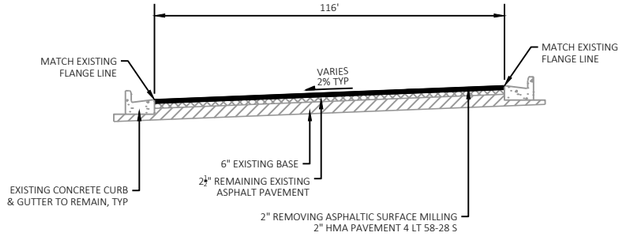
PLOT DATE : 7/28/2026 5:44 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:60 FT



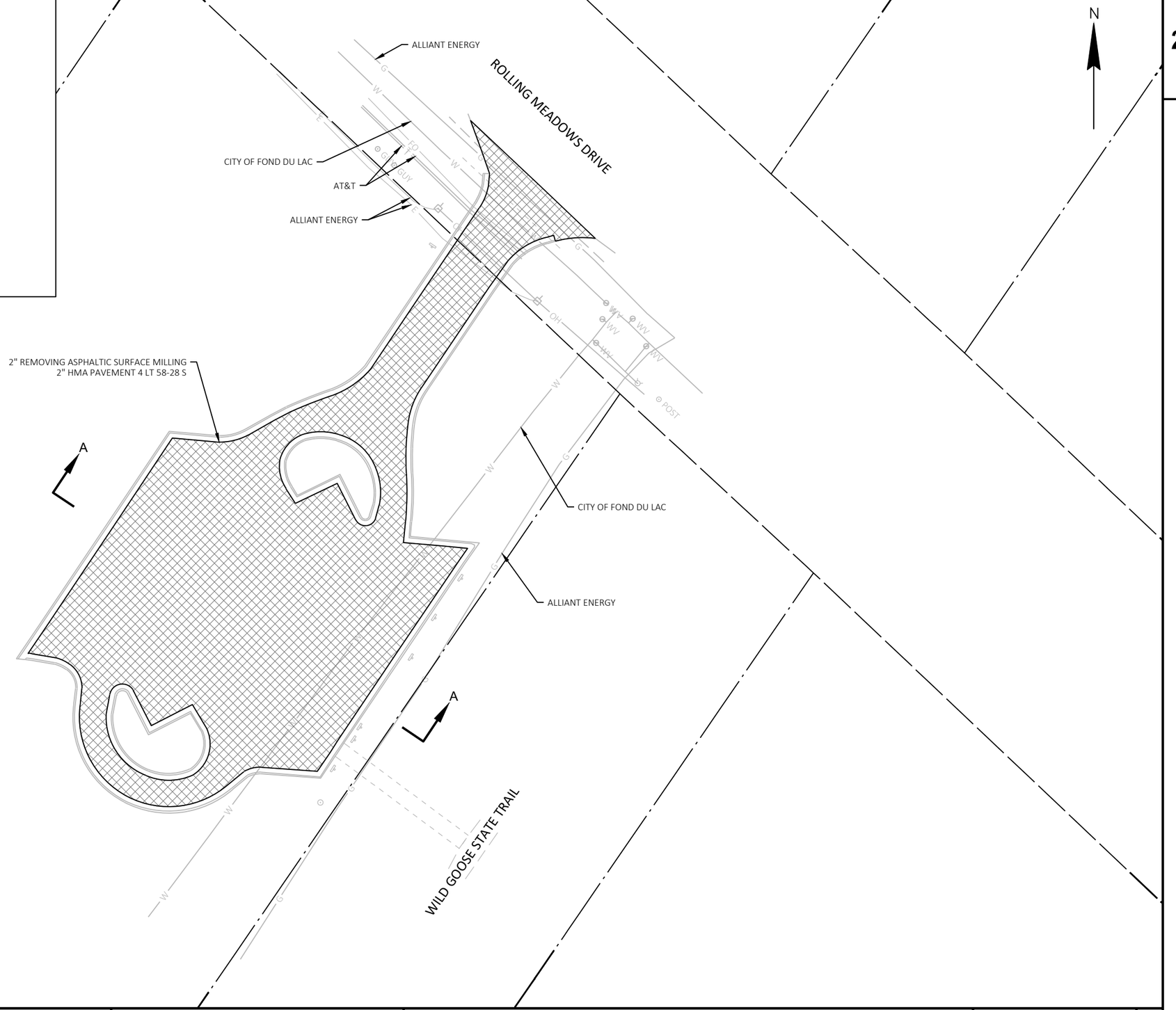
PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	PLAN DETAILS - HICKORY RAMP F DITCH GRADING	SHEET 50	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021201-PD.DWG
LAYOUT NAME - Sheet-02

PLOT DATE : 7/28/2026 5:44 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:60 FT



SECTION A-A
PARK AND RIDE



PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PLAN DETAILS - PARK & RIDE	SHEET 51	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-021203-PD.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 7/31/2026 7:28 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

EXIST R/W

2150 2151 2152 2153 2154 2155 2156 2157 IH 41 SB 2158 2159 2160 2161 2162 2163 2164

SIGN

INL

B

B

IH 41 NB

EXIST R/W

MATCH LINE STA 2165+00

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

ALL DISTURBED AREAS NOT OCCUPIED BY PAVEMENT, AGGREGATES, OR STRUCTURES SHALL RECEIVE TOPSOIL, SEED MIX NO. 30, FERTILIZER TYPE B, AND EROSION MAT CLASS I TYPE B, UNLESS OTHERWISE NOTED IN THE PLANS.

DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 52	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022001-EC.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 7/28/2026 4:59 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

EXIST R/W

RAMP 'D'

316'D'

317'D'

MATCH LINE STA 2165+00

MATCH LINE STA 2180+00

2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179

IH 41 SB

IH 41 NB

309'A' 310'A' 311'A' 312'A' 313'A' 314'A' 315'A' 316'A' 317'A' 318'A

RAMP 'A'

EXIST R/W

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) (B)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

ALL DISTURBED AREAS NOT OCCUPIED BY PAVEMENT, AGGREGATES, OR STRUCTURES SHALL RECEIVE TOPSOIL, SEED MIX NO. 30, FERTILIZER TYPE B, AND EROSION MAT CLASS I TYPE B, UNLESS OTHERWISE NOTED IN THE PLANS.

DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 53	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022001-EC.DWG
LAYOUT NAME - Sheet-02

PLOT DATE : 7/28/2026 4:59 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

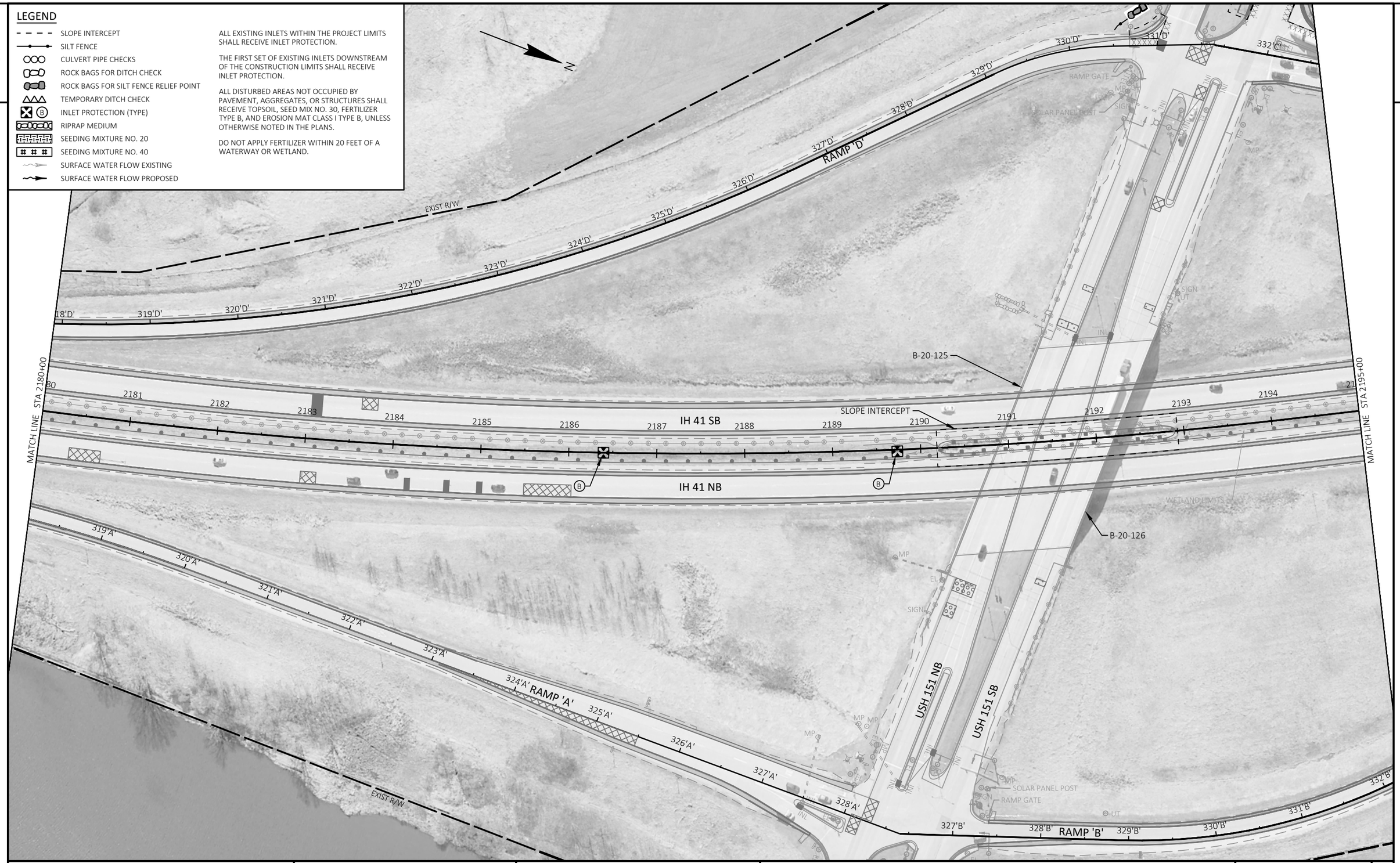
- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

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DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.



PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 54	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022001-EC.DWG
LAYOUT NAME - Sheet-03

PLOT DATE : 7/28/2026 5:00 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

MP

333'C'

334'C'

335'C'

336'C'

337'C'

338'C'

339'C'

340'C'

341'C'

342'C'

343'C'

344'C'

345'C'

346'C'

RAMP 'C'

EXIST R/W

N

STA 2195+00

MATCH LINE

2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210

STA 2210+00

MATCH LINE

IH 41 SB

IH 41 NB

WETLAND LIMITS

WETLAND LIMITS

333'B'

334'B'

335'B'

336'B'

337'B'

338'B'

339'B'

340'B'

341'B'

342'B'

343'B'

344'B'

RAMP 'B'

EXIST R/W

B

B

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

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DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 55	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022001-EC.DWG
LAYOUT NAME - Sheet-04

PLOT DATE : 7/28/2026 5:00 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

MAIN ST

EXIST R/W

EXIST R/W

EXIST R/W

MATCH LINE STA 2210+00

MATCH LINE STA 2225+00

2210

2211

2212

2213

2214

2215

2216

2217

IH 41 SB

2218

2219

2220

2221

2222

2223

2224

IH 41 NB

B

WETLAND LIMITS

WETLAND LIMITS

SLOPE INTERCEPT

B-20-69

EXIST R/W

MAIN ST

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) B
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

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DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 56	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022001-EC.DWG
LAYOUT NAME - Sheet-05

PLOT DATE : 7/28/2026 5:00 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

E. BR. FOND DU LAC RIVER

EXIST R/W

B-20-71

WETLAND LIMITS

MATCH LINE STA 2225+00

2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239

IH 41 SB

IH 41 NB

MATCH LINE STA 2240+00

SIGN

WETLAND LIMITS

SLOPE INTERCEPT, TYP

B-20-70

EXIST R/W

N

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

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DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 57	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022001-EC.DWG
LAYOUT NAME - Sheet-06
PLOT DATE : 7/28/2026 5:01 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

LEGEND

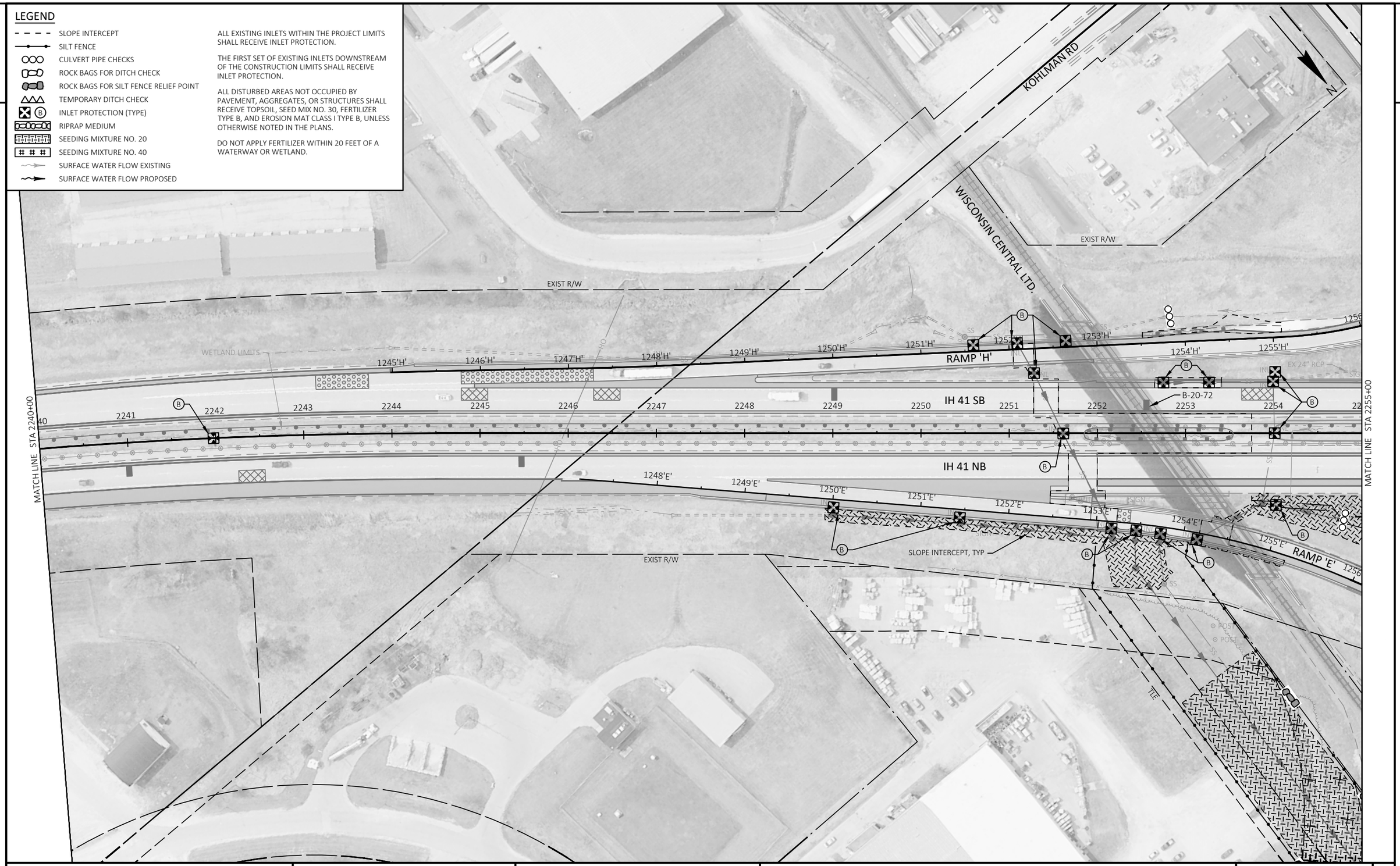
- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

ALL DISTURBED AREAS NOT OCCUPIED BY PAVEMENT, AGGREGATES, OR STRUCTURES SHALL RECEIVE TOPSOIL, SEED MIX NO. 30, FERTILIZER TYPE B, AND EROSION MAT CLASS I TYPE B, UNLESS OTHERWISE NOTED IN THE PLANS.

DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.



PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 58	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022001-EC.DWG
LAYOUT NAME - Sheet-07

PLOT DATE : 7/28/2026 5:01 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

ALL DISTURBED AREAS NOT OCCUPIED BY PAVEMENT, AGGREGATES, OR STRUCTURES SHALL RECEIVE TOPSOIL, SEED MIX NO. 30, FERTILIZER TYPE B, AND EROSION MAT CLASS I TYPE B, UNLESS OTHERWISE NOTED IN THE PLANS.

DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

HICKORY ST

RAMP 'G'

RAMP 'F'

RAMP 'E'

IH 41 SB

IH 41 NB

EXIST R/W

WETLAND LIMITS

EX 24" RCP

B-20-111

SLOPE INTERCEPT, TYP

5 - EX 24X38" RCHE

WISCONSIN CENTRAL LTD.

MATCH LINE STA 2255+00

MATCH LINE STA 2270+00

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 59	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022001-EC.DWG
LAYOUT NAME - Sheet-08
PLOT DATE : 7/28/2026 5:01 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

MATCH LINE STA 2270+00

MATCH LINE STA 2285+00

B-20-171

SIGN

WETLAND LIMITS

EXIST R/W

IH 41 SB

IH 41 NB

2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284

1'G' 1272'G' 2'F' 1273'F' 1274'F' 1275'F' 1276'F' 1277'F' 1278'F'

EX 48" RCP

EX 24" RCP

2 - EX 48" RCP

SLOPE INTERCEPT, TYP

WILD GOOSE STATE TRAIL

EXIST SS EASEMENT

EXIST SS EASEMENT

N

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

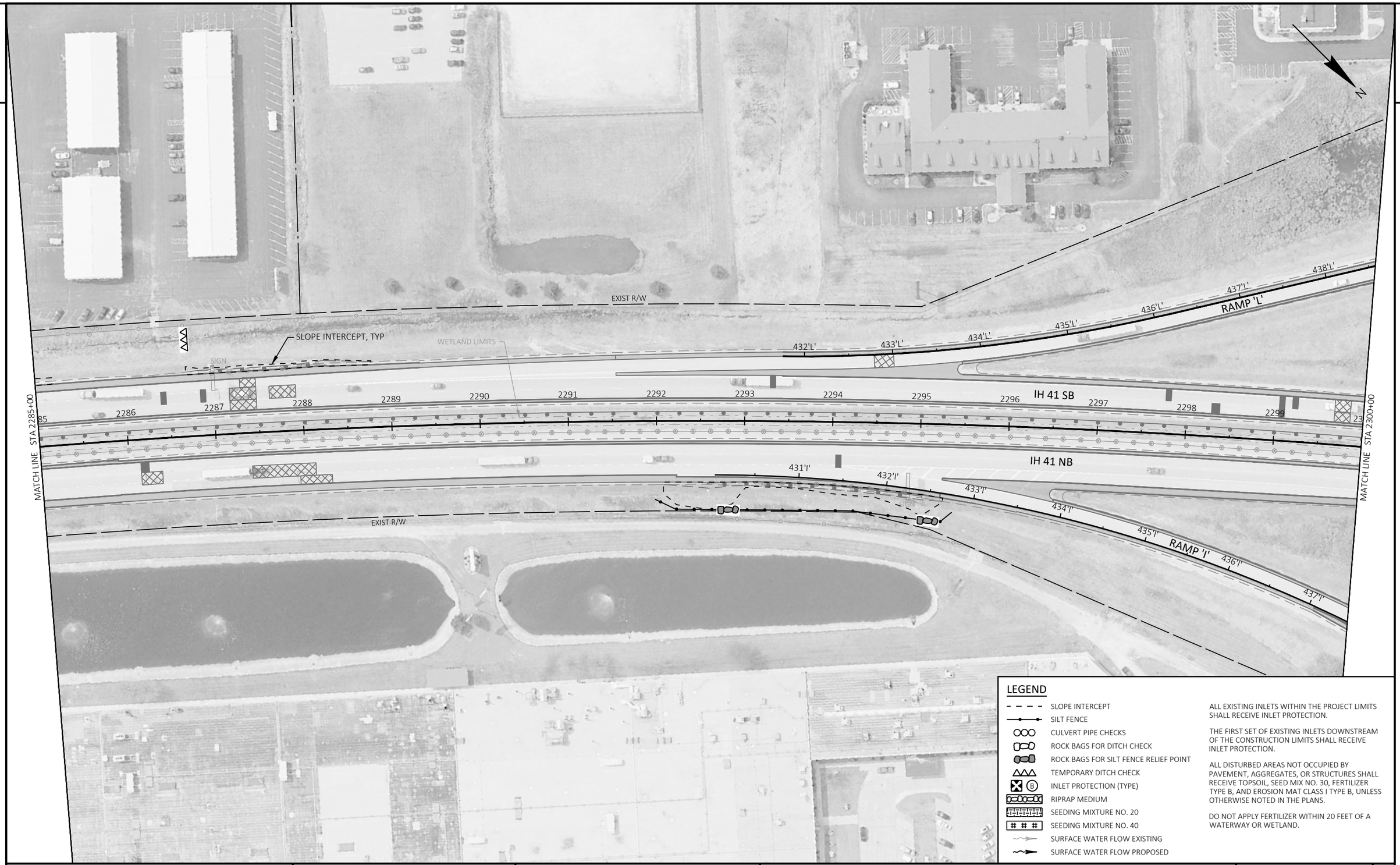
THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

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DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 60	E

2



LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

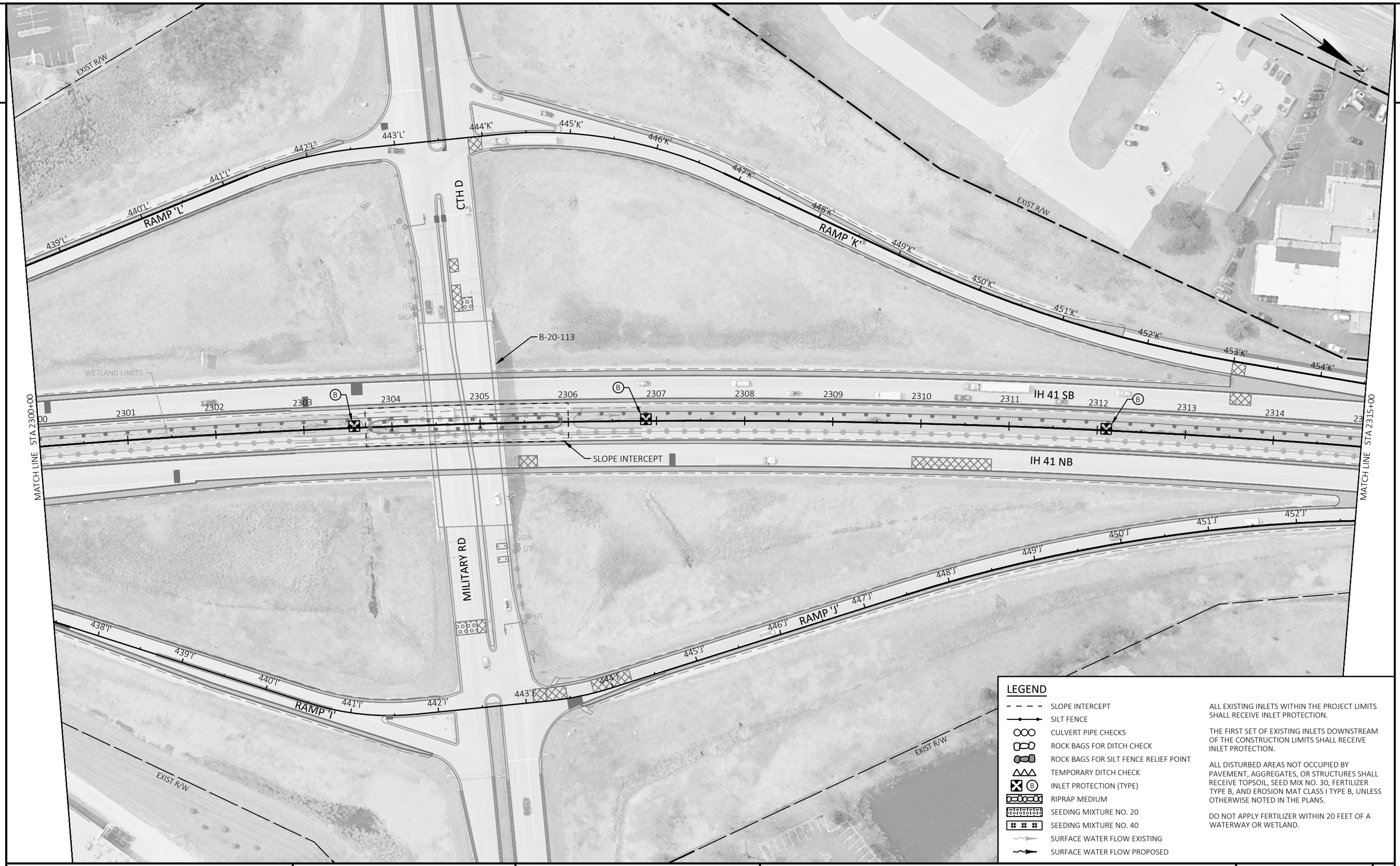
ALL DISTURBED AREAS NOT OCCUPIED BY PAVEMENT, AGGREGATES, OR STRUCTURES SHALL RECEIVE TOPSOIL, SEED MIX NO. 30, FERTILIZER TYPE B, AND EROSION MAT CLASS I TYPE B, UNLESS OTHERWISE NOTED IN THE PLANS.

DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 61	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022001-EC.DWG
LAYOUT NAME - Sheet-10
PLOT DATE : 7/28/2026 5:02 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

ALL DISTURBED AREAS NOT OCCUPIED BY PAVEMENT, AGGREGATES, OR STRUCTURES SHALL RECEIVE TOPSOIL, SEED MIX NO. 30, FERTILIZER TYPE B, AND EROSION MAT CLASS I TYPE B, UNLESS OTHERWISE NOTED IN THE PLANS.

DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 62	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022001-EC.DWG
LAYOUT NAME - Sheet-11
PLOT DATE : 7/28/2026 5:02 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

CTH VVV/ROLLING MEADOWS DR

EXIST R/W

EXIST R/W

455'K' 456'K' 457'K'

MATCH LINE STA 2315+00

2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330

EX 18" CMP

IH 41 SB

IH 41 NB

EX 18" RCP

MP MP MP MP MP

SIGN SIGN

453'J' 454'J'

EXIST R/W

CTH VV/PIONEER RD

EXIST R/W

N

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) (B)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

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DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 63	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022001-EC.DWG
LAYOUT NAME - Sheet-12
PLOT DATE : 7/28/2026 5:03 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

EXIST R/W

RAMP 'C'

RAMP 'B'

RAMP 'D'

RAMP 'A'

USH 151 SB

USH 151 NB

IH 41 SB

IH 41 NB

B-20-126

B-20-125

WETLAND LIMITS

SLOPE INTERCEPT, TYP

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

ALL DISTURBED AREAS NOT OCCUPIED BY PAVEMENT, AGGREGATES, OR STRUCTURES SHALL RECEIVE TOPSOIL, SEED MIX NO. 30, FERTILIZER TYPE B, AND EROSION MAT CLASS I TYPE B, UNLESS OTHERWISE NOTED IN THE PLANS.

DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 64	E

2

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) (B)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

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DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

N

RAMP 'E'

B-20-72

1256'E'

1255'E'

1254'E'

WISCONSIN CENTRAL LTD.

15'SS'

SLOPE INTERCEPT, TYP

TLE

MATCH LINE STA 19'SS'+50

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 65	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022003-EC.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 7/28/2026 5:47 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

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DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

WISCONSIN CENTRAL LTD.

MATCH LINE STA 19'SS'+50

20'SS'

21'SS'

EX 30" SS

22'SS'

23'SS'

24'SS'

25'SS'

SS

XXXXXX

EXIST SS EASEMENT

SLOPE INTERCEPT, TYP

TLE

W&L

EXIST R/W

26'HS'

HORSESHOE LANE

XXXXXXXX

TLE

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 66	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022003-EC.DWG
LAYOUT NAME - Sheet-02

PLOT DATE : 7/28/2026 5:47 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

EXIST SS EASEMENT

EX 30" SS

26'SS'

EXIST R/W

XXXXXXXX

GUY

WELL

25'HS'

26'HS'

27'HS'

28'HS'

29'HS'

30'

HORSESHOE LANE

MATCH LINE STA 30'HS'+00

12" CMCP

12" CMCP

CPCS 12-INCH

CPCS 12-INCH

EXIST R/W

XXXXXXXXXXXX

TLE

SLOPE INTERCEPT, TYP

WISCONSIN CENTRAL LTD.

24'SS'

XXXXXXX

SS

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

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DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 67	E

2



LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

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THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

ALL DISTURBED AREAS NOT OCCUPIED BY PAVEMENT, AGGREGATES, OR STRUCTURES SHALL RECEIVE TOPSOIL, SEED MIX NO. 30, FERTILIZER TYPE B, AND EROSION MAT CLASS I TYPE B, UNLESS OTHERWISE NOTED IN THE PLANS.

DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 68	E

2

LEGEND

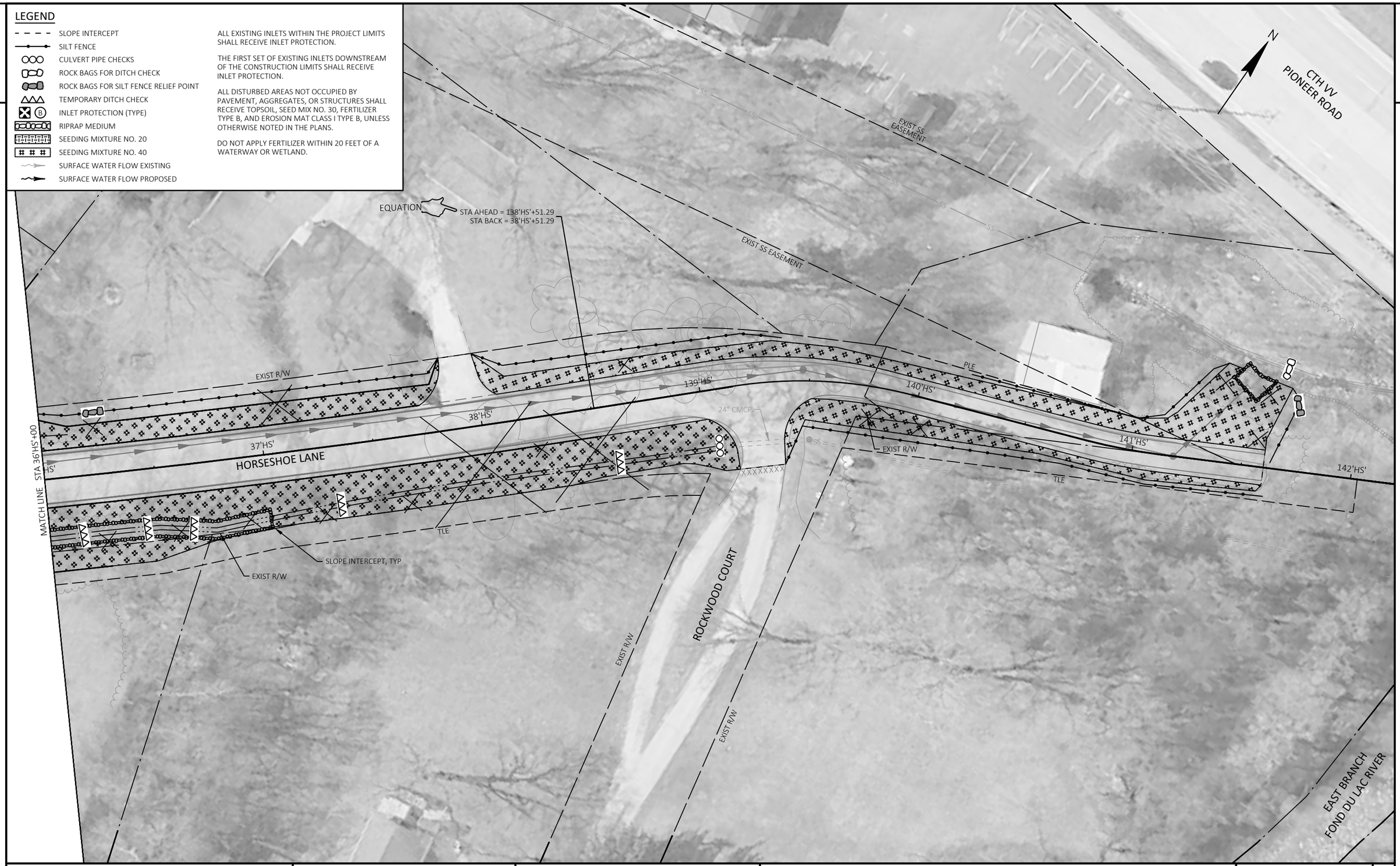
- SLOPE INTERCEPT
- SILT FENCE
- CULVERT PIPE CHECKS
- ROCK BAGS FOR DITCH CHECK
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) (B)
- RIPRAP MEDIUM
- SEEDING MIXTURE NO. 20
- SEEDING MIXTURE NO. 40
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

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DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATERWAY OR WETLAND.



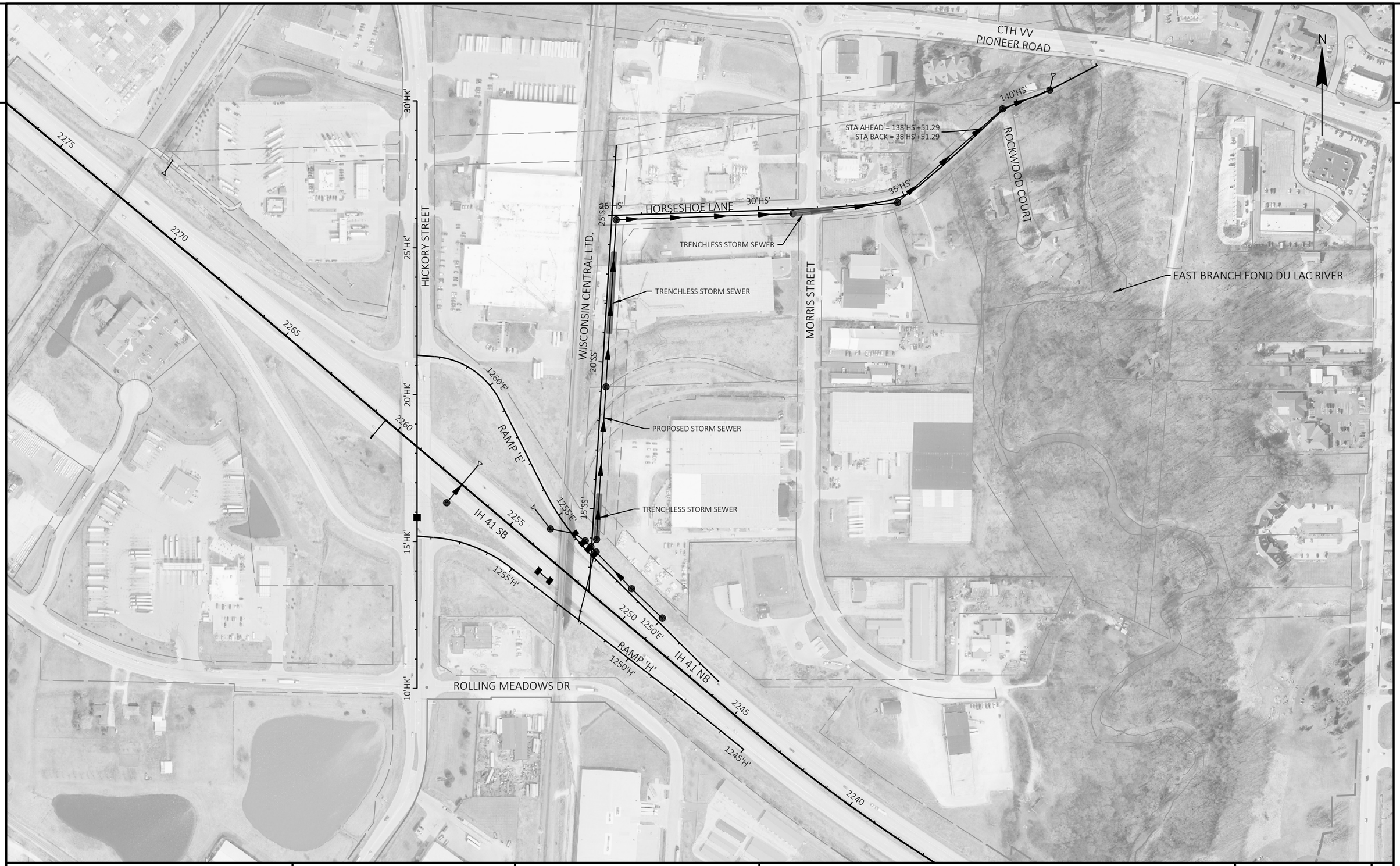
PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 69	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022003-EC.DWG
LAYOUT NAME - Sheet-05

PLOT DATE : 7/28/2026 5:48 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

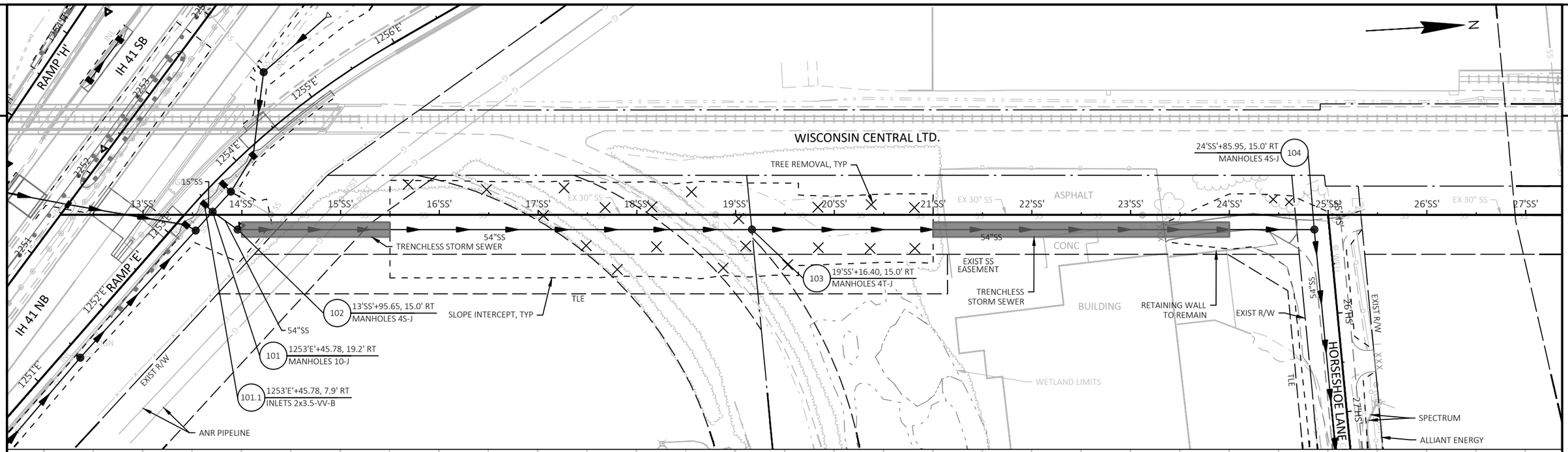
2

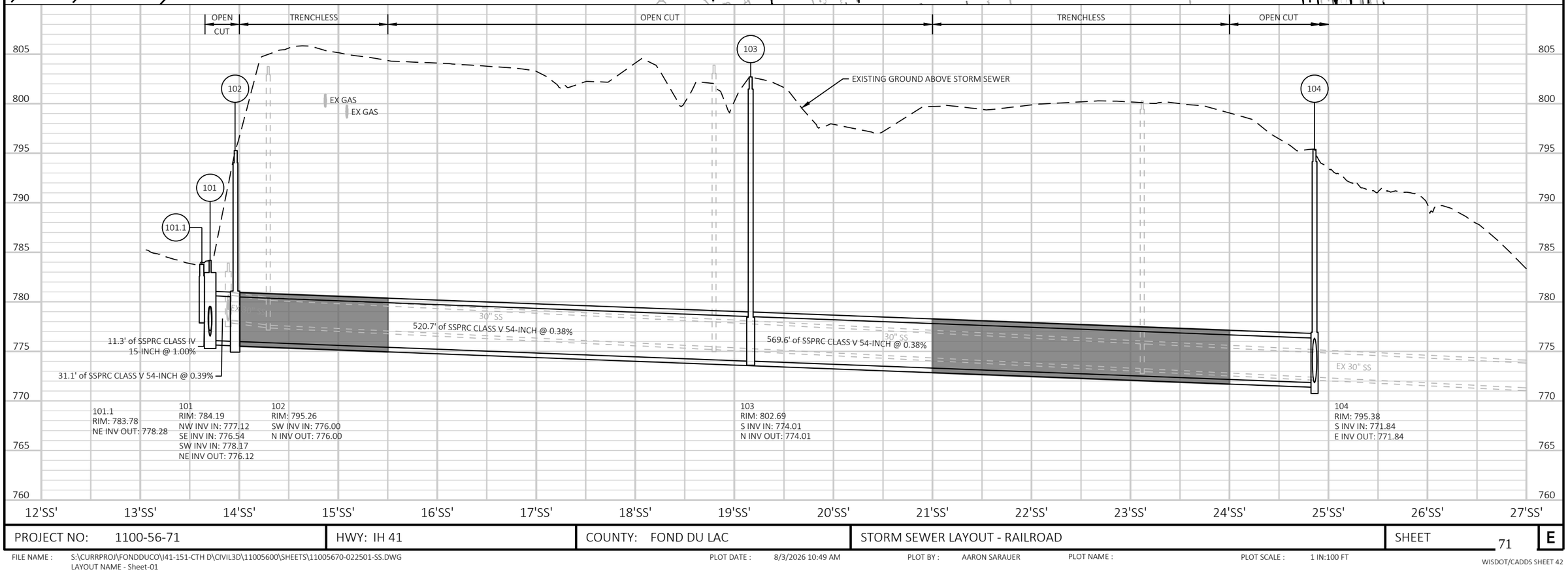


PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	STORM SEWER OVERVIEW	SHEET 70	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022500-SS.DWG
LAYOUT NAME - Sheet 01

PLOT DATE : 7/28/2026 5:50 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:300 FT

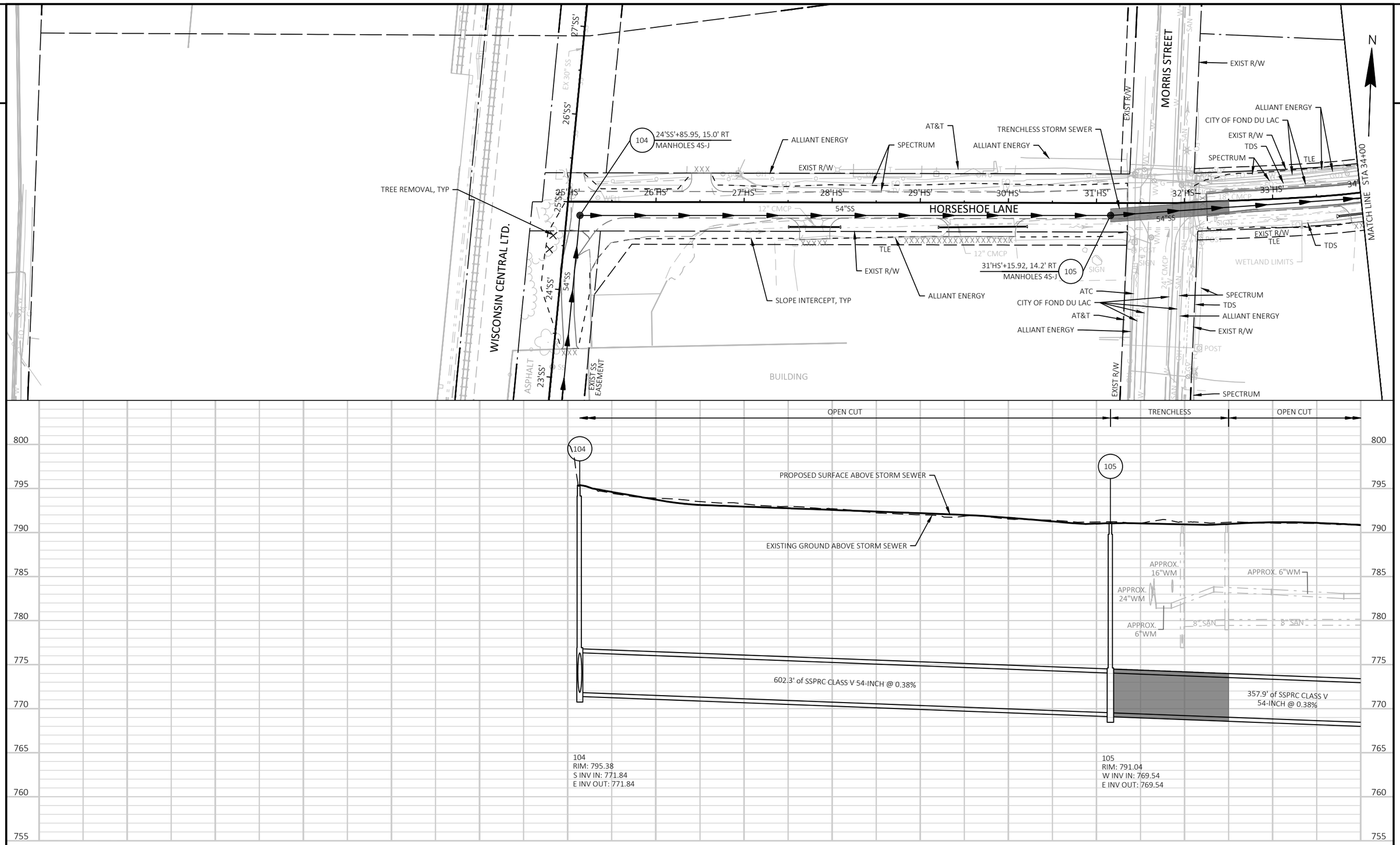




PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	STORM SEWER LAYOUT - RAILROAD	SHEET 71	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022501-SS.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 8/3/2026 10:49 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

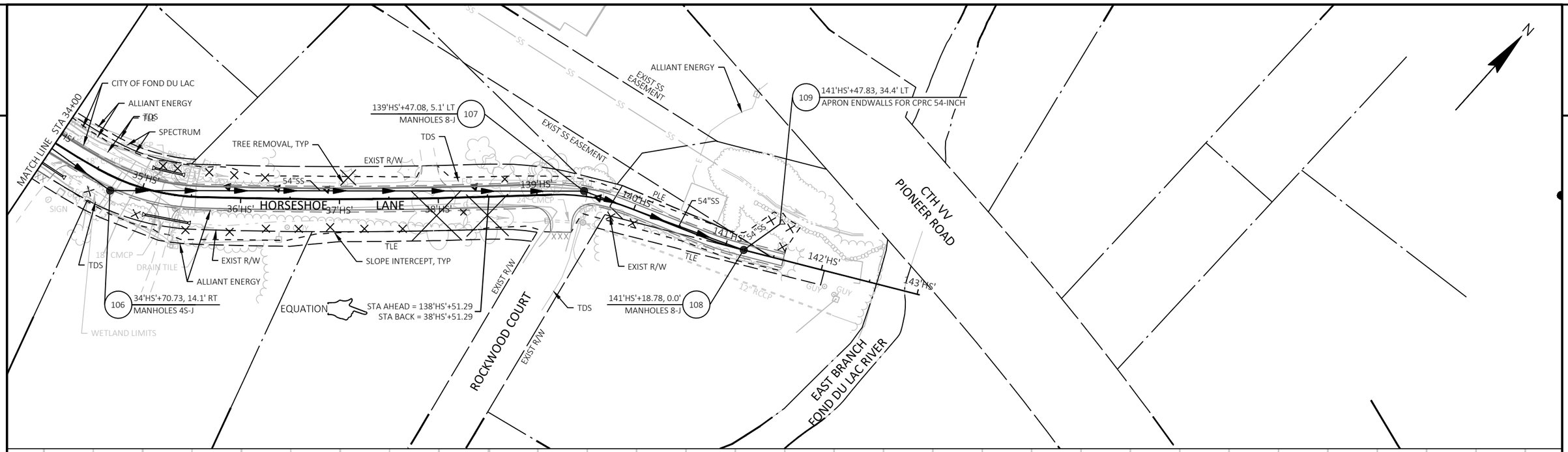


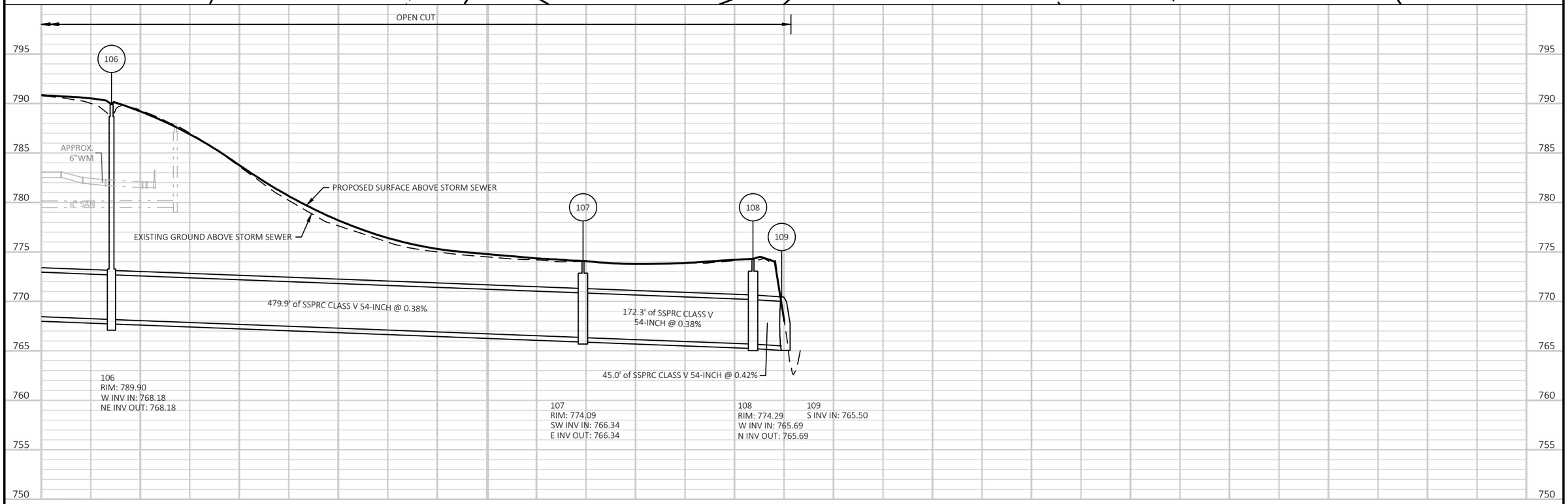
PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	STORM SEWER LAYOUT - HORSESHOE LANE	SHEET 72	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022502-SS.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 7/28/2026 5:56 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

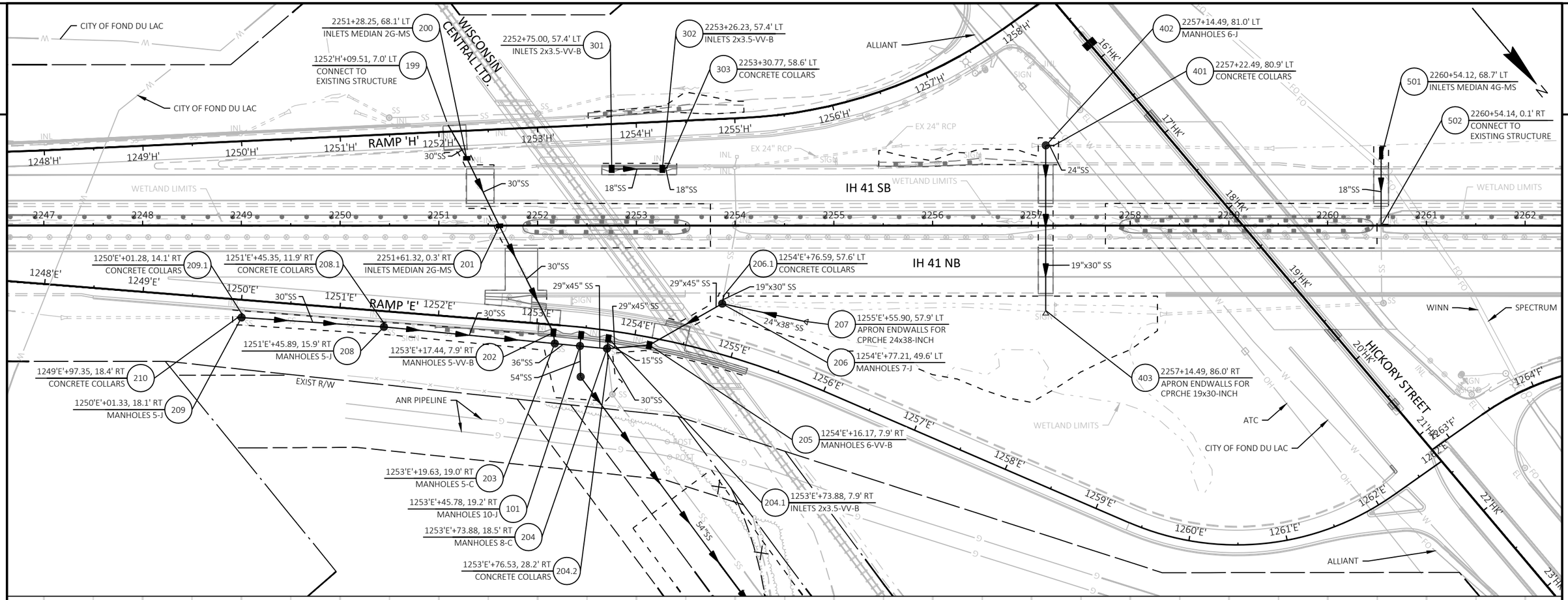




PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	STORM SEWER LAYOUT - HORSESHOE LANE	SHEET 73	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022502-SS.DWG
LAYOUT NAME - Sheet-02

PLOT DATE : 7/28/2026 5:56 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

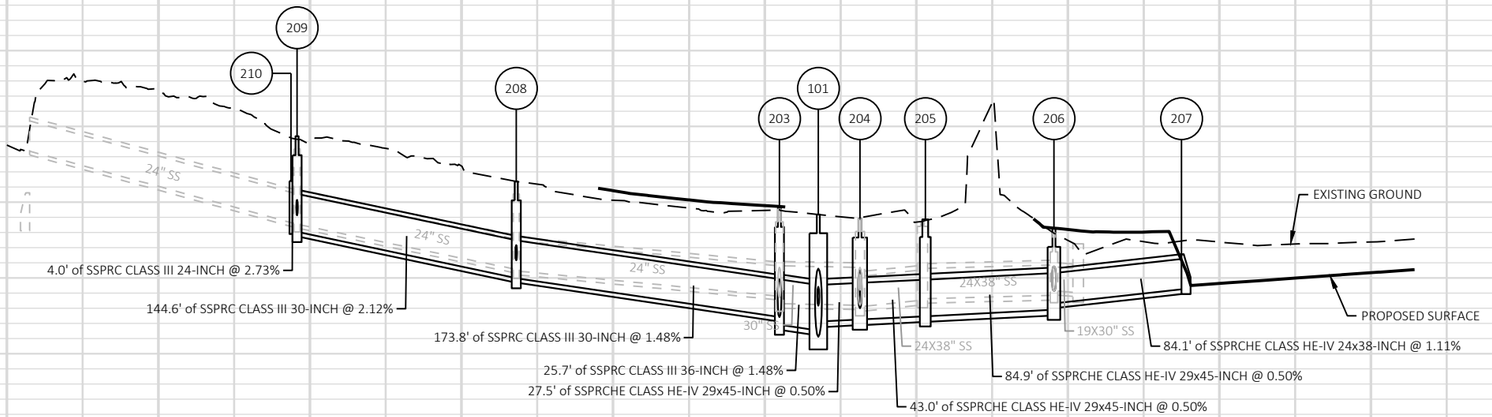


PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	STORM SEWER LAYOUT - IH 41	SHEET 74	E

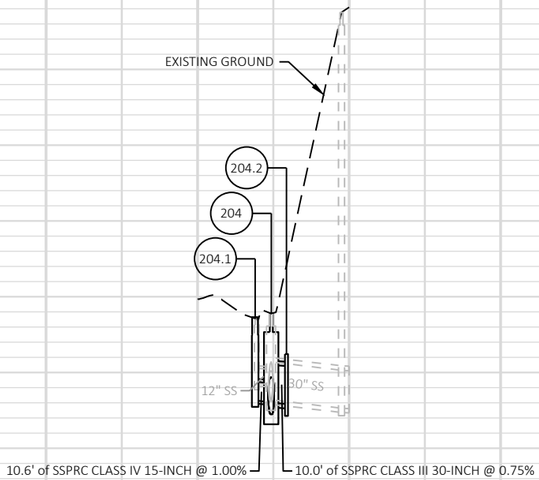
FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022503-SS.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 8/3/2026 10:33 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

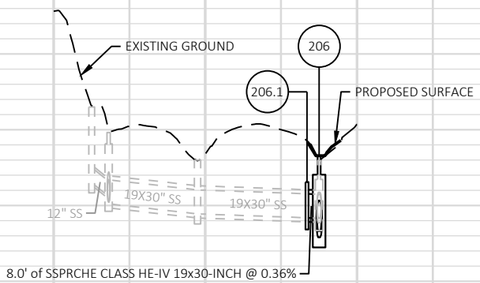
WISDOT/CADDS SHEET 42



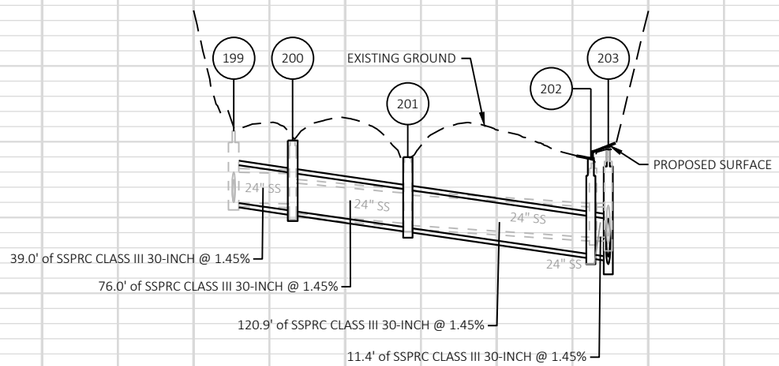
210	209	208	203	101	204	205	206	207
NW INV OUT: 783.65	RIM: 789.34 SE INV IN: 783.54 SW INV IN: 784.14 NW INV OUT: 783.04	RIM: 786.36 SE INV IN: 779.98 SW INV IN: 781.16 NW INV OUT: 779.98	RIM: 784.61 SW INV IN: 777.42 SE INV IN: 777.42 NW INV OUT: 776.92	RIM: 784.19 NW INV IN: 777.12 SE INV IN: 776.54 SW INV IN: 778.17 NE INV OUT: 776.12	RIM: 783.91 NW INV IN: 777.26 SW INV IN: 778.04 SE INV OUT: 777.26 NE INV OUT: 778.00	RIM: 783.87 W INV IN: 777.47 SE INV OUT: 777.47	RIM: 783.28 NW INV IN: 778.32 SW INV IN: 779.16 E INV OUT: 779.90	SE INV OUT: 779.25



204.1	204	204.2
RIM: 783.65 NE INV OUT: 778.15	RIM: 783.91 NW INV IN: 777.26 SW INV IN: 778.04 SE INV OUT: 777.26 NE INV OUT: 778.00	SW INV IN: 777.92



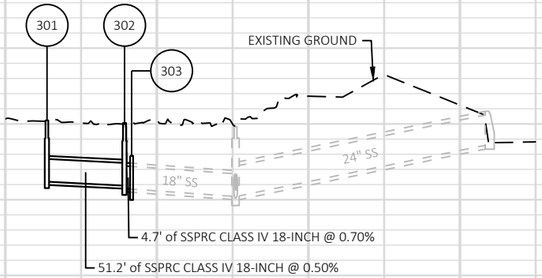
206.1	206
NE INV OUT: 779.19	RIM: 783.28 NW INV IN: 778.32 SW INV IN: 779.16 E INV OUT: 777.90



199	200	201	202	203
CONNECT TO EXISTING STRUCTURE N INV OUT: 781.00	RIM: 785.09 S INV IN: 780.43 N INV OUT: 780.43	RIM: 783.99 S INV IN: 779.33 N INV OUT: 779.33	RIM: 783.93 S INV IN: 777.58 NE INV OUT: 777.58	RIM: 784.61 SW INV IN: 777.42 SE INV IN: 777.42 NW INV OUT: 776.92

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	STORM SEWER LAYOUT - IH 41	SHEET 75	E

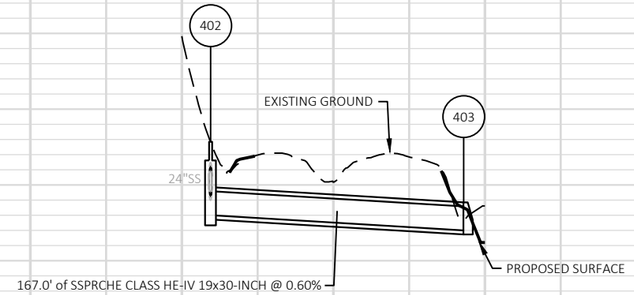
FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022503-SS.DWG
LAYOUT NAME - Sheet-02
PLOT DATE : 7/28/2026 6:01 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 41



301
RIM: 785.24
NW INV OUT: 781.19

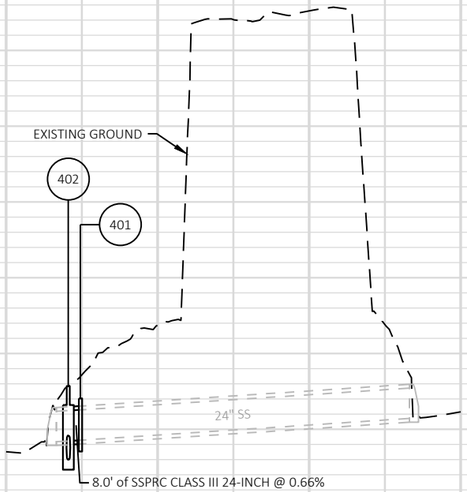
302
RIM: 785.06
SE INV IN: 780.93
NW INV OUT: 780.73

303
SE INV IN: 780.70



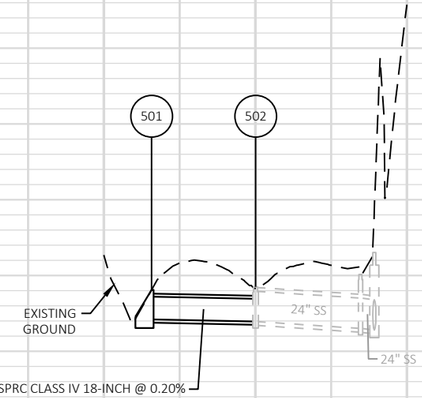
402
RIM: 787.85
NW INV IN: 784.23
NE INV OUT: 783.00

403
SW INV IN: 782.00



402
RIM: 787.85
NW INV IN: 784.23
NE INV OUT: 783.00

401
SE INV OUT: 784.28



501
RIM: 789.06
NE INV OUT: 787.10

502
CONNECT TO
EXISTING STRUCTURE
18" INV (SW): 786.96

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	STORM SEWER LAYOUT - IH 41	SHEET 76	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022503-SS.DWG
LAYOUT NAME - Sheet-03
PLOT DATE : 7/28/2026 6:01 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

2

1265'G'
1266'G'
RAMP 'G'
1267'G'
1268'G'
1269'G'
1270'G'
1271'G'
1272'G'
IH 41 SB
IH 41 NB
1264
1265
1266
1267
1268
1269
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
1266'F'
1267'F'
1268'F'
RAMP 'F'
1269'F'
1270'F'
1271'F'
1272'F'
1273'F'
1274'F'
1275'F'
1276'F'
1277'F'
1278'F'
WETLAND LIMITS
SIGN
INL
EX 24X38" RCHE
EX 48" RCP
EX 24" RCP
EX 36" RCP
2 - EX 48" RCP
36"SS
1273'F'+69.05, 96.8' RT
APRON ENDWALLS FOR CPRC 36-INCH
601
1273'F'+73.66, 143.2' RT
CONNECT TO
EXISTING STRUCTURE
602
N

800
795
790
785
780
775
770
765
760
755
EXISTING GROUND
PROPOSED SURFACE
36" SS
46.6' of SSPRC CLASS III 36-INCH @ 2.00%
60" SS

601
NE INV OUT: 783.00

602
CONNECT TO
EXISTING STRUCTURE
36" INV (SW): 782.07

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	STORM SEWER LAYOUT - IH 41	SHEET 77	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-022503-SS.DWG
LAYOUT NAME - Sheet-04
PLOT DATE : 8/24/2026 1:03 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 41

2

STORM SEWER STRUCTURE DATA - 11005600-Storm-Prop

STRUCTURE NUMBER	ALIGNMENT	STATION	OFFSET	LOCATION	TYPE	RIM/GRATE ELEVATION	STRUCTURE INV ELEV	TOTAL DEPTH	SUMP DEPTH	CONNECTING PIPES	PIPE DIRECTION	PIPE SIZE & TYPE	PIPE INVERT	PIPE ROUTE	PIPE LENGTH	PIPE SLOPE	REMARKS
101	RAMP E	1253+45.78	19.19	RT	MANHOLES 10-J	784.19	776.12	8.06	0.00	204-101 IN 203-101 IN 101.1-101 IN 101-102 OUT	NW SE SW NE	SSPRCHE CLASS HE-IV 29X45-INCH SSPRC CLASS III 36-INCH SSPRC CLASS IV 15-INCH SSPRC CLASS V 54-INCH	777.12 776.54 778.17 776.12	FROM STR: 204 FROM STR: 203 FROM STR: 101.1 TO STR: 102	-- -- -- 31.07'	-- -- -- 0.39%	
101.1	RAMP E	1253+45.78	7.87	RT	INLETS 2X3.5-VV-B	783.78	778.28	5.50	0.00	101.1-101 OUT	NE	SSPRC CLASS IV 15-INCH	778.28	TO STR: 101	11.32'	1.00%	
102	STORM SEWER	13+95.65	15.00	RT	MANHOLES 4S-J	795.26	776.00	19.26	0.00	101-102 IN 102-103 OUT	SW N	SSPRC CLASS V 54-INCH SSPRC CLASS V 54-INCH	776.00 776.00	FROM STR: 101 TO STR: 103	-- 520.75'	-- 0.38%	
103	STORM SEWER	19+16.40	15.00	RT	MANHOLES 4T-J	802.69	774.01	28.68	0.00	102-103 IN 103-104 OUT	S N	SSPRC CLASS V 54-INCH SSPRC CLASS V 54-INCH	774.01 774.01	FROM STR: 102 TO STR: 104	-- 569.55'	-- 0.38%	
104	STORM SEWER	24+85.95	15.00	RT	MANHOLES 4S-J	795.38	771.84	23.54	0.00	103-104 IN 104-105 OUT	S E	SSPRC CLASS V 54-INCH SSPRC CLASS V 54-INCH	771.84 771.84	FROM STR: 103 TO STR: 105	-- 602.31'	-- 0.38%	
105	HORSESHOE LN	31+15.92	14.20	RT	MANHOLES 4S-J	791.04	769.54	21.50	0.00	104-105 IN 105-106 OUT	W E	SSPRC CLASS V 54-INCH SSPRC CLASS V 54-INCH	769.54 769.54	FROM STR: 104 TO STR: 106	-- 357.94'	-- 0.38%	
106	HORSESHOE LN	34+70.73	14.05	RT	MANHOLES 4S-J	789.90	768.18	21.73	0.00	105-106 IN 106-107 OUT	W NE	SSPRC CLASS V 54-INCH SSPRC CLASS V 54-INCH	768.18 768.18	FROM STR: 105 TO STR: 107	-- 479.86'	-- 0.38%	
107	HORSESHOE LN	139+47.08	-5.07	LT	MANHOLES 8-J	774.09	766.34	7.75	0.00	106-107 IN 107-108 OUT	SW E	SSPRC CLASS V 54-INCH SSPRC CLASS V 54-INCH	766.34 766.34	FROM STR: 106 TO STR: 108	-- 172.35'	-- 0.38%	
108	HORSESHOE LN	141+18.78	0.00		MANHOLES 8-J	774.29	765.69	8.61	0.00	107-108 IN 108-109 OUT	W N	SSPRC CLASS V 54-INCH SSPRC CLASS V 54-INCH	765.69 765.69	FROM STR: 107 TO STR: 109	-- 45.00'	-- 0.42%	
109	HORSESHOE LN	141+47.83	-34.37	LT	APRON ENDWALLS FOR CPRC 54-INCH					108-109 IN	S	SSPRC CLASS V 54-INCH	765.50	FROM STR: 108	--	--	PIPE GRATE REQ'D
199	RAMP H	1252+09.51	-7.00	LT	CONNECT TO EXISTING STRUCTURE					199-200 OUT	N	SSPRC CLASS III 30-INCH	781.00	TO STR: 200	38.98'	1.45%	
200	IH 41	2251+28.25	-68.11	LT	INLETS MEDIAN 2G-MS	785.09	780.43	4.66	0.00	199-200 IN 200-201 OUT	S N	SSPRC CLASS III 30-INCH SSPRC CLASS III 30-INCH	780.43 780.43	FROM STR: 199 TO STR: 201	-- 75.98'	-- 1.45%	
201	IH 41	2251+61.32	0.29	RT	INLETS MEDIAN 2G-MS	783.99	779.33	4.66	0.00	200-201 IN 201-202 OUT	S N	SSPRC CLASS III 30-INCH SSPRC CLASS III 30-INCH	779.33 779.33	FROM STR: 200 TO STR: 202	-- 120.86'	-- 1.45%	
202	RAMP E	1253+17.44	7.87	RT	MANHOLES 5-VV-B	783.93	777.58	6.34	0.00	201-202 IN 202-203 OUT	S NE	SSPRC CLASS III 30-INCH SSPRC CLASS III 30-INCH	777.58 777.58	FROM STR: 201 TO STR: 203	-- 11.36'	-- 1.45%	
203	RAMP E	1253+19.63	19.02	RT	MANHOLES 5-C	784.61	776.92	7.69	0.00	202-203 IN 208-203 IN 203-101 OUT	SW SE NW	SSPRC CLASS III 30-INCH SSPRC CLASS III 30-INCH SSPRC CLASS III 36-INCH	777.42 777.42 776.92	FROM STR: 202 FROM STR: 208 TO STR: 101	-- -- 25.65'	-- -- 1.48%	
204	RAMP E	1253+73.88	18.50	RT	MANHOLES 8-C	783.91	777.26	6.65	0.00	205-204 IN 204.1-204 IN 204-101 OUT 204-204.2 OUT	NW SW SE NE	SSPRCHE CLASS HE-IV 29X45-INCH SSPRC CLASS IV 15-INCH SSPRCHE CLASS HE-IV 29X45-INCH SSPRC CLASS III 30-INCH	777.26 778.04 777.26 778.00	FROM STR: 205 FROM STR: 204.1 TO STR: 101 TO STR: 204.2	-- -- 27.47' 10.00'	-- -- 0.50% 0.75%	
204.1	RAMP E	1253+73.88	7.87	RT	INLETS 2X3.5-VV-B	783.65	778.15	5.50	0.00	204.1-204 OUT	NE	SSPRC CLASS IV 15-INCH	778.15	TO STR: 204	10.63'	1.00%	
204.2	RAMP E	1253+76.53	28.16	RT	CONCRETE COLLARS					204-204.2 IN	SW	SSPRC CLASS III 30-INCH	777.92	FROM STR: 204	--	--	
205	RAMP E	1254+16.17	7.87	RT	MANHOLES 6-VV-B	783.87	777.47	6.40	0.00	206-205 IN 205-204 OUT	W SE	SSPRCHE CLASS HE-IV 29X45-INCH SSPRCHE CLASS HE-IV 29X45-INCH	777.47 777.47	FROM STR: 206 TO STR: 204	-- 42.95'	-- 0.50%	
206	RAMP E	1254+77.21	-49.61	LT	MANHOLES 7-J	783.28	777.90	5.38	0.00	207-206 IN 206.1-206 IN 206-205 OUT	NW SW E	SSPRCHE CLASS HE-IV 24X38-INCH SSPRCHE CLASS HE-IV 19X30-INCH SSPRCHE CLASS HE-IV 29X45-INCH	778.32 779.16 777.90	FROM STR: 207 FROM STR: 206.1 TO STR: 205	-- -- 84.93'	-- -- 0.50%	
206.1	RAMP E	1254+76.59	-57.59	LT	CONCRETE COLLARS					206.1-206 OUT	NE	SSPRCHE CLASS HE-IV 19X30-INCH	779.19	TO STR: 206	8.00'	0.36%	
207	RAMP E	1255+55.90	-57.93	LT	APRON ENDWALLS FOR CPRCHE 24X38-INCH					207-206 OUT	SE	SSPRCHE CLASS HE-IV 24X38-INCH	779.25	TO STR: 206	84.14'	1.11%	PIPE GRATE REQ'D
208	RAMP E	1251+45.89	15.90	RT	MANHOLES 5-J	786.36	779.98	6.38	0.00	209-208 IN 208.1-208 IN 208-203 OUT	SE SW NW	SSPRC CLASS III 30-INCH SSPRC CLASS III 12-INCH SSPRC CLASS III 30-INCH	779.98 781.16 779.98	FROM STR: 209 FROM STR: 208.1 TO STR: 203	-- -- 173.77'	-- -- 1.48%	
208.1	RAMP E	1251+45.35	11.94	RT	CONCRETE COLLARS					208.1-208 OUT	NE	SSPRC CLASS III 12-INCH	781.61	TO STR: 208	4.00'	11.35%	
209	RAMP E	1250+01.33	18.06	RT	MANHOLES 5-J	789.34	783.04	6.30	0.00	210-209 IN 209.1-209 IN 209-208 OUT	SE SW NW	SSPRC CLASS III 24-INCH SSPRC CLASS III 12-INCH SSPRC CLASS III 30-INCH	783.54 784.14 783.04	FROM STR: 210 FROM STR: 209.1 TO STR: 208	-- -- 144.57'	-- -- 2.12%	
209.1	RAMP E	1250+01.28	14.06	RT	CONCRETE COLLARS					209.1-209 OUT	NE	SSPRC CLASS III 12-INCH	784.22	TO STR: 209	4.00'	2.00%	

NOTES:

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2. MANHOLES SHALL BE CONSTRUCTED IN A WAY THAT WILL ALLOW THE CASTING TO BE ALIGNED IN THE MIDDLE OF A LANE OR ON A JOINT LINE.
3. CONTRACTOR SHALL VERIFY EXISTING PIPE SIZES, MATERIALS AND INVERT ELEVATION WHEN CONNECTING NEW STORM SEWER INTO EXISTING PIPES PRIOR TO MANUFACTURING INLETS AND MANHOLES.
4. STATION/ OFFSET OF STORM SEWER STRUCTURES ARE TO THE CENTER OF STRUCTURE EXCEPT FOR CONCRETE APRON ENDWALLS WHICH ARE TO PIPE END.
5. RIM ELEVATION GIVEN AT THE INLET COVER FLANGE LOCATION
6. FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE BOTTOM OF STRUCTURE. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE

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STORM SEWER STRUCTURE DATA - 11005600-Storm-Prop

STRUCTURE NUMBER	ALIGNMENT	STATION	OFFSET	LOCATION	TYPE	RIM/GRATE ELEVATION	STRUCTURE INV ELEV	TOTAL DEPTH	SUMP DEPTH	CONNECTING PIPES	PIPE DIRECTION	PIPE SIZE & TYPE	PIPE INVERT	PIPE ROUTE	PIPE LENGTH	PIPE SLOPE	REMARKS
210	RAMP E	1249+97.35	18.38	RT	CONCRETE COLLARS					210-209 OUT	NW	SSPRC CLASS III 24-INCH	783.65	TO STR: 209	4.00'	2.73%	
301	IH 41	2252+75.00	-57.38	LT	INLETS 2X3.5-VV-B	785.24	781.19	4.05	0.00	301-302 OUT	NW	SSPRC CLASS IV 18-INCH	781.19	TO STR: 302	51.23'	0.50%	
302	IH 41	2253+26.23	-57.38	LT	INLETS 2X3.5-VV-B	785.06	780.73	4.33	0.00	301-302 IN 302-303 OUT	SE NW	SSPRC CLASS IV 18-INCH SSPRC CLASS IV 18-INCH	780.93 780.73	FROM STR: 301 TO STR: 303	-- 4.69'	-- 0.70%	
303	IH 41	2253+30.77	-58.56	LT	CONCRETE COLLARS					302-303 IN	SE	SSPRC CLASS IV 18-INCH	780.70	FROM STR: 302	--	--	
401	IH 41	2257+22.49	-80.95	LT	CONCRETE COLLARS					401-402 OUT	SE	SSPRC CLASS III 24-INCH	784.28	TO STR: 402	8.00'	0.66%	
402	IH 41	2257+14.49	-81.05	LT	MANHOLES 6-J	787.85	783.00	4.85	0.00	401-402 IN 402-403 OUT	NW NE	SSPRC CLASS III 24-INCH SSPRCHE CLASS HE-IV 19X30-INCH	784.23 783.00	FROM STR: 401 TO STR: 403	-- 167.00'	-- 0.60%	
403	IH 41	2257+14.49	85.95	RT	APRON ENDWALLS FOR CPRCHE 19X30-INCH					402-403 IN	SW	SSPRCHE CLASS HE-IV 19X30-INCH	782.00	FROM STR: 402	--	--	
501	IH 41	2260+54.12	-68.72	LT	INLETS MEDIAN 4G-MS	789.06	787.03	2.03	0.00	501-502 OUT	NE	SSPRC CLASS IV 18-INCH	787.10	TO STR: 502	68.80'	0.20%	
502	IH 41	2260+54.14	0.09	RT	CONNECT TO EXISTING STRUCTURE					501-502 IN	SW	SSPRC CLASS IV 18-INCH	786.96	FROM STR: 501	--	--	
601	RAMP F	1273+69.05	96.81	RT	APRON ENDWALLS FOR CPRC 36-INCH					601-602 OUT	NE	SSPRC CLASS III 36-INCH	783.00	TO STR: 602	46.57'	2.00%	PIPE GRATE REQ'D
602	RAMP F	1273+73.66	143.16	RT	CONNECT TO EXISTING STRUCTURE					601-602 IN	SW	SSPRC CLASS III 36-INCH	782.07	FROM STR: 601	--	--	
701	USH 151	93+43.96	-22.53	LT	REMOVE EX HM-GJ CASTING INSTALL NEW HM CASTING	869.49	868.49	1.00	1.00								
702	USH 151	98+66.95	-12.46	LT	ADJUSTING INLET COVERS												RIM ELEV SUBJECT TO C & G REPLACEMENT
703	USH 151	98+83.92	23.93	RT	ADJUSTING INLET COVERS												RIM ELEV SUBJECT TO C & G REPLACEMENT
704	USH 151	103+81.31	-0.58	LT	ADJUSTING INLET COVERS												RIM ELEV SUBJECT TO C & G REPLACEMENT
705	USH 151	104+28.55	23.18	RT	ADJUSTING INLET COVERS												RIM ELEV SUBJECT TO C & G REPLACEMENT
706	RAMP A	327+49.92	10.60	RT	ADJUSTING INLET COVERS												RIM ELEV SUBJECT TO C & G REPLACEMENT
801	HICKORY	15+82.27	-4.00	LT	ADJUSTING INLET COVERS												RIM ELEV SUBJECT TO C & G REPLACEMENT
802	HICKORY	15+82.27	4.00	RT	ADJUSTING INLET COVERS												RIM ELEV SUBJECT TO C & G REPLACEMENT
901	MILITARY	325+75.36	0.98	RT	ADJUSTING INLET COVERS												RIM ELEV SUBJECT TO C & G REPLACEMENT
902	MILITARY	325+75.36	8.86	RT	ADJUSTING INLET COVERS												RIM ELEV SUBJECT TO C & G REPLACEMENT
903	RAMP I	441+44.07	1.47	RT	ADJUSTING INLET COVERS												RIM ELEV SUBJECT TO C & G REPLACEMENT

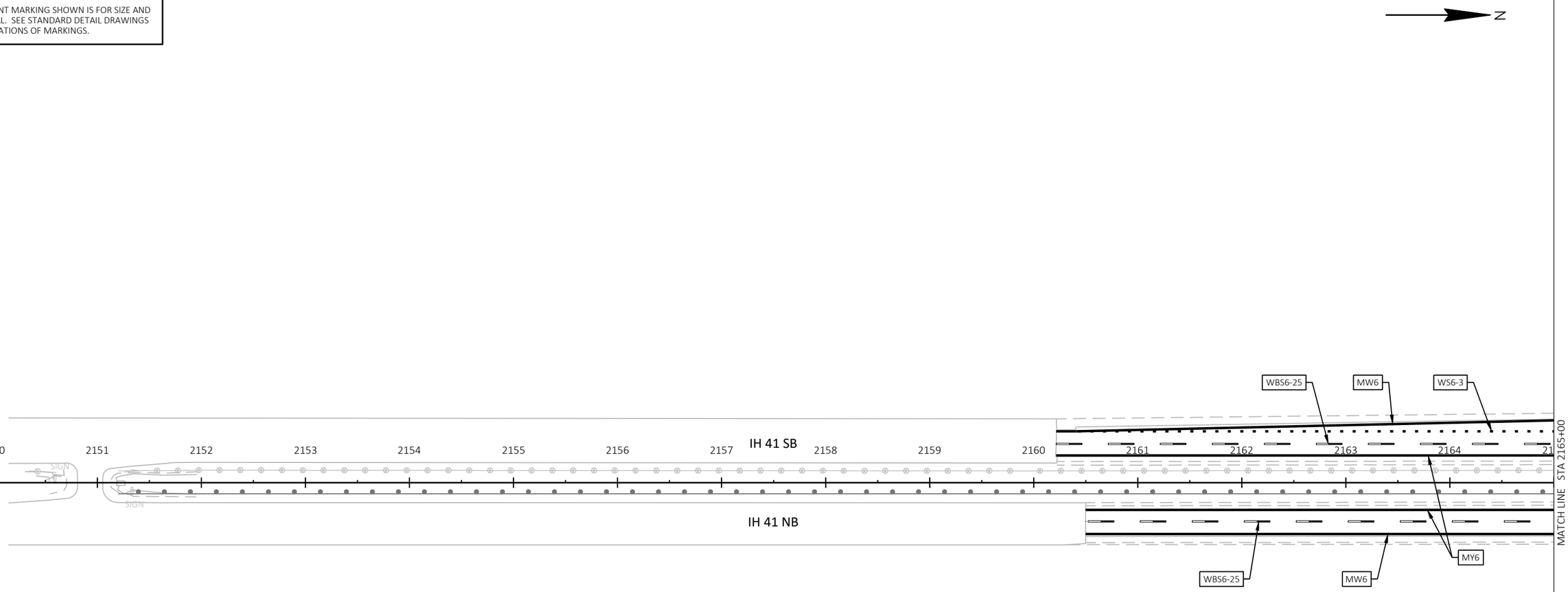
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NOTES:

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2. MANHOLES SHALL BE CONSTRUCTED IN A WAY THAT WILL ALLOW THE CASTING TO BE ALIGNED IN THE MIDDLE OF A LANE OR ON A JOINT LINE.
3. CONTRACTOR SHALL VERIFY EXISTING PIPE SIZES, MATERIALS AND INVERT ELEVATION WHEN CONNECTING NEW STORM SEWER INTO EXISTING PIPES PRIOR TO MANUFACTURING INLETS AND MANHOLES.
4. STATION/ OFFSET OF STORM SEWER STRUCTURES ARE TO THE CENTER OF STRUCTURE EXCEPT FOR CONCRETE APRON ENDWALLS WHICH ARE TO PIPE END.
5. RIM ELEVATION GIVEN AT THE INLET COVER FLANGE LOCATION
6. FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE BOTTOM OF STRUCTURE. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE

NOTES

PAVEMENT MARKING SHOWN IS FOR SIZE AND MATERIAL. SEE STANDARD DETAIL DRAWINGS FOR LOCATIONS OF MARKINGS.

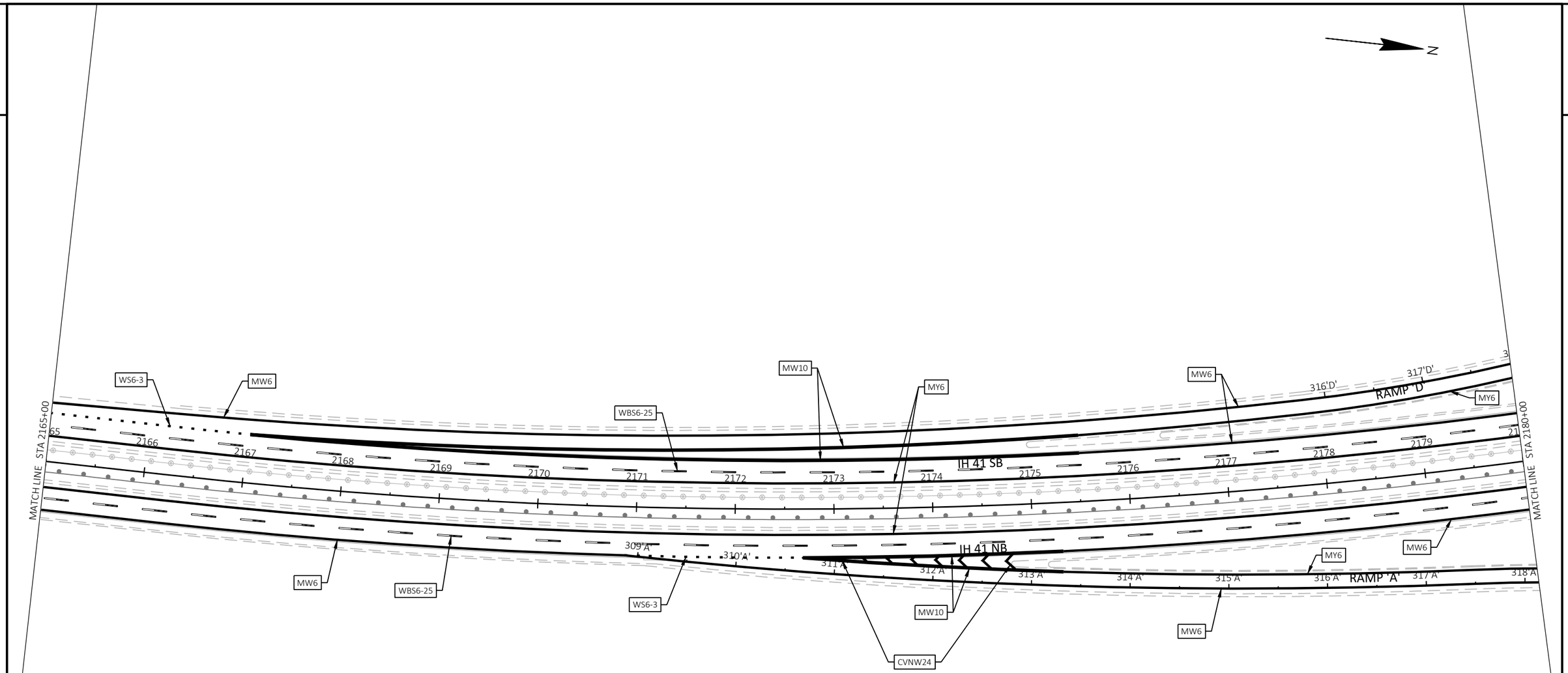


LEGEND

ARW-2	MARKING ARROW EPOXY (WHITE) (TYPE 2)
ARW-3	MARKING ARROW EPOXY (WHITE) (TYPE 3)
CVNW24	MARKING CHEVRON EPOXY 24-INCH (WHITE)
MW10	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE)
MW6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
MY6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
SLW18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
WBS10-6	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE SKIP)/ MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK SKIP) (3' SEG, 3' SEG, 6' GAP)
WBS6-25	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP)/ MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK SKIP) (12.5' SEG, 12.5' SEG, 25' GAP)
WDW-O	MARKING WORD EPOXY (WHITE) ("ONLY")
WS10-3	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE SKIP) (3' SEG., 9' GAP)
WS6-3	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP) (3' SEG, 9' GAP)

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN - IH 41	SHEET 80	E

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LEGEND

ARW-2	MARKING ARROW EPOXY (WHITE) (TYPE 2)
ARW-3	MARKING ARROW EPOXY (WHITE) (TYPE 3)
CVNW24	MARKING CHEVRON EPOXY 24-INCH (WHITE)
MW10	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE)
MW6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
MY6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
SLW18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
WBS10-6	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE SKIP)/ MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK SKIP) (3' SEG, 3' SEG, 6' GAP)
WBS6-25	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP)/ MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK SKIP) (12.5' SEG, 12.5' SEG, 25' GAP)
WDW-O	MARKING WORD EPOXY (WHITE) ("ONLY")
WS10-3	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE SKIP) (3' SEG., 9' GAP)
WS6-3	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP) (3' SEG, 9' GAP)

NOTES

PAVEMENT MARKING SHOWN IS FOR SIZE AND MATERIAL. SEE STANDARD DETAIL DRAWINGS FOR LOCATIONS OF MARKINGS.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN - IH 41	SHEET 81	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-024501-PM.DWG
LAYOUT NAME - Sheet-02
PLOT DATE : 8/24/2026 10:22 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

LEGEND

ARW-2	MARKING ARROW EPOXY (WHITE) (TYPE 2)
ARW-3	MARKING ARROW EPOXY (WHITE) (TYPE 3)
CVNW24	MARKING CHEVRON EPOXY 24-INCH (WHITE)
MW10	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE)
MW6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
MY6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
SLW18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
WBS10-6	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE SKIP)/ MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK SKIP) (3' SEG, 3' SEG, 6' GAP)
WBS6-25	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP)/ MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK SKIP) (12.5' SEG, 12.5' SEG, 25' GAP)
WDW-O	MARKING WORD EPOXY (WHITE) ("ONLY")
WS10-3	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE SKIP) (3' SEG., 9' GAP)
WS6-3	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP) (3' SEG, 9' GAP)

N

RAMP 'D'

RAMP 'A'

RAMP 'B'

IH 41 SB

IH 41 NB

USH 151 NB

USH 151 SB

MATCH LINE STA 2180+00

MATCH LINE STA 2195+00

B-20-125

B-20-126

RAMP GATE

SOLAR PANEL POST

SIGN

MP

EL

UT

NOTES

PAVEMENT MARKING SHOWN IS FOR SIZE AND MATERIAL. SEE STANDARD DETAIL DRAWINGS FOR LOCATIONS OF MARKINGS.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN - IH 41	SHEET 82	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-024501-PM.DWG
LAYOUT NAME - Sheet-03

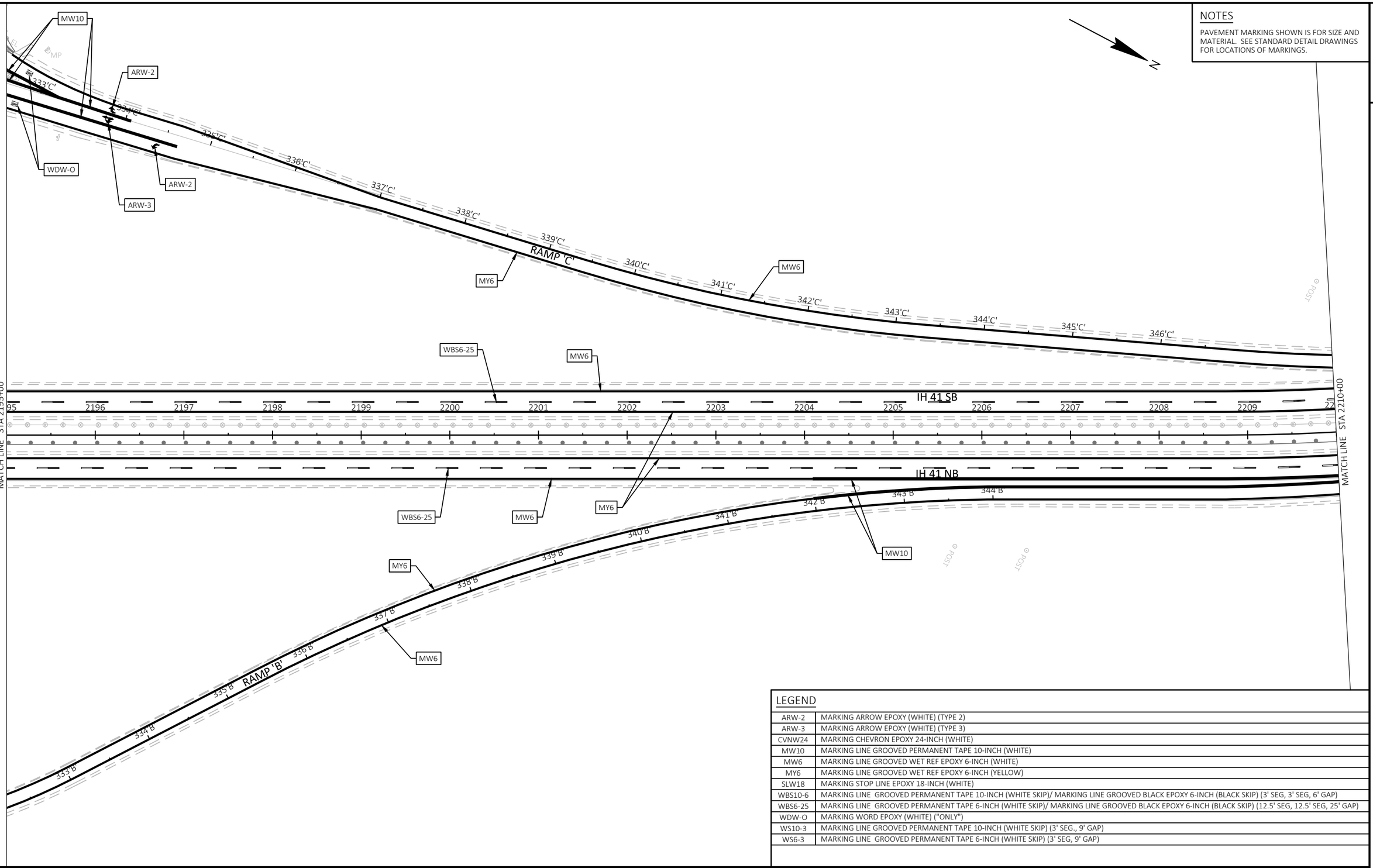
PLOT DATE : 8/24/2026 10:22 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

NOTES

PAVEMENT MARKING SHOWN IS FOR SIZE AND MATERIAL. SEE STANDARD DETAIL DRAWINGS FOR LOCATIONS OF MARKINGS.



LEGEND

ARW-2	MARKING ARROW EPOXY (WHITE) (TYPE 2)
ARW-3	MARKING ARROW EPOXY (WHITE) (TYPE 3)
CVNW24	MARKING CHEVRON EPOXY 24-INCH (WHITE)
MW10	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE)
MW6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
MY6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
SLW18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
WBS10-6	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE SKIP)/ MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK SKIP) (3' SEG, 3' SEG, 6' GAP)
WBS6-25	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP)/ MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK SKIP) (12.5' SEG, 12.5' SEG, 25' GAP)
WDW-O	MARKING WORD EPOXY (WHITE) ("ONLY")
WS10-3	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE SKIP) (3' SEG., 9' GAP)
WS6-3	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP) (3' SEG, 9' GAP)

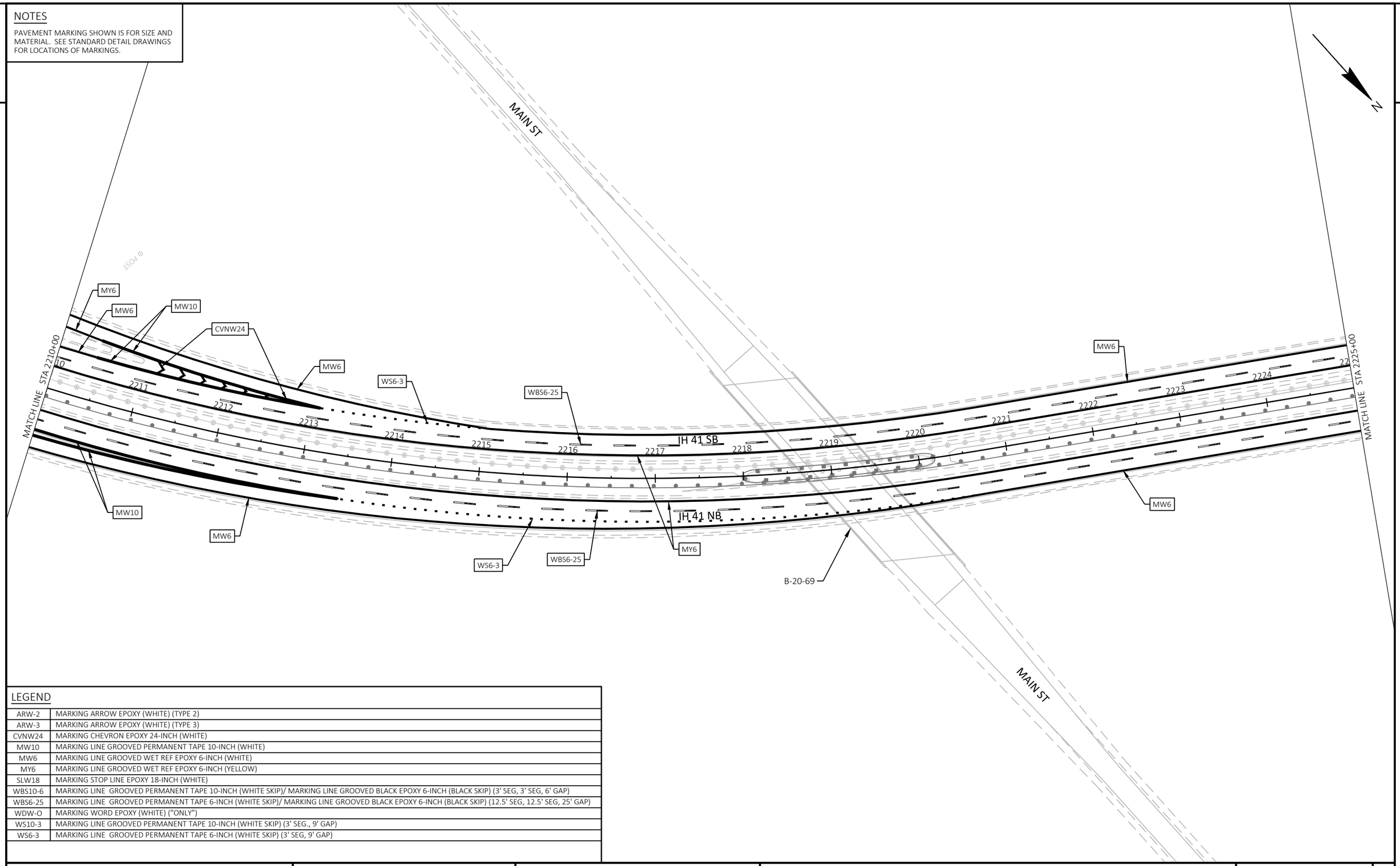
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN - IH 41	SHEET 83	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-024501-PM.DWG
LAYOUT NAME - Sheet-04
PLOT DATE : 8/24/2026 10:22 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

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NOTES

PAVEMENT MARKING SHOWN IS FOR SIZE AND MATERIAL. SEE STANDARD DETAIL DRAWINGS FOR LOCATIONS OF MARKINGS.



LEGEND

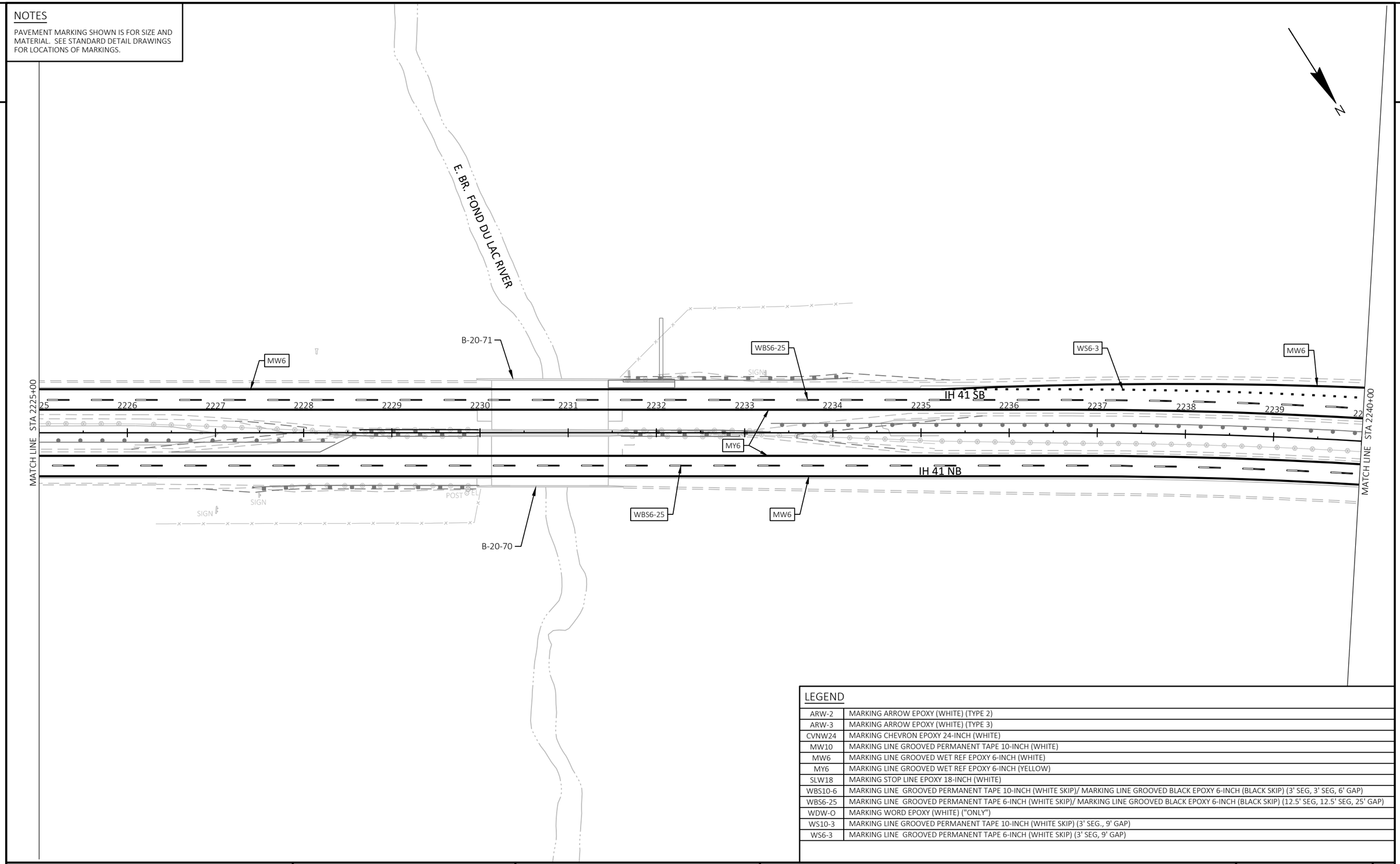
ARW-2	MARKING ARROW EPOXY (WHITE) (TYPE 2)
ARW-3	MARKING ARROW EPOXY (WHITE) (TYPE 3)
CVNW24	MARKING CHEVRON EPOXY 24-INCH (WHITE)
MW10	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE)
MW6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
MY6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
SLW18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
WBS10-6	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE SKIP)/ MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK SKIP) (3' SEG, 3' SEG, 6' GAP)
WBS6-25	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP)/ MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK SKIP) (12.5' SEG, 12.5' SEG, 25' GAP)
WDW-O	MARKING WORD EPOXY (WHITE) ("ONLY")
WS10-3	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE SKIP) (3' SEG., 9' GAP)
WS6-3	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP) (3' SEG, 9' GAP)

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN - IH 41	SHEET 84	E

2

NOTES

PAVEMENT MARKING SHOWN IS FOR SIZE AND MATERIAL. SEE STANDARD DETAIL DRAWINGS FOR LOCATIONS OF MARKINGS.



LEGEND

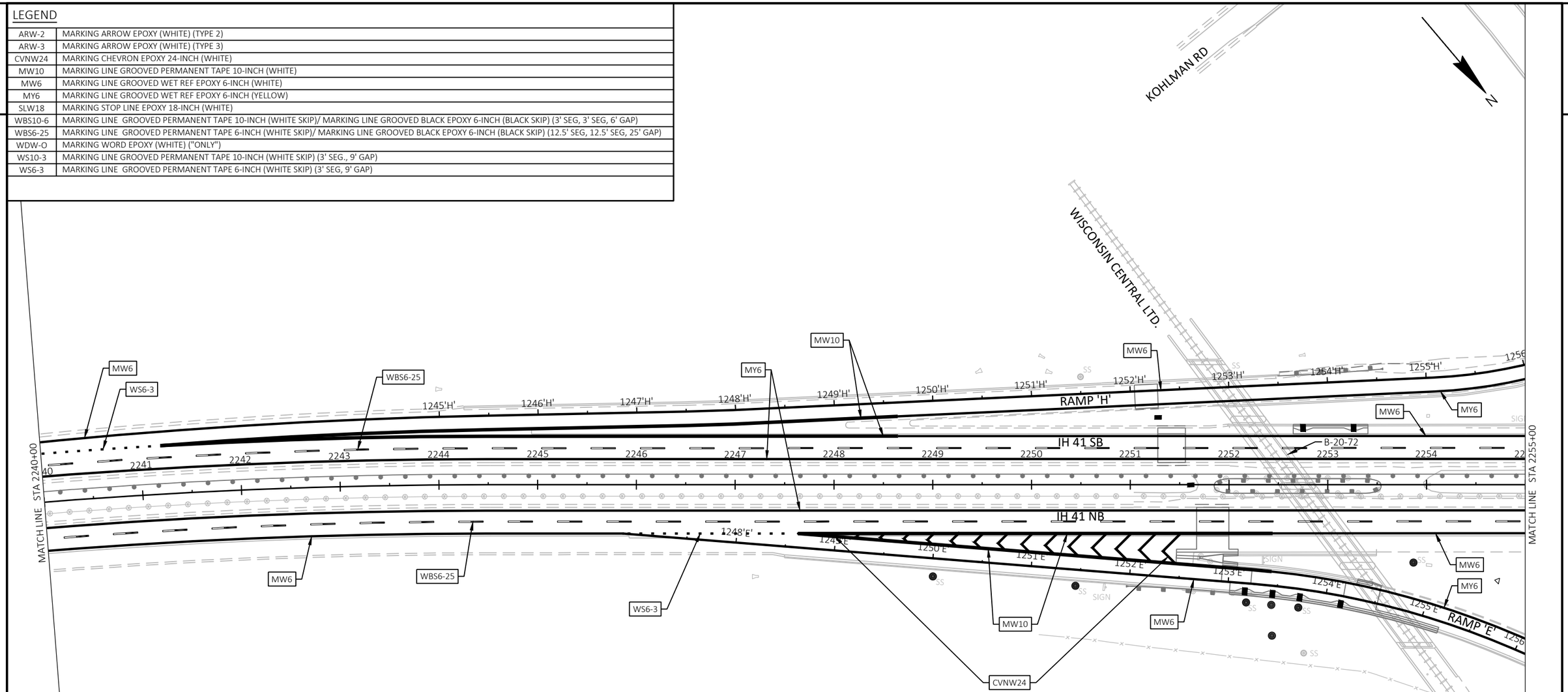
ARW-2	MARKING ARROW EPOXY (WHITE) (TYPE 2)
ARW-3	MARKING ARROW EPOXY (WHITE) (TYPE 3)
CVNW24	MARKING CHEVRON EPOXY 24-INCH (WHITE)
MW10	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE)
MW6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
MY6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
SLW18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
WBS10-6	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE SKIP)/ MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK SKIP) (3' SEG, 3' SEG, 6' GAP)
WBS6-25	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP)/ MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK SKIP) (12.5' SEG, 12.5' SEG, 25' GAP)
WDW-O	MARKING WORD EPOXY (WHITE) ("ONLY")
WS10-3	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE SKIP) (3' SEG., 9' GAP)
WS6-3	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP) (3' SEG, 9' GAP)

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN - IH 41	SHEET 85	E

2

LEGEND

ARW-2	MARKING ARROW EPOXY (WHITE) (TYPE 2)
ARW-3	MARKING ARROW EPOXY (WHITE) (TYPE 3)
CVNW24	MARKING CHEVRON EPOXY 24-INCH (WHITE)
MW10	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE)
MW6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
MY6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
SLW18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
WBS10-6	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE SKIP)/ MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK SKIP) (3' SEG, 3' SEG, 6' GAP)
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WS6-3	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP) (3' SEG, 9' GAP)



NOTES

PAVEMENT MARKING SHOWN IS FOR SIZE AND MATERIAL. SEE STANDARD DETAIL DRAWINGS FOR LOCATIONS OF MARKINGS.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN - IH 41	SHEET 86	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-024501-PM.DWG
LAYOUT NAME - Sheet-07

PLOT DATE : 8/24/2026 10:23 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

NOTES

PAVEMENT MARKING SHOWN IS FOR SIZE AND MATERIAL. SEE STANDARD DETAIL DRAWINGS FOR LOCATIONS OF MARKINGS.

HICKORY ST

IH 41 SB

IH 41 NB

MATCH LINE STA 2255+00

MATCH LINE STA 2270+00

RAMP 'G'

RAMP 'F'

RAMP 'E'

HICKORY ST

WISCONSIN CENTRAL LTD.

MW10 MW6 MY6 SLW18 B-20-111 WBS6-25 CVNW24 WS10-3

LEGEND

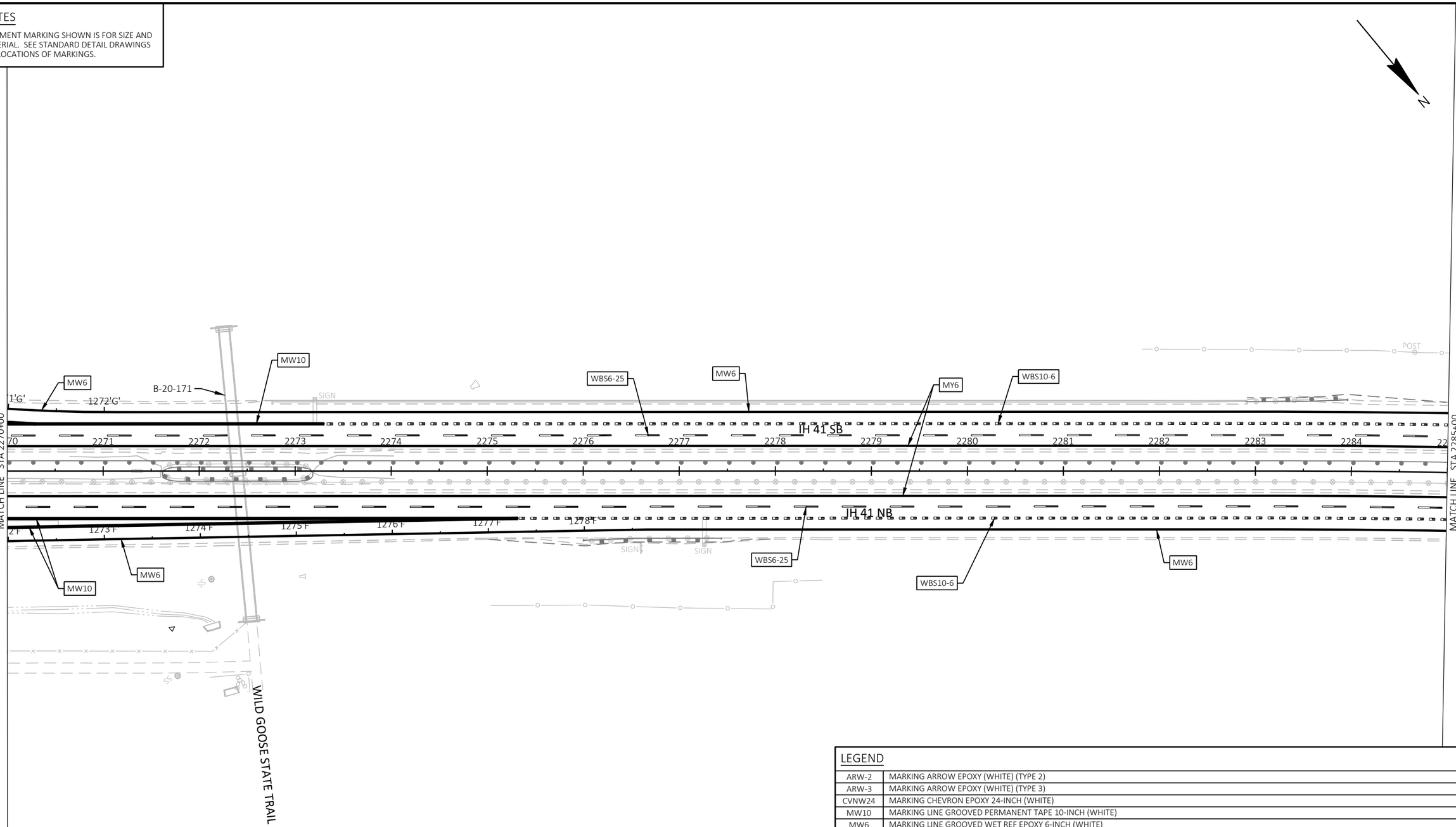
ARW-2	MARKING ARROW EPOXY (WHITE) (TYPE 2)
ARW-3	MARKING ARROW EPOXY (WHITE) (TYPE 3)
CVNW24	MARKING CHEVRON EPOXY 24-INCH (WHITE)
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SLW18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
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WS10-3	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE SKIP) (3' SEG., 9' GAP)
WS6-3	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP) (3' SEG, 9' GAP)

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN - IH 41	SHEET 87	E

2

NOTES

PAVEMENT MARKING SHOWN IS FOR SIZE AND MATERIAL. SEE STANDARD DETAIL DRAWINGS FOR LOCATIONS OF MARKINGS.



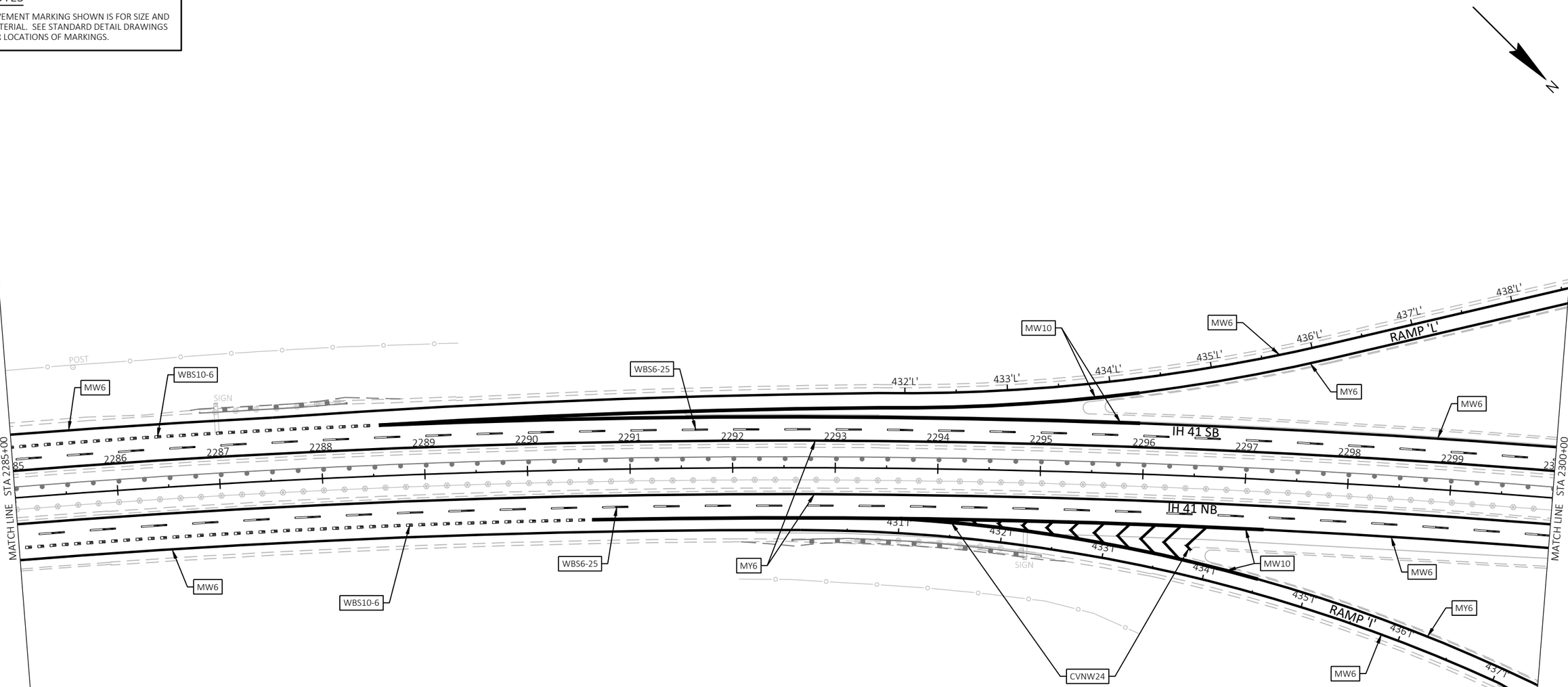
LEGEND

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MY6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
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WS6-3	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP) (3' SEG, 9' GAP)

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN - IH 41	SHEET 88	E

NOTES

PAVEMENT MARKING SHOWN IS FOR SIZE AND MATERIAL. SEE STANDARD DETAIL DRAWINGS FOR LOCATIONS OF MARKINGS.



LEGEND

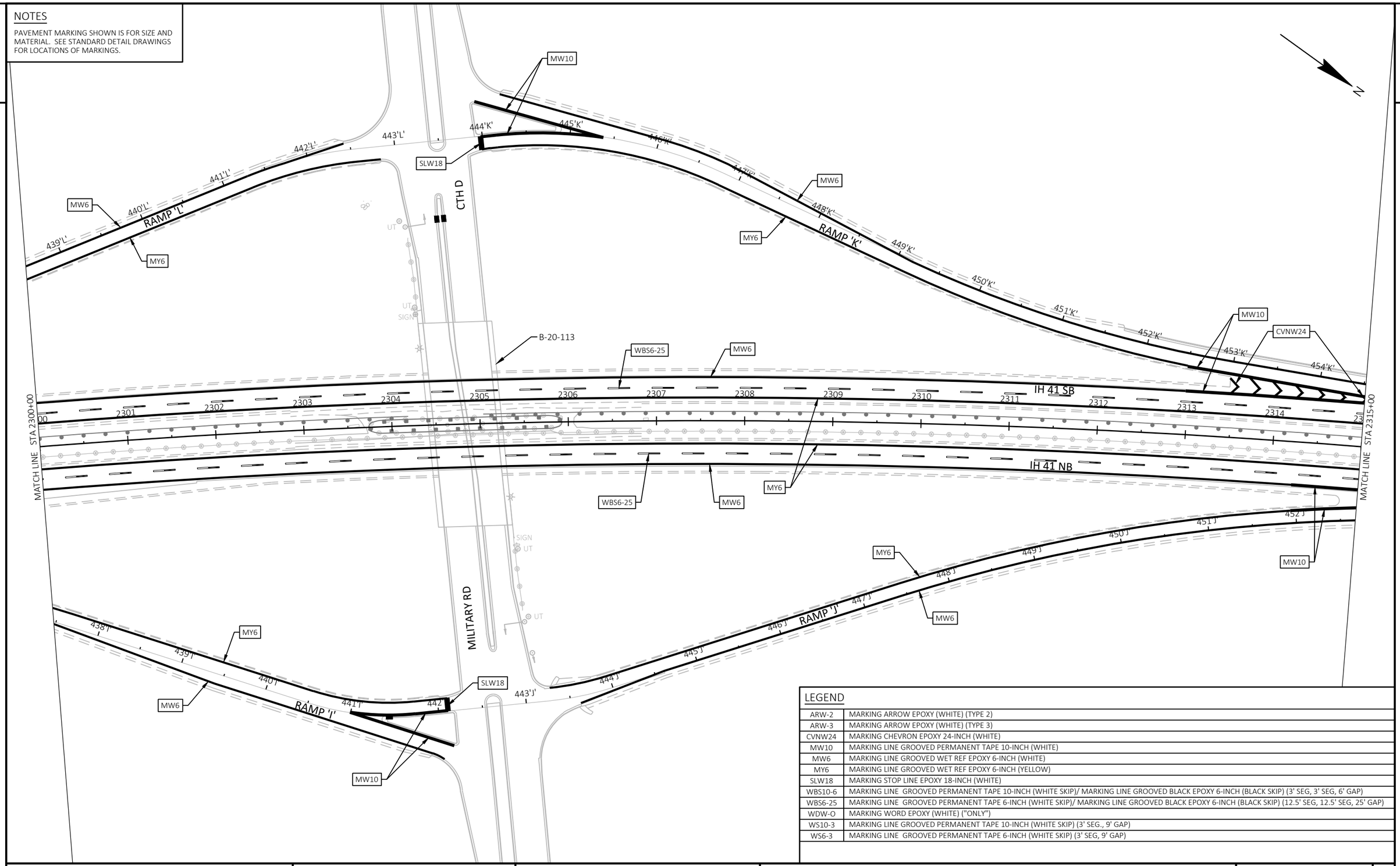
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WS6-3	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP) (3' SEG, 9' GAP)

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN - IH 41	SHEET 89	E

2

NOTES

PAVEMENT MARKING SHOWN IS FOR SIZE AND MATERIAL. SEE STANDARD DETAIL DRAWINGS FOR LOCATIONS OF MARKINGS.



LEGEND	
ARW-2	MARKING ARROW EPOXY (WHITE) (TYPE 2)
ARW-3	MARKING ARROW EPOXY (WHITE) (TYPE 3)
CVNW24	MARKING CHEVRON EPOXY 24-INCH (WHITE)
MW10	MARKING LINE GROOVED PERMANENT TAPE 10-INCH (WHITE)
MW6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
MY6	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
SLW18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
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WBS6-25	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE SKIP)/ MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK SKIP) (12.5' SEG, 12.5' SEG, 25' GAP)
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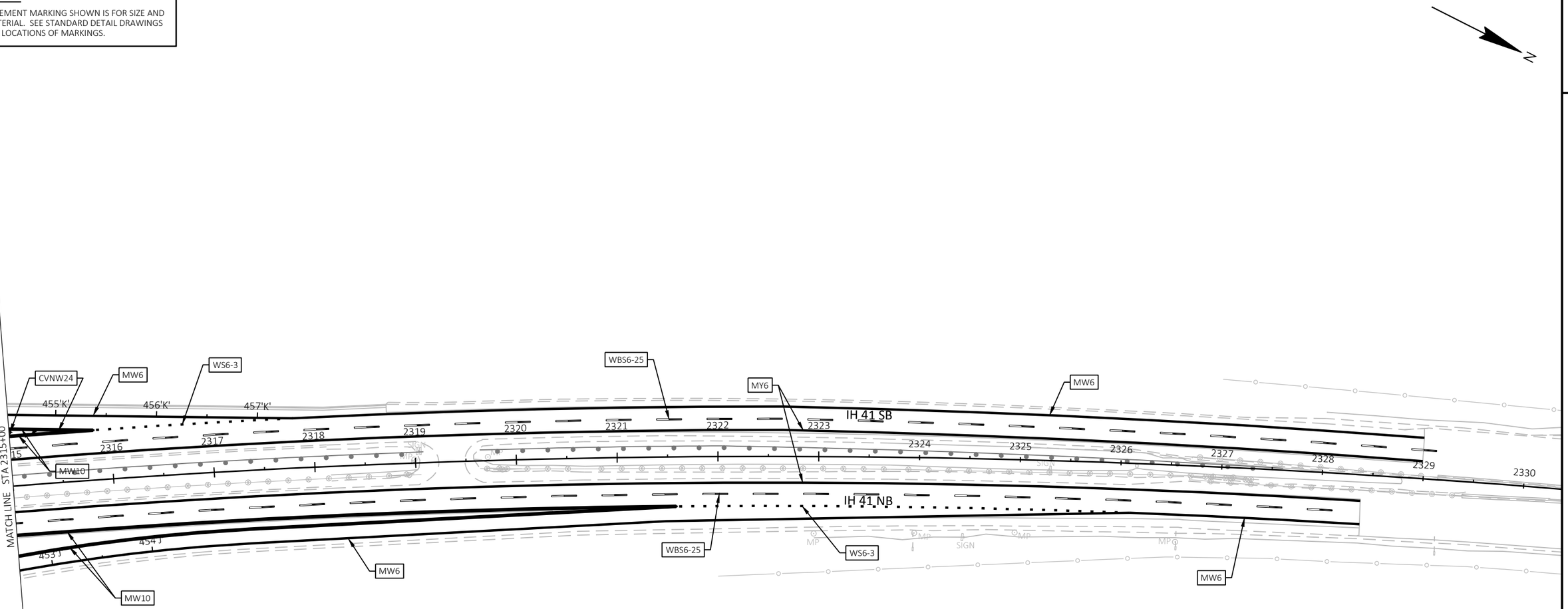
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN - IH 41	SHEET 90	E

2

NOTES

PAVEMENT MARKING SHOWN IS FOR SIZE AND MATERIAL. SEE STANDARD DETAIL DRAWINGS FOR LOCATIONS OF MARKINGS.

2



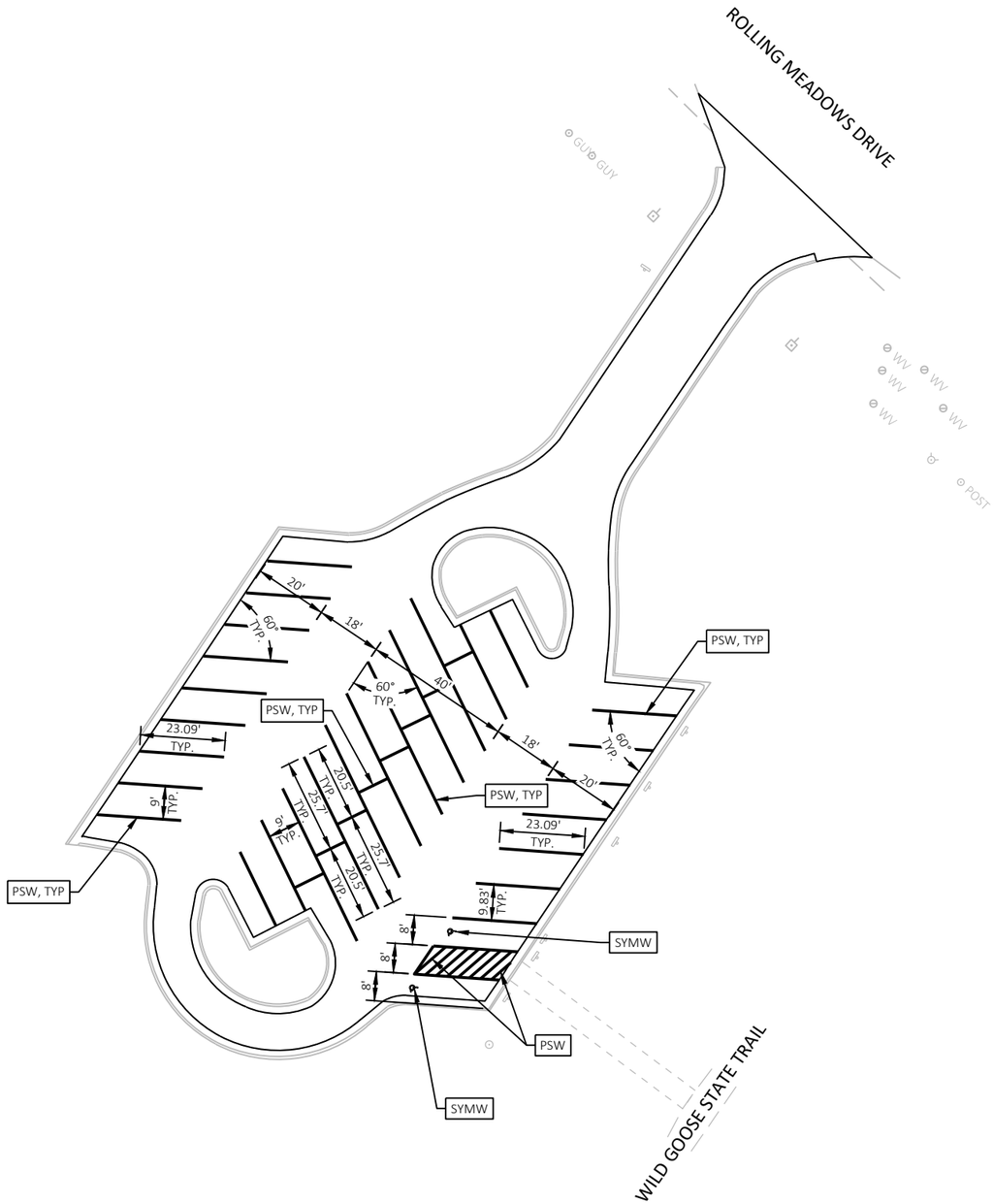
LEGEND

ARW-2	MARKING ARROW EPOXY (WHITE) (TYPE 2)
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CVNW24	MARKING CHEVRON EPOXY 24-INCH (WHITE)
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN - IH 41	SHEET 91	E

2

LEGEND	
PSW	MARKING PARKING STALL EPOXY (WHITE)
SYMW	MARKING SYMBOL EPOXY (WHITE)



NOTES

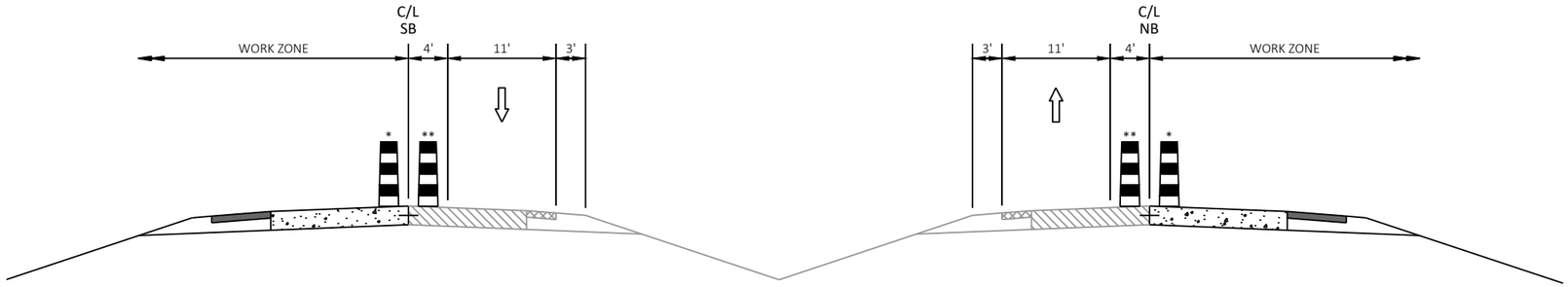
PAVEMENT MARKING SHOWN IS FOR MATERIAL. SEE STANDARD DETAIL DRAWING "PARKING STALL MARKING" FOR LOCATIONS OF MARKINGS.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN - PARK & RIDE	SHEET 92	E

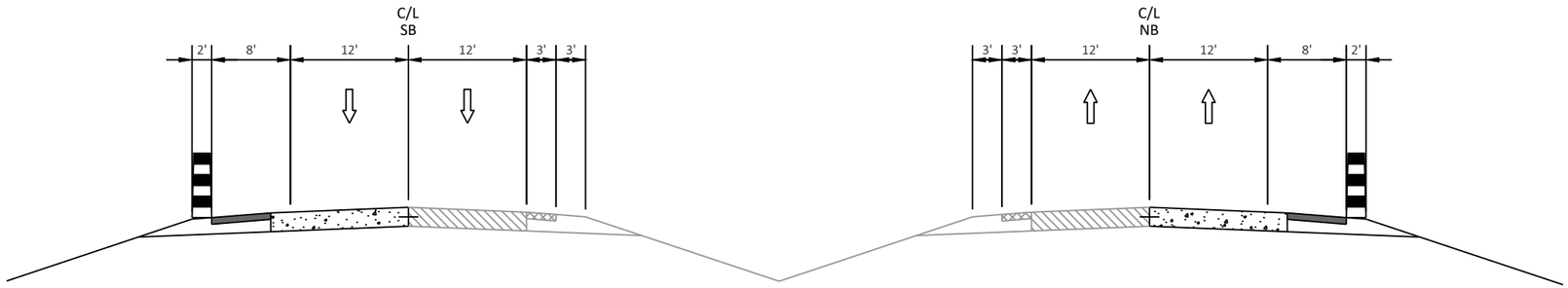
FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-024502-PM.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 8/24/2026 10:23 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

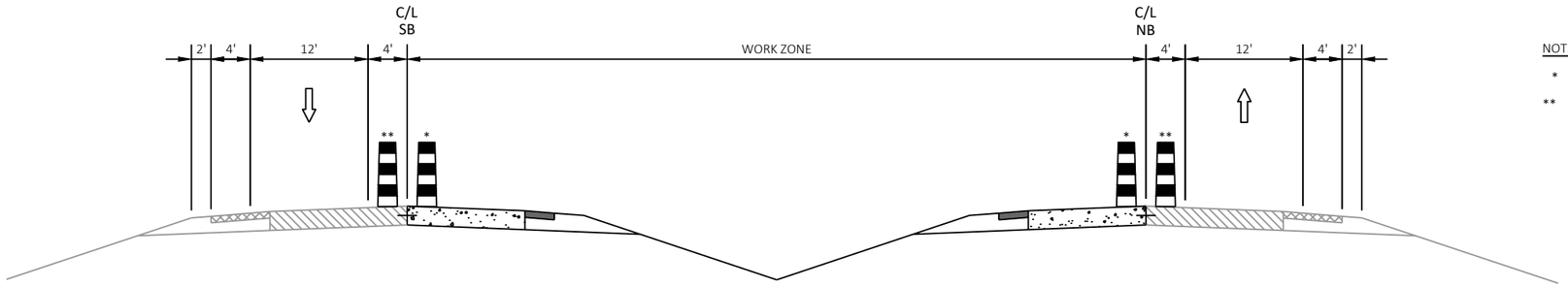
WISDOT/CADDS SHEET 42



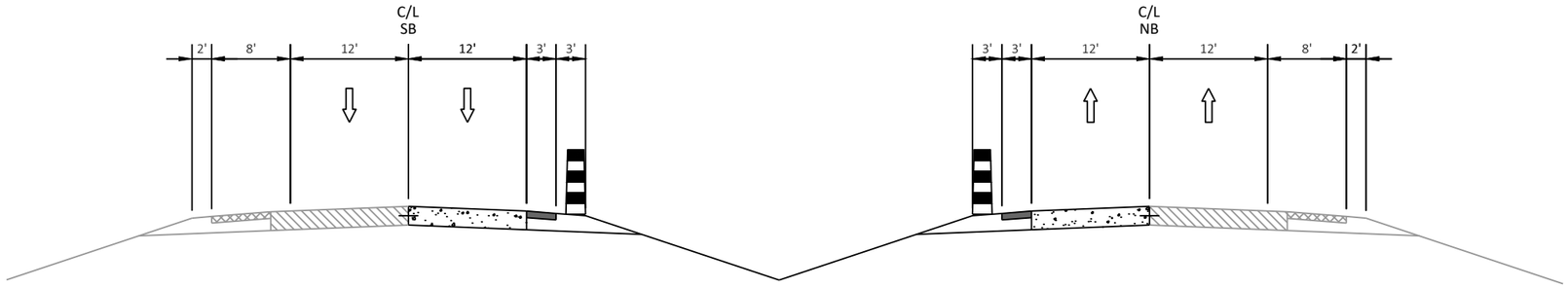
TRAFFIC CONTROL DETAIL OUTER LANE CLOSURE - OFF PEAK



TRAFFIC CONTROL DETAIL OUTER LANE CLOSURE - PEAK



TRAFFIC CONTROL DETAIL INNER LANE CLOSURE - OFF PEAK



TRAFFIC CONTROL DETAIL INNER LANE CLOSURE - PEAK

NOTES:

* NORMAL TRAFFIC CONTROL DRUM POSITION.

** TRAFFIC CONTROL DRUM POSITION ADJACENT TO ACTIVE WORK OPERATION. TRAFFIC EXPECTED TO SHIFT ONTO SHOULDER TO BYPASS CONSTRUCTION OPERATION.

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TRAFFIC CONTROL	SHEET 93	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-025100-TC.DWG
LAYOUT NAME - Sheet-01
PLOT DATE : 7/28/2026 5:10 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:15 FT
WISDOT/CADDS SHEET 42

2

LEGEND

DSLT — DIGITAL SPEED LIMIT TRAILER

WORK AREA

GENERAL NOTES - DETOUR

SEE S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" AND "TRAFFIC CONTROL, LANE CLOSURE, DIGITAL SPEED REDUCTION SYSTEM" FOR GENERAL NOTES, SIGN SPACING, FLASHING BEACON SIGN SPACING, AND DIGITAL SPEED LIMIT TRAILER SPACING REQUIREMENTS.

PLACE FLASHING BEACON SIGNS ON BOTH SIDES OF THE ROADWAY.

MAP SHOWN IS NOT TO SCALE.

1

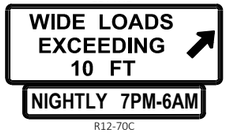


W12-52
48"X48"

WO57-52
48"X36"

2

R12-70B
114"X42"



R12-70C
96"X18"

3



MB3-1
24"X12"

M1-1
24"X24"

W12-52
48"X48"

4



W12-52
48"X48"

5



M1-1
36"X36"

W12-52
48"X48"

6



M1-1
24"X24"

W12-52
48"X48"

7



MB3-3
24"X12"

M1-1
24"X24"

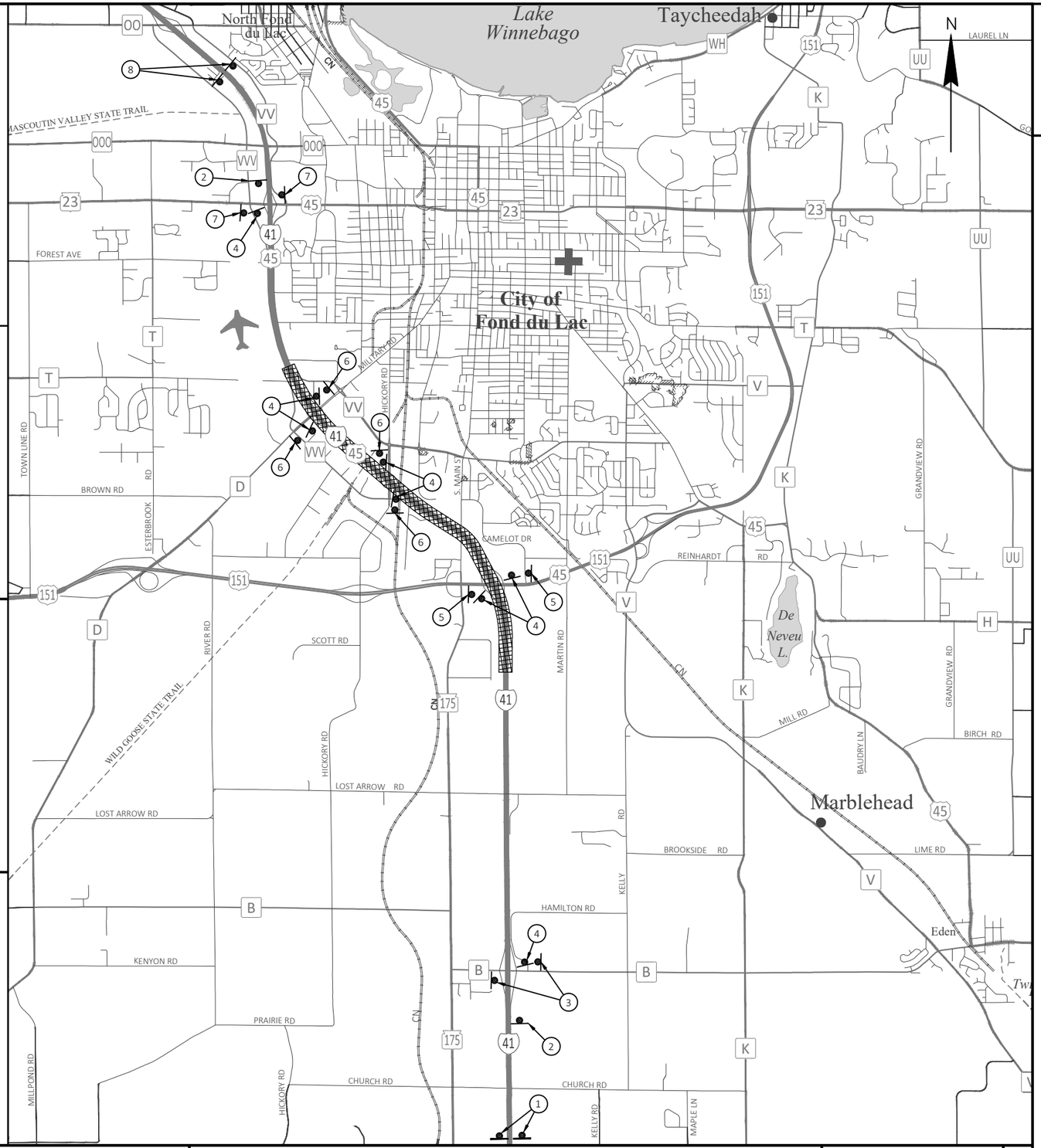
W12-52
48"X48"

8



W12-52
48"X48"

WO57-52
48"X36"



PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TRAFFIC CONTROL - WIDTH RESTRICTION SIGNING	SHEET 94	E

2

LEGEND

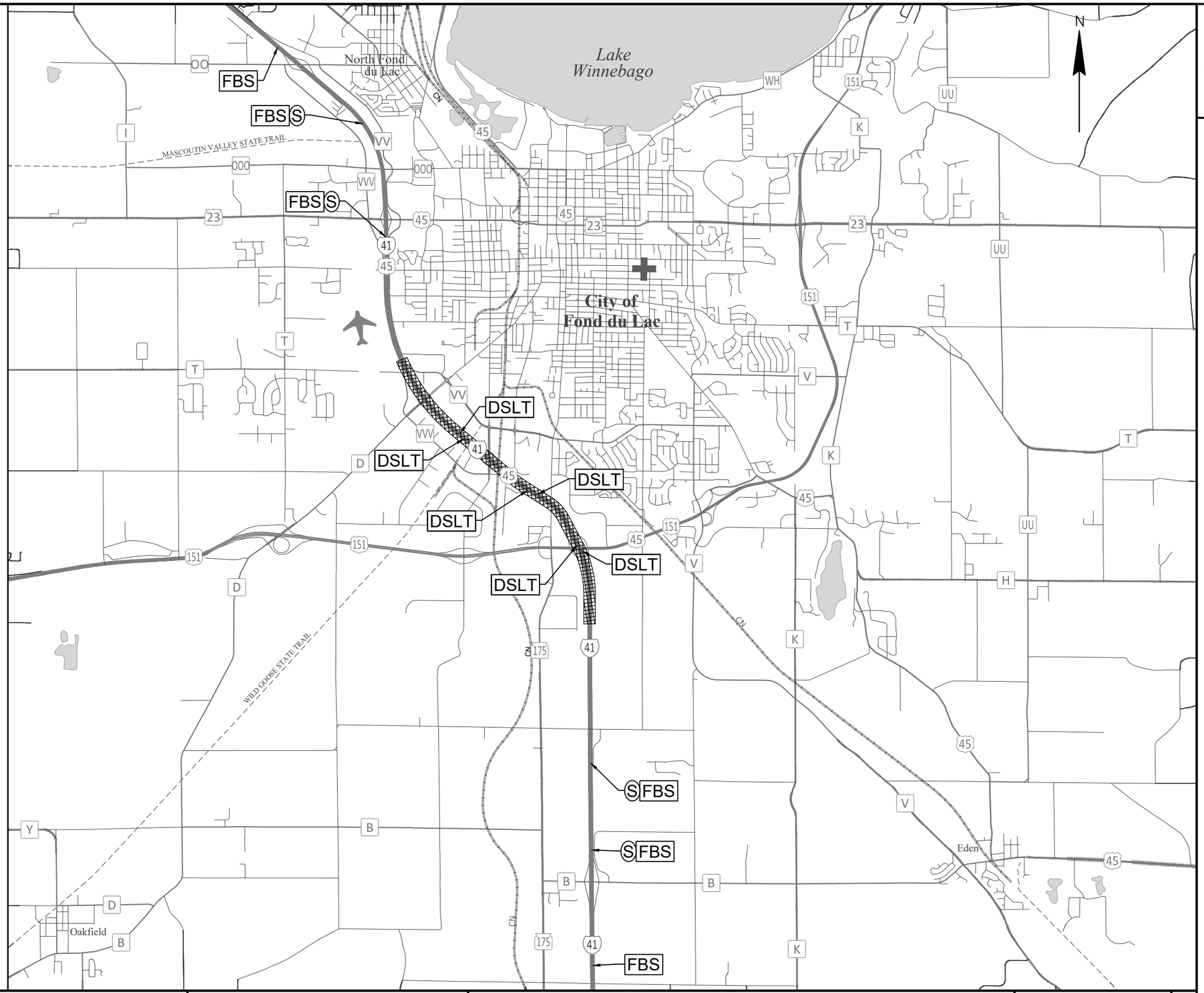
- DSLT — DIGITAL SPEED LIMIT TRAILER
- FBS — FLASHING BEACON SIGNS
- Ⓢ — PORTABLE TRAFFIC SENSOR (PTS)
- ⊠ — WORK AREA

GENERAL NOTES - DETOUR

SEE S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" AND "TRAFFIC CONTROL, LANE CLOSURE, DIGITAL SPEED REDUCTION SYSTEM" FOR GENERAL NOTES, SIGN SPACING, FLASHING BEACON SIGN SPACING, AND DIGITAL SPEED LIMIT TRAILER SPACING REQUIREMENTS.

PLACE FLASHING BEACON SIGNS ON BOTH SIDES OF THE ROADWAY.

MAP SHOWN IS NOT TO SCALE.



2

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TRAFFIC CONTROL - BQWS AND DSRS OVERVIEW	SHEET 95	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-025102-TC.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 7/28/2026 5:11 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : NTS

WISDOT/CADDS SHEET 42

2

LEGEND

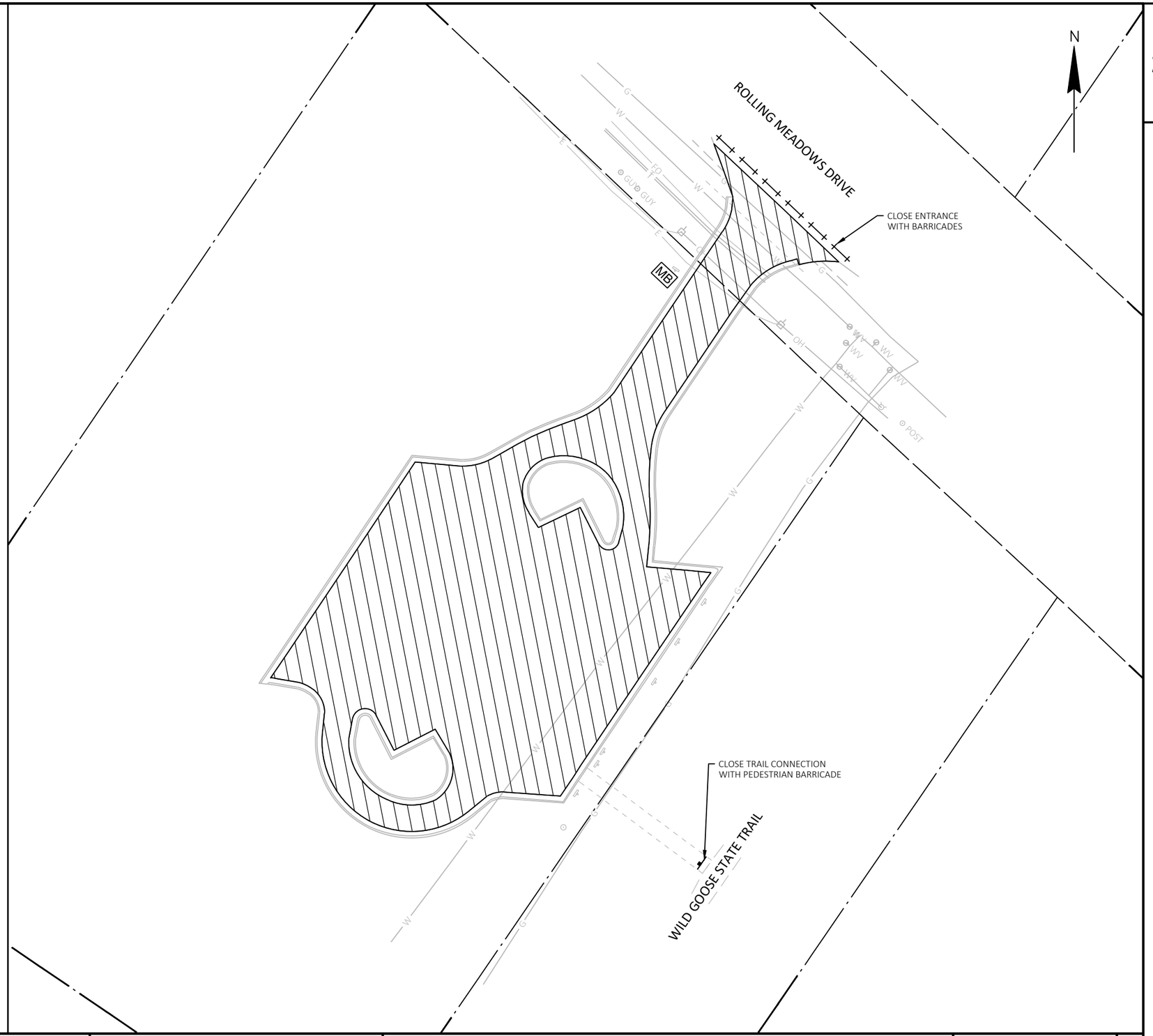
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- WORK AREA

PCMS MESSAGES		
	7 DAYS PRIOR TO WORK STARTING	
LOCATION	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)
PARK & RIDE ENTRANCE	LOT CLOSED BEGINS	{DAY} {DATE XX}

GENERAL NOTES

COVER PARK & RIDE SIGNS AT:

- NB ROLLING MEADOWS DR AND PARK & RIDE ENTRANCE
- SB ROLLING MEADOWS DR AND PARK & RIDE ENTRANCE
- NB HICKORY ST SOUTH OF ROLLING MEADOWS DR
- NB IH 41 EXIT RAMP AND HICKORY ST
- SB IH 41 EXIT RAMP AND HICKORY ST



2

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	TRAFFIC CONTROL - PARK & RIDE	SHEET 96	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-025111-TC.DWG
LAYOUT NAME - Sheet-01
PLOT DATE : 7/28/2026 5:12 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

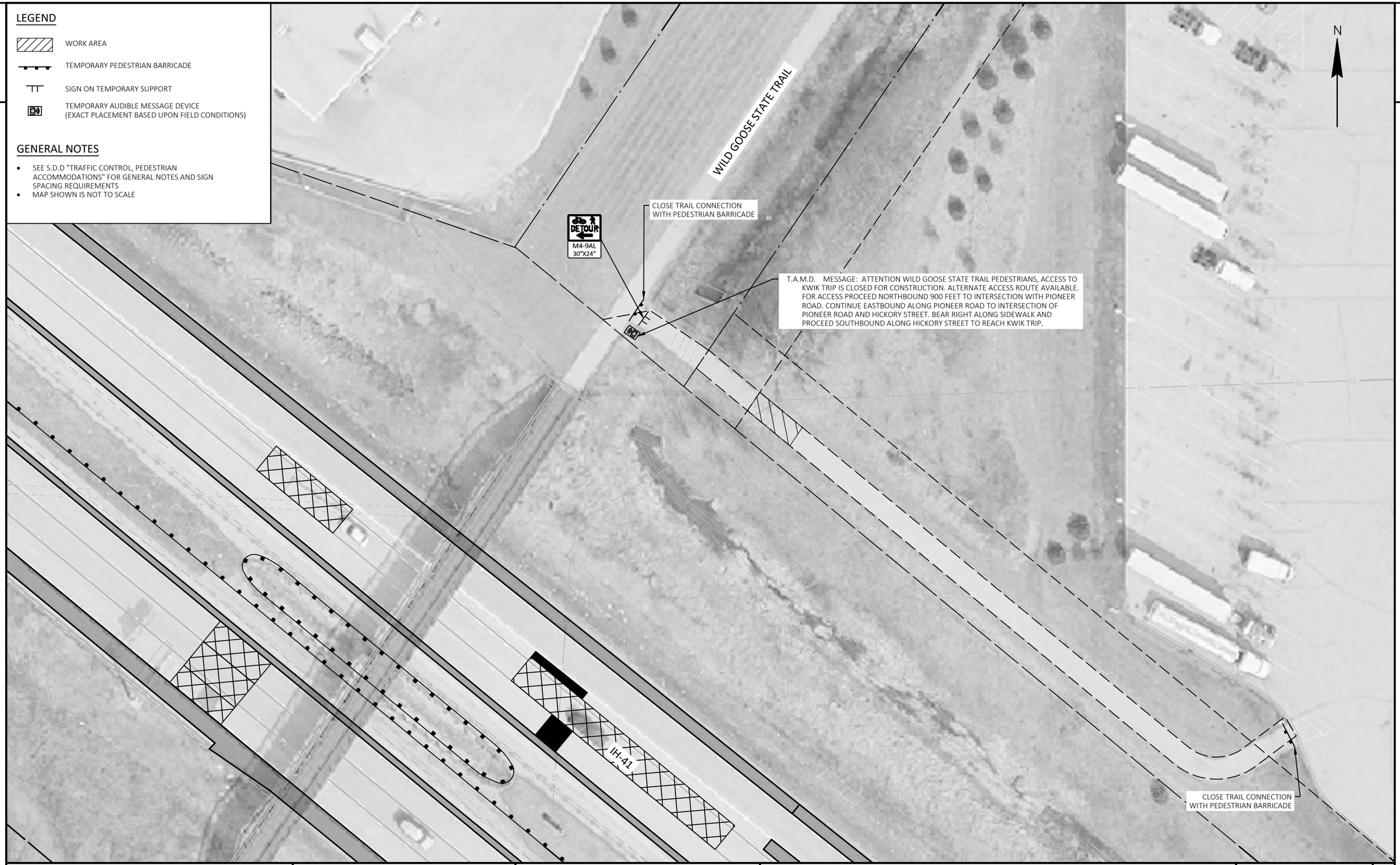
2

LEGEND

- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

GENERAL NOTES

- SEE S.D.D "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATIONS" FOR GENERAL NOTES AND SIGN SPACING REQUIREMENTS
- MAP SHOWN IS NOT TO SCALE



PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	TRAFFIC CONTROL - PEDESTRIAN DETOUR	SHEET 97	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-025112-TC.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 7/28/2026 6:08 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

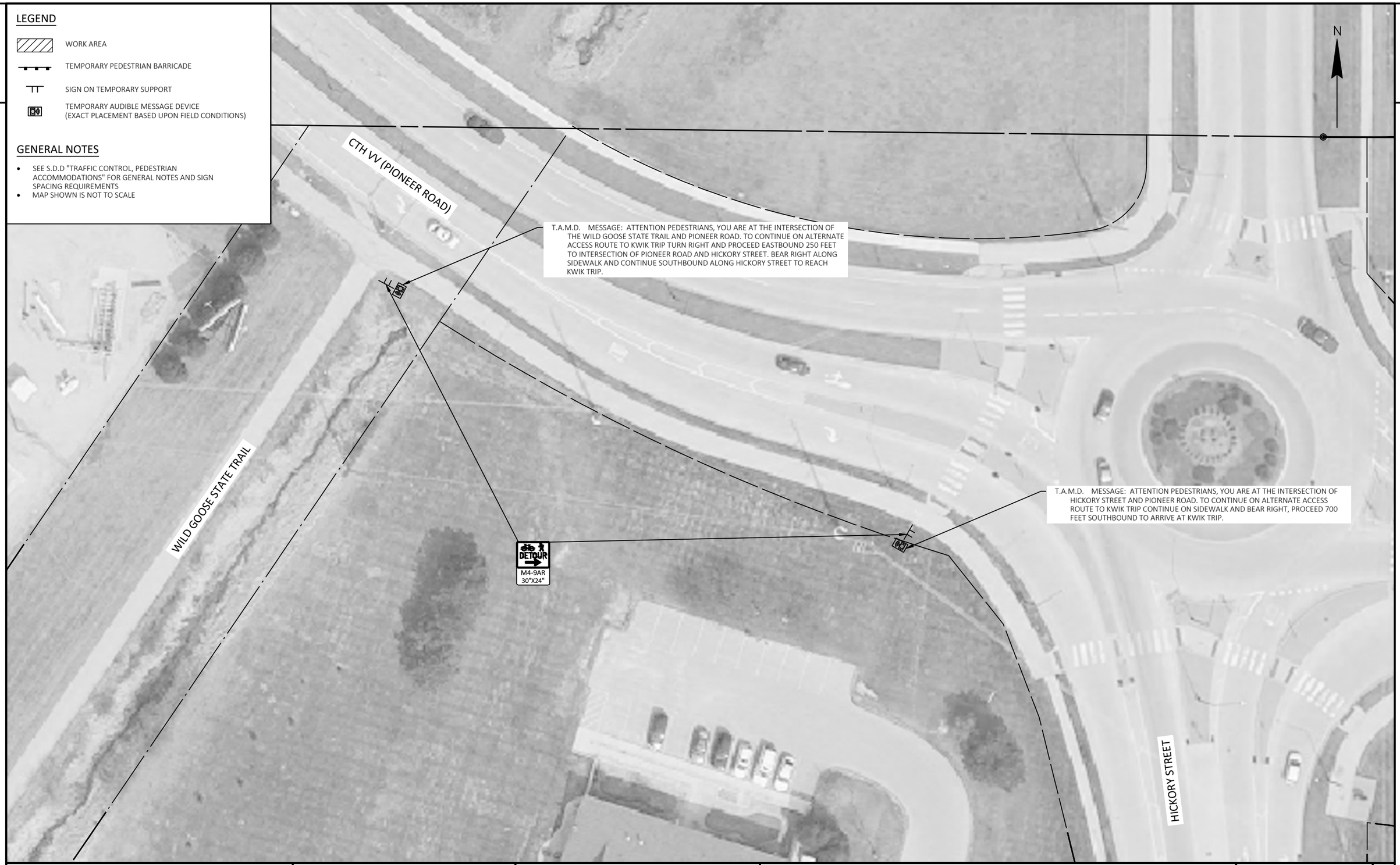
2

LEGEND

- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

GENERAL NOTES

- SEE S.D.D "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATIONS" FOR GENERAL NOTES AND SIGN SPACING REQUIREMENTS
- MAP SHOWN IS NOT TO SCALE



2

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	TRAFFIC CONTROL - PEDESTRIAN DETOUR	SHEET 98	E

2

LEGEND

- SIGN LOCATION
- TYPE III BARRICADE WITH SIGN
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- PROPOSED DETOUR ROUTE
- WORK AREA

GENERAL NOTES - DETOUR

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES", "BARRICADES AND SIGNS FOR VARIOUS CLOSURES", "DETOUR SIGNING FOR MAINLINE CLOSURES", AND "TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE" FOR GENERAL NOTES AND SIGN SPACING REQUIREMENTS.

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MAP SHOWN IS NOT TO SCALE.

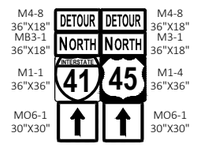
PCMS MESSAGES

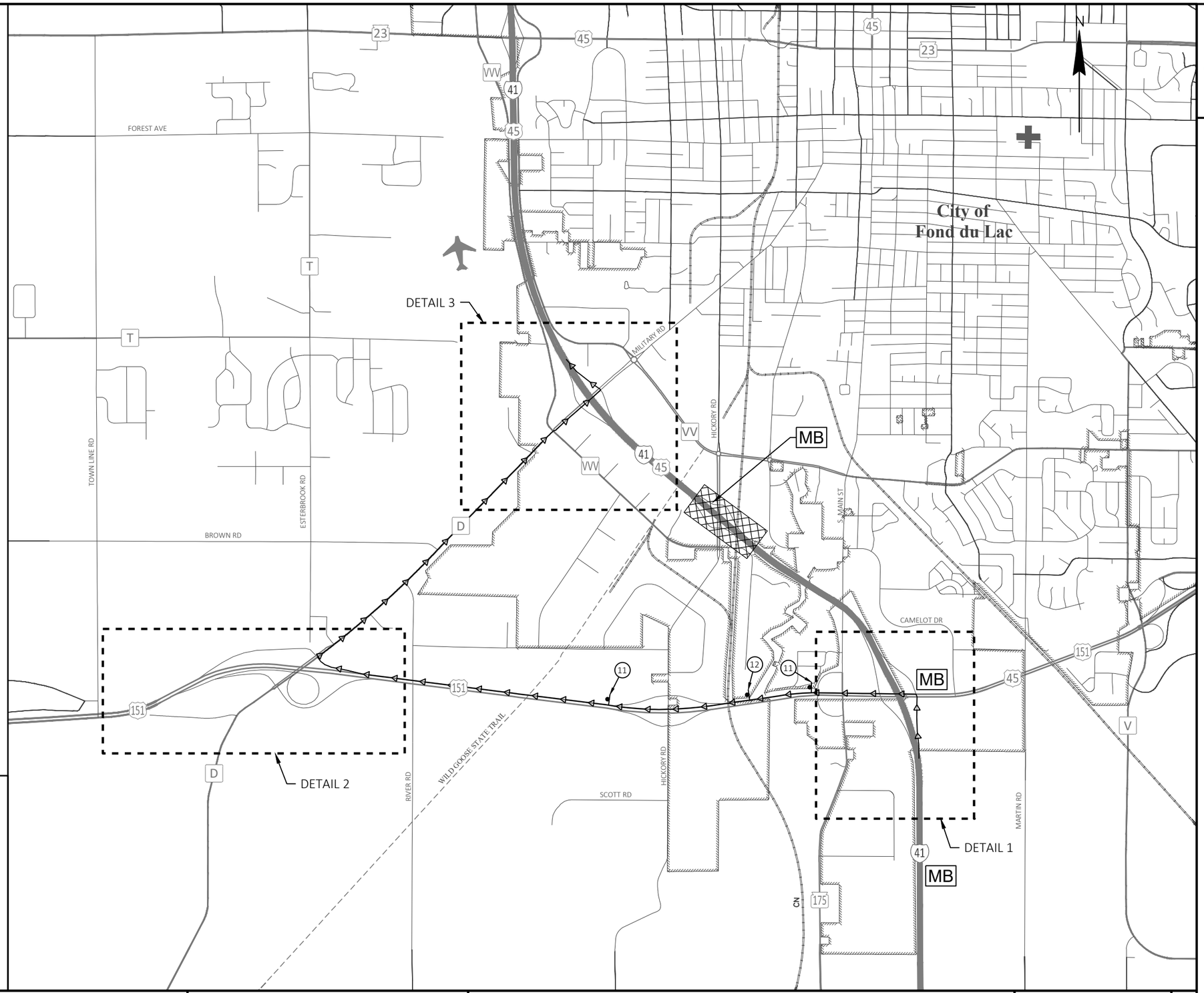
	7 DAYS PRIOR TO FREEWAY CLOSURE	
LOCATION	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)
IH 41 NB	FREEWAY TO CLOSE	XXXXDAY XXPM-XXAM
USH 151 RAMP B	RAMP TO CLOSE	XXXXDAY XXPM-XXAM
HICKORY ST RAMP F	RAMP TO CLOSE	XXXXDAY XXPM-XXAM

(11)



(12)





PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	DETOUR - IH 41 NORTHBOUND	SHEET 99	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-027001-DT.DWG
LAYOUT NAME - Sheet-01
PLOT DATE : 7/28/2026 5:12 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : NTS
WISDOT/CADDS SHEET 42

2

LEGEND

- SIGN LOCATION
- TYPE III BARRICADE WITH SIGN
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- PROPOSED DETOUR ROUTE
- WORK AREA

GENERAL NOTES - DETOUR

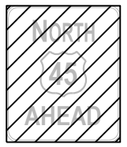
SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES", "BARRICADES AND SIGNS FOR VARIOUS CLOSURES", "DETOUR SIGNING FOR MAINLINE CLOSURES", AND "TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE" FOR GENERAL NOTES AND SIGN SPACING REQUIREMENTS.

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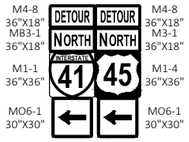
1 COVER



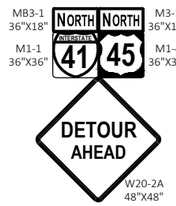
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3



4



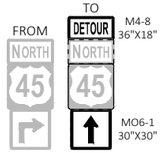
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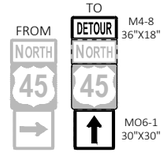
6 COVER



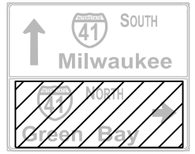
7 MODIFY EXISTING SIGNS



8 MODIFY EXISTING SIGNS



9 COVER



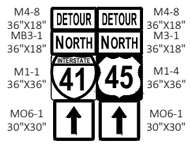
10 COVER



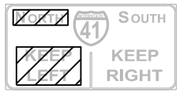
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12



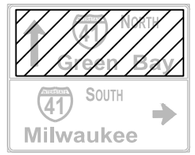
13 COVER



14 COVER



15 COVER

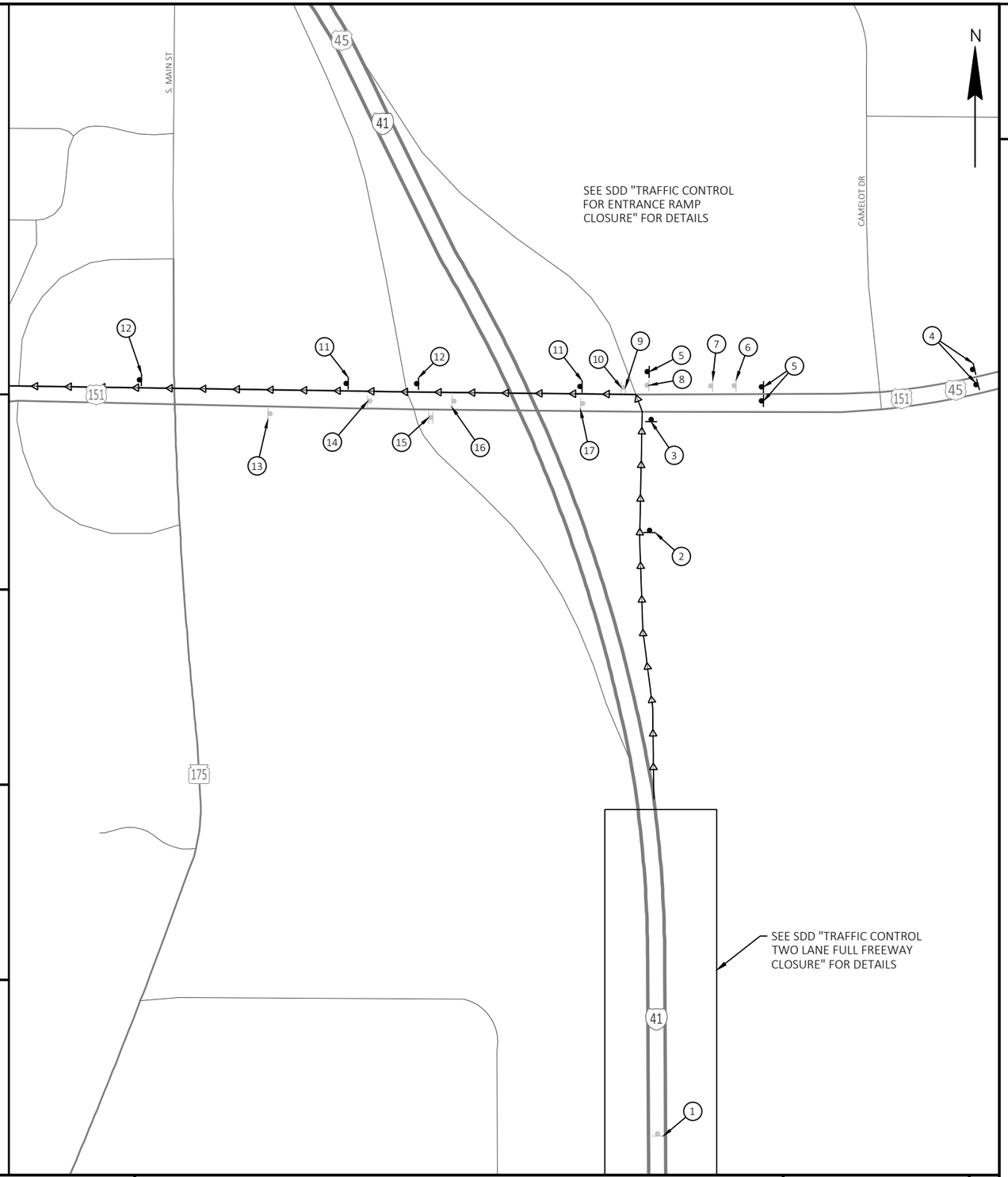


16 COVER



17 COVER





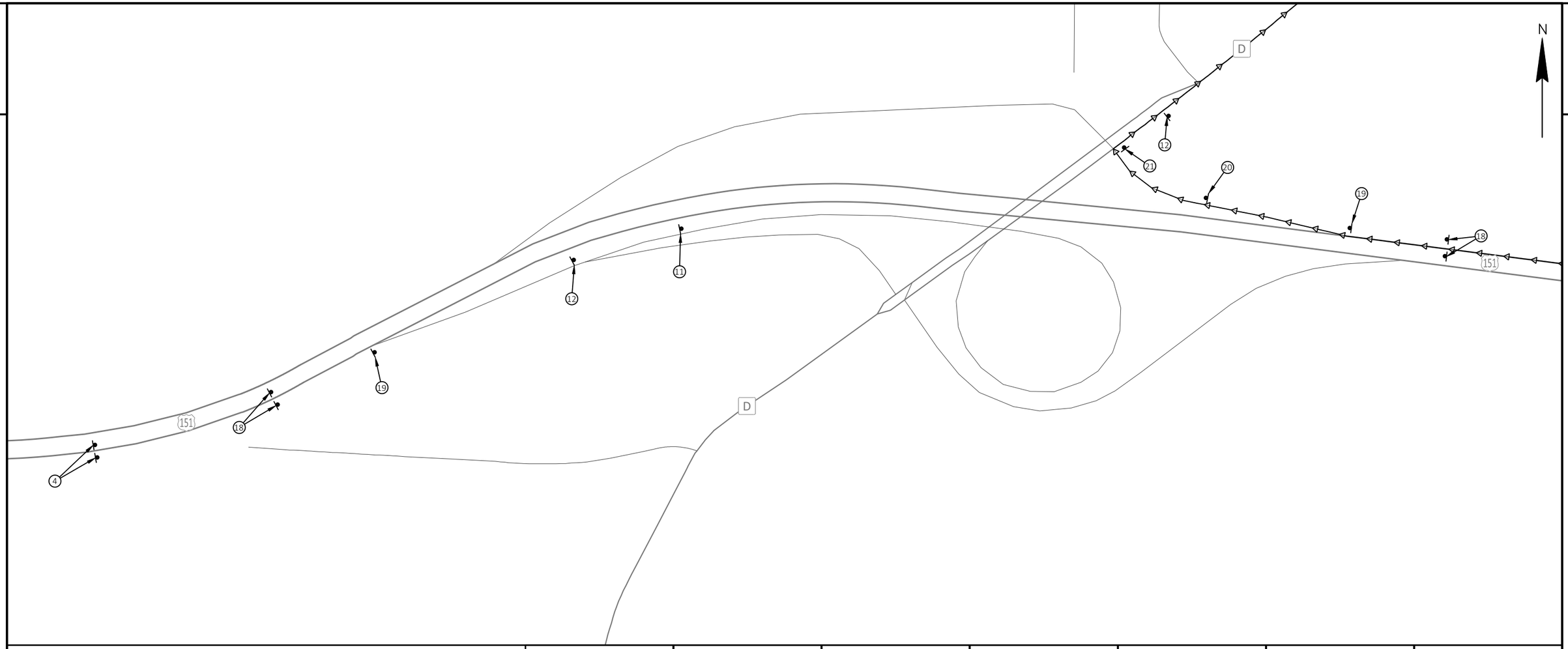
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	DETOUR - IH 41 NORTHBOUND - DETAIL 1	SHEET 100	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-027001-DT.DWG
LAYOUT NAME - Sheet-02

PLOT DATE : 7/28/2026 5:12 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : NTS

WISDOT/CADDS SHEET 42

2



2

LEGEND

- SIGN LOCATION
- TYPE III BARRICADE WITH SIGN
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- PROPOSED DETOUR ROUTE
- WORK AREA

GENERAL NOTES - DETOUR

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES", "BARRICADES AND SIGNS FOR VARIOUS CLOSURES", "DETOUR SIGNING FOR MAINLINE CLOSURES", AND "TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE" FOR GENERAL NOTES AND SIGN SPACING REQUIREMENTS.

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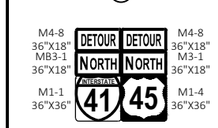
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MAP SHOWN IS NOT TO SCALE.

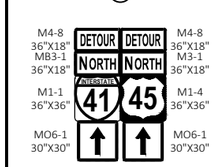
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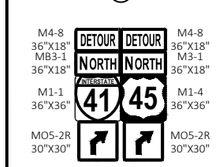
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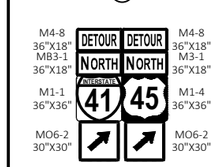
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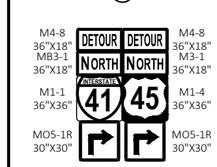
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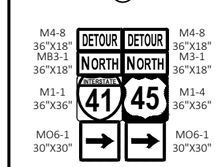
(19)



(20)



(21)



PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	DETOUR - IH 41 NORTHBOUND - DETAIL 2	SHEET 101	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-027001-DT.DWG
LAYOUT NAME - Sheet-03
PLOT DATE : 7/28/2026 5:13 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : NTS
WISDOT/CADDS SHEET 42

2

LEGEND

- SIGN LOCATION
- TYPE III BARRICADE WITH SIGN
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- PROPOSED DETOUR ROUTE
- WORK AREA

GENERAL NOTES - DETOUR

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES", "BARRICADES AND SIGNS FOR VARIOUS CLOSURES", "DETOUR SIGNING FOR MAINLINE CLOSURES", AND "TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE" FOR GENERAL NOTES AND SIGN SPACING REQUIREMENTS.

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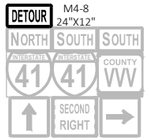
(22) MODIFY EXISTING SIGNS

M4-8 24"X12"



(23) MODIFY EXISTING SIGNS

M4-8 24"X12"



(24) MODIFY EXISTING SIGNS

M4-8 24"X12"



(25) MODIFY EXISTING SIGNS

M4-8 24"X12"



(26)



M4-8A 30"X24"
MB3-1 36"X18"
M1-1 36"X36"



PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	DETOUR - IH 41 NORTHBOUND - DETAIL 3	SHEET 102	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-027001-DT.DWG
LAYOUT NAME - Sheet-04

PLOT DATE : 7/28/2026 5:13 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : NTS

WISDOT/CADDS SHEET 42

2

LEGEND

- SIGN LOCATION
- TYPE III BARRICADE WITH SIGN
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- PROPOSED DETOUR ROUTE
- WORK AREA

GENERAL NOTES - DETOUR

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES", "BARRICADES AND SIGNS FOR VARIOUS CLOSURES", "DETOUR SIGNING FOR MAINLINE CLOSURES", AND "TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE" FOR GENERAL NOTES AND SIGN SPACING REQUIREMENTS.

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PCMS MESSAGES

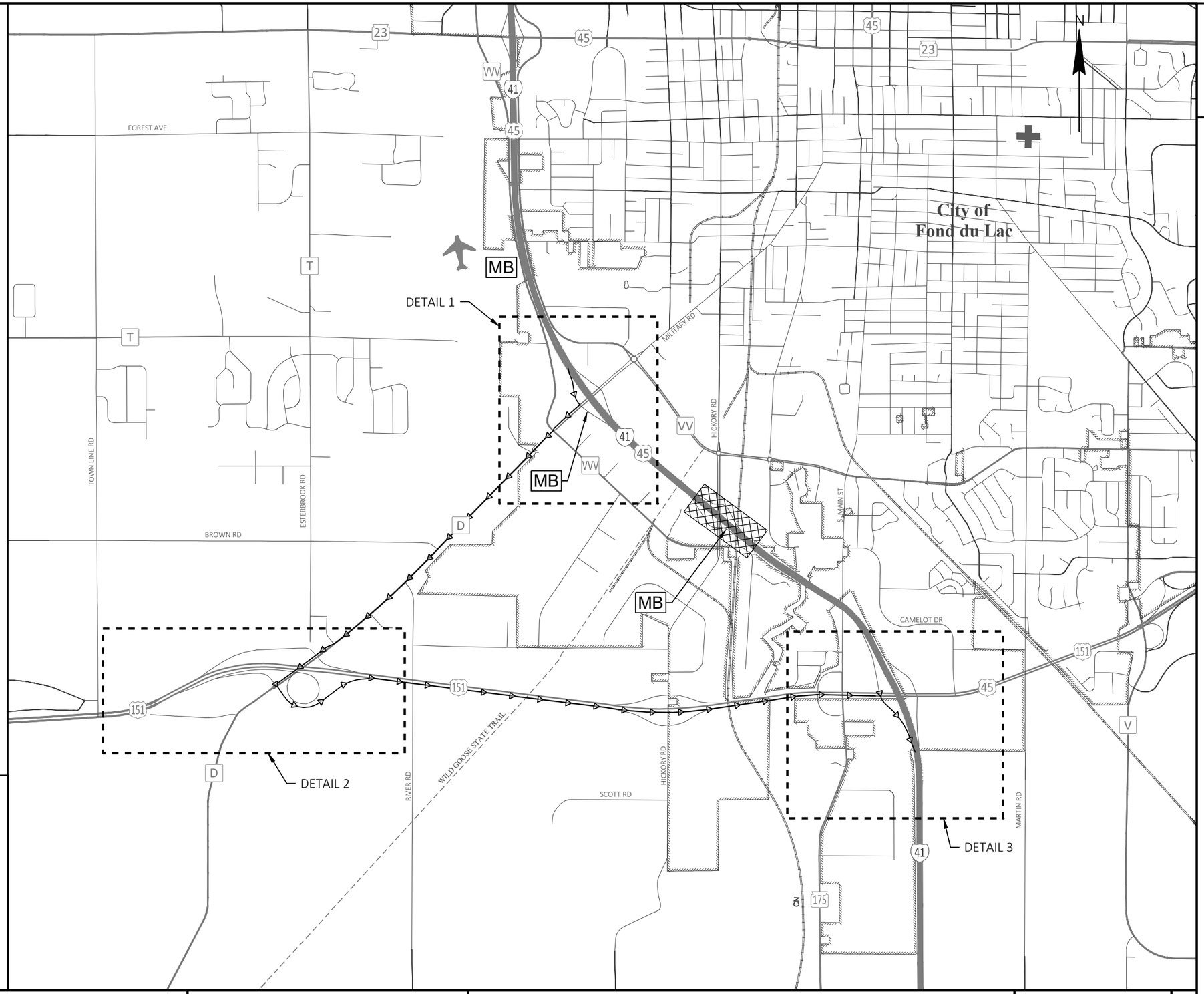
	7 DAYS PRIOR TO FREEWAY CLOSURE	
LOCATION	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)
IH 41 SB	FREEWAY TO CLOSE	XXXXDAY XXPM-XXAM
MILITARY RD RAMP L	RAMP TO CLOSE	XXXXDAY XXPM-XXAM
HICKORY ST RAMP H	RAMP TO CLOSE	XXXXDAY XXPM-XXAM

(9)

M4-8 36"X18" DETOUR | DETOUR M4-8 36"X18"
MB3-3 36"X18" SOUTH | SOUTH M3-3 36"X18"
M1-1 36"X36" INTERSTATE 41 | 45 M1-4 36"X36"

(10)

M4-8 36"X18" DETOUR | DETOUR M4-8 36"X18"
MB3-3 36"X18" SOUTH | SOUTH M3-3 36"X18"
M1-1 36"X36" INTERSTATE 41 | 45 M1-4 36"X36"
M06-1 30"X30" ↑ | ↑ M06-1 30"X30"



PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	DETOUR - IH 41 SOUTHBOUND	SHEET 103	E

LEGEND

- SIGN LOCATION
- TYPE III BARRICADE WITH SIGN
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- PROPOSED DETOUR ROUTE
- WORK AREA

GENERAL NOTES - DETOUR

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1

M4-8 36"X18" — DETOUR / DETOUR
M4-8 36"X18" — SOUTH / SOUTH
M3-3 36"X18"
M1-1 36"X36" — INTERSTATE 41 / 45 — M1-4 36"X36"
MO5-1R 30"X30" — MO5-1R 30"X30"

2

M4-8 36"X18" — DETOUR / DETOUR
M4-8 36"X18" — SOUTH / SOUTH
M3-3 36"X18"
M1-1 36"X36" — INTERSTATE 41 / 45 — M1-4 36"X36"
MO6-1 30"X30" — MO6-1 30"X30"

3

MB3-3 36"X18" — SOUTH / SOUTH — M3-3 36"X18"
M1-1 36"X36" — INTERSTATE 41 / 45 — M1-4 36"X36"
DETOUR AHEAD
W20-2A 48"X48"

4

COVER

SOUTH 41 NORTH
KEEP LEFT — KEEP RIGHT

5

COVER

41 SOUTH Milwaukee
41 NORTH Green Bay

6

MODIFY EXISTING SIGNS

FROM: SOUTH / INTERSTATE 41
TO: DETOUR / SOUTH / INTERSTATE 41 — M4-8 36"X18"
MO6-1 30"X30"

7

DETOUR — M4-8 36"X18"
SOUTH — M3-3 36"X18"
45 — M1-4 36"X36"
MO6-1 30"X30"

8

MODIFY EXISTING SIGNS

FROM: SOUTH / INTERSTATE 41
TO: DETOUR — M4-8 36"X18"
MO6-1 30"X30"

9

M4-8 36"X18" — DETOUR / DETOUR — M4-8 36"X18"
M4-8 36"X18" — SOUTH / SOUTH — M3-3 36"X18"
MB3-3 36"X18"
M1-1 36"X36" — INTERSTATE 41 / 45 — M1-4 36"X36"

10

M4-8 36"X18" — DETOUR / DETOUR — M4-8 36"X18"
M4-8 36"X18" — SOUTH / SOUTH — M3-3 36"X18"
MB3-3 36"X18"
M1-1 36"X36" — INTERSTATE 41 / 45 — M1-4 36"X36"
MO6-1 30"X30" — MO6-1 30"X30"

11

COVER

41 SOUTH Milwaukee

12

COVER

41 NORTH Green Bay
41 SOUTH Milwaukee

13

COVER

SOUTH / INTERSTATE 41

14

COVER

NORTH 41 SOUTH
KEEP LEFT — KEEP RIGHT

15

COVER

NORTH / SOUTH / SOUTH
INTERSTATE 41 / 41
COUNTY VV
USE RIGHT LANE

16

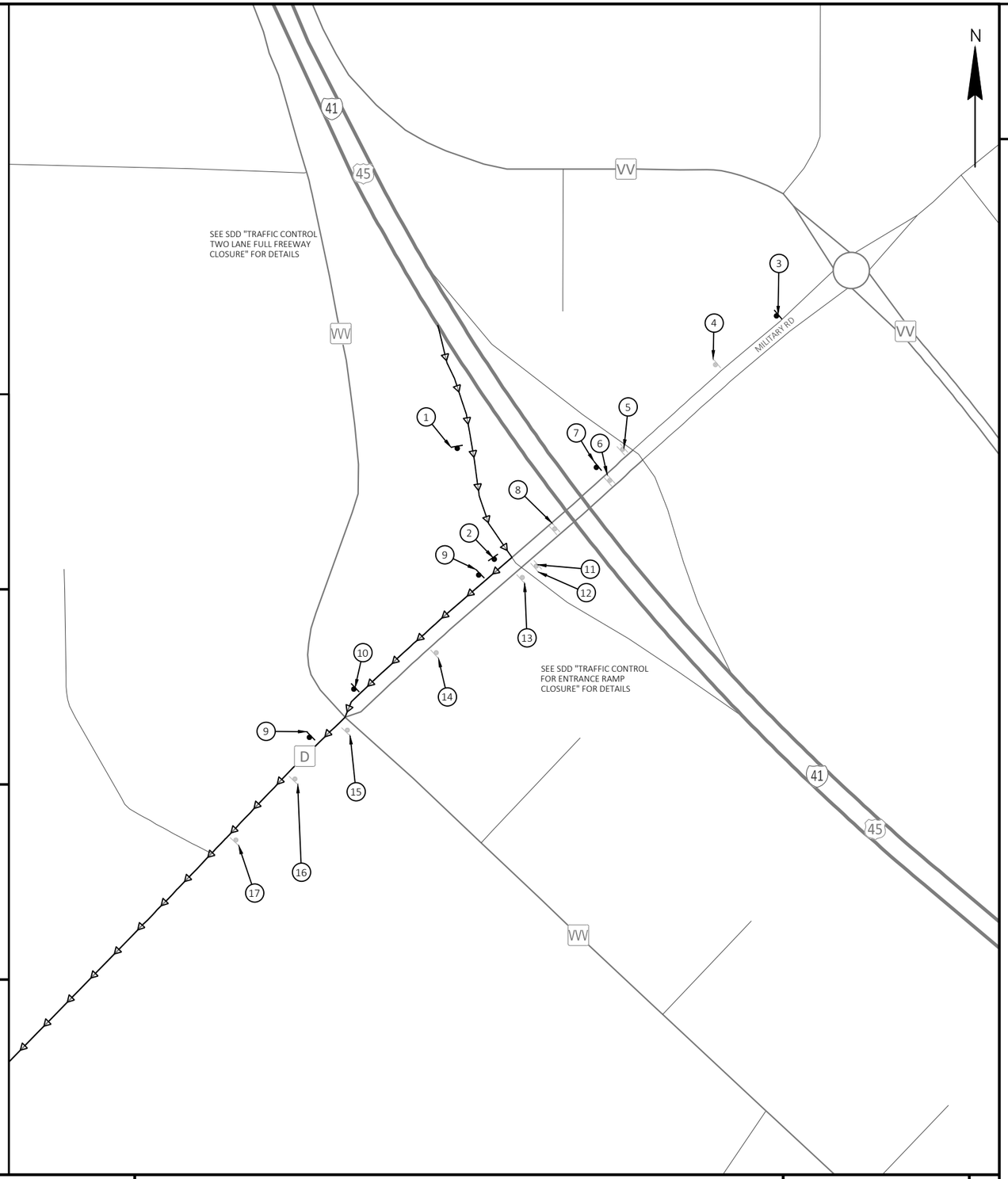
COVER

Oshkosh
Milwaukee
Rolling Meadows Dr

17

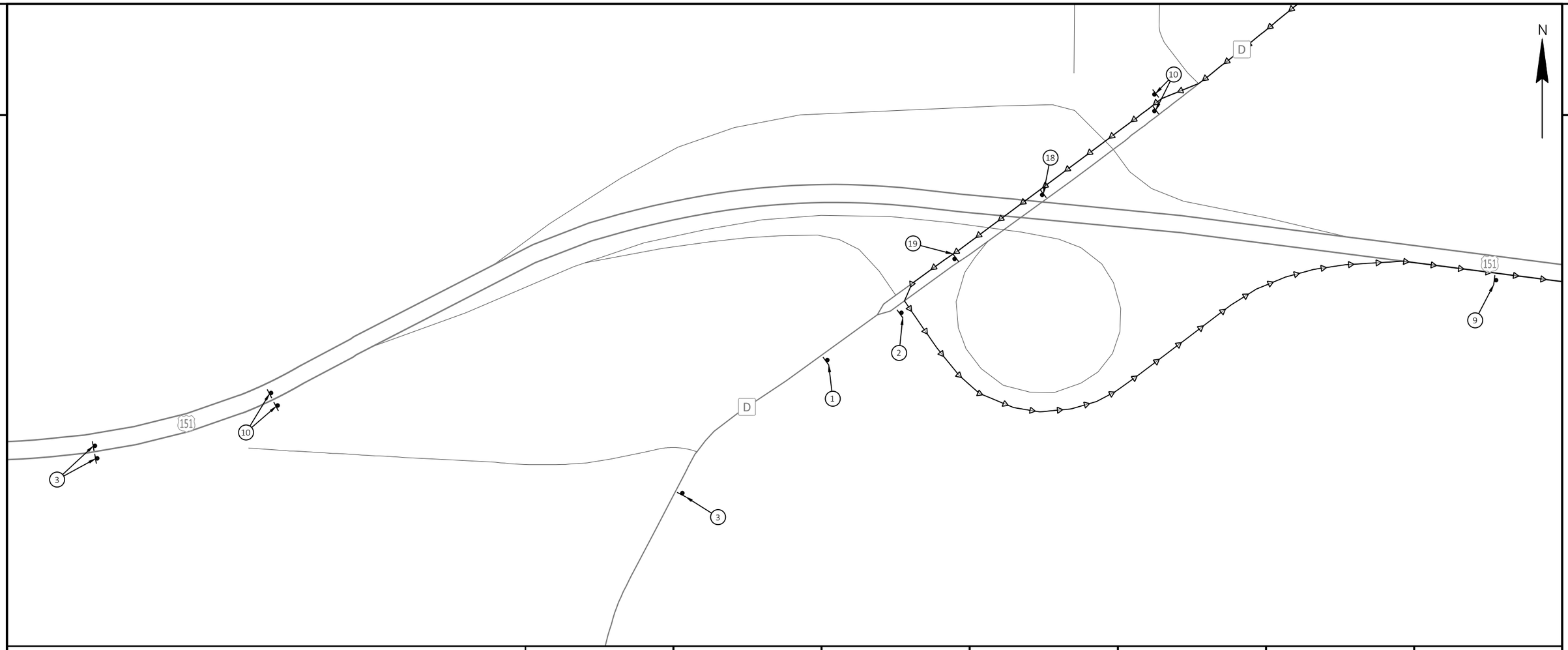
COVER

NORTH / SOUTH / SOUTH
INTERSTATE 41 / 41
COUNTY VV
USE LEFT LANE — USE RIGHT LANE



PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	DETOUR - IH 41 SOUTHBOUND - DETAIL 1	SHEET 104	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-027002-DT.DWG
LAYOUT NAME - Sheet-02
PLOT DATE : 7/28/2026 5:13 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : NTS



2

LEGEND

- SIGN LOCATION
- TYPE III BARRICADE WITH SIGN
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- PROPOSED DETOUR ROUTE
- WORK AREA

GENERAL NOTES - DETOUR

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES", "BARRICADES AND SIGNS FOR VARIOUS CLOSURES", "DETOUR SIGNING FOR MAINLINE CLOSURES", AND "TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE" FOR GENERAL NOTES AND SIGN SPACING REQUIREMENTS.

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MAP SHOWN IS NOT TO SCALE.

1	2	3	9	10	18	19
M4-8 36"X18" DETOUR DETOUR M4-8 36"X18" MB3-3 36"X18" SOUTH SOUTH M3-3 36"X18" M1-1 36"X36" INTERSTATE 41 45 M1-4 36"X36" MO5-1R 30"X30" MO5-1R 30"X30"	M4-8 36"X18" DETOUR DETOUR M4-8 36"X18" MB3-3 36"X18" SOUTH SOUTH M3-3 36"X18" M1-1 36"X36" INTERSTATE 41 45 M1-4 36"X36" MO6-1 30"X30" MO6-1 30"X30"	MB3-3 36"X18" SOUTH SOUTH M3-3 36"X18" M1-1 36"X36" INTERSTATE 41 45 M1-4 36"X36" DETOUR AHEAD W20-2A 48"X48"	M4-8 36"X18" DETOUR DETOUR M4-8 36"X18" MB3-3 36"X18" SOUTH SOUTH M3-3 36"X18" M1-1 36"X36" INTERSTATE 41 45 M1-4 36"X36"	M4-8 36"X18" DETOUR DETOUR M4-8 36"X18" MB3-3 36"X18" SOUTH SOUTH M3-3 36"X18" M1-1 36"X36" INTERSTATE 41 45 M1-4 36"X36" MO6-1 30"X30" MO6-1 30"X30"	M4-8 36"X18" DETOUR DETOUR M4-8 36"X18" MB3-3 36"X18" SOUTH SOUTH M3-3 36"X18" M1-1 36"X36" INTERSTATE 41 45 M1-4 36"X36" MO5-1L 30"X30" MO5-1L 30"X30"	M4-8 36"X18" DETOUR DETOUR M4-8 36"X18" MB3-3 36"X18" SOUTH SOUTH M3-3 36"X18" M1-1 36"X36" INTERSTATE 41 45 M1-4 36"X36" MO6-1 30"X30" MO6-1 30"X30"

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	DETOUR - IH 41 SOUTHBOUND - DETAIL 2	SHEET 105	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-027002-DT.DWG
LAYOUT NAME - Sheet-03
PLOT DATE : 7/28/2026 5:13 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : NTS
WISDOT/CADDS SHEET 42

2

LEGEND

- SIGN LOCATION
- TYPE III BARRICADE WITH SIGN
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- PROPOSED DETOUR ROUTE
- WORK AREA

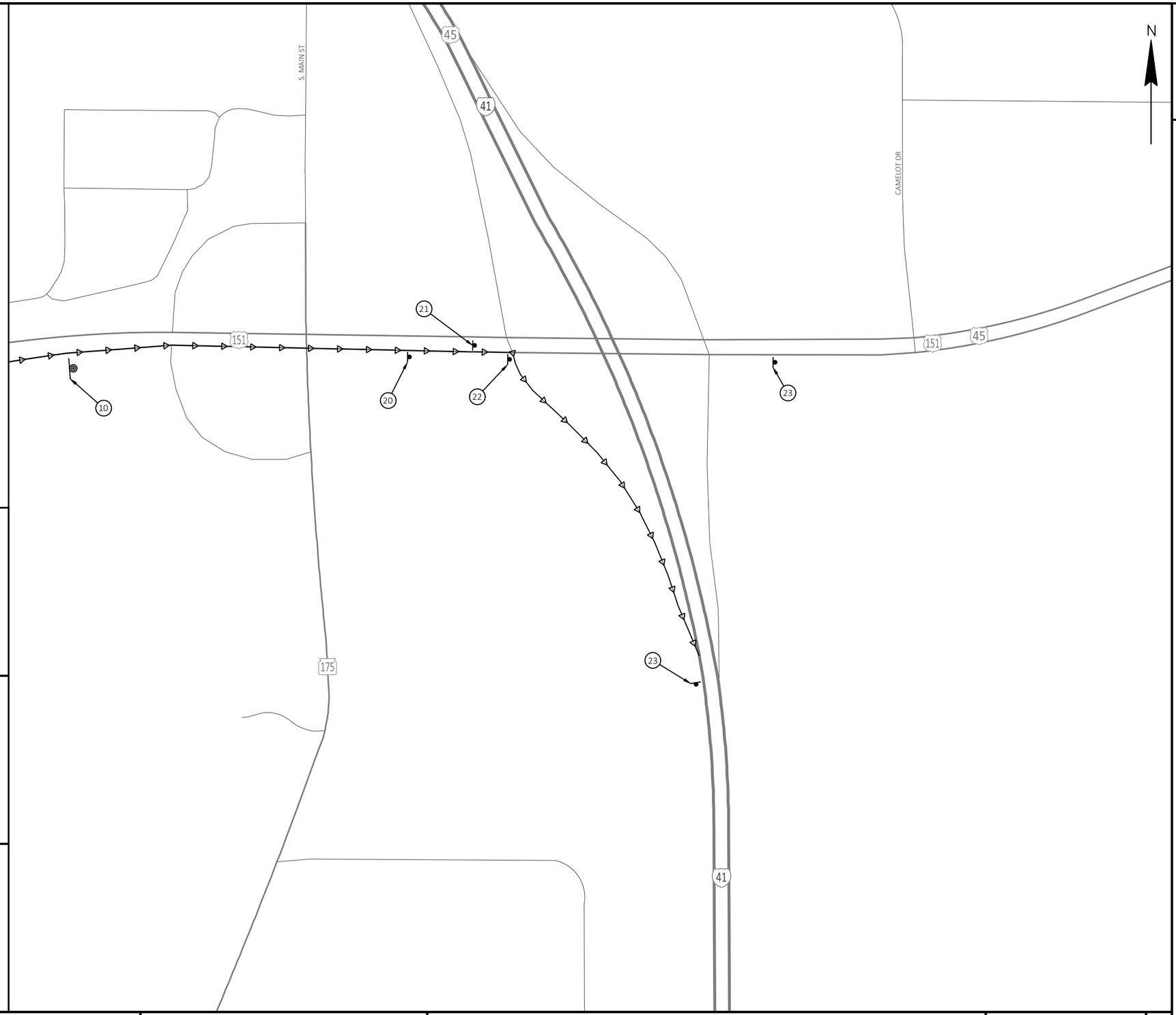
GENERAL NOTES - DETOUR

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES", "BARRICADES AND SIGNS FOR VARIOUS CLOSURES", "DETOUR SIGNING FOR MAINLINE CLOSURES", AND "TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE" FOR GENERAL NOTES AND SIGN SPACING REQUIREMENTS.

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON FIELD CONDITIONS AND THE CONTRACTOR'S METHODS OR SEQUENCE OF OPERATION.

ALL EXISTING OR TEMPORARY SIGN MESSAGES THAT CONFLICT WITH THE DETOUR SHALL BE COVERED OR REMOVED.

MAP SHOWN IS NOT TO SCALE.



10

M4-8 36"X18" — DETOUR / SOUTH
MB3-3 36"X18" — INTERSTATE 41 / 45
M3-3 36"X18"
M1-1 36"X36"
M1-4 36"X36"
MO6-1 30"X30"
MO6-1 30"X30"

20

M4-8 36"X18" — DETOUR / SOUTH
MB3-3 36"X18" — INTERSTATE 45 / 41
M3-3 36"X18"
M1-4 36"X36"
M1-1 36"X36"
MO6-1 30"X30"
MO5-1R 30"X30"

21

MODIFY EXISTING SIGNS

M4-8 36"X18" — DETOUR / NORTH 45 / SOUTH 45

22

M4-8 36"X18" — DETOUR / SOUTH
MB3-3 36"X18" — INTERSTATE 41
M1-1 36"X36"
MO6-1 30"X30"

23

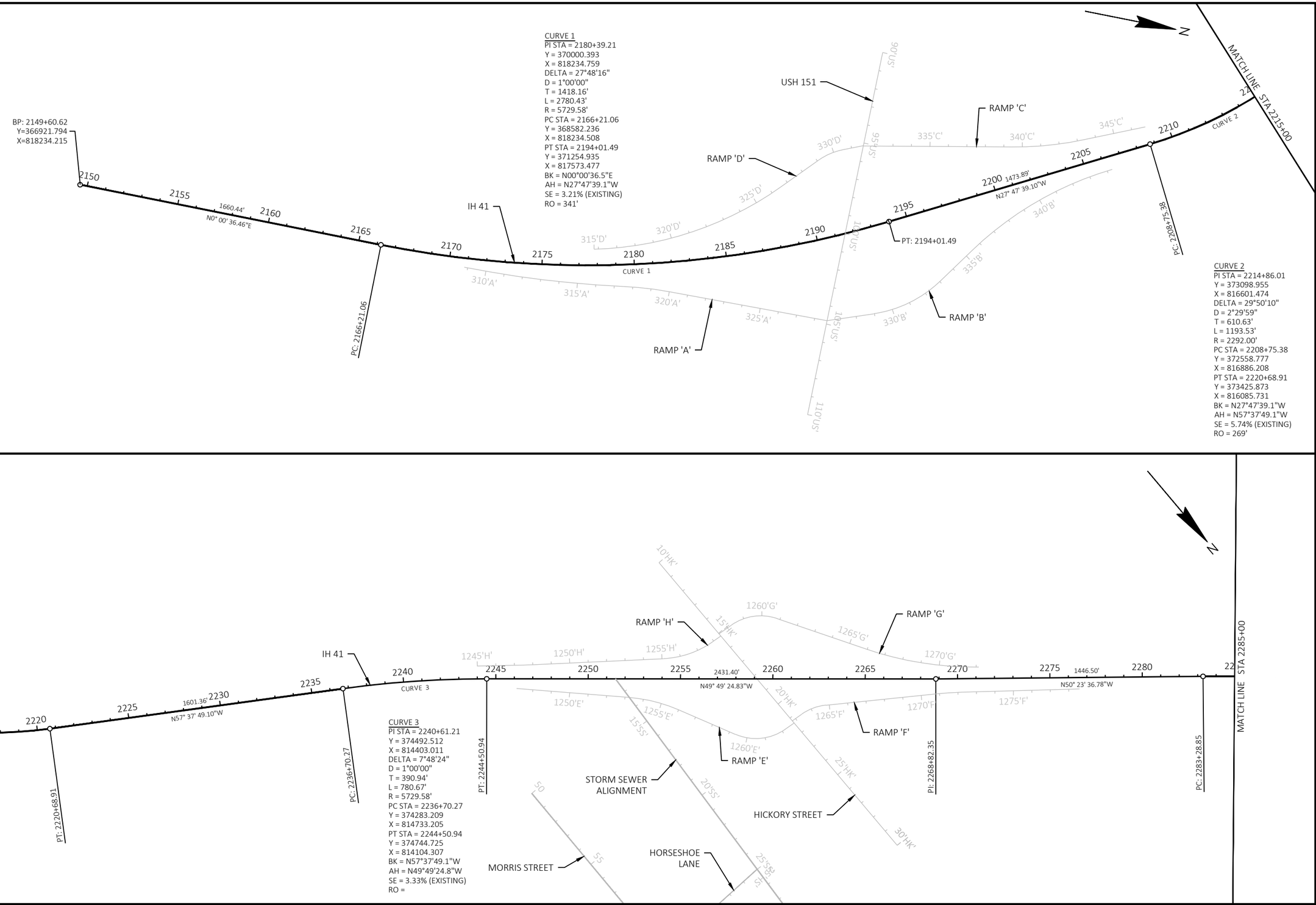
M4-8A 30"X24" — END DETOUR / SOUTH
MB3-3 36"X18" — INTERSTATE 41
M1-1 36"X36"

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	DETOUR - IH 41 SOUTHBOUND - DETAIL 3	SHEET 106	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-027002-DT.DWG
LAYOUT NAME - Sheet-04

PLOT DATE : 7/28/2026 5:13 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : NTS

WISDOT/CADDS SHEET 42



CURVE 1
PI STA = 2180+39.21
Y = 370000.393
X = 818234.759
DELTA = 27°48'16"
D = 1°00'00"
T = 1418.16'
L = 2780.43'
R = 5729.58'
PC STA = 2166+21.06
Y = 368582.236
X = 818234.508
PT STA = 2194+01.49
Y = 371254.935
X = 817573.477
BK = N00°00'36.5"E
AH = N27°47'39.1"W
SE = 3.21% (EXISTING)
RO = 341'

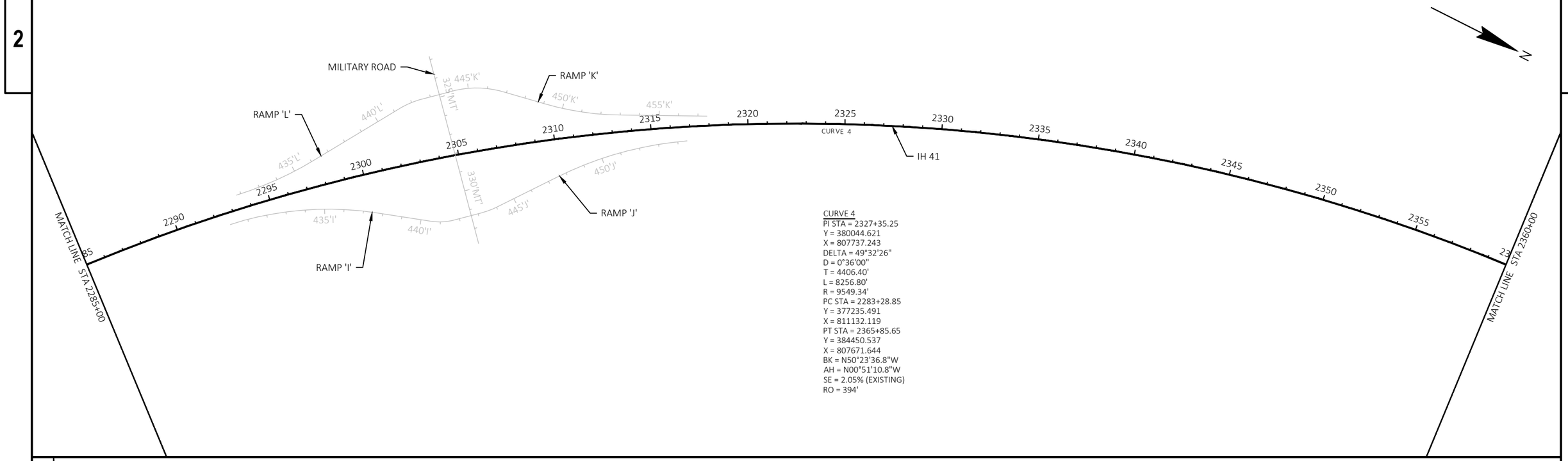
CURVE 2
PI STA = 2214+86.01
Y = 373098.955
X = 816601.474
DELTA = 29°50'10"
D = 2°29'59"
T = 610.63'
L = 1193.53'
R = 2292.00'
PC STA = 2208+75.38
Y = 372558.777
X = 816886.208
PT STA = 2220+68.91
Y = 373425.873
X = 816085.731
BK = N27°47'39.1"W
AH = N57°37'49.1"W
SE = 5.74% (EXISTING)
RO = 269'

CURVE 3
PI STA = 2240+61.21
Y = 374492.512
X = 814403.011
DELTA = 7°48'24"
D = 1°00'00"
T = 390.94'
L = 780.67'
R = 5729.58'
PC STA = 2236+70.27
Y = 374283.209
X = 814733.205
PT STA = 2244+50.94
Y = 374744.725
X = 814104.307
BK = N57°37'49.1"W
AH = N49°49'24.8"W
SE = 3.33% (EXISTING)
RO =

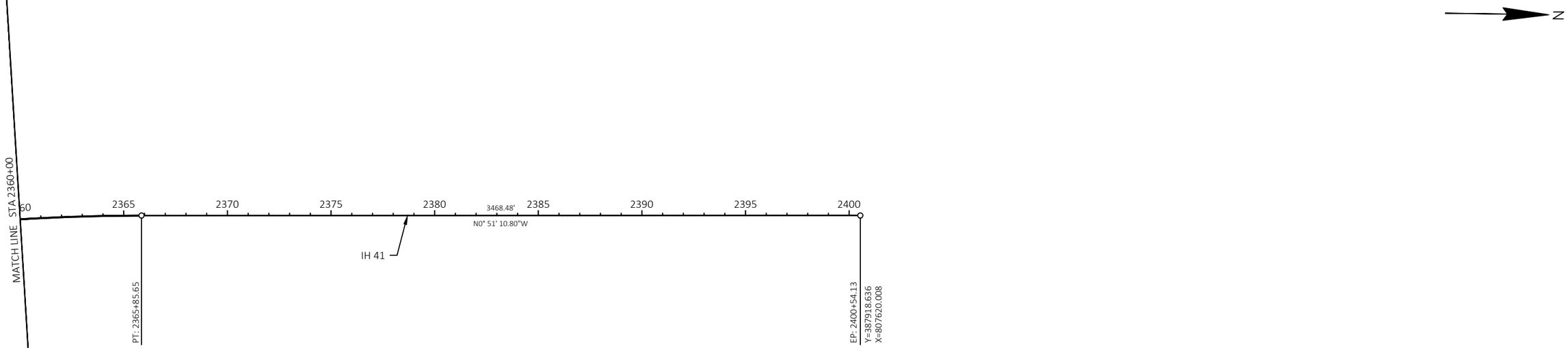
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	ALIGNMENT DIAGRAM - IH 41	SHEET 107	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-027201-AD.DWG
LAYOUT NAME - Sheet-01
PLOT DATE : 7/28/2026 5:14 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:500 FT

2



CURVE 4
PI STA = 2327+35.25
Y = 380044.621
X = 807737.243
DELTA = 49°32'26"
D = 0°36'00"
T = 4406.40'
L = 8256.80'
R = 9549.34'
PC STA = 2283+28.85
Y = 377235.491
X = 811132.119
PT STA = 2365+85.65
Y = 384450.537
X = 807671.644
BK = N50°23'36.8"W
AH = N00°51'10.8"W
SE = 2.05% (EXISTING)
RO = 394'



PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	ALIGNMENT DIAGRAM - IH 41	SHEET 108	E

2

N

CURVE 'D'1
PI STA = 321+35.17
Y = 370263.109
X = 817907.932
DELTA = 33°48'45"
D = 3°07'07"
T = 558.42'
L = 1084.25'
R = 1837.27'
PC STA = 315+76.75
Y = 369718.683
X = 818032.184
PT STA = 326+61.00
Y = 370646.309
X = 817501.734
BK = N12°51'22.3"W
AH = N46°40'07.5"W
SE = 5.16% (EXISTING)
RO = 226'

CURVE 'D'2
PI STA = 329+80.28
Y = 370865.403
X = 817269.491
DELTA = 24°20'40"
D = 17°27'49"
T = 70.77'
L = 139.40'
R = 328.08'
PC STA = 329+09.51
Y = 370816.841
X = 817320.967
PT STA = 330+48.91
Y = 370930.866
X = 817242.610
BK = N46°40'07.3"W
AH = N22°19'27.8"W
SE = R.C. (EXISTING)
RO = N/A

CURVE 'C'1
PI STA = 341+39.71
Y = 372021.290
X = 817010.655
DELTA = 12°16'43"
D = 3°07'07"
T = 197.62'
L = 393.73'
R = 1837.27'
PC STA = 339+42.08
Y = 371827.209
X = 817047.903
PT STA = 343+35.82
Y = 372203.010
X = 816932.984
BK = N10°51'51.2"W
AH = N23°08'34.4"W
SE = 5.16% (EXISTING)
RO = 226'

BP: 315'D'+76.75
Y=369718.683
X=818032.184

PT: 326'D'+61.00

PC: 329'D'+09.51

PT: 330'D'+48.91

BP: 90'US'+00.00
Y=371042.811
X=816683.628

90'US'

USH 151

PC: 339'C'+42.08

PT: 343'C'+35.82

EP: 346'C'+75.31
Y=372515.186
X=816799.553

339.50'
N23° 08' 34.39"W

345'C'

340'C'

CURVE 'C'1

335'C'

802.98'
N10° 51' 51.23"W

RAMP 'C'

RAMP 'D'

325'D'

320'D'

CURVE 'D'1

248.51'
N46° 40' 07.48"W

CURVE 'D'2

116.49'
N22° 19' 27.71"W

330'D'

99'US'

EP: 331'D'+65.40
Y=371038.625
X=817198.362

BP: 331'C'+39.10
Y=371038.618
X=817199.251

2170

2175

2180

2185

2190

2195

2200

2205

2210

IH 41

BP: 308'A'+81.22
Y=369048.400
X=818264.964

310'A'

CURVE 'A'1

315'A'

CURVE 'A'2

320'A'

PRC: 317'A'+49.96

PT: 319'A'+99.69

868.39'
N0° 51' 51.24"W

325'A'

RAMP 'A'

100'US'

S89° 32' 02.38"E
2000.00'

CURVE 'B'2

340'B'

EP: 344'B'+27.80
Y=372385.017
X=817060.310

238.23'
N55° 09' 11.38"W

335'B'

RAMP 'B'

PC: 335'B'+40.92

254.92'
N19° 36' 05.00"W

CURVE 'B'1

330'B'

105'US'

EP: 328'A'+68.08
Y=371030.765
X=818164.759

BP: 326'B'+40.62
Y=371030.767
X=818164.496

PT: 333'B'+02.69

PC: 328'B'+95.54

EP: 110'US'+00.00
Y=371026.545
X=818683.561

110'US'

CURVE 'A'1
PI STA = 313+16.40
Y = 369483.575
X = 818264.022
DELTA = 8°31'41"
D = 0°58'54"
T = 435.18'
L = 868.74'
R = 5836.62'
PC STA = 308+81.22
Y = 369048.400
X = 818264.964
PT STA = 317+49.96
Y = 369913.799
X = 818198.556
BK = N00°07'26.5"W
AH = N08°39'07.7"W
SE = 3.96% (EXISTING)
RO = 194'

CURVE 'A'2
PI STA = 318+75.02
Y = 370037.433
X = 818179.743
DELTA = 7°47'16"
D = 3°07'07"
T = 125.06'
L = 249.73'
R = 1837.27'
PC STA = 317+49.96
Y = 369913.799
X = 818198.556
PT STA = 319+99.69
Y = 370162.476
X = 818177.857
BK = N08°39'07.7"W
AH = N00°51'51.2"W
SE = 3.15% (EXISTING)
RO = 348'

CURVE 'B'1
PI STA = 331+05.91
Y = 371469.088
X = 818008.405
DELTA = 35°33'06"
D = 8°43'55"
T = 210.37'
L = 407.15'
R = 656.17'
PC STA = 328+95.54
Y = 371270.911
X = 818078.978
PT STA = 333+02.69
Y = 371589.289
X = 817835.760
BK = N19°36'05.0"W
AH = N55°09'11.4"W
SE = 6.00% (EXISTING)
RO = 226'

CURVE 'B'2
PI STA = 339+93.18
Y = 371983.827
X = 817269.084
DELTA = 27°39'41"
D = 3°07'08"
T = 452.26'
L = 886.88'
R = 1837.03'
PC STA = 335+40.92
Y = 371725.412
X = 817640.246
PT STA = 344+27.80
Y = 372385.017
X = 817060.310
BK = N55°09'11.4"W
AH = N27°29'30.6"W
SE = 5.72% (EXISTING)
RO = 249'

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	ALIGNMENT DIAGRAM - USH 151 RAMPS	SHEET 109	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-027202-AD.DWG
LAYOUT NAME - Sheet-01
PLOT DATE : 7/28/2026 5:15 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:300 FT
WISDOT/CADDS SHEET 42

2

2

CURVE 'H'1
PI STA = 1245+23.31
Y = 374673.845
X = 814080.062
DELTA = 0°30'03"
D = 0°59'34"
T = 25.22'
L = 50.45'
R = 5770.69'
PC STA = 1244+98.09
Y = 374658.135
X = 814099.796
PT STA = 1245+48.54
Y = 374689.726
X = 814060.466
BK = N51°28'38.9"W
AH = N50°58'35.7"W
SE = N/A
RO = N/A

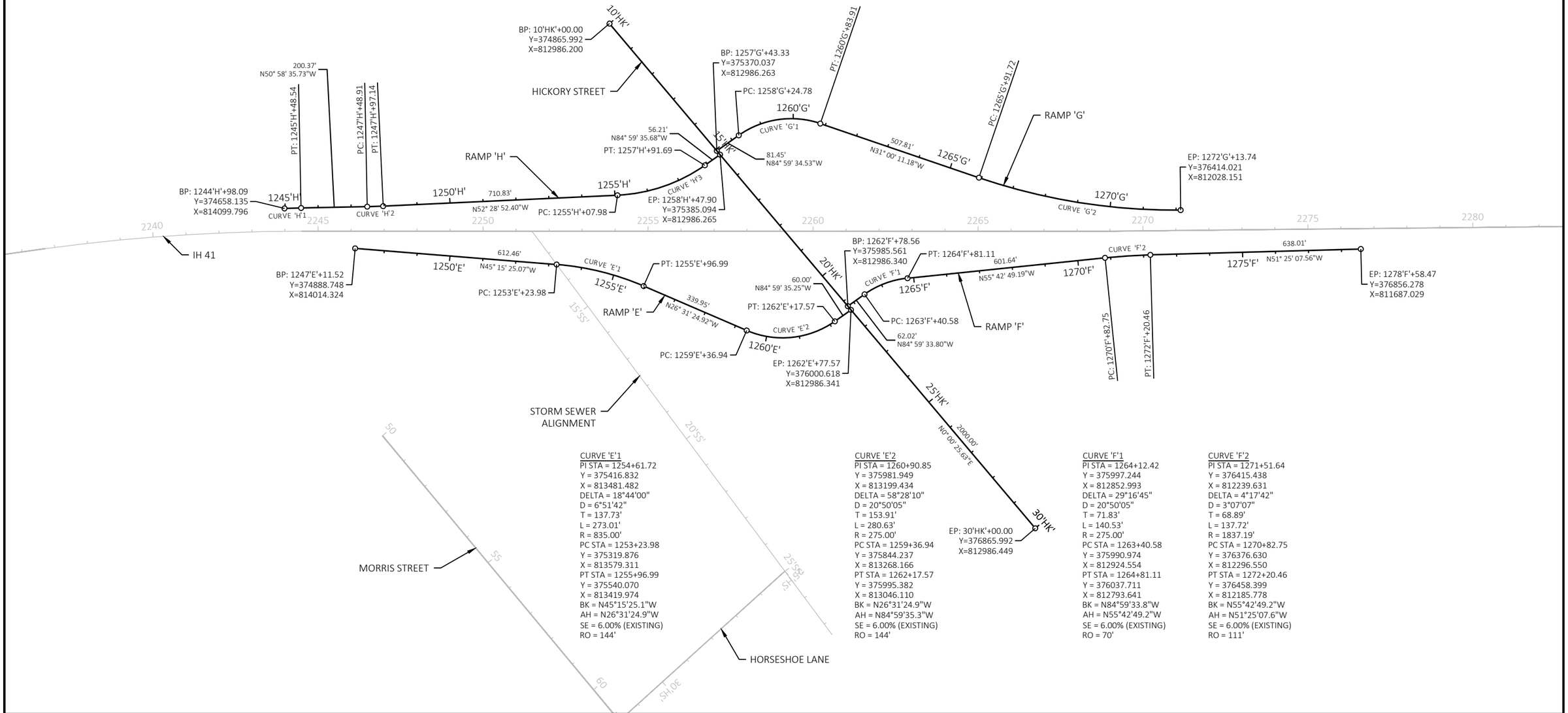
CURVE 'H'2
PI STA = 1247+73.03
Y = 374831.074
X = 813886.062
DELTA = 1°30'17"
D = 3°07'10"
T = 24.12'
L = 48.23'
R = 1836.71'
PC STA = 1247+48.91
Y = 374815.888
X = 813904.799
PT STA = 1247+97.14
Y = 374845.762
X = 813866.933
BK = N50°58'35.7"W
AH = N52°28'52.4"W
SE = N/A
RO = N/A

CURVE 'H'3
PI STA = 1256+53.77
Y = 375367.465
X = 813187.498
DELTA = 32°30'43"
D = 11°27'34"
T = 145.79'
L = 283.71'
R = 499.99'
PC STA = 1255+07.98
Y = 375278.676
X = 813303.132
PT STA = 1257+91.69
Y = 375380.188
X = 813042.265
BK = N52°28'52.4"W
AH = N84°59'35.7"W
SE = 5.70% (EXISTING)
RO = 71'

CURVE 'G'1
PI STA = 1259+64.87
Y = 375389.373
X = 812765.571
DELTA = 53°59'23"
D = 20°50'05"
T = 140.09'
L = 259.13'
R = 275.00'
PC STA = 1258+24.78
Y = 375377.146
X = 812905.125
PT STA = 1260+83.91
Y = 375509.448
X = 812693.413
BK = N84°59'34.5"W
AH = N31°00'11.2"W
SE = 6.00% (EXISTING)
RO = 90'

CURVE 'G'2
PI STA = 1269+05.74
Y = 376213.866
X = 812270.105
DELTA = 19°23'52"
D = 3°07'07"
T = 314.01'
L = 622.02'
R = 1837.27'
PC STA = 1265+91.72
Y = 375944.713
X = 812431.848
PT STA = 1272+13.74
Y = 376414.021
X = 812028.151
BK = N31°00'11.2"W
AH = N50°24'03.1"W
SE = 6.00% (EXISTING)
RO = 140'

N



CURVE 'E'1
PI STA = 1254+61.72
Y = 375416.832
X = 813481.482
DELTA = 18°44'00"
D = 6°51'42"
T = 137.73'
L = 273.01'
R = 835.00'
PC STA = 1253+23.98
Y = 375319.876
X = 813579.311
PT STA = 1255+96.99
Y = 375540.070
X = 813419.974
BK = N45°15'25.1"W
AH = N26°31'24.9"W
SE = 6.00% (EXISTING)
RO = 144'

CURVE 'E'2
PI STA = 1260+90.85
Y = 375981.949
X = 813199.434
DELTA = 58°28'10"
D = 20°50'05"
T = 153.91'
L = 280.63'
R = 275.00'
PC STA = 1259+36.94
Y = 375844.237
X = 813268.166
PT STA = 1262+17.57
Y = 375995.382
X = 813046.110
BK = N26°31'24.9"W
AH = N84°59'35.3"W
SE = 6.00% (EXISTING)
RO = 144'

CURVE 'F'1
PI STA = 1264+12.42
Y = 375997.244
X = 812852.993
DELTA = 29°16'45"
D = 20°50'05"
T = 71.83'
L = 140.53'
R = 275.00'
PC STA = 1263+40.58
Y = 375990.974
X = 812924.554
PT STA = 1264+81.11
Y = 376037.711
X = 812793.641
BK = N84°59'33.8"W
AH = N55°42'49.2"W
SE = 6.00% (EXISTING)
RO = 70'

CURVE 'F'2
PI STA = 1271+51.64
Y = 376415.438
X = 812239.631
DELTA = 4°17'42"
D = 3°07'07"
T = 68.89'
L = 137.72'
R = 1837.19'
PC STA = 1270+82.75
Y = 376376.630
X = 812296.550
PT STA = 1272+20.46
Y = 376458.399
X = 812185.778
BK = N55°42'49.2"W
AH = N51°25'07.6"W
SE = 6.00% (EXISTING)
RO = 111'

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	ALIGNMENT DIAGRAM - HICKORY STREET RAMPS	SHEET 110	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-027202-AD.DWG
LAYOUT NAME - Sheet-02
PLOT DATE : 7/28/2026 5:15 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:300 FT

WISDOT/CADDS SHEET 42

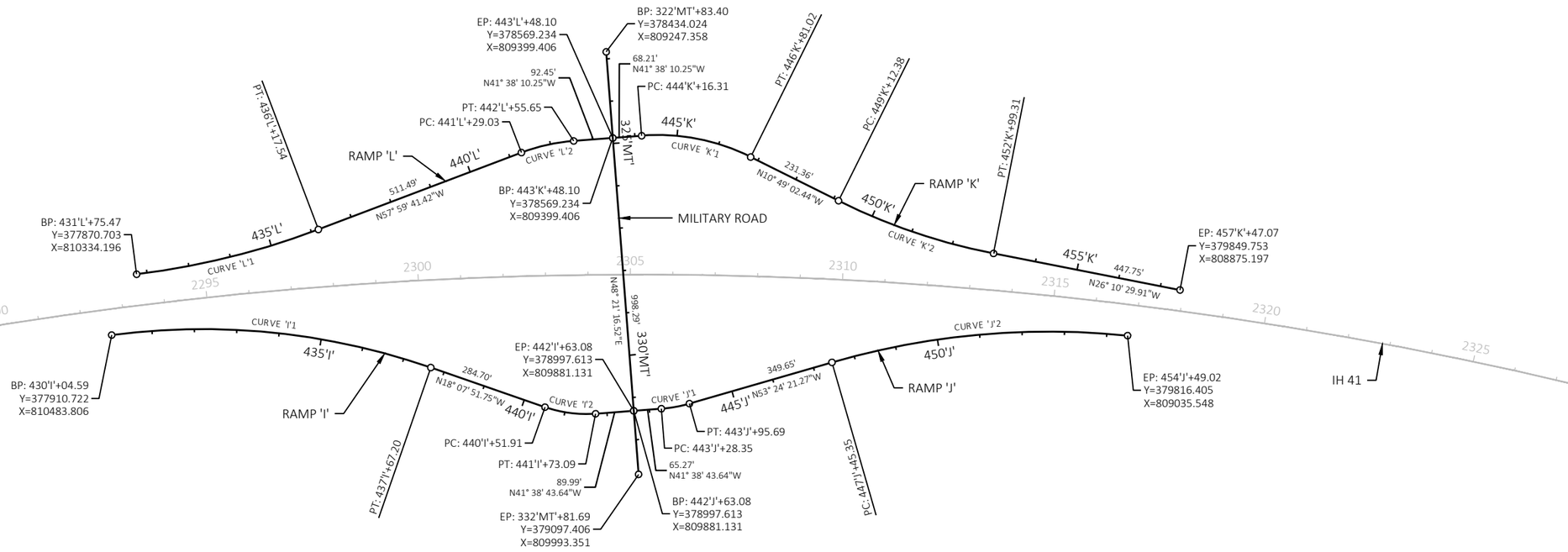
2

CURVE 'L'1
PI STA = 433+97.58
Y = 378029.913
X = 810179.325
DELTA = 13°47'10"
D = 3°07'07"
T = 222.11'
L = 442.07'
R = 1837.26'
PC STA = 431+75.47
Y = 377870.703
X = 810334.196
PT STA = 436+17.54
Y = 378147.630
X = 809990.976
BK = N44°12'31.0"W
AH = N57°59'41.4"W
SE = 5.72% (EXISTING)
RO = 249'

CURVE 'L'2
PI STA = 441+92.78
Y = 378452.501
X = 809503.178
DELTA = 16°21'31"
D = 12°55'11"
T = 63.74'
L = 126.62'
R = 443.47'
PC STA = 441+29.03
Y = 378418.718
X = 809557.231
PT STA = 442+55.65
Y = 378500.140
X = 809460.828
BK = N57°59'41.4"W
AH = N41°38'10.2"W
SE = N/A
RO = N/A

CURVE 'K'1
PI STA = 445+51.95
Y = 378721.585
X = 809263.970
DELTA = 30°49'08"
D = 11°38'33"
T = 135.64'
L = 264.71'
R = 492.13'
PC STA = 444+16.31
Y = 378620.210
X = 809354.090
PT STA = 446+81.02
Y = 378854.815
X = 809238.513
BK = N41°38'10.2"W
AH = N10°49'02.4"W
SE = N/A
RO = N/A

CURVE 'K'2
PI STA = 451+07.01
Y = 379273.243
X = 809158.563
DELTA = 15°21'27"
D = 3°58'09"
T = 194.63'
L = 386.93'
R = 1443.57'
PC STA = 449+12.38
Y = 379082.067
X = 809195.091
PT STA = 452+99.31
Y = 379447.917
X = 809072.707
BK = N10°49'02.4"W
AH = N26°10'29.9"W
SE = 6.00% (EXISTING)
RO = 246'



CURVE 'I'1
PI STA = 433+92.92
Y = 378186.423
X = 810210.337
DELTA = 26°38'10"
D = 3°29'34"
T = 388.33'
L = 762.61'
R = 1640.42'
PC STA = 430+04.59
Y = 377910.722
X = 810483.806
PT STA = 437+67.20
Y = 378555.468
X = 810089.493
BK = N44°46'01.8"W
AH = N18°07'51.7"W
SE = 5.90% (EXISTING)
RO = 246'

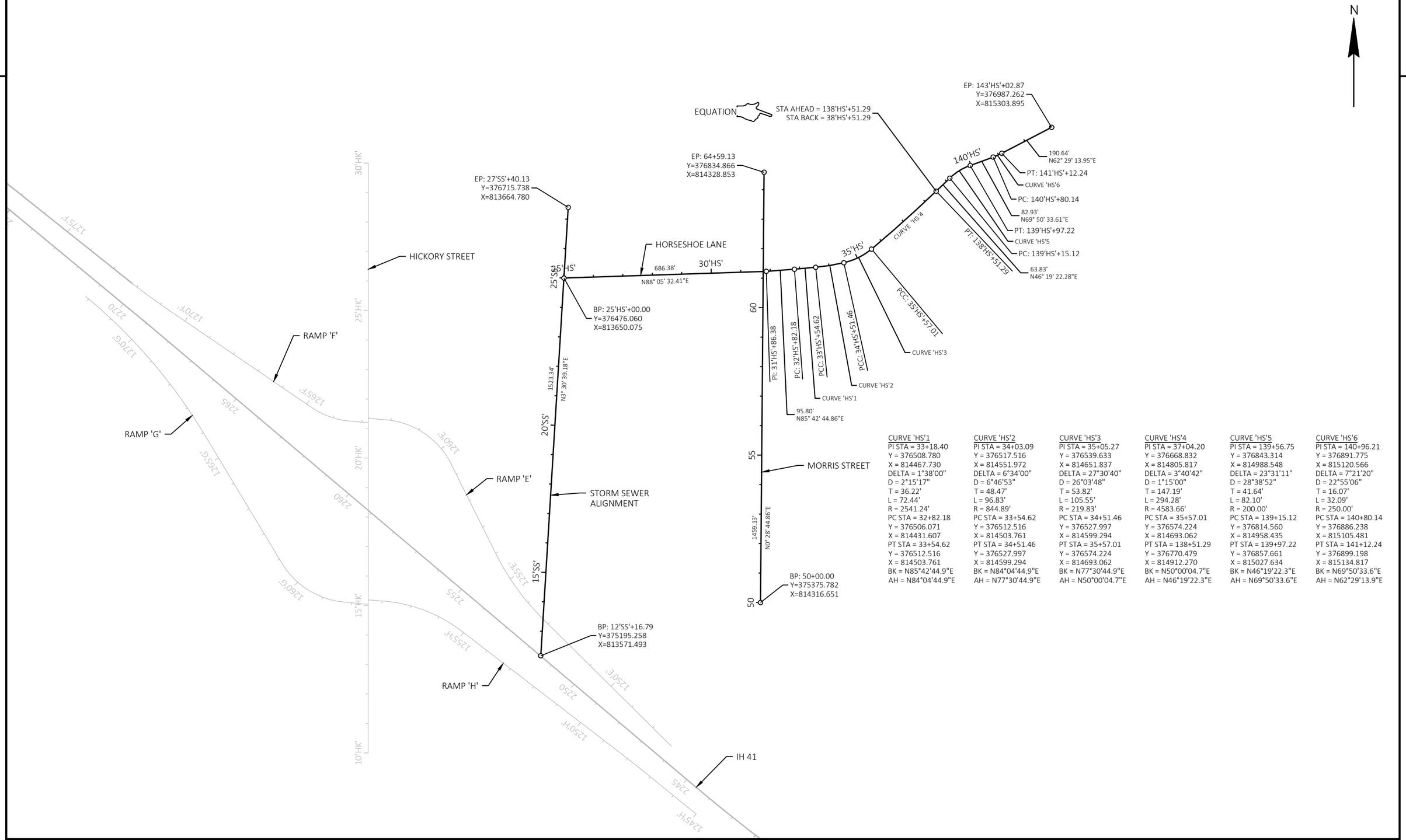
CURVE 'I'2
PI STA = 441+13.36
Y = 378884.440
X = 809981.771
DELTA = 23°30'52"
D = 19°24'15"
T = 61.46'
L = 121.18'
R = 295.27'
PC STA = 440+51.91
Y = 378826.036
X = 810000.896
PT STA = 441+73.09
Y = 378930.364
X = 809940.932
BK = N18°07'51.7"W
AH = N41°38'43.6"W
SE = N/A
RO = N/A

CURVE 'J'1
PI STA = 443+62.14
Y = 379071.639
X = 809815.303
DELTA = 11°45'38"
D = 17°27'50"
T = 33.79'
L = 67.34'
R = 328.08'
PC STA = 443+28.35
Y = 379046.389
X = 809837.757
PT STA = 443+95.69
Y = 379091.782
X = 809788.174
BK = N41°38'43.6"W
AH = N53°24'21.3"W
SE = N/A
RO = N/A

CURVE 'J'2
PI STA = 451+01.55
Y = 379512.571
X = 809221.459
DELTA = 21°56'39"
D = 3°07'07"
T = 356.20'
L = 703.67'
R = 1837.26'
PC STA = 447+45.35
Y = 379300.226
X = 809507.444
PT STA = 454+49.02
Y = 379816.405
X = 809035.548
BK = N53°24'21.3"W
AH = N31°27'42.3"W
SE = 5.72% (EXISTING)
RO = 249'

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	ALIGNMENT DIAGRAM - MILITARY ROAD RAMPS	SHEET 111	E

2



CURVE 'HS'1
PI STA = 33+18.40
Y = 376508.780
X = 814467.730
DELTA = 1°38'00"
D = 2°15'17"
T = 36.22'
L = 72.44'
R = 2541.24'
PC STA = 32+82.18
Y = 376506.071
X = 814431.607
PT STA = 33+54.62
Y = 376512.516
X = 814503.761
BK = N85°42'44.9"E
AH = N84°04'44.9"E

CURVE 'HS'2
PI STA = 34+03.09
Y = 376517.516
X = 814551.972
DELTA = 6°34'00"
D = 6°46'53"
T = 48.47'
L = 96.83'
R = 844.89'
PC STA = 33+54.62
Y = 376512.516
X = 814503.761
PT STA = 34+51.46
Y = 376527.997
X = 814599.294
BK = N84°04'44.9"E
AH = N77°30'44.9"E

CURVE 'HS'3
PI STA = 35+05.27
Y = 376539.633
X = 814651.837
DELTA = 27°30'40"
D = 26°03'48"
T = 53.82'
L = 105.55'
R = 219.83'
PC STA = 34+51.46
Y = 376527.997
X = 814599.294
PT STA = 35+57.01
Y = 376574.224
X = 814693.062
BK = N77°30'44.9"E
AH = N50°00'04.7"E

CURVE 'HS'4
PI STA = 37+04.20
Y = 376668.832
X = 814805.817
DELTA = 3°40'42"
D = 1°15'00"
T = 147.19'
L = 294.28'
R = 4583.66'
PC STA = 35+57.01
Y = 376574.224
X = 814693.062
PT STA = 138+51.29
Y = 376770.479
X = 814912.270
BK = N50°00'04.7"E
AH = N46°19'22.3"E

CURVE 'HS'5
PI STA = 139+56.75
Y = 376843.314
X = 814988.548
DELTA = 23°31'11"
D = 28°38'52"
T = 41.64'
L = 82.10'
R = 200.00'
PC STA = 139+15.12
Y = 376814.560
X = 814958.435
PT STA = 139+97.22
Y = 376857.661
X = 815027.634
BK = N46°19'22.3"E
AH = N69°50'33.6"E

CURVE 'HS'6
PI STA = 140+96.21
Y = 376891.775
X = 815120.566
DELTA = 7°21'20"
D = 22°55'06"
T = 16.07'
L = 32.09'
R = 250.00'
PC STA = 140+80.14
Y = 376886.238
X = 815105.481
PT STA = 141+12.24
Y = 376899.198
X = 815134.817
BK = N69°50'33.6"E
AH = N62°29'13.9"E

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	ALIGNMENT DIAGRAM - STORM SEWER - HORSESHOE LANE - MORRIS STREET	SHEET 112	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-027203-AD.DWG
LAYOUT NAME - Sheet-01
PLOT DATE : 7/28/2026 6:09 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:300 FT
WISDOT/CADDS SHEET 42

Estimate Of Quantities

Line	Item	Item Description	Unit	Total	1100-56-70 Qty	1100-56-71 Qty
0002	201.0105	Clearing	STA	13.000		13.000
0004	201.0205	Grubbing	STA	13.000		13.000
0006	203.0100	Removing Small Pipe Culverts	EACH	4.000		4.000
0008	204.0100	Removing Concrete Pavement	SY	620.000	620.000	
0010	204.0110	Removing Asphaltic Surface	SY	4,350.000	1,514.000	2,836.000
0012	204.0115	Removing Asphaltic Surface Butt Joints	SY	89.000	89.000	
0014	204.0120	Removing Asphaltic Surface Milling	SY	58,100.000	58,100.000	
0016	204.0150	Removing Curb & Gutter	LF	477.000	477.000	
0018	204.0155	Removing Concrete Sidewalk	SY	18.000	18.000	
0020	204.0157	Removing Concrete Barrier	LF	314.000	314.000	
0022	204.0165	Removing Guardrail	LF	4,410.000	4,410.000	
0024	204.0167	Removing Cable Barrier	LF	17,200.000	17,200.000	
0026	204.0170	Removing Fence	LF	270.000	270.000	
0028	204.0175	Removing Concrete Slope Paving	SY	924.000	924.000	
0030	204.0180	Removing Delineators and Markers	EACH	15.000	15.000	
0032	204.0190	Removing Surface Drains	EACH	1.000	1.000	
0034	204.0210	Removing Manholes	EACH	6.000		6.000
0036	204.0220	Removing Inlets	EACH	6.000		6.000
0038	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	18.000		18.000
0040	204.0245	Removing Storm Sewer (size) 02. 18-Inch	LF	5.000		5.000
0042	204.0245	Removing Storm Sewer (size) 03. 24-Inch	LF	600.000		600.000
0044	204.0245	Removing Storm Sewer (size) 04. 30-Inch	LF	63.000		63.000
0046	204.0245	Removing Storm Sewer (size) 05. 36-Inch	LF	58.000		58.000
0048	204.0245	Removing Storm Sewer (size) 06. 19-Inch x 30-Inch	LF	21.000		21.000
0050	204.0245	Removing Storm Sewer (size) 07. 24-Inch x 38-Inch	LF	130.000		130.000
0052	204.9060.S	Removing (item description) 01. Crash Cushion	EACH	1.000	1.000	
0054	205.0100	Excavation Common	CY	3,870.000	597.000	3,273.000
0056	208.0100	Borrow	CY	558.000	558.000	
0058	213.0100	Finishing Roadway (project) 01. 1100-56-70	EACH	1.000	1.000	
0060	213.0100	Finishing Roadway (project) 02. 1100-56-71	EACH	1.000		1.000
0062	305.0110	Base Aggregate Dense 3/4-Inch	TON	7,130.000	6,912.000	218.000
0064	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	5,420.000	1,283.000	4,137.000
0066	305.0130	Base Aggregate Dense 3-Inch	TON	2,660.000		2,660.000
0068	405.0100	Coloring Concrete WisDOT Red	CY	107.000	107.000	
0070	415.1090	Concrete Pavement HES 9-Inch	SY	355.000	355.000	
0072	415.2010	Concrete Truck Apron 12-Inch	SY	320.000	320.000	
0074	416.0610	Drilled Tie Bars	EACH	2,063.000	2,063.000	
0076	416.0620	Drilled Dowel Bars	EACH	3,947.000	3,947.000	
0078	416.1710	Concrete Pavement Repair	SY	180.000	180.000	
0080	416.1715	Concrete Pavement Repair SHES	SY	970.000	970.000	
0082	416.1720	Concrete Pavement Replacement	SY	670.000	670.000	
0084	416.1725	Concrete Pavement Replacement SHES	SY	5,910.000	5,910.000	
0086	455.0605	Tack Coat	GAL	4,430.000	4,320.000	110.000
0088	460.2000	Incentive Density HMA Pavement	DOL	4,430.000	4,430.000	
0090	460.5224	HMA Pavement 4 LT 58-28 S	TON	6,850.000	6,850.000	
0092	465.0105	Asphaltic Surface	TON	725.000	228.000	497.000
0094	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	165.000		165.000
0096	465.0125	Asphaltic Surface Temporary	TON	90.000	90.000	
0098	465.0510	Asphaltic Rumble Strips, Shoulder Divided Roadway	LF	38,960.000	38,960.000	

					1100-56-70	1100-56-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0100	502.3205	Pigmented Surface Sealer Reseal	SY	1,000.000	1,000.000	
0102	502.4204	Adhesive Anchors No. 4 Bar	EACH	10.000	10.000	
0104	509.0301	Preparation Decks Type 1	SY	1.000	1.000	
0106	509.0310.S	Sawing Pavement Deck Preparation Areas	LF	10.000	10.000	
0108	509.1500	Concrete Surface Repair	SF	10.000	10.000	
0110	509.2100.S	Concrete Masonry Deck Repair	CY	1.000	1.000	
0112	520.2018	Culvert Pipe Temporary 18-Inch	LF	254.000		254.000
0114	520.8000	Concrete Collars for Pipe	EACH	7.000		7.000
0116	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	4.000		4.000
0118	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	6.000		6.000
0120	521.3112	Culvert Pipe Corrugated Steel 12-Inch	LF	154.000		154.000
0122	521.3118	Culvert Pipe Corrugated Steel 18-Inch	LF	124.000		124.000
0124	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	1.000		1.000
0126	522.1054	Apron Endwalls for Culvert Pipe Reinforced Concrete 54-Inch	EACH	1.000		1.000
0128	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	1.000		1.000
0130	522.2624	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 24x38-Inch	EACH	1.000		1.000
0132	601.0413	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type G	LF	90.000	90.000	
0134	601.0551	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A	LF	395.000	395.000	
0136	601.0574	Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type G	LF	87.000	87.000	
0138	601.0590	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF	118.000	118.000	
0140	602.0405	Concrete Sidewalk 4-Inch	SF	160.000	160.000	
0142	602.3010	Concrete Surface Drains	CY	8.000	8.000	
0144	602.3210	Concrete Rumble Strips, Shoulder Divided Roadway	LF	20,320.000	20,320.000	
0146	603.0105	Concrete Barrier Single-Faced 32-Inch	LF	92.000	92.000	
0148	603.1142	Concrete Barrier Type S42	LF	215.000	215.000	
0150	603.3111	Concrete Barrier Transition Type NJ32SF to S32	EACH	2.000	2.000	
0152	604.0500	Slope Paving Crushed Aggregate	SY	924.000	924.000	
0154	606.0200	Riprap Medium	CY	318.000		318.000
0156	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	8.000		8.000
0158	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	12.000		12.000
0160	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	576.000		576.000
0162	608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	73.000		73.000
0164	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	22.000		22.000
0166	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	125.000		125.000
0168	608.0554	Storm Sewer Pipe Reinforced Concrete Class V 54-Inch	LF	2,194.000		2,194.000
0170	608.2419	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	175.000		175.000
0172	608.2424	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	LF	84.000		84.000
0174	608.2429	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch	LF	155.000		155.000
0176	611.0530	Manhole Covers Type J	EACH	12.000		12.000
0178	611.0612	Inlet Covers Type C	EACH	2.000		2.000
0180	611.0627	Inlet Covers Type HM	EACH	1.000	1.000	
0182	611.0642	Inlet Covers Type MS	EACH	8.000		8.000
0184	611.0656	Inlet Covers Type VV-B	EACH	6.000		6.000
0186	611.2005	Manholes 5-FT Diameter	EACH	4.000		4.000
0188	611.2006	Manholes 6-FT Diameter	EACH	2.000		2.000
0190	611.2007	Manholes 7-FT Diameter	EACH	1.000		1.000
0192	611.2008	Manholes 8-FT Diameter	EACH	3.000		3.000
0194	611.2010	Manholes 10-FT Diameter	EACH	1.000		1.000
0196	611.2504	Manholes Variable Tee 4-FT Diameter	EACH	1.000		1.000

Estimate Of Quantities

Line	Item	Item Description	Unit	Total	1100-56-70 Qty	1100-56-71 Qty
0198	611.2604	Manholes Variable Special 4-FT Diameter	EACH	4.000		4.000
0200	611.3260	Inlets 2x3.5-FT	EACH	4.000		4.000
0202	611.3902	Inlets Median 2 Grate	EACH	2.000		2.000
0204	611.3904	Inlets Median 4 Grate	EACH	1.000		1.000
0206	611.8115	Adjusting Inlet Covers	EACH	10.000	10.000	
0208	611.9850.S	Pipe Grates (size) 01. 36-Inch	EACH	1.000		1.000
0210	611.9850.S	Pipe Grates (size) 02. 54-Inch	EACH	1.000		1.000
0212	611.9850.S	Pipe Grates (size) 03. 24x38-Inch	EACH	1.000		1.000
0214	613.1100.S	Cable Barrier Type 1	LF	16,840.000	16,840.000	
0216	613.1200.S	Cable Barrier End Terminal Type 1	EACH	12.000	12.000	
0218	614.0220	Steel Thrie Beam Bullnose Terminal	EACH	12.000	12.000	
0220	614.0230	Steel Thrie Beam	LF	1,300.000	1,300.000	
0222	614.0800	Crash Cushions Permanent	EACH	1.000	1.000	
0224	614.2300	MGS Guardrail 3	LF	1,132.500	1,132.500	
0226	614.2500	MGS Thrie Beam Transition	LF	395.800	395.800	
0228	614.2610	MGS Guardrail Terminal EAT	EACH	12.000	12.000	
0230	614.2620	MGS Guardrail Terminal Type 2	EACH	5.000	5.000	
0232	616.0100	Fence Woven Wire (height) 01. 4-FT	LF	263.000	150.000	113.000
0234	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1100-56-70	EACH	1.000	1.000	
0236	618.0100	Maintenance and Repair of Haul Roads (project) 02. 1100-56-71	EACH	1.000		1.000
0238	619.1000	Mobilization	EACH	1.000	0.500	0.500
0240	624.0100	Water	MGAL	210.000	112.800	97.200
0242	625.0100	Topsoil	SY	7,430.000	7,430.000	
0244	625.0500	Salvaged Topsoil	SY	21,800.000		21,800.000
0246	627.0200	Mulching	SY	4,620.000		4,620.000
0248	628.1504	Silt Fence	LF	4,450.000	1,635.000	2,815.000
0250	628.1520	Silt Fence Maintenance	LF	4,450.000	1,635.000	2,815.000
0252	628.1905	Mobilizations Erosion Control	EACH	10.000	5.000	5.000
0254	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	3.000	3.000
0256	628.2004	Erosion Mat Class I Type B	SY	22,800.000	7,434.000	15,366.000
0258	628.2008	Erosion Mat Urban Class I Type B	SY	6,390.000		6,390.000
0260	628.7010	Inlet Protection Type B	EACH	71.000	71.000	
0262	628.7504	Temporary Ditch Checks	LF	240.000	45.000	195.000
0264	628.7555	Culvert Pipe Checks	EACH	81.000	10.000	71.000
0266	628.7560	Tracking Pads	EACH	5.000		5.000
0268	628.7570	Rock Bags	EACH	460.000	150.000	310.000
0270	629.0210	Fertilizer Type B	CWT	19.000	4.900	14.100
0272	630.0120	Seeding Mixture No. 20	LB	760.000	74.000	686.000
0274	630.0130	Seeding Mixture No. 30	LB	260.000	260.000	
0276	630.0140	Seeding Mixture No. 40	LB	350.000		350.000
0278	630.0200	Seeding Temporary	LB	120.000		120.000
0280	630.0500	Seed Water	MGAL	690.000	171.000	519.000
0282	633.0100	Delineator Posts Steel	EACH	8.000	8.000	
0284	633.0500	Delineator Reflectors	EACH	8.000	8.000	
0286	633.1000	Delineators Barrier Wall	EACH	3.000	3.000	
0288	633.5200	Markers Culvert End	EACH	4.000		4.000
0290	634.0614	Posts Wood 4x6-Inch x 14-FT	EACH	1.000	1.000	
0292	634.0616	Posts Wood 4x6-Inch x 16-FT	EACH	7.000	7.000	
0294	634.0618	Posts Wood 4x6-Inch x 18-FT	EACH	2.000	2.000	

					1100-56-70	1100-56-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0296	634.0620	Posts Wood 4x6-Inch x 20-FT	EACH	6.000	6.000	
0298	638.2102	Moving Signs Type II	EACH	15.000	13.000	2.000
0300	638.3000	Removing Small Sign Supports	EACH	15.000	15.000	
0302	638.4000	Moving Small Sign Supports	EACH	2.000		2.000
0304	642.5401	Field Office Type D	EACH	1.000	0.500	0.500
0306	643.0300	Traffic Control Drums	DAY	58,095.000	52,845.000	5,250.000
0308	643.0370.S	Digital Speed Reduction System (DSRS)	DAY	364.000	364.000	
0310	643.0420	Traffic Control Barricades Type III	DAY	1,842.000	1,002.000	840.000
0312	643.0705	Traffic Control Warning Lights Type A	DAY	3,036.000	1,986.000	1,050.000
0314	643.0715	Traffic Control Warning Lights Type C	DAY	6,676.000	6,676.000	
0316	643.0810	Traffic Control Connected Arrow Boards	DAY	364.000	364.000	
0318	643.0900	Traffic Control Signs	DAY	11,815.000	11,380.000	435.000
0320	643.0910	Traffic Control Covering Signs Type I	EACH	91.000	91.000	
0322	643.0920	Traffic Control Covering Signs Type II	EACH	804.000	804.000	
0324	643.1050	Traffic Control Signs PCMS	DAY	165.000	165.000	
0326	643.1205.S	Basic Traffic Queue Warning System	DAY	364.000	364.000	
0328	643.1220	Traffic Control Connected Work Zone Start and End Location Markers	DAY	364.000	364.000	
0330	643.5000	Traffic Control	EACH	1.000	0.500	0.500
0332	644.1810	Temporary Pedestrian Barricade	LF	30.000	6.000	24.000
0334	644.1900.S	Temporary Audible Message Devices	DAY	15.000		15.000
0336	645.0120	Geotextile Type HR	SY	770.000		770.000
0338	646.2025	Marking Line Grooved Black Epoxy 6-Inch	LF	8,440.000	8,440.000	
0340	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	93,040.000	93,040.000	
0342	646.2050	Marking Line Grooved Permanent Tape 6-Inch	LF	9,260.000	9,260.000	
0344	646.4025	Marking Line Grooved Black Epoxy 10-Inch	LF	768.000	768.000	
0346	646.4050	Marking Line Grooved Permanent Tape 10-Inch	LF	16,640.000	16,640.000	
0348	646.5020	Marking Arrow Epoxy	EACH	9.000	9.000	
0350	646.5120	Marking Word Epoxy	EACH	3.000	3.000	
0352	646.5220	Marking Symbol Epoxy	EACH	2.000	2.000	
0354	646.6120	Marking Stop Line Epoxy 18-Inch	LF	189.000	189.000	
0356	646.7220	Marking Chevron Epoxy 24-Inch	LF	1,090.000	1,090.000	
0358	646.8320	Marking Parking Stall Epoxy	LF	1,010.000	1,010.000	
0360	646.9000	Marking Removal Line 4-Inch	LF	91,600.000	91,600.000	
0362	646.9055	Marking Removal Line Grooved Contrast Permanent Tape 4-Inch	LF	8,550.000	8,550.000	
0364	646.9100	Marking Removal Line 8-Inch	LF	10,650.000	10,650.000	
0366	646.9155	Marking Removal Line Grooved Contrast Permanent Tape 8-Inch	LF	4,630.000	4,630.000	
0368	646.9200	Marking Removal Line Wide	LF	760.000	760.000	
0370	646.9300	Marking Removal Special Marking	EACH	11.000	11.000	
0372	650.4000	Construction Staking Storm Sewer	EACH	33.000		33.000
0374	650.4500	Construction Staking Subgrade	LF	1,955.000	389.000	1,566.000
0376	650.5000	Construction Staking Base	LF	1,566.000		1,566.000
0378	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	118.000	118.000	
0380	650.7000	Construction Staking Concrete Pavement	LF	389.000	389.000	
0382	650.7500	Construction Staking Concrete Barrier	LF	307.000	307.000	
0384	650.8000	Construction Staking Resurfacing Reference	LF	52,984.000	52,984.000	
0386	650.9911	Construction Staking Supplemental Control (project) 01. 1100-56-70	EACH	1.000	1.000	
0388	650.9911	Construction Staking Supplemental Control (project) 02. 1100-56-71	EACH	1.000		1.000
0390	650.9920	Construction Staking Slope Stakes	LF	3,858.000	2,292.000	1,566.000
0392	653.0900	Adjusting Pull Boxes	EACH	1.000	1.000	

					1100-56-70	1100-56-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0394	690.0150	Sawing Asphalt	LF	6,586.000	6,132.000	454.000
0396	690.0250	Sawing Concrete	LF	15,584.000	15,562.000	22.000
0398	715.0603	Incentive Strength Concrete Barrier	DOL	154.000	154.000	
0400	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	500.000	
0402	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,400.000		2,400.000
0404	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	3,650.000		3,650.000
0406	SPV.0060	Special 01. Repair Chainlink Fence B-20-111	EACH	1.000	1.000	
0408	SPV.0060	Special 02. Concrete Barrier Transition	EACH	1.000	1.000	
0410	SPV.0060	Special 03. Connect to Existing Structure	EACH	3.000		3.000
0412	SPV.0060	Special 04. Geotechnical Instrumentation	EACH	1.000		1.000
0414	SPV.0060	Special 05. Inclinometer Casing	EACH	3.000		3.000
0416	SPV.0060	Special 06. Settlement Monitoring Point	EACH	4.000		4.000
0418	SPV.0060	Special 07. Structure Survey Target	EACH	20.000		20.000
0420	SPV.0060	Special 08. Utility Line Opening	EACH	10.000	5.000	5.000
0422	SPV.0060	Special 09. Sawing Concrete Barrier Single Faced	EACH	5.000	5.000	
0424	SPV.0090	Special 01. Joint Sealing	LF	4,140.000	4,140.000	
0426	SPV.0090	Special 02. Trenchless Storm Sewer Pipe Reinforced Concrete Class V 54-Inch	LF	585.000		585.000
0428	SPV.0195	Special 01. Excavation, Hauling, and Disposal of VOC Contaminated Soil	TON	3,610.000		3,610.000
0430	SPV.0195	Special 02. Excavation, Hauling, and Disposal of Pesticide Contaminated Soil	TON	1,010.000		1,010.000

CLEARING AND GRUBBING ITEMS

STATION - STATION	LOCATION	ROADWAY	201.0105 CLEARING STA	201.0205 GRUBBING STA
PROJECT 1100-56-71				
CATEGORY CODE 0010				
15'SS'+00 - 21'SS'+00	LT & RT	STORM SEWER	6	6
24'SS'+00 - 25'SS'+00	LT & RT	STORM SEWER	1	1
34'HS'+00 - 140'HS'+00	LT & RT	HORSESHOE LN	6	6
		TOTALS	**13**	**13**

REMOVING ITEMS

STATION - STATION	LOCATION	ROADWAY	204.0165 REMOVING GUARDRAIL LF	204.0167 REMOVING CABLE BARRIER LF	204.0170 REMOVING FENCE LF	204.0180 REMOVING DELINEATORS AND MARKERS EACH
PROJECT 1100-56-70						
CATEGORY CODE 0010						
2151+20 - 2229+00	RT	IH 41 SB (MEDIAN)	--	7,801	--	2
2190+24 - 2192+93	LT & RT	IH 41 MEDIAN	551	--	--	--
2218+03 - 2220+16	LT & RT	IH 41 MEDIAN	438	--	--	--
2227+64 - 2229+99	RT	IH 41 NB	235	--	40	--
2228+26 - 2229+99	RT	IH 41 NB (MEDIAN)	173	--	--	--
2228+64 - 2229+99	LT	IH 41 SB (MEDIAN)	135	--	--	--
2231+60 - 2232+94	RT	IH 41 NB (MEDIAN)	135	--	--	--
2231+60 - 2233+20	LT	IH 41 SB (MEDIAN)	161	--	--	--
2231+60 - 2232+45	LT	IH 41 SB	86	--	114	--
2232+52 - 2264+68	RT	IH 41 NB (MEDIAN)	--	3,197	--	2
2233+48	LT	IH 41 SB	--	--	--	1
2251+85 - 2253+54	LT & RT	IH 41 MEDIAN	351	--	--	--
2255+43 - 2256+16	LT	IH 41 NB (MEDIAN)	73	--	--	--
2257+90 - 2260+46	LT & RT	IH 41 MEDIAN	526	--	--	--
2264+97 - 2319+05	RT	IH 41 NB (MEDIAN)	--	5,426	--	4
2266+53 - 2267+26	LT	IH 41 SB	73	--	--	--
2271+61 - 2273+17	LT & RT	IH 41 MEDIAN	326	--	--	--
2276+02 - 2277+44	RT	IH 41 NB	142	--	--	--
2282+89 - 2283+62	LT	IH 41 SB	73	--	--	--
2286+84 - 2288+25	LT	IH 41 SB	142	--	--	--
2303+74 - 2305+93	LT & RT	IH 41 MEDIAN	452	--	--	--
2319+64 - 2327+38	RT	IH 41 NB	--	776	--	2
1250'E'+90 - 1253'E'+00	RT	RAMP E	--	--	--	3
1252'E'+54 - 1253'E'+27	RT	RAMP E	73	--	--	--
1273'F'+56 - 1273'F'+91	RT	RAMP F	--	--	36	--
		TOTALS	**4,410**	**17,200**	**270**	**15**

REMOVING PAVEMENT ITEMS

STATION - STATION	LOCATION	ROADWAY	204.0100 REMOVING CONCRETE PAVEMENT SY	204.0110* REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY	204.0157 REMOVING CONCRETE BARRIER LF	204.0190 REMOVING SURFACE DRAINS EACH	204.9060.S.01 REMOVING CRASH CUSHION EACH	COMMENTS
PROJECT 1100-56-70												
CATEGORY CODE 0010												
2160+21 - 2230+13	LT & RT	IH 41 SB	--	--	11	9,007	--	--	--	--	--	SHOULDER MILLING
2160+50 - 2229+97	LT & RT	IH 41 NB	--	--	10	8,108	--	--	--	--	--	SHOULDER MILLING
2226+50 - 2228+56	RT	IH 41 NB	--	167	--	--	--	--	--	--	--	REMOVE SHOULDER FOR CABLE BARRIER
2231+45 - 2328+99	LT & RT	IH 41 SB	--	--	17	11,266	--	--	--	--	--	SHOULDER MILLING
2233+04 - 2234+84	LT	IH 41 SB	--	153	--	--	--	--	--	--	--	REMOVE SHOULDER FOR CABLE BARRIER
2231+61 - 2328+40	LT & RT	IH 41 NB	--	--	14	13,827	--	--	--	--	--	SHOULDER MILLING
2231+45 - 2232+21	LT	IH 41 SB	--	77	--	--	--	--	--	1	--	SURFACE DRAIN REPLACEMENT
2251+28 - 2251+56	LT	IH 41 SB	81	28	--	--	--	--	--	--	--	STORM SEWER REPLACEMENT
2251+46 - 2252+09	RT	IH 41 NB	142	104	--	--	--	--	15	--	1	STORM SEWER REPLACEMENT
2252+65 - 2253+41	LT	IH 41 SB	--	51	--	--	--	--	76	--	--	STORM SEWER REPLACEMENT
2257+07 - 2257+22	LT	IH 41 SB	43	22	--	--	--	--	--	--	--	STORM SEWER REPLACEMENT
2257+07 - 2257+22	RT	IH 41 NB	43	33	--	--	--	--	--	--	--	STORM SEWER REPLACEMENT
2260+47 - 2260+62	LT	IH 41 SB	43	15	--	--	--	--	--	--	--	STORM SEWER REPLACEMENT
311'A'+19 - 327'A'+99	LT & RT	RAMP A	`	42	2	1,448	--	--	--	--	--	SHOULDER MILLING
327'A'+50	RT	RAMP A	--	--	--	--	10	--	--	--	--	INLET ADJUSTMENT
327'B'+29 - 2211+32	LT & RT	RAMP B	--	18	2	1,723	--	--	--	--	--	SHOULDER MILLING
331'C'+89 - 2212+71	LT & RT	RAMP C	--	14	1	1,551	--	--	--	--	--	SHOULDER MILLING
2169+50 - 330'D'+68	LT & RT	RAMP D	--	--	2	1,875	--	--	--	--	--	SHOULDER MILLING
1249'E'+24 - 1262'E'+17	LT & RT	RAMP E	--	2	3	1,128	--	--	--	--	--	SHOULDER MILLING
1252'E'+93 - 1255'E'+19	LT & RT	RAMP E	116	152	--	--	22	--	223	--	--	STORM SEWER REPLACEMENT
1263'F'+60 - 1272'F'+52	LT & RT	RAMP F	--	8	1	727	--	--	--	--	--	SHOULDER MILLING
1258'G'+04 - 1270'G'+24	LT & RT	RAMP G	--	14	1	1,075	--	--	--	--	--	SHOULDER MILLING
1244'H'+98 - 1257'H'+65	LT & RT	RAMP H	--	32	4	1,002	--	--	--	--	--	SHOULDER MILLING
1252'H'+04 - 1252'H'+28	LT & RT	RAMP H	39	23	--	--	--	--	--	--	--	STORM SEWER REPLACEMENT
432'I'+62 - 442'I'+03	LT & RT	RAMP I	--	7	1	777	--	--	--	--	--	SHOULDER MILLING
441'I'+44	RT	RAMP I	--	--	--	--	10	--	--	--	--	INLET ADJUSTMENT
443'J'+28 - 2230+35	LT & RT	RAMP J	--	7	1	1,085	--	--	--	--	--	SHOULDER MILLING
444'K'+08 - 452'K'+99	LT & RT	RAMP K	--	2	4	721	--	--	--	--	--	SHOULDER MILLING
2291+55 - 442'L'+83	LT & RT	RAMP L	--	6	1	963	--	--	--	--	--	SHOULDER MILLING
91'US'+97 - 94'US'+75	LT	USH 151 SB	--	--	--	--	278	--	--	--	--	MEDIAN TRUCK APRON
94'US'+11 - 94'US'+60	LT	USH 151 SB	76	--	--	--	--	--	--	--	--	RADIUS TRUCK APRON
95'US'+06 - 95'US'+45	RT	USH 151 NB	37	--	--	--	--	--	--	--	--	RADIUS TRUCK APRON
98'US'+17 - 98'US'+23	LT	USH 151 SB	--	1	--	--	--	--	--	--	--	CONCRETE REPAIR
98'US'+67	LT	USH 151 SB	--	--	--	--	13	--	--	--	--	INLET ADJUSTMENT
98'US'+70 - 98'US'+78	RT	USH 151 NB	--	1	--	--	--	--	--	--	--	CONCRETE REPAIR
98'US'+84	RT	USH 151 NB	--	--	--	--	14	--	--	--	--	INLET ADJUSTMENT
101'US'+54 - 101'US'+60	LT	USH 151 SB	--	1	--	--	--	--	--	--	--	CONCRETE REPAIR
101'US'+87 - 102'US'+02	RT	USH 151 NB	--	2	--	--	--	--	--	--	--	CONCRETE REPAIR
102'US'+17 - 102'US'+17	RT	USH 151 NB	--	2	--	--	--	--	--	--	--	CONCRETE REPAIR
103'US'+81	LT	USH 151 NB	--	--	--	--	10	--	--	--	--	INLET ADJUSTMENT
104'US'+29	RT	USH 151 NB	--	--	--	--	10	--	--	--	--	INLET ADJUSTMENT
15'HK'+82	LT	HICKORY ST SB	--	--	--	--	10	--	--	--	--	INLET ADJUSTMENT
15'HK'+82	RT	HICKORY ST NB	--	--	--	--	10	--	--	--	--	INLET ADJUSTMENT
16'HK'+73 - 16'HK'+88	LT & RT	HICKORY ST	--	--	--	--	24	7	--	--	--	MEDIAN REPAIR
19'HK'+58 - 19'HK'+73	LT & RT	HICKORY ST	--	--	--	--	24	7	--	--	--	MEDIAN REPAIR
20'HK'+56 - 20'HK'+63	LT & RT	HICKORY ST	--	--	--	--	14	4	--	--	--	MEDIAN REPAIR
21'HK'+05 - 21'HK'+12	RT	HICKORY ST	--	--	--	--	8	--	--	--	--	CURB & GUTTER REPAIR
325'MT'+75	LT	MILITARY RD SB	--	--	--	--	10	--	--	--	--	INLET ADJUSTMENT
325'MT'+75	LT	MILITARY RD NB	--	--	--	--	10	--	--	--	--	INLET ADJUSTMENT
		PARK & RIDE	--	--	14	1,817	--	--	--	--	--	--
PROJECT 1100-56-70 SUBTOTALS			620	984	89	58,100	477	18	314	1	1	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONTINUED ON NEXT SHEET

CONTINUED FROM PREVIOUS SHEET

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REMOVING PAVEMENT ITEMS

STATION - STATION	LOCATION	ROADWAY	204.0100 REMOVING CONCRETE PAVEMENT SY	204.0110* REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY	204.0157 REMOVING CONCRETE BARRIER LF	204.0190 REMOVING SURFACE DRAINS EACH	204.9060.S.01 REMOVING CRASH CUSHION EACH	COMMENTS
PROJECT 1100-56-71												
CATEGORY CODE 0010												
23'SS'+33 - 24'SS'+68	RT	STORM SEWER	--	239	--	--	--	--	--	--	--	STORM SEWER INSTALLATION
27'HS'+63 - 27'HS+97	RT	HORSESHOE LN	--	58	--	--	--	--	--	--	--	STORM SEWER INSTALLATION
28'HS'+80 - 30'HS'+08	RT	HORSESHOE LN	--	173	--	--	--	--	--	--	--	STORM SEWER INSTALLATION
37'HS'+25 - 141'HS'+62	LT & RT	HORSESHOE LN	--	2,366	--	--	--	--	--	--	--	STORM SEWER INSTALLATION
		PROJECT 1100-56-71 SUBTOTALS	--	2,836	--	--	--	--	--	--	--	
		TOTALS	**620**	**3,820**	**89**	**58,100**	**477**	**18**	**314**	**1**	**1**	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING DRAINAGE ITEMS

STATION - STATION	LOCATION	ROADWAY	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0210 REMOVING MANHOLES EACH	204.0220 REMOVING INLETS EACH	204.0245.01 REMOVING STORM SEWER 12-INCH LF	204.0245.02 REMOVING STORM SEWER 18-INCH LF	204.0245.03 REMOVING STORM SEWER 24-INCH LF	204.0245.04 REMOVING STORM SEWER 30-INCH LF	204.0245.05 REMOVING STORM SEWER 36-INCH LF	204.0245.06 REMOVING STORM SEWER 19X30-INCH LF	204.0245.07 REMOVING STORM SEWER 24X38-INCH LF	COMMENTS
PROJECT 1100-56-71													
CATEGORY CODE 0010													
1252'H'+10 - 1253'E'+20	LT & RT	IH 41, RAMP E, & RAMP H	--	--	3	--	--	251	--	--	--	--	STORM SEWER CROSSING
2253+31 - 2253+26	LT	IH 41 SB	--	--	1	--	5	--	--	--	--	--	STORM SEWER EXTENSION
2257+01 - 2257+27	LT	IH 41 SB	--	--	--	--	--	22	--	--	--	--	NEW STORM SEWER CROSSING
1249'E'+97 - 1254'E'+90	LT & RT	RAMP E	--	6	2	18	--	327	63	--	21	130	STORM SEWER REPLACEMENT
1273'F'+68 - 1273'F'+74	RT	RAMP F	--	--	--	--	--	--	--	58	--	--	STORM SEWER REPLACEMENT
27'HS'+79	RT	HORSESHOE LN	1	--	--	--	--	--	--	--	--	--	24 LF OF 12" CMCP
29'HS'+71	RT	HORSESHOE LN	1	--	--	--	--	--	--	--	--	--	81 LF OF 12" CMCP
34'HS'+00	RT	HORSESHOE LN	1	--	--	--	--	--	--	--	--	--	50 LF OF 18" CMCP
35'HS'+30	RT	HORSESHOE LN	1	--	--	--	--	--	--	--	--	--	27 LF OF 18" CMCP
		TOTALS	**4**	**6**	**6**	**18**	**5**	**600**	**63**	**58**	**21**	**130**	

EARTHWORK SUMMARY

DIVISION	FROM/TO STATION	LOCATION	205.0100 EXCAVATION COMMON (1) CUT (2)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW	COMMENT:
DIVISION 1 - PROJECT 1100-56-70										
	2190+24 - 2192+86	BULLNOSE	57	57	94	118	-61			
	2218+00 - 2220+14	BULLNOSE	25	25	139	174	-149			
	2251+89 - 2253+50	BULLNOSE	17	17	96	120	-103			
	2255+98 - 2257+00	BEAMGUARD	2	2	11	14	-12			
	2257+93 - 2260+42	BULLNOSE	14	14	199	249	-235			
	2267+00 - 2267+58	BEAMGUARD	8	8	4	5	3			
	2271+65 - 2273+15	BULLNOSE	9	9	146	183	-174			
	2276+00 - 2278+00	BEAMGUARD	14	14	6	8	7			
	2283+00 - 2285+00	BEAMGUARD	14	14	22	28	-14			
	2287+00 - 2288+25	BEAMGUARD	14	14	0	0	14			
	2303+77 - 2306+00	BULLNOSE	86	86	5	6	80			
	2226+00 - 2229+97	FDL RIVER EAST	96	96	56	70	26			
	2231+63 - 2235+00	FDL RIVER WEST	56	56	107	134	-78			
	1251+99 - 1253+00	RAMP E	5	5	14	18	-13			
	1254+00 - 1255+00	RAMP H	4	4	8	10	-6			
	2292+60 - 2295+00	RAMP I	7	7	13	16	-9			
	91+97 - 94+75	USH 151	169	169	4	5	164			
DIVISION 1 SUBTOTAL			597	597	924	1155	-558	0	558	
DIVISION 2 - PROJECT 1100-56-71										
	2253+75 - 2258+28	RAMP 'E' GORE	1678	1678	128	160	1518			
	2265+00 - 2272+07	RAMP 'F' OUTSIDE DITCH	1595	1595	0	0	1595			
DIVISION 2 SUBTOTAL			3273	3273	128	160	3113	3113	0	
		GRAND TOTAL	3870	**3870**	1052	1315	2555	**3113**	**558**	
		TOTAL EXCAVATION COMMON	**3870**							

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) NOT USED
(4) NOT USED
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(6) NOT USED
(7) NOT USED
(8) NOT USED
(9) NOT USED
(10) NOT USED
(11) NOT USED
(12) NOT USED
(13) EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(15) NOT USED

BASE AGGREGATE DENSE AND WATER ITEMS

STATION - STATION	LOCATION	ROADWAY	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0130 BASE AGGREGATE DENSE 3-INCH TON	624.0100 WATER MGAL	COMMENTS
PROJECT 1100-56-70							
CATEGORY CODE 0010							
2151+20 - 2230+13	LT & RT	IH 41 SB	1,972	--	--	27.2	--
2160+50 - 2229+97	LT & RT	IH 41 NB	650	--	--	8.7	--
2231+45 - 2328+99	LT & RT	IH 41 SB	1,126	--	--	15.4	--
2231+61 - 2328+40	LT & RT	IH 41 NB	2,096	--	--	28.8	--
2231+45 - 2232+21	LT	IH 41 SB	--	87	--	1.2	SURFACE DRAIN REPLACEMENT
2251+28 - 2251+56	LT	IH 41 SB	13	122	--	1.9	STORM SEWER REPLACEMENT
2251+47 - 2252+60	RT	IH 41 NB	8	214	--	3.1	STORM SEWER REPLACEMENT
2252+65 - 2253+41	LT	IH 41 SB	--	81	--	1.1	STORM SEWER REPLACEMENT
2257+07 - 2257+22	LT	IH 41 SB	6	64	--	1.0	STORM SEWER REPLACEMENT
2257+07 - 2257+22	RT	IH 41 NB	6	64	--	1.0	STORM SEWER REPLACEMENT
2260+47 - 2260+62	LT	IH 41 SB	6	64	--	1.0	STORM SEWER REPLACEMENT
2266+55 - 2267+14	LT	IH 41 SB	--	42	--	0.6	SURFACE DRAIN REPLACEMENT
311'A'+19 - 327'A'+99	LT & RT	RAMP A	117	--	--	1.6	--
327'B'+30 - 2211+32	LT & RT	RAMP B	143	--	--	2.0	--
331'C'+89 - 2212+72	LT & RT	RAMP C	128	--	--	1.8	--
2169+50 - 330'D'+68	LT & RT	RAMP D	155	--	--	2.1	--
1252'E'+93 - 1255'E'+19	LT & RT	RAMP E	--	343	--	4.8	STORM SEWER REPLACEMENT
1254'E'+44 - 1262'E'+17	LT	RAMP E	17	--	--	0.2	--
1263'F'+60 - 1272'F'+52	LT & RT	RAMP F	55	--	--	0.8	--
1258'G'+04 - 1270'G'+24	LT & RT	RAMP G	86	--	--	1.2	--
1249'H'+11 - 1257'H'+26	LT & RT	RAMP H	30	--	--	0.4	--
432'I'+72 - 442'I'+03	LT & RT	RAMP I	65	--	--	0.9	--
443'J'+37 - 2320+35	LT & RT	RAMP J	92	--	--	1.3	--
444'K'+08 - 452'K'+99	LT & RT	RAMP K	58	--	--	0.8	--
2291+54 - 442'L'+83	LT & RT	RAMP L	83	--	--	1.1	--
91'US'+97 - 94'US'+75	LT	USH 151 SB	--	127	--	1.8	--
94'US'+11 - 94'US'+60	LT	USH 151 SB	--	37	--	0.5	--
95'US'+06 - 95'US'+45	RT	USH 151 NB	--	19	--	0.3	--
16'HK'+73 - 16'HK'+88	LT & RT	HICKORY ST	--	7	--	0.1	MEDIAN REPAIR
19'HK'+58 - 19'HK'+73	LT & RT	HICKORY ST	--	7	--	0.1	MEDIAN REPAIR
20'HK'+56 - 20'HK'+63	LT & RT	HICKORY ST	--	4	--	--	MEDIAN REPAIR
21'HK'+05 - 21'HK'+12	RT	HICKORY ST	--	1	--	--	CURB & GUTTER REPAIR
PROJECT 1100-56-70 SUBTOTALS			6,912	1,283	--	112.8	
PROJECT 1100-56-71							
CATEGORY CODE 0010							
1273'F'+57 - 1273'F'+88	RT	TRAIL	--	14	--	0.2	--
23'SS'+33 - 24'SS"+68	RT	--	--	89	--	1.2	--
25'HS'+04 - 31'HS'+35	LT & RT	HORSESHOE LN	--	1,766	2,660	61.2	--
32'HS'+50 - 141'HS'+60	LT & RT	HORSESHOE LN	218	1,967	--	30.4	--
32'HS'+10 - 39'HS'+15	LT & RT	HORSESHOE LN	--	301	--	4.2	TEMPORARY ROADWAY
PROJECT 1100-56-71 SUBTOTALS			218	4,137	2,660	97.2	
TOTALS			**7,130**	**5,420**	**2,660**	**210.0**	

BASE AGGREGATE DENSE 3/4-INCH WEIGHT CALCULATIONS BASED ON 2.1 TONS/CY.
BASE AGGREGATE DENSE 1 1/4-INCH WEIGHT CALCULATIONS BASED ON 2.0 TONS/CY.
BASE AGGREGATE DENSE 3-INCH WEIGHT CALCULATIONS BASED ON 2.2 TONS/CY.

CONCRETE PAVEMENT REPAIR & REPLACEMENT ITEMS

STATION - STATION	LOCATION	ROADWAY	204.0110* REMOVING ASPHALTIC SURFACE SY	416.0610* DRILLED TIE BARS EACH	416.0620* DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	465.0105* ASPHALTIC SURFACE TON	690.0150* SAWING ASPHALT LF	690.0250* SAWING CONCRETE LF	SPV.0090.01 JOINT SEALING LF	COMMENTS
PROJECT 1100-56-70														
CATEGORY CODE 0010														
2160+21 - 2230+13	LT & RT	IH 41 SB	72	214	502	--	170	--	888	16.1	696	1,744	--	--
2160+50 - 2230+13	LT & RT	IH 41 NB	85	256	496	--	110	--	1,083	19.0	810	1,853	--	--
2229+97 - 2230+13	LT & RT	IH 41 SB	--	--	--	--	--	--	--	--	--	--	206	B-20-71
2229+97 - 2230+13	LT & RT	IH 41NB	--	--	--	--	--	--	--	--	--	--	206	B-20-70
2231+45 - 2231+61	LT & RT	IH 41 SB	--	--	--	--	--	--	--	--	--	--	206	B-20-71
2231+45 - 2231+61	LT & RT	IH 41NB	--	--	--	--	--	--	--	--	--	--	206	B-20-70
2231+45 - 2328+99	LT & RT	IH 41 SB	51	191	735	12	204	118	682	11.5	512	2,217	--	--
2231+46 - 2328+40	LT & RT	IH 41 NB	51	343	568	--	184	--	963	13.3	502	2,162	--	--
2251+28 - 2251+56	LT	IH 41 SB	7	12	36	--	--	--	87	1.9	92	54	--	STORM SEWER REPLACEMENT
2251+67 - 2252+00	RT	IH 41 NB	8	13	36	--	--	--	100	2.2	106	54	--	STORM SEWER REPLACEMENT
2257+07 - 2257+22	LT	IH 41 SB	4	12	36	--	--	--	49	1.1	53	54	--	STORM SEWER REPLACEMENT
2257+07 - 2257+22	RT	IH 41 NB	4	12	36	--	--	--	49	1.1	53	54	--	STORM SEWER REPLACEMENT
2260+47 - 2260+62	LT	IH 41 SB	4	12	36	--	--	--	49	1.1	53	54	--	STORM SEWER REPLACEMENT
311'A'+19 - 328'A'+20	LT & RT	RAMP A	42	104	82	--	--	--	305	9.3	383	463	--	--
327'B'+30 - 2211+32	LT & RT	RAMP B	18	--	44	--	--	--	130	4.0	170	105	--	--
331'C'+89 - 2212+72	LT & RT	RAMP C	14	--	22	--	--	--	105	3.1	130	60	--	--
1249'E'+24 - 1262'E'+17	LT & RT	RAMP E	2	6	55	48	--	--	--	0.5	24	98	--	--
1263'F'+60 - 1272'F'+52	LT & RT	RAMP F	8	34	44	--	18	--	89	1.7	76	195	--	--
1258'G'+04 - 1270'G'+24	LT & RT	RAMP G	14	12	88	--	20	--	110	3.1	137	213	75	--
1244'H'+98 - 1257'H'+26	LT & RT	RAMP H	32	6	22	--	--	255	--	7.2	293	77	--	--
432'I'+62 - 442'I'+03	LT & RT	RAMP I	7	24	2	--	18	--	--	1.5	63	65	210	--
443'J'+09 - 2320+35	LT & RT	RAMP J	7	52	57	--	18	--	146	1.6	69	292	--	--
443'K'+84 - 454'K'+92	LT & RT	RAMP K	2	18	47	--	30	--	31	0.5	20	148	--	--
2291+54 - 442'L'+94	LT & RT	RAMP L	6	--	31	--	5	--	42	1.2	54	88	--	--
95'US'+09 - 98'US'+75	LT & RT	USH 151 SB	1	51	72	--	8	--	105	0.2	8	332	--	--
95'US'+11 - 98'US'+94	LT & RT	USH 151 NB	1	5	60	29	12	--	--	0.2	10	142	--	--
98'US'+38 - 98'US'+76	LT & RT	USH 151 SB	--	--	--	--	--	--	--	--	--	--	241	B-20-126
98'US'+75 - 99'US'+10	LT & RT	USH 151 NB	--	--	--	--	--	--	--	--	--	--	155	B-20-125
101'US'+07 - 101'US'+39	LT & RT	USH 151 SB	--	--	--	--	--	--	--	--	--	--	166	B-20-126
101'US'+24 - 104'US'+89	LT & RT	USH 151 SB	1	--	16	8	--	--	--	0.2	8	30	--	--
101'US'+41 - 101'US'+87	LT & RT	USH 151 NB	--	--	--	--	--	--	--	--	--	--	251	B-20-125
101'US'+42 - 101'US'+93	LT & RT	USH 151 NB	4	36	64	--	--	72	32	0.9	40	258	--	--
15'HK'+19 16'HK'+90	LT & RT	HICKORY ST SB	--	2	16	8	--	--	--	--	--	36	--	--
16'HK'+24 - 16'HK'+85	LT & RT	HICKORY ST NB	--	--	--	--	--	--	--	--	--	--	280	B-20-111
16'HK'+74 - 17'HK'+20	LT & RT	HICKORY ST SB	--	--	--	--	--	--	--	--	--	--	254	B-20-111
19'HK'+26 - 19'HK'+72	LT & RT	HICKORY ST NB	--	--	--	--	--	--	--	--	--	--	220	B-20-111
19'HK'+56 - 21'HK'+34	LT & RT	HICKORY ST NB	--	4	31	16	--	--	--	--	--	71	--	--
19'HK'+60 - 20'HK'+10	LT & RT	HICKORY ST SB	--	--	--	--	--	--	--	--	--	--	256	B-20-111
19'HK'+64 - 21'HK'+20	LT & RT	HICKORY ST SB	--	12	34	8	--	26	--	--	--	111	--	--
324'MT'+87 - 326'MT'+94	LT & RT	MILITARY RD SB	--	52	44	--	2	24	57	--	--	251	--	--
329'MT'+26 - 331'MT'+32	LT & RT	MILITARY RD NB	--	24	46	--	--	48	20	--	--	174	--	--
329'MT'+27 - 331'MT'+32	LT & RT	MILITARY RD SB	--	4	32	16	--	--	--	--	--	72	--	--
2217+70 - 2218+68	LT	MAIN ST	--	--	--	--	--	--	--	--	--	--	415	B-20-69
2219+45 - 2220+33	RT	MAIN ST	--	--	--	--	--	--	--	--	--	--	415	B-20-69
UNDISTRIBUTED			85	199	500	35	171	127	788	22.5	838	2,913	378	--
		TOTALS	**530**	**1,710**	**3,890**	**180**	**970**	**670**	**5,910**	**125**	**5,200**	**14,440**	**4,140**	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE PAVEMENT ITEMS

STATION - STATION	LOCATION	ROADWAY	405.0100 COLORING CONCRETE WISDOT RED CY	415.1090 CONCRETE PAVEMENT HES 9-INCH SY	415.2010 CONCRETE TRUCK APRON 12-INCH SY	COMMENTS
PROJECT 1100-56-70						
CATEGORY CODE 0010						
2231+45 - 2232+21	LT	IH 41 SB	--	59	--	SURFACE DRAIN REPLACEMENT
2251+47 - 2252+09	RT	IH 41 NB	--	73	--	CRASH CUSHION REPLACEMENT
1252'E'+93 - 1253'E'+23	LT	RAMP E	--	50	--	STORM SEWER REPLACEMENT
1254'E'+18 - 1254'E'+53	LT	RAMP E	--	62	--	STORM SEWER REPLACEMENT
1252'H'+04 - 1252'H'+28	RT	RAMP H	--	39	--	STORM SEWER REPLACEMENT
91'US'+97 - 94'US'+75	LT	USH 151 SB	90	--	271	MEDIAN TRUCK APRON
94'US'+11 - 94'US'+60	LT	USH 151 SB	11	53	31	RADIUS TRUCK APRON
95'US'+06 - 95'US'+45	RT	USH 151 NB	6	19	18	RADIUS TRUCK APRON
		TOTALS	**107**	**355**	**320**	

DRILLED TIE BARS AND DRILLED DOWEL BARS

STATION - STATION	LOCATION	ROADWAY	416.0610* DRILLED TIE BARS EACH	416.0620* DRILLED DOWEL BARS EACH	502.4204 ADHESIVE ANCHORS NO. 4 BAR EACH	COMMENTS
PROJECT 1100-56-70						
CATEGORY CODE 0010						
2231+45 - 2232+21	LT	IH 41 SB	32	--	--	SURFACE DRAIN REPLACEMENT
2251+47 - 2252+09	RT	IH 41 NB	15	--	4	CRASH CUSHION REPLACEMENT
2252+65 - 2253+41	LT	IH 41 SB	--	--	4	BARRIER REPLACEMENT
327'A'+50	RT	RAMP A	10	--	--	INLET ADJUSTMENT
1252'E'+93 - 1253'E'+23	LT & RT	RAMP E	5	12	--	STORM SEWER REPLACEMENT
1254'E'+18 - 1254'E'+53	LT & RT	RAMP E	3	23	2	STORM SEWER REPLACEMENT
1252'H'+04 - 1252'H'+28	LT & RT	RAMP H	--	22	--	STORM SEWER REPLACEMENT
441'I'+44	RT	RAMP I	10	--	--	INLET ADJUSTMENT
91'US'+97 - 94'US'+75	LT	USH 151 SB	98	--	--	MEDIAN TRUCK APRON
94'US'+11 - 94'US'+60	LT	USH 151 SB	29	--	--	RADIUS TRUCK APRON
95'US'+06 - 95'US'+45	RT	USH 151 NB	19	--	--	RADIUS TRUCK APRON
98'US'+67	LT	USH 151 SB	10	--	--	INLET ADJUSTMENT
98'US'+84	RT	USH 151 NB	10	--	--	INLET ADJUSTMENT
103'US'+81	LT	USH 151 NB	10	--	--	INLET ADJUSTMENT
104'US'+29	RT	USH 151 NB	10	--	--	INLET ADJUSTMENT
15'HK'+82	LT	HICKORY RD SB	10	--	--	INLET ADJUSTMENT
15'HK'+82	RT	HICKORY RD NB	10	--	--	INLET ADJUSTMENT
16'HK'+73 - 16'HK'+90	LT & RT	HICKORY ST	13	--	--	MEDIAN REPAIR
19'HK'+56 - 19'HK'+73	LT & RT	HICKORY ST	13	--	--	MEDIAN REPAIR
20'HK'+56	LT & RT	HICKORY ST	16	--	--	MEDIAN REPAIR
21'HK'+05 - 21'HK'+12	RT	HICKORY ST NB	10	--	--	CURB & GUTTER REPAIR
325'MT'+75	LT	MILITARY RD SB	10	--	--	INLET ADJUSTMENT
325'MT'+75	RT	MILITARY RD SB	10	--	--	INLET ADJUSTMENT
		TOTALS	**353**	**57**	**10**	

* ADDITIONAL QUANTITES SHOWN ELSEWHERE

ASPHALTIC ITEMS

STATION - STATION	LOCATION	ROADWAY	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	465.0105* ASPHALTIC SURFACE TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	COMMENTS
PROJECT 1100-56-70							
CATEGORY CODE 0010							
2160+21 - 2230+13	LT & RT	IH 41 SB	662	1,059	--	--	SHOULDERS
2160+50 - 2229+97	LT & RT	IH 41 NB	597	954	--	--	SHOULDERS
2231+45 - 2328+99	LT & RT	IH 41 SB	835	1,335	--	--	SHOULDERS
2231+61 - 2328+40	LT & RT	IH 41 NB	1,019	1,630	--	--	SHOULDERS
2231+45 - 2232+21	LT	IH 41 SB	--	--	--	--	SURFACE DRAIN REPLACEMENT
2251+47 - 2252+60	RT	IH 41 NB	9	--	24	27	STORM SEWER / CRASH CUSHION REPLACEMENT
2251+28 - 2254+56	LT & RT	IH 41 SB	6	--	8	24	STORM SEWER REPLACEMENT
2252+65 - 2253+41	LT	IH 41 SB	2	--	10	--	BARRIER REPLACEMENT
2257+07 - 2257+22	LT & RT	IH 41 NB	4	--	10	13	STORM SEWER REPLACEMENT
2257+07 - 2257+22	LT & RT	IH 41 SB	3	--	6	13	STORM SEWER REPLACEMENT
2260+47 - 2260+62	LT & RT	IH 41 SB	3	--	4	13	STORM SEWER REPLACEMENT
2266+55 - 2267+14	LT	IH 41 SB	1	--	3	--	SURFACE DRAIN REPLACEMENT
311'A'+19 - 327'A'+99	LT & RT	RAMP A	106	170	--	--	SHOULDERS
327'B'+29 - 2211+32	LT & RT	RAMP B	127	203	--	--	SHOULDERS
331'C'+89 - 2212+71	LT & RT	RAMP C	114	182	--	--	SHOULDERS
2169+50 - 330'D'+68	LT & RT	RAMP D	138	220	--	--	SHOULDERS
1249'E'+24 - 1262'E'+17	LT & RT	RAMP E	83	133	--	--	SHOULDERS
1253'E'+02 - 1255'E'+19	LT & RT	RAMP E	7	--	32	--	STORM SEWER REPLACEMENT
1263'F'+60 - 1272'F'+52	LT & RT	RAMP F	54	86	--	--	SHOULDERS
1258'G'+04 - 1270'G'+24	LT & RT	RAMP G	79	126	--	--	SHOULDERS
1244'H'+98 - 1257'H'+65	LT & RT	RAMP H	75	120	--	--	SHOULDERS
1252'H'+04 - 1252'H'+28	LT & RT	RAMP H	1	--	6	--	STORM SEWER REPLACEMENT
432'I'+62 - 442'I'+03	LT & RT	RAMP I	57	91	--	--	SHOULDERS
443'J'+28 - 2230+35	LT & RT	RAMP J	80	128	--	--	SHOULDERS
444'K'+08 - 452'K'+99	LT & RT	RAMP K	53	85	--	--	SHOULDERS
2291+55 - 442'L'+83	LT & RT	RAMP L	71	113	--	--	SHOULDERS
		PARK & RIDE	134	215	--	--	--
		PROJECT 1100-56-70 SUBTOTALS	4,320	6,850	103	90	
PROJECT 1100-56-71							
CATEGORY CODE 0010							
1273'F'+57 - 1273'F'+88	RT	TRAIL	2	--	7	--	--
32'HS'+25 - 141'HS'+60	LT & RT	HORSESOE LN	108	--	490	--	--
		PROJECT 1100-56-71 SUBTOTALS	110	--	497	--	
		TOTALS	**4,430**	**6,850**	**600**	**90**	

HMA PAVEMENT WEIGHT CALCULATIONS BASED ON 112 LB/SY/IN.
TACK COAT CALCULATIONS BASED ON 0.070 GAL/SY ON MILLED HMA, PULVERIZED HMA, CONCRETE OR RUBBLIZED CONCRETE
TACK COAT CALCULATIONS BASED ON 0.050 GAL/SY ON PREVIOUSLY PLACED LOWER LAYERS
ASPHALTIC SURFACE WEIGHT CALCULATIONS BASED ON 112 LB/SY/IN.
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

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ASPHALTIC SURFACE
DRIVEWAYS AND FIELD ENTRANCES

STATION	LOCATION	ROADWAY	465.0120 TON
PROJECT 1100-56-71 CATEGORY CODE 0010			
23'SS'+23 - 24'SS'+68	RT	HORSESHOE LN	59
26'HS'+51	LT	HORSESHOE LN	15
27'HS'+80	RT	HORSESHOE LN	25
29'HS'+70	RT	HORSESHOE LN	45
34'HS'+01	RT	HORSESHOE LN	21
		TOTAL	**165**

ASPHALTIC SURFACE WEIGHT CALCULATIONS BASED ON 112 LB/SY/IN.

RUMBLE STRIP ITEMS

STATION - STATION	LOCATION	ROADWAY	465.0510 ASPHALTIC RUMBLE STRIPS SHOULDER DIVIDED ROADWAY LF	602.3210 CONCRETE RUMBLE STRIPS SHOULDER DIVIDED ROADWAY LF
PROJECT 1100-56-70 CATEGORY CODE 0010				
2160+21 - 2229+73	LT & RT	IH 41 SB	7,526	4,938
2160+50 - 2229+73	LT & RT	IH 41 NB	6,949	5,470
2231+85 - 2328+99	LT & RT	IH 41 SB	12,459	5,158
2231+86 - 2328+40	LT & RT	IH 41 NB	12,026	4,754
		TOTALS	**38,960**	**20,320**

CONCRETE CURB AND GUTTER ITEMS

STATION - STATION	ROADWAY	601.0551 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A LF	601.0413 CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G LF	601.0574 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE G LF	601.0590 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	COMMENTS
PROJECT 1100-56-70 CATEGORY CODE 0010							
2231+62 LT - 2232+21 LT	IH 41 SB	--	--	--	59	59	SURFACE DRAIN REPLACEMENT
2266+55 LT - 2267+14 LT	IH 41 SB	--	--	--	59	59	SURFACE DRAIN REPLACEMENT
327'A'+50	RAMP A	--	--	10	--	--	INLET ADJUSTMENT
441'I'+44 RT	RAMP I	--	--	10	--	--	INLET ADJUSTMENT
91'US'+97 LT - 94'US'+75 LT	USH 151 SB	278	--	--	--	--	MEDIAN TRUCK APRON
94'US'+11 LT - 332'C'+57 LT	USH 151 SB/ RAMP C	67	--	--	--	--	RADIUS TRUCK APRON
95'US'+06 RT - 330'D'+68	USH 151 NB/ RAMP D	50	--	--	--	--	RADIUS TRUCK APRON
98'US'+67 LT	USH 151 SB	--	--	13	--	--	INLET ADJUSTMENT
98'US'+84 RT	USH 151 NB	--	--	14	--	--	INLET ADJUSTMENT
103'US'+81 LT	USH 151 NB	--	--	10	--	--	INLET ADJUSTMENT
104'US'+29 RT	USH 151 NB	--	--	10	--	--	INLET ADJUSTMENT
15'HK'+82 LT	HICKORY ST SB	--	10	--	--	--	INLET ADJUSTMENT
15'HK'+82 RT	HICKORY ST NB	--	10	--	--	--	INLET ADJUSTMENT
16'HK'+74 LT - 16'HK'+88 LT	HICKORY ST SB	--	14	--	--	--	MEDIAN REPAIR
16'HK'+74 RT - 16'HK'+83 RT	HICKORY ST NB	--	10	--	--	--	MEDIAN REPAIR
19'HK'+58 RT - 19'HK'+72 RT	HICKORY ST NB	--	14	--	--	--	MEDIAN REPAIR
19'HK'+63 LT - 19'HK'+72 LT	HICKORY ST SB	--	10	--	--	--	MEDIAN REPAIR
20'HK'+56 LT - 20'HK'+63 LT	HICKORY ST NB	--	7	--	--	--	MEDIAN REPAIR
20'HK'+56 RT - 20'HK'+63 RT	HICKORY ST SB	--	7	--	--	--	MEDIAN REPAIR
21'HK'+05 RT - 21'HK'+12	HICKORY ST NB	--	8	--	--	--	CURB & GUTTER REPAIR
325'MT'+75 RT	MILITARY RD SB	--	--	10	--	--	INLET ADJUSTMENT
325'MT'+75 RT	MILITARY RD NB	--	--	10	--	--	INLET ADJUSTMENT
	TOTALS	**395**	**90**	**87**	**118**	**118**	

CONCRETE SIDEWALK 4-INCH

STATION - STATION	LOCATION	ROADWAY	602.0405 SF	COMMENTS
PROJECT 1100-56-70 CATEGORY CODE 0010				
16'HK'+73 - 16'HK'+87	LT & RT	HICKORY ST	62.5	MEDIAN REPAIR
19'HK'+58 - 19'HK'+73	LT & RT	HICKORY ST	62.5	MEDIAN REPAIR
20'HK'+56 - 20'HK'+63	LT & RT	HICKORY ST	35.0	MEDIAN REPAIR
		TOTAL	**160**	

CONCRETE SURFACE DRAINS

STATION	LOCATION	ROADWAY	602.3010 CY
PROJECT 1100-56-70 CATEGORY CODE 0010			
2232+05	LT	IH 41 SB	6.4
2266+99	LT	IH 41 SB	1.6
		TOTAL	**8.0**

CONCRETE BARRIER ITEMS

STATION - STATION	LOCATION	ROADWAY	603.0105 CONCRETE BARRIER SINGLE-FACED 32-INCH LF	603.1142 CONCRETE BARRIER TYPE S42 LF	603.3111 CONCRETE BARRIER TRANSITION TYPE NJ32SF TO S32 EACH	650.7500 CONSTRUCTION STAKING CONCRETE BARRIER LF	SPV.0060.02 CONCRETE BARRIER TRANSITION EACH
PROJECT 1100-56-70 CATEGORY CODE 0010							
2251+71 - 2252+09	RT	IH 41 NB	--	--	2	--	1
2252+65 - 2253+41	LT	IH 41 SB	77	--	--	77	--
1253'E'+02 - 1255'E'+19	RT	RAMP E	--	215	--	215	--
1249'E'+29 - 1254'E'+44	LT	RAMP E	15	--	--	15	--
		TOTALS	**92**	**215**	**2**	**307**	**1**

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TEMPORARY CULVERT PIPE SUMMARY

FROM	-	TO	ROADWAY	**520.2018 CULVERT PIPE TEMPORARY 18-INCH** LF	ALUMINUM THICKNESS (INCHES)	STEEL THICKNESS (INCHES)
PROJECT 1100-56-71						
CATEGORY CODE 0010						
35'HS'+41.59 RT	-	36'HS'+79.32 RT	HORSESHOE LN	141	0.060	0.064
36'HS'+79.32 RT	-	37'HS'+91.66 RT	HORSESHOE LN	113	0.060	0.064
			TOTALS	**254**		

CULVERT PIPE SUMMARY

STATION	ROADWAY	**521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH** EACH	**521.1018 APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH** EACH	**521.3112 CULVERT PIPE CORRUGATED STEEL 12-INCH** LF	**521.3118 CULVERT PIPE CORRUGATED STEEL 18-INCH** LF	STEEL THICKNESS (INCHES)
PROJECT 1100-56-71						
CATEGORY CODE 0010						
27+80.00' RT	HORSESHOE LN	2	--	56	--	0.064
29+71.00' RT	HORSESHOE LN	2	--	98	--	0.064
33+98.72' RT	HORSESHOE LN	--	2	--	52	0.064
35+22.57' LT	HORSESHOE LN	--	2	--	28	0.064
35+28.56' RT	HORSESHOE LN	--	2	--	44	0.064
	TOTALS	**4**	**6**	**154**	**124**	

STORM SEWER STRUCTURES

STRUCTURE	STATION	OFFSET*	ROADWAY	520.8000 CONCRETE COLLARS FOR PIPE EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	522.1054 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 54-INCH EACH	522.2619 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH EACH	522.2624 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 24X38-INCH EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0612 INLET COVERS TYPE C EACH	611.0627 INLET COVERS TYPE HM EACH	611.0642 INLET COVERS TYPE MS EACH	611.0656 INLET COVERS TYPE VV-B EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH	611.2010 MANHOLES 10-FT DIAMETER EACH	611.2504 MANHOLES VARIABLE TEE 4-FT DIAMETER EACH	611.2604 MANHOLES VARIABLE SPECIAL 4-FT DIAMETER EACH	611.3260 INLETS 2X3.5-FT EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	611.3904 INLETS MEDIAN 4 GRATE EACH	611.8115 ADJUSTING INLET COVERS EACH	611.9850.S.01 PIPE GRATES (36-INCH) EACH	611.9850.S.02 PIPE GRATES (54-INCH) EACH	611.9850.S.03 PIPE GRATES (24X38-INCH) EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	SPV.0060.03 CONNECT TO EXISTING STRUCTURE EACH
PROJECT 1100-56-70																														
CATEGORY CODE 0010																														
701	93+43.96	22.53' LT	USH 151	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
702	98+66.95	12.46' LT	USH 151	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
703	98+83.92	23.93' RT	USH 151	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
704	103+81.31	0.58' LT	USH 151	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
705	104+28.55	23.18' RT	USH 151	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
706	327+49.92	10.60' RT	RAMP A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
801	15+82.27	4.00' LT	HICKORY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
802	15+82.27	4.00' RT	HICKORY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
901	325+75.36	0.98' RT	MILITARY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
902	325+75.36	8.86' RT	MILITARY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
903	441+44.07	1.47' RT	RAMP I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
		PROJECT 1100-56-70 SUBTOTALS		--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	10	--	--	--	--	--
PROJECT 1100-56-71																														
CATEGORY CODE 0010																														
101	1253+45.78	19.19' RT	RAMP E	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--
101.1	1253+45.78	7.87' RT	RAMP E	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	--
102	13+95.65	15.00' RT	STORM SEWER	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--
103	19+16.40	15.00' RT	STORM SEWER	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--
104	24+85.95	15.00' RT	STORM SEWER	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--
105	31+15.92	14.20' RT	HORSESHOE LN	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--
106	34+70.73	14.05' RT	HORSESHOE LN	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--
107	139+47.08	5.07' LT	HORSESHOE LN	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--
108	141+18.78	0.00	HORSESHOE LN	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--
109	141+47.83	34.37' LT	HORSESHOE LN	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	1	--
199	1252+09.51	7.00' LT	RAMP H	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
200	2251+28.25	68.11' LT	IH 41	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	--
201	2251+61.32	0.29' RT	IH 41	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	--
202	1253+17.44	7.87' RT	RAMP E	--	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
203	1253+19.63	19.02' RT	RAMP E	--	--	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
204	1253+73.88	18.50' RT	RAMP E	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--
204.1	1253+73.88	7.87' RT	RAMP E	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	--
204.2	1253+76.53	28.16' RT	RAMP E	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
205	1254+16.17	7.87' RT	RAMP E	--	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
206	1254+77.21	49.61' LT	RAMP E	--	--	--	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	1	--
206.1	1254+76.59	57.59' LT	RAMP E	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
207	1255+55.90	57.93' LT	RAMP E	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	--
208	1251+45.89	15.90' RT	RAMP E	--	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
208.1	1251+45.35	11.94' RT	RAMP E	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
209	1250+01.33	18.06' RT	RAMP E	--	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
209.1	1250+01.28	14.06' RT	RAMP E	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
210	1249+97.35	18.38' RT	RAMP E	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
301	2252+75.00	57.38' LT	IH 41	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	--
302	2253+26.23	57.38' LT	IH 41	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	--
303	2253+30.77	58.56' LT	IH 41	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
401	2257+22.49	80.95' LT	IH 41	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
402	2257+14.49	81.05' LT	IH 41	--	--	--	--	--	1	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
403	2257+14.49	85.95' RT	IH 41	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
501	2260+54.12	68.72' LT	IH 41	--	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	1	--
502	2260+54.14	0.09' RT	IH 41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
601	1273+69.05	96.81' RT	RAMP F	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	1	--
602	1273+73.66	143.16' RT	RAMP F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
		PROJECT 1100-56-71 SUBTOTALS		7	1	1	1	1	12	2	--	8	6	4	2	1	3	1	1	4	4	2	1	--	1	1	1	33	3
		TOTALS		**7**	**1**	**1**	**1**	**1**	**12**	**2**	**1**	**8**	**6**	**4**	**2**	**1**	**3**	**1**	**1**	**4**	**4**	**2**	**1**	**10**	**1**	**1**	**1**	**33**	**3**

STORM SEWER PIPES

FROM - TO	ROADWAY	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0336 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	608.0554 STORM SEWER PIPE REINFORCED CONCRETE CLASS V 54-INCH LF	608.2419 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH LF	608.2424 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 24X38-INCH LF	608.2429 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 29X45-INCH LF	SPV.0090.02 TRENCHLESS STORM SEWER PIPE REINFORCED CONCRETE CLASS V 54-INCH LF	JOINT TIES* EACH
PROJECT 1100-56-71													
CATEGORY CODE 0010													
101 - 102	STORM SEWER	--	--	--	--	--	--	31	--	--	--	--	--
101.1 - 101	RAMP E	--	--	--	--	11	--	--	--	--	--	--	--
102 - 103	STORM SEWER	--	--	--	--	--	--	371	--	--	--	150	--
103 - 104	STORM SEWER	--	--	--	--	--	--	270	--	--	--	300	--
104 - 105	HORSESHOE LN	--	--	--	--	--	--	602	--	--	--	--	--
105 - 106	HORSESHOE LN	--	--	--	--	--	--	223	--	--	--	135	--
106 - 107	HORSESHOE LN	--	--	--	--	--	--	480	--	--	--	--	--
107 - 108	HORSESHOE LN	--	--	--	--	--	--	172	--	--	--	--	--
108 - 109	HORSESHOE LN	--	--	--	--	--	--	45	--	--	--	--	6
199 - 200	IH 41	--	--	39	--	--	--	--	--	--	--	--	--
200 - 201	IH 41	--	--	76	--	--	--	--	--	--	--	--	--
201 - 202	IH 41	--	--	121	--	--	--	--	--	--	--	--	--
202 - 203	RAMP E	--	--	11	--	--	--	--	--	--	--	--	--
203 - 101	RAMP E	--	--	--	26	--	--	--	--	--	--	--	--
204 - 101	RAMP E	--	--	--	--	--	--	--	--	--	27	--	--
204 - 101	RAMP E	--	--	10	--	--	--	--	--	--	--	--	--
204.1 - 204	RAMP E	--	--	--	--	11	--	--	--	--	--	--	--
205 - 204	RAMP E	--	--	--	--	--	--	--	--	--	43	--	--
206 - 205	RAMP E	--	--	--	--	--	--	--	--	--	85	--	--
206.1 - 206	RAMP E	--	--	--	--	--	--	--	8	--	--	--	--
207 - 206	RAMP E	--	--	--	--	--	--	--	--	84	--	--	6
208 - 203	RAMP E	--	--	174	--	--	--	--	--	--	--	--	--
208.1 - 208	RAMP E	4	--	--	--	--	--	--	--	--	--	--	--
209 - 208	RAMP E	--	--	145	--	--	--	--	--	--	--	--	--
209.1 - 209	RAMP E	4	--	--	--	--	--	--	--	--	--	--	--
210 - 209	RAMP E	--	4	--	--	--	--	--	--	--	--	--	--
301 - 302	IH 41	--	--	--	--	--	51	--	--	--	--	--	--
302 - 303	IH 41	--	--	--	--	--	5	--	--	--	--	--	--
401 - 402	IH 41	--	8	--	--	--	--	--	--	--	--	--	--
402 - 403	IH 41	--	--	--	--	--	--	--	167	--	--	--	6
501 - 502	IH 41	--	--	--	--	--	69	--	--	--	--	--	--
601 - 602	IH 41	--	--	--	47	--	--	--	--	--	--	--	6
	TOTALS	**8**	**12**	**576**	**73**	**22**	**125**	**2,194**	**175**	**84**	**155**	**585**	24

*NON-BID ITEM: FOR INFORMATION ONLY

3

RIPRAP AND GEOTEXTILE ITEMS

STATION - STATION	LOCATION	ROADWAY	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY	COMMENTS
PROJECT 1100-56-71					
CATEGORY CODE 0010					
37'HS'+50 - 37'HS'+00	RT	HORSESHOE LN	67	188	SS OUTFALL
141'HS'+50	LT	HORSESHOE LN	8	25	SS OUTFALL
1257+15	RT	IH 41 NB	5	17	SS OUTFALL
1273'F'+48 - 1274'F'+22	RT	RAMP F	173	385	DRAINAGE DITCH
UNDISTRIBUTED			65	155	
		TOTALS	**318**	**770**	

CABLE BARRIER ITEMS

STATION - STATION	LOCATION	ROADWAY	613.1100.S CABLE BARRIER TYPE 1 LF	613.1200.S CABLE BARRIER END TERMINAL TYPE 1 EACH
PROJECT 110-56-70				
CATEGORY CODE 0010				
2151+20 - 2190+66	RT	IH 41 NB	3,952	2
2192+01 - 2228+36	RT	IH 41 NB	3,642	2
2233+30 - 2264+41	LT	IH 41 SB	3,114	2
2264+96 - 2304+19	LT	IH 41 SB	3,928	2
2305+04 - 2319+08	LT	IH 41 SB	1,406	2
2319+64 - 2327+61	LT	IH 41 SB	798	2
		TOTALS	**16,840**	**12**

FENCE WOVEN WIRE 4-FT

STATION - STATION	LOCATION	ROADWAY	616.0100.01 LF	COMMENTS
PROJECT 1100-56-70				
CATEGORY CODE 0010				
2229+93 - 2230+01	RT	IH 41 NB	39	--
2231+59 - 2232+37	LT	IH 41 SB	111	--
		PROJECT 1100-56-70 SUBTOTAL	150	
PROJECT 1100-56-71				
CATEGORY CODE 0010				
1273'F'+56 - 1273'F'+91	RT	RAMP F	35	DRAINAGE DITCH
14'SS'+06 - 14'SS'+58	LT & RT	STORM SEWER	78	STORM SEWER REPLACEMENT
		PROJECT 1100-56-71 SUBTOTAL	113	
		TOTAL	**263**	

MGS GUARDRAIL ITEMS

STATION - STATION	LOCATION	ROADWAY	614.0220 STEEL THRIE BEAM BULLNOSE TERMINAL EACH	614.0230 STEEL THRIE BEAM LF	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH
PROJECT 1100-56-70								
CATEGORY CODE 0010								
2190+20 - 2192+89	LT & RT	IH 41	2.0	325.0	--	--	--	--
2217+99 - 2220+18	LT & RT	IH 41	2.0	225.0	--	--	--	--
2227+44 - 2229+99	RT	IH 41 NB	--	--	162.5	39.4	1.0	--
2228+31 - 2229+99	RT	IH 41 NB	--	--	75.0	39.4	1.0	--
2228+64 - 2229+99	LT	IH 41 SB	--	--	114.0	20.6	--	1.0
2231+60 - 2232+94	RT	IH 41 NB	--	--	114.0	20.6	--	1.0
2231+60 - 2233+27	LT	IH 41 SB	--	--	75.0	39.4	1.0	--
2231+60 - 2234+15	LT	IH 41 SB	--	--	162.5	39.4	1.0	--
2251+85 - 2253+54	LT & RT	IH 41	2.0	125.0	--	--	--	--
2255+43 - 2256+48	LT	IH 41 SB	--	--	12.5	39.4	1.0	--
2257+89 - 2260+46	LT & RT	IH 41	2.0	300.0	--	--	--	--
2266+53 - 2267+58	LT	IH 41 SB	--	--	12.5	39.4	1.0	--
2271+62 - 2273+18	LT & RT	IH 41	2.0	100.0	--	--	--	--
2276+02 - 2277+44	RT	IH 41 NB	--	--	89.0	--	1.0	1.0
2282+89 - 2283+94	LT	IH 41 SB	--	--	12.5	39.4	1.0	--
2286+84 - 2288+25	LT	IH 41 SB	--	--	89.0	--	1.0	1.0
2303+74 - 2305+93	LT & RT	IH 41	2.0	225.0	--	--	--	--
1251'E'+99 - 1253'E'+04	RT	RAMP E	--	--	12.5	39.4	1.0	--
1253'H'+50 - 1254'H'+55	LT	RAMP H	--	--	12.5	39.4	1.0	--
2292+60 - 432'I'+41	RT	RAMP I	--	--	189.0	--	1.0	1.0
		TOTALS	**12.0**	**1,300.0**	**1,132.5**	**395.8**	**12.0**	**5.0**

CRASH CUSHION ITEMS

STATION	LOCATION	ROADWAY	614.0800 CRASH CUSHIONS PERMANENT EACH	BACK WIDTH FT	OBJECT MARKING PATTERN	CRASH TEST LEVEL	TRAVEL DIRECTION	TRAFFIC LOCATION	CRASH CUSHION SHIELDS
PROJECT 1100-56-70									
CATEGORY CODE 0010									
2251+71	RT	IH 41 NB/ RAMP E	1	2	OM-3C	TL-3	UNIDIRECTIONAL	L AND R	PERMANENT CONCRETE BARRIER IN RAMP GORE
		TOTAL	**1**						

3

RESTORATION ITEMS

STATION - STATION	LOCATION	ROADWAY	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.2004 EROSION MAT CLASS I TYPE B SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL	COMMENTS
PROJECT 1100-56-70														
CATEGORY CODE 0010														
2225+83 - 2227+97	LT & RT	IH 41 MEDIAN	383	--	--	383	--	0.2	--	17	--	--	9	--
2226+90 - 2229+97	RT	IH 41 NB	632	--	--	632	--	0.4	--	28	--	--	14	--
2231+62 - 2233+60	LT	IH 41 SB	722	--	--	722	--	0.5	--	33	--	--	16	--
2233+60 - 2235+76	LT & RT	IH 41 MEDIAN	407	--	--	407	--	0.3	--	18	--	--	9	--
2255+45 - 2257+67	LT	IH 41 SB	293	--	--	293	--	0.2	--	13	--	--	7	--
2266+55 - 2267+79	LT	IH 41 SB	126	--	--	126	--	0.1	--	6	--	--	3	--
2275+13 - 2277+65	RT	IH 41 NB	412	--	--	412	--	0.3	--	19	--	--	9	--
2282+91 - 2285+19	LT	IH 41 SB	263	--	--	263	--	0.2	--	12	--	--	6	--
2286+70 - 2289+14	LT	IH 41 SB	165	--	--	165	--	0.1	--	7	--	--	4	--
1252'E'+00 - 1253'E'+23	RT	RAMP E	1,305	--	--	1,305	--	0.8	59	--	--	--	29	--
1253'H'+52 - 1255'H'+10	LT	RAMP H	170	--	--	170	--	0.1	--	8	--	--	4	--
430'I'+05 - 432'I'+65	RT	RAMP I	528	--	--	528	--	0.3	--	24	--	--	12	--
91'US'+97 - 94'US'+75	LT	USH 151 MEDIAN	436	--	--	436	--	0.3	--	20	--	--	10	--
94'US'+12 - 94'US'+60	LT	USH 151/ RAMP C	59	--	--	59	--	--	--	3	--	--	1	--
95'US'+06 - 95'US'+45	RT	USH 151/ RAMP D	45	--	--	45	--	--	--	2	--	--	1	--
UNDISTRIBUTED			1,484	--	--	1,488	--	1.1	15	50	--	--	37	
PROJECT 1100-56-70 SUBTOTALS			7,430	--	--	7,434	--	4.9	74	260	--	--	171	
PROJECT 1100-56-71														
CATEGORY CODE 0010														
1266'F'+90 - 1274'F'+05	RT	RAMP F	--	2,539	--	2,539	--	1.6	114	--	--	--	57	DRAINAGE DITCH
2253+75 - 2258+28	RT	IH 41	--	3,539	--	3,539	--	2.2	159	--	--	--	80	GORE
15'SS'+45 - 21'SS'+05	LT & RT	--	--	6,216	--	6,216	--	3.9	280	--	--	--	140	SS TRENCH
23'SS'+33 - 25'SS'+12	LT & RT	--	--	609	--	--	609	0.4	--	--	27	--	14	SS TRENCH
25'HS'+04 - 31'HS'+35	LT & RT	HORSESHOE LN	--	1,184	--	--	1,184	1.0	--	--	74	--	37	--
31'HS'+94 - 141'HS'+60	LT & RT	HORSESHOE LN	--	3,315	--	--	3,315	2.5	--	--	176	--	88	--
UNDISTRIBUTED			--	4,398	4,620	3,072	1,282	3	133	--	73	120	103	
PROJECT 1100-56-71 SUBTOTALS			--	21,800	4,620	15,366	6,390	14.1	686	--	350	120	519	
TOTALS			**7,430**	**21,800**	**4,620**	**22,800**	**6,390**	**19.0**	**760**	**260**	**350**	**120**	**690**	

3

EROSION CONTROL ITEMS

STATION	LOCATION	ROADWAY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7560 TRACKING PADS EACH	628.7570 ROCK BAGS EACH	COMMENTS
PROJECT 1100-56-70 CATEGORY CODE 0010												
		IH 41 NB	--	--	--	--	5	--	--	--	--	EXISTING INLETS
		IH 41 SB	--	--	--	--	5	--	--	--	--	EXISTING INLETS
		IH 41 MEDIAN	--	--	--	--	23	--	--	--	--	EXISTING INLETS
2226+76 - 2229+97	RT	IH 41 NB	353	353	--	--	--	--	--	--	17	BEAMGUARD REPLACEMENT
2231+45 - 2235+33	LT	IH-41 SB	459	459	--	--	--	--	--	--	34	BEAMGUARD REPLACEMENT
2251+28 - 2260+82	LT & RT	IH-41	--	--	--	--	5	--	6	--	--	STORM SEWER REPLACEMENT
2275+00	IH-41 NB	RT	--	--	--	--	--	12	--	--	--	BEAMGUARD REPLACEMENT
2282+92	IH-41 SB	LT	--	--	--	--	--	12	--	--	--	BEAMGUARD REPLACEMENT
2286+70	IH-41 SB	LT	--	--	--	--	--	12	--	--	--	BEAMGUARD REPLACEMENT
2318+96	IH-41	LT & RT	--	--	--	--	--	--	2	--	--	--
327'A'+50	RAMP A	RT	--	--	--	--	1	--	--	--	--	--
332'C'+40 - 332'C'+85	RAMP C/USH 151	LT	83	83	--	--	--	--	--	--	17	RADIUS TRUCK APRON
330'D'+51 - 331'D'+09	RAMP D/USH 151	LT	70	70	--	--	--	--	--	--	17	RADIUS TRUCK APRON
1249'E'+93 - 1255'E'+19	RAMP E	RT	--	--	--	--	9	--	--	--	--	--
430'I'+00 - 432'I'+78	RAMP I	RT	344	344	--	--	--	--	--	--	34	BEAMGUARD REPLACEMENT
91'US'+97 - 104'US'+30	USH 151	LT & RT	--	--	--	--	5	--	--	--	--	--
15'HK'+82	HICKORY STREET	LT & RT	--	--	--	--	2	--	--	--	--	--
325'MT'+75	MILITARY ROAD	LT & RT	--	--	--	--	2	--	--	--	--	--
UNDISTRIBUTED			326	326	5	3	14	9	2	--	31	--
	PROJECT 1100-56-70 SUBTOTALS		1,635	1,635	5	3	71	45	10	--	150	
PROJECT 1100-56-71 CATEGORY CODE 0010												
2253+93 - 2258+28	RT	IH-41 NB	--	--	--	--	--	--	7	1	15	GORE
1266'F'+77 - 1274'F'+18	RT	RAMP F	64	64	--	--	--	--	34	1	47	DRAINAGE DITCH
13'SS'+51 - 21'SS'+07	LT & RT	--	1,437	1,437	--	--	--	--	--	1	136	SS TRENCH
23'SS'+33 - 25'SS'+12	LT	--	--	--	--	--	--	--	--	--	--	SS TRENCH
25'HS'+04 - 31'HS'+49	LT & RT	HORSESHOE LN	--	--	--	--	--	24	5	1	--	--
31'HS'+94 - 141'HS'+60	LT & RT	HORSESHOE LN	752	752	--	--	--	132	11	1	49	--
UNDISTRIBUTED			562	562	5	3	--	39	14	--	63	--
	PROJECT 1100-56-71 SUBTOTALS		2,815	2,815	5	3	--	195	71	5	310	
		TOTALS	**4,450**	**4,450**	**10**	**6**	**71**	**240**	**81**	**5**	**460**	

DELINEATOR ITEMS

STATION	LOCATION	ROADWAY	633.0100 DELINEATOR POSTS STEEL EACH	633.0500 DELINEATOR REFLECTORS EACH	633.1000 DELINEATORS BARRIER WALL EACH	633.5200 MARKERS CULVERT END EACH	COMMENTS
PROJECT 1100-56-70 CATEGORY CODE 0010							
2151+21	LT	IH 41 SB	1	1	--	--	MAINTENANCE CROSSOVER
2264+40	RT	IH 41 NB	1	1	--	--	MAINTENANCE CROSSOVER
2264+99	LT	IH 41 SB	1	1	--	--	MAINTENANCE CROSSOVER
231+09	RT	IH 41 NB	1	1	--	--	MAINTENANCE CROSSOVER
2319+62	LT	IH 41 SB	1	1	--	--	MAINTENANCE CROSSOVER
1249'E'+90 - 1251'E'+90	RT	RAMP E	3	3	--	--	--
1253'E'+05 - 1255'E'+05	RT	RAMP E	--	--	3	--	--
PROJECT 1100-56-70 SUBTOTALS			8	8	3	--	
PROJECT 1100-56-71 CATEGORY CODE 0010							
2257+14	RT	IH 41 NB	--	--	--	1	--
1255'E'+56	LT	RAMP E	--	--	--	1	--
1273'F'+69	RT	RAMP F	--	--	--	1	--
141+48	LT	HORSESHOE LN	--	--	--	1	--
PROJECT 1100-56-71 SUBTOTALS			--	--	--	4	
TOTALS			**8**	**8**	**3**	**4**	

MOVING SIGN ITEMS

STATION	LOCATION	ROADWAY	634.0614 POSTS WOOD 4X6X14 EACH	634.0616 POSTS WOOD 4X6X16 EACH	634.0618 POSTS WOOD 4X6X18 EACH	634.0620 POSTS WOOD 4X6X20 EACH	638.2102 MOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH
PROJECT 1100-56-70 CATEGORY CODE 0010									
2151+35	RT	IH 41 NB	--	1	--	--	1	1	--
2227+51	RT	IH 41 NB	--	--	--	2	1	2	--
2233+23	LT	IH 41 SB	--	--	--	2	1	2	--
2256+46	LT	IH 41 SB	1	--	--	--	1	1	--
2264+35	LT	IH 41 SB	--	1	--	--	1	1	--
2265+00	RT	IH 41 SB	--	1	--	--	1	1	--
2267+22	LT	IH 41 SB	--	--	--	2	1	2	--
2319+03	LT	IH 41 SB	--	1	--	--	1	1	--
2319+61	RT	IH 41 NB	--	1	--	--	1	--	--
332'C'+39	LT	RAMP C	--	1	--	--	1	1	--
1251'E'+77	RT	RAMP E	--	1	--	--	1	1	--
16'HK'+83	RT	HICKORY ST	--	--	1	--	1	1	--
19'HK'+63	LT	HICKORY ST	--	--	1	--	1	1	--
PROJECT 1100-56-70 SUBTOTALS			1	7	2	6	13	15	--
PROJECT 100-56-71 CATEGORY CODE 0010									
32'HS'+10	LT	HORSESHOE LN	--	--	--	--	1	--	1
32'HS'+36	RT	HORSESHOE LN	--	--	--	--	1	--	1
PROJECT 100-56-71 SUBTOTALS			--	--	--	--	2	--	2
TOTALS			**1**	**7**	**2**	**6**	**15**	**15**	**2**

TRAFFIC CONTROL ITEMS

LOCATION	NUMBER OF DAYS IN SERVICE	643.0300 TRAFFIC CONTROL DRUMS		643.0420 TRAFFIC CONTROL BARRICADES TYPE III		643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A		643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C		643.0900* TRAFFIC CONTROL SIGNS		643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I			643.0920* TRAFFIC CONTROL COVERING SIGNS TYPE II			643.1050 TRAFFIC CONTROL SIGNS PCMS			643.5000 TRAFFIC CONTROL	644.1810 TEMPORARY PEDESTRIAN BARRICADE	644.1900.S TEMPORARY AUDIBLE MESSAGE DEVICE		COMMENTS
		NO. REQ'D	TOTAL DAY	NO. REQ'D	TOTAL DAY	NO. REQ'D	TOTAL DAY	NO. REQ'D	TOTAL DAY	NO. REQ'D	TOTAL DAY	NO. CYCLES	NO. SIGNS	TOTAL EACH	NO. CYCLES	NO. SIGNS	TOTAL EACH	NO. REQ'D	NO. DAYS	TOTAL DAY	EACH	LF	NO. REQ'D	TOTAL DAY	
PROJECT 1100-56-70 CATEGORY CODE 0010																									
PROJECT 1100-56-70	182	120	21,840	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	7	14	0.5	--	--	--	
WIDTH RESTRICTION SIGNING	119	--	--	--	--	--	--	--	--	44	5,236	--	--	--	--	--	--	--	--	--	--	--	--	--	
IH 41 NB	33	196	6,468	3	99	6	198	48	1,584	25	825	--	--	--	33	4	132	--	--	--	--	--	--	--	INSIDE LANE NIGHTLY CLOSURE
IH 41 NB	35	187	6,545	4	140	8	280	38	1,330	28	980	--	--	--	35	4	140	--	--	--	--	--	--	--	OUTSIDE LANE NIGHTLY CLOSURE
IH 41 NB	4	68	272	1	4	2	8	--	--	1	4	--	--	--	4	1	4	--	--	--	--	--	--	--	AUXILIARY LANE NIGHTLY CLOSURE
IH 41 SB	33	196	6,468	3	99	6	198	48	1,584	25	825	--	--	--	33	3	99	--	--	--	--	--	--	--	INSIDE LANE NIGHTLY CLOSURE
IH 41 SB	35	187	6,545	4	140	8	280	38	1,330	28	980	--	--	--	35	3	105	--	--	--	--	--	--	--	OUTSIDE LANE NIGHTLY CLOSURE
IH 41 SB	4	68	272	1	4	2	8	--	--	1	4	--	--	--	4	1	4	--	--	--	--	--	--	--	AUXILIARY LANE NIGHTLY CLOSURE
IH 41 NB	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	7	7	--	--	--	--	PRIOR TO FREEWAY CLOSURE
IH 41 NB	3	145	435	14	42	28	84	60	180	37	111	--	--	--	3	14	42	2	3	6	--	--	--	--	FULL FREEWAY CLOSURE
IH 41 SB	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	7	7	--	--	--	--	PRIOR TO FREEWAY CLOSURE
IH 41 SB	3	126	378	14	42	28	84	60	180	37	111	--	--	--	3	15	45	2	3	6	--	--	--	--	FULL FREEWAY CLOSURE
RAMP A	5	27	135	4	20	8	40	--	--	9	45	5	4	20	--	--	--	1	12	12	--	--	--	--	NIGHTLY RAMP CLOSURE
RAMP B	3	49	147	9	27	18	54	8	24	26	78	--	--	--	3	12	36	1	10	10	--	--	--	--	NIGHTLY RAMP CLOSURE
RAMP C	3	28	84	4	12	8	24	--	--	9	27	3	4	12	--	--	--	1	10	10	--	--	--	--	NIGHTLY RAMP CLOSURE
RAMP D	5	52	260	9	45	18	90	8	40	26	130	--	--	--	5	9	45	1	12	12	--	--	--	--	NIGHTLY RAMP CLOSURE
RAMP E	19	35	665	4	76	8	152	--	--	9	171	1	4	4	1	--	--	1	7	7	--	--	--	--	FULL RAMP CLOSURE
RAMP F	3	38	114	9	27	18	54	8	24	26	78	--	--	--	3	8	24	1	10	10	--	--	--	--	NIGHTLY RAMP CLOSURE
RAMP G	3	17	51	4	12	8	24	--	--	10	30	3	7	21	--	--	--	1	10	10	--	--	--	--	NIGHTLY RAMP CLOSURE
RAMP H	5	42	210	9	45	18	90	8	40	26	130	1	1	1	1	8	8	1	7	7	--	--	--	--	NIGHTLY RAMP CLOSURE
RAMP I	3	71	213	4	12	8	24	--	--	9	27	3	5	15	--	--	--	1	10	10	--	--	--	--	NIGHTLY RAMP CLOSURE
RAMP J	3	29	87	9	27	18	54	8	24	26	78	--	--	--	3	11	33	1	10	10	--	--	--	--	NIGHTLY RAMP CLOSURE
RAMP K	3	33	99	4	12	8	24	--	--	10	30	3	6	18	--	--	--	1	10	10	--	--	--	--	NIGHTLY RAMP CLOSURE
RAMP L	3	30	90	9	27	18	54	8	24	26	78	--	--	--	3	13	39	1	10	10	--	--	--	--	NIGHTLY RAMP CLOSURE
USH 151 NB	2	45	90	2	4	4	8	14	28	10	20	--	--	--	--	--	--	--	--	--	--	--	--	--	INSIDE LANE NIGHTLY CLOSURE
USH 151 NB	2	45	90	2	4	4	8	14	28	10	20	--	--	--	--	--	--	--	--	--	--	--	--	--	OUTSIDE LANE NIGHTLY CLOSURE
USH 151 SB	7	93	651	4	28	8	56	14	98	13	91	--	--	--	--	--	--	--	--	--	--	--	--	--	INSIDE LANE NIGHTLY CLOSURE
USH 151 SB	2	57	114	3	6	6	12	14	28	11	22	--	--	--	--	--	--	--	--	--	--	--	--	--	OUTSIDE LANE NIGHTLY CLOSURE
HICKORY ST NB	2	36	72	1	2	2	4	9	18	9	18	--	--	--	--	--	--	--	--	--	--	--	--	--	INSIDE LANE NIGHTLY CLOSURE
HICKORY ST NB	2	22	44	1	2	2	4	9	18	9	18	--	--	--	--	--	--	--	--	--	--	--	--	--	OUTSIDE LANE NIGHTLY CLOSURE
HICKORY ST SB	2	33	66	2	4	4	8	9	18	10	20	--	--	--	--	--	--	--	--	--	--	--	--	--	OUTSIDE LANE NIGHTLY CLOSURE
MILITARY RD NB	2	38	76	2	4	4	8	9	18	11	22	--	--	--	--	--	--	--	--	--	--	--	--	--	INSIDE LANE NIGHTLY CLOSURE
MILITARY RD NB	2	40	80	3	6	6	12	11	22	12	24	--	--	--	--	--	--	--	--	--	--	--	--	--	OUTSIDE LANE NIGHTLY CLOSURE
MILITARY RD SB	2	46	92	3	6	6	12	9	18	13	26	--	--	--	--	--	--	--	--	--	--	--	--	--	INSIDE LANE NIGHTLY CLOSURE
MILITARY RD SB	2	46	92	3	6	6	12	9	18	13	26	--	--	--	--	--	--	--	--	--	--	--	--	--	OUTSIDE LANE NIGHTLY CLOSURE
PARK AND RIDE	3	--	--	6	18	6	18	--	--	--	--	1	--	--	1	6	6	1	7	7	--	6	--	--	FULL CLOSURE
PROJECT 1100-56-70 SUBTOTALS			52,845		1,002		1,986		6,676		10,285			91			762			165	0.5	6		--	
PROJECT 1100-56-71 CATEGORY CODE 0010																									
PROJECT 1100-56-71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--	--	--
WILD GOOSE STATE TRAIL	5	--	--	--	--	--	--	--	--	3	15	--	--	--	--	--	--	--	--	--	--	24	3	15	PEDESTRIAN DETOUR
HORSESHOE LANE	105	50	5,250	8	840	10	1,050	--	--	4	420	--	--	--	--	--	--	--	--	--	--	--	--	--	ROAD CLOSED TO THRU TRAFFIC
PROJECT 1100-56-71 SUBTOTALS			5,250		840		1,050		--		435			--			--			--	0.5	24		15	
TOTALS			**58,095**		**1,842**		**3,036**		**6,676**		**10,720**			**91**			**762**			**165**	**1.0**	**30**		**15**	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC CONTROL DETOUR ITEMS

LOCATION	NUMBER OF DAYS IN SERVICE	643.0900* TRAFFIC CONTROL SIGNS		643.0920* TRAFFIC CONTROL COVERING SIGNS TYPE II		
		NO. REQ'D	TOTAL DAY	*NO. CYCLES*	*NO. SIGNS*	TOTAL EACH
PROJECT 1100-56-70						
CATEGORY CODE 0010						
IH 41 NB DETOUR						
IH 41 NB (MEDIAN), SOUTH OF USH 151 OFF-RAMP	3	--	--	*3*	*1*	3
IH 41 NB OFF-RAMP (OUTSIDE), 500' SOUTH OF USH 151	3	*8*	24	--	--	--
IH 41 NB OFF-RAMP (OUTSIDE), AT USH 151	3	*8*	24	--	--	--
USH 151 SB (MEDIAN & OUTSIDE), 1500' EAST OF IH 41 NB RAMPS	3	*10*	30	--	--	--
USH 151 SB (MEDIAN & OUTSIDE), 500' EAST OF IH 41 NB RAMPS	3	*8*	24	--	--	--
USH 151 SB (OUTSIDE), 500' EAST OF IH 41 NB RAMPS	3	--	--	*3*	*2*	6
USH 151 SB (OUTSIDE), 400' EAST OF IH 41 NB RAMPS [MODIFY EXISTING SIGN]	3	*2*	6	--	--	--
USH 151 SB (OUTSIDE), EAST OF IH 41 NB RAMPS [MODIFY EXISTING SIGN]	3	*2*	6	--	--	--
USH 151 SB (OUTSIDE), EAST OF IH 41 NB RAMPS	3	*4*	12	--	--	--
USH 151 SB (OUTSIDE), WEST OF IH 41 NB RAMPS	3	--	--	*3*	*1*	3
USH 151NB (SB OUTSIDE), WEST OF IH 41 NB RAMPS	3	--	--	*3*	*1*	3
USH 151 SB (OUTSIDE), 200' WEST OF IH 41 NB RAMPS	3	*6*	18	--	--	--
USH 151 NB (MEDIAN), 300' WEST OF IH 41 NB RAMPS	3	--	--	*3*	*2*	6
USH 151 NB (MEDIAN), 100' EAST OF IH 41 SB RAMPS	3	--	--	*3*	*1*	3
USH 151 NB (OUTSIDE), EAST OF IH 41 SB RAMPS	3	--	--	*3*	*1*	3
USH 151 SB (OUTSIDE), EAST OF IH 41 SB RAMPS	3	*8*	24	--	--	--
USH 151 NB (MEDIAN), 100' WEST OF IH 41 SB RAMPS	3	--	--	*3*	*1*	3
USH 151 SB (OUTSIDE), 200' WEST OF IH 41 SB RAMPS	3	*6*	18	*3*	*2*	6
USH 151 NB (OUTSIDE), 600' WEST OF IH 41 SB RAMPS	3	--	--	*3*	*2*	6
USH 151 SB (OUTSIDE), 500' EAST OF STH 175 EXIT/ENTRANCE	3	*8*	24	--	--	--
USH 151 SB (OUTSIDE), 200' WEST OF STH 175 EXIT/ENTRANCE	3	*6*	18	--	--	--
USH 151 SB (OUTSIDE), 500' EAST OF HICKORY RD OFF-RAMP	3	*8*	24	--	--	--
USH 151 SB (OUTSIDE), 200' WEST OF HICKORY RD ON-RAMP	3	*6*	18	--	--	--
USH 151 SB (MEDIAN & OUTSIDE), 500' EAST OF CTH D RD OFF-RAMP	3	*16*	48	--	--	--
USH 151 SB (MEDIAN), AT CTH D OFF-RAMP	3	*8*	24	--	--	--
USH 151 SB OFF-RAMP (OUTSIDE), 500' EAST OF CTH D	3	*8*	24	--	--	--
USH 151 SB OFF-RAMP (OUTSIDE), AT CTH D	3	*8*	24	--	--	--
USH 51 NB (MEDIAN & OUTSIDE), 1500' WEST OF CTH D OFF-RAMP	3	*10*	30	--	--	--
USH 51 NB (MEDIAN & OUTSIDE), 500' WEST OF CTH D OFF-RAMP	3	*16*	48	--	--	--
USH 51 NB (MEDIAN & OUTSIDE), AT CTH D OFF-RAMP	3	*8*	24	--	--	--
USH 151NB OFF-RAMP (GORE), 100' WEST OF RAMP SPLIT	3	*8*	24	--	--	--
USH 151NB OFF-RAMP (GORE), 200' EAST OF RAMP SPLIT	3	*8*	24	--	--	--
CTH D NB (OUTSIDE), 200' NORTH OF USH 151 SB RAMPS	3	*8*	24	--	--	--
CTH D NB (OUTSIDE), 750' SOUTHWEST CTH VVV [MODIFY EXISTING SIGN]	3	*1*	3	--	--	--
CTH D NB (OUTSIDE), 100' SOUTHWEST CTH VVV [MODIFY EXISTING SIGN]	3	*1*	3	--	--	--
CTH D NB (MEDIAN), 100' NORTHEAST OF IH 41 SB RAMPS [MODIFY EXISTING SIGN]	3	*1*	3	--	--	--
CTH D NB (MEDIAN), 100' SOUTHWEST OF IH 41 NB RAMPS [MODIFY EXISTING SIGN]	3	*1*	3	--	--	--
IH 41 NB (OUTSIDE), 200' NORTH OF CTH D ON-RAMP	3	*1*	3	--	--	--
IH 41 NB DETOUR SUBTOTALS			579			42

TRAFFIC CONTROL DETOUR ITEMS

LOCATION	NUMBER OF DAYS IN SERVICE	643.0900* TRAFFIC CONTROL SIGNS		643.0920* TRAFFIC CONTROL COVERING SIGNS TYPE II		
		NO. REQ'D	TOTAL DAY	*NO. CYCLES*	*NO. SIGNS*	TOTAL EACH
PROJECT 1100-56-70						
CATEGORY CODE 0010						
IH 41 SB DETOUR						
IH 41 SB OFF-RAMP (OUTSIDE), 500' NORTH OF CTH D	3	*8*	24	--	--	--
IH 41 SB OFF-RAMP (OUTSIDE), AT CTH D	3	*8*	24	--	--	--
MILITARY RD SB (OUTSIDE), 750' NORTHEAST OF IH 41 NB RAMPS	3	*5*	15	--	--	--
MILITARY RD SB (OUTSIDE), 500' NORTHEAST OF IH 41 NB RAMPS	3	--	--	*3*	*2*	--
MILITARY RD SB (OUTSIDE), SOUTHWEST OF IH 41 NB RAMPS	3	--	--	*3*	*1*	--
CTH D SB (MEDIAN), 100' SOUTHWEST OF IH 41 NB RAMPS [MODIFY EXISTING SIGN]	3	*2*	6	--	--	--
CTH D SB (OUTSIDE), 100' SOUTHWEST OF IH 41 NB RAMPS	3	*4*	12	--	--	--
CTH D SB (MEDIAN), 100' NORTHEAST OF IH 41 SB RAMPS [MODIFY EXISTING SIGN]	3	*2*	6	--	--	--
CTH D SB (NB OUTSIDE), NORTHEAST OF IH 41 SB RAMPS	3	--	--	*3*	*1*	--
CTH D NB (OUTSIDE), NORTHEAST OF IH 41 SB RAMPS	3	--	--	*3*	*1*	--
CTH D NB (OUTSIDE), SOUTHWEST OF IH 41 SB RAMPS	3	--	--	*3*	*1*	--
CTH D SB (OUTSIDE), 200' SOUTHWEST OF IH 41 SB RAMPS	3	*6*	18	--	--	--
CTH D NB (OUTSIDE), 500' SOUTHWEST OF IH 41 SB RAMPS	3	--	--	*3*	*2*	--
CTH D SB (OUTSIDE), 100' NORTHEAST OF CTH VVV	3	*8*	24	--	--	--
CTH D NB (OUTSIDE), 100' SOUTHWEST OF CTH VVV	3	--	--	*3*	*1*	--
CTH D SB (OUTSIDE), 200' SOUTHWEST OF CTH VVV	3	*6*	18	--	--	--
CTH D NB (OUTSIDE), 300' SOUTHWEST OF CTH VVV	3	--	--	*3*	*1*	--
CTH D NB (OUTSIDE), 750' SOUTHWEST CTH VVV	3	--	--	*3*	*1*	--
CTH D SB (OUTSIDE), 400' NORTHEAST OF USH 151 SB RAMPS	3	*8*	24	--	--	--
CTH D SB (MEDIAN), 325' NORTHEAST OF USH 151 SB RAMPS	3	*8*	24	--	--	--
CTH D SB (MEDIAN), 325' SOUTHWEST OF USH 151 SB RAMPS	3	*8*	24	--	--	--
CTH D SB (MEDIAN), 300' NORTHEAST OF USH 151 NB RAMP	3	*8*	24	--	--	--
CTH D NB (OUTSIDE), SOUTHWEST OF USH 151 NB RAMP	3	*8*	24	--	--	--
CTH D NB (OUTSIDE), 500' SOUTHWEST OF USH 151 NB RAMP	3	*8*	24	--	--	--
CTH D NB (OUTSIDE), 1500' SOUTHWEST OF USH 151 NB RAMP	3	*5*	15	--	--	--
USH 51 NB (MEDIAN & OUTSIDE), 1500' WEST OF CTH D OFF-RAMP	3	*10*	30	--	--	--
USH 51 NB (MEDIAN & OUTSIDE), 500' WEST OF CTH D OFF-RAMP	3	*16*	48	--	--	--
USH 151 NB (OUTSIDE), 200' EAST OF CTH D ON-RAMP	3	*6*	18	--	--	--
USH 151 NB (OUTSIDE), 500' WEST OF HICKORY RD OFF-RAMP	3	*8*	24	--	--	--
USH 151 NB (OUTSIDE), 200' EAST OF HICKORY RD ON-RAMP	3	*6*	18	--	--	--
USH 151 NB (OUTSIDE), 500' WEST OF STH 175 EXIT/ENTRANCE	3	*8*	24	--	--	--
USH 151 NB (OUTSIDE), 500' WEST OF IH 41 SB RAMPS	3	*8*	24	--	--	--
USH 151 NB (MEDIAN), 100' WEST OF IH 41 SB RAMPS [MODIFY EXISTING SIGN]	3	*2*	6	--	--	--
USH 151 NB (OUTSIDE), WEST OF IH 41 SB RAMPS	3	*4*	12	--	--	--
USH 151 NB (OUTSIDE), 200' EAST OF IH 41 NB RAMPS	3	*1*	3	--	--	--
IH 41 SB (OUTSIDE), 200' SOUTH OF USH 151 ON-RAMP	3	*1*	3	--	--	--
IH 41 SB DETOUR SUBTOTALS			516			--
TOTALS			**1,095**			**42**

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

DIGITAL SPEED REDUCTION SYSTEM

LOCATION	STAGE	DIGITAL SPEED LIMIT TRAILERS (DSLT)	643.0370.S DIGITAL SPEED REDUCTION SYSTEM DAY
PROJECT 1100-56-70 CATEGORY CODE 0010			
IH 41 NB	2	3	28
IH 41 SB	2	3	28
IH 41 NB	3	3	119
IH 41 SB	3	3	119
IH 41 NB	4	3	35
IH 41 SB	4	3	35
		TOTAL	**364**

* THESE ITEMS ARE PART OF THE DSRS AND ARE PAID FOR ONE COMPLETE SYSTEM PER ROADWAY.

CONNECTED WORK ZONES

STAGE	DAYS	#	643.0810 CONNECTED ARROW BOARD DAY	#	643.1220 CONNECTED WORK ZONE START AND END LOCATION MARKERS DAY	COMMENTS
PROJECT 1100-56-70 CATEGORY CODE 0010						
STAGE 2 - IH 41 NB	28	1	28	1	28	SINGLE LANE CLOSURE
STAGE 2 - IH 41 SB	28	1	28	1	28	SINGLE LANE CLOSURE
STAGE 3 - IH 41 NB	116	1	116	1	116	SINGLE LANE CLOSURE
STAGE 3 - IH 41 SB	116	1	116	1	116	SINGLE LANE CLOSURE
STAGE 3 - IH 41 NB	3	1	3	1	3	FULL FREEWAY CLOSURE
STAGE 3 - IH 41 SB	3	1	3	1	3	FULL FREEWAY CLOSURE
STAGE 4 - IH 41 NB	35	1	35	1	35	SINGLE LANE CLOSURE
STAGE 4 - IH 41 SB	35	1	35	1	35	SINGLE LANE CLOSURE
		TOTAL	**364**		**364**	

* ONLY ONE SET OF CONNECTED WORK ZONE START AND END MARKERS IS REQUIRED FOR A SERIES OF CLOSURES.

3

BASIC TRAFFIC QUEUE WARNING SYSTEM

LOCATION	STAGE	FLASHING BEACON SIGNS (FBS)	PORTABLE TRAFFIC SENSORS (PTS)	643.1205.S BASIC TRAFFIC QUEUE WARNING SYSTEM DAY
PROJECT 1100-56-70 CATEGORY CODE 0010				
IH 41 NB	2	6	3	28
IH 41 SB	2	6	3	28
IH 41 NB	3	6	3	119
IH 41 SB	3	6	3	119
IH 41 NB	4	6	3	35
IH 41 SB	4	6	3	35
			TOTAL	**364**

* THESE ITEMS ARE PART OF THE QWS AND ARE PAID FOR ONE COMPLETE SYSTEM PER ROADWAY.

PAVEMENT MARKING ITEMS

ROADWAY	646.2025 MARKING LINE GROOVED BLACK EPOXY 6-INCH LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH WHITE LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH YELLOW LF	646.2050 MARKING LINE GROOVED PERMANENT TAPE 6-INCH WHITE LF	646.4025 MARKING LINE GROOVED BLACK EPOXY 10-INCH LF	646.4050 MARKING LINE GROOVED PERMANENT TAPE 10-INCH WHITE LF	646.5020 MARKING ARROW EPOXY WHITE EACH	646.5120 MARKING WORD EPOXY WHITE EACH	646.5220 MARKING SYMBOL EPOXY WHITE EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE LF	646.7220 MARKING CHEVRON EPOXY 24-INCH WHITE LF	646.8320 MARKING PARKING STALL EPOXY WHITE LF
PROJECT 1100-56-70												
CATEGORY CODE 0010												
IH 41 SB	4,226	11,870	16,866	4,651	384	3,832	--	--	--	--	362	--
IH 41 NB	4,214	11,478	16,800	4,609	384	4,236	--	--	--	--	728	--
RAMP A	--	1,888	1,464	--	--	712	3	1	--	54	--	--
RAMP B	--	3,160	1,454	--	--	948	--	--	--	--	--	--
RAMP C	--	2,034	1,632	--	--	820	6	2	--	72	--	--
RAMP D	--	3,220	1,718	--	--	840	--	--	--	--	--	--
RAMP E	--	1,576	878	--	--	680	--	--	--	16	--	--
RAMP F	--	1,448	602	--	--	776	--	--	--	--	--	--
RAMP G	--	1,438	1,060	--	--	404	--	--	--	16	--	--
RAMP H	--	2,112	808	--	--	748	--	--	--	--	--	--
RAMP I	--	1,214	756	--	--	592	--	--	--	15	--	--
RAMP J	--	2,010	866	--	--	728	--	--	--	--	--	--
RAMP K	--	1,326	848	--	--	580	--	--	--	16	--	--
RAMP L	--	1,662	852	--	--	744	--	--	--	--	--	--
PARK & RIDE	--	--	--	--	--	--	--	--	2	--	--	1,010
		46,436	46,604									
TOTALS	**8,440**	**93,040**		**9,260**	**768**	**16,640**	**9**	**3**	**2**	**189**	**1,090**	**1,010**

REMOVING PAVEMENT MARKING ITEMS

ROADWAY	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9055 MARKING REMOVAL LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF	646.9155 MARKING REMOVAL LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF	646.9300 MARKING REMOVAL SPECIAL MARKING EACH
PROJECT 1100-56-70						
CATEGORY CODE 0010						
IH 41 SB	27,147	4,277	2,507	1,103	229	--
IH 41 NB	28,326	4,261	2,804	1,212	343	--
RAMP A	3,415	12	125	265	54	3
RAMP B	4,614	--	--	949	--	--
RAMP C	3,703	--	333	260	71	8
RAMP D	4,938	--	--	841	--	--
RAMP E	2,454	--	614	--	16	--
RAMP F	2,050	--	778	--	--	--
RAMP G	2,499	--	337	--	16	--
RAMP H	2,921	--	748	--	--	--
RAMP I	1,969	--	522	--	15	--
RAMP J	2,877	--	730	--	--	--
RAMP K	2,173	--	409	--	16	--
RAMP L	2,514	--	743	--	--	--
TOTALS	**91,600**	**8,550**	**10,650**	**4,630**	**760**	**11**

CONSTRUCTION STAKING ITEMS

STATION - STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9911 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (01. 1100-56-70) EACH	650.9911 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (02. 1100-56-71) EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
PROJECT 1100-56-70 CATEGORY CODE 0010								
PROJECT 1100-56-70		--	--	--	--	1	--	--
IH-41 NB	RT	--	--	--	16,789	--	--	--
IH-41 SB	LT	--	--	--	16,876	--	--	--
2226+76 - 2229+97	RT	--	--	--	--	--	--	321
2231+62 - 2235+33	LT	--	--	--	--	--	--	371
2255+45 - 2257+12	LT	--	--	--	--	--	--	167
2266+55 - 2267+80	LT	--	--	--	--	--	--	125
2275+02 - 2277+95	RT	--	--	--	--	--	--	293
2282+92 - 2285+19	LT	--	--	--	--	--	--	227
2286+70 - 2288+80	LT	--	--	--	--	--	--	209
2292+08 - 2295+24	RT	--	--	--	--	--	--	316
91'US'+97 - 94+'US'+72	LT	275	--	275	--	--	--	--
94'US'+11 - 94'US'+60	LT	65	--	65	--	--	--	--
95'US'+06 - 95'US'+45	RT	49	--	49	--	--	--	--
RAMP A	LT & RT	--	--	--	1,680	--	--	--
RAMP B	LT & RT	--	--	--	2,199	--	--	--
RAMP C	LT & RT	--	--	--	1,867	--	--	--
RAMP D	LT & RT	--	--	--	2,308	--	--	--
RAMP E	LT & RT	--	--	--	1,293	--	--	105
RAMP F	LT & RT	--	--	--	892	--	--	--
RAMP G	LT & RT	--	--	--	1,220	--	--	--
RAMP H	LT & RT	--	--	--	1,267	--	--	158
RAMP I	LT & RT	--	--	--	941	--	--	--
RAMP J	LT & RT	--	--	--	3,270	--	--	--
RAMP K	LT & RT	--	--	--	1,084	--	--	--
RAMP L	LT & RT	--	--	--	1,298	--	--	--
PROJECT 1100-56-70 SUBTOTALS		389	--	389	52,984	1	--	2,292
PROJECT 1100-56-71 CATEGORY CODE 0010								
PROJECT 1100-56-71		--	--	--	--	--	1	--
25'HS'+04 - 31'HS'+35	LT & RT	631	631	--	--	--	--	631
32'HS'+25 - 41'HS'+60	LT & RT	935	935	--	--	--	--	935
PROJECT 1100-56-71 SUBTOTALS		1,566	1,566	--	--	--	1	1,566
TOTALS		**1,955**	**1,566**	**389**	**52,984**	**1**	**1**	**3,858**

STAKING ITEMS FOR STORM SEWER, CURB & GUTTER, AND BARRIER SHOWN ELSEWHERE

ADJUSTING PULL BOXES

STATION	LOCATION	ROADWAY	653.0900 EACH
PROJECT 1100-56-70 CATEGORY CODE 0010			
332'C'+44	48' LT	RAMP C	1
		TOTAL	**1**

GEOTECHNICAL INSTRUMENTATION

LOCATION	SPV.0060.04 EACH
PROJECT 1100-56-71 CATEGORY CODE 0010	
STORM SEWER INSTALLATION	1
TOTAL	**1**

INCLINOMETER CASING

STATION	LOCATION	ROADWAY	SPV.0060.05 EACH
PROJECT 1100-56-71 CATEGORY CODE 0010			
17'SS'+10	4' LT	STORM SEWER	1
19'SS'+60	2' LT	STORM SEWER	1
24'SS'+65	2' RT	STORM SEWER	1
		TOTAL	**3**

SETTLEMENT MONITORING POINT

STATION	LOCATION	ROADWAY	SPV.0060.06 EACH
PROJECT 1100-56-71 CATEGORY CODE 0010			
15'SS'+15	9' RT	STORM SEWER	1
21'SS'+70	19' RT	STORM SEWER	1
23'SS'+20	22' RT	STORM SEWER	1
32'HS'+05	2' RT	HORSESHOE LN	1
		TOTAL	**4**

STRUCTURE SURVEY TARGET

LOCATION	SPV.0060.07 EACH	COMMENTS
PROJECT 1100-56-71 CATEGORY CODE 0010		
CN RAILROAD	11	SPACED EVERY 100' STARTING ~STA 15'SS'+00 TO STA 26'SS'+00
1000 MORRIS STREET	3	3 SPACED ALONG WEST EDGE OF BUILDING
990 MORRIS STREET	4	4 LOCATIONS ON STRUCTURES WITHIN YARD
995 MORRIS STREET	2	SW & SE CORNERS OF BUILDING
TOTAL	**20**	

3

SAWING PAVEMENT ITEMS

STATION - STATION	LOCATION	ROADWAY	690.0150* SAWING ASPHALT LF	690.0250* SAWING CONCRETE LF	SPV.0060.09 SAWING CONCRETE BARRIER SINGLE FACED EACH	COMMENTS
PROJECT 1100-56-70 CATEGORY CODE 0010						
2226+50 - 2228+56	RT	IH 41 NB	211	--	--	SHOULDER REMOVAL FOR CABLE BARRIER
2231+45 - 2232+21	LT	IH 41 SB	11	--	--	SURFACE DRAIN REPLACEMENT
2233+04 - 2234+84	LT	IH 41 SB	185	--	--	SHOULDER REMOVAL FOR CABLE BARRIER
2251+28 - 2251+56	LT	IH 41 SB	18	52	--	STORM SEWER REPLACEMENT
2251+47 - 2252+09	RT	IH 41 NB	49	39	2	CRASH CUSHION REPLACEMENT
2251+67 - 2252+00	LT & RT	IH 41 NB	32	52	--	STORM SEWER REPLACEMENT
2252+65 - 2253+41	LT	IH 41 SB	88	7	2	BARRIER REPLACEMENT
2257+12 - 2257+27	LT & RT	IH 41 SB	26	52	--	STORM SEWER REPLACEMENT
2257+12 - 2257+27	LT & RT	IH 41 NB	40	52	--	STORM SEWER REPLACEMENT
2260+47 - 2260+62	LT & RT	IH 41 SB	18	52	--	STORM SEWER REPLACEMENT
2266+55 - 2267+14	LT	IH 41 SB	67	--	--	SURFACE DRAIN REPLACEMENT
327'A'+50	RT	RAMP A	--	15	--	INLET ADJUSTMENT
1253'E'+03 - 1255'E'+19	LT & RT	RAMP E	169	80	1	STORM SEWER REPLACEMENT
1252'H'+04 - 1252'H'+28	LT & RT	RAMP H	18	30	--	STORM SEWER REPLACEMENT
441'I'+44	RT	RAMP I	--	15	--	INLET ADJUSTMENT
91'US'+97 - 94'US'+75	LT	USH 151 SB	--	284	--	MEDIAN TRUCK APRON
94'US'+11 - 94'US'+60	LT	USH 151 SB	--	90	--	RADIUS TRUCK APRON
95'US'+06 - 95'US'+45	RT	USH 151 NB	--	59	--	RADIUS TRUCK APRON
98'US'+67	LT	USH 151 SB	--	16	--	INLET ADJUSTMENT
98'US'+84	RT	USH 151 NB	--	18	--	INLET ADJUSTMENT
103'US'+81	LT	USH 151 NB	--	15	--	INLET ADJUSTMENT
104'US'+29	RT	USH 151 NB	--	15	--	INLET ADJUSTMENT
15'HK'+82	LT	HICKORY ST SB	--	15	--	INLET ADJUSTMENT
15'HK'+82	RT	HICKORY ST NB	--	15	--	INLET ADJUSTMENT
16'HK'+73 - 16'HK'+90	LT & RT	HICKORY ST	--	34	--	MEDIAN REPAIR
325'MT'+75	RT	MILITARY RD SB	--	15	--	INLET ADJUSTMENT
325'MT'+75	RT	MILITARY RD NB	--	15	--	INLET ADJUSTMENT
19'HK'+56 - 19'HK'+73	LT & RT	HICKORY ST	--	34	--	MEDIAN REPAIR
20'HK'+56 - 20'HK'+63	LT & RT	HICKORY ST	--	34	--	MEDIAN REPAIR
21'HK'+05 - 21'HK'+12	RT	HICKORY ST NB	--	17	--	CURB & GUTTER REPAIR
	PROJECT 1100-56-70 SUBTOTALS		932	1,122	5	
PROJECT 1100-56-71 CATEGORY CODE 0010						
23'SS'+33	RT	DRIVEWAY	19	--	--	--
26'SS'+51	LT	DRIVEWAY	--	22	--	--
27'HS'+79	RT	DRIVEWAY	34	--	--	--
29'HS'+69	RT	DRIVEWAY	128	--	--	--
32'HS'+50	LT & RT	HORSESHOE LN	24	--	--	--
34'HS'+01	RT	DRIVEWAY	228	--	--	--
39'HS'+24	RT	ROCKWOOD CT	21	--	--	--
	PROJECT 1100-56-71 SUBTOTALS		454	22	--	
		TOTALS	**1,386**	**1,144**	**5**	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

UTILITY LINE OPENINGS

LOCATION	SPV.0060.08 EACH
PROJECT 1100-56-70 CATEGORY CODE 0010	
UNDISTRIBUTED	5
PROJECT 1100-56-70 SUBTOTAL	5
PROJECT 1100-56-71 CATEGORY CODE 0010	
UNDISTRIBUTED	5
PROJECT 1100-56-71 SUBTOTAL	5
TOTAL	**10**

CONTAMINATED SOIL ITEMS

STATION - STATION	LOCATION	SPV.0195.01 EXCAVATION, HAULING, AND DISPOSAL OF VOC CONTAMINATED SOIL TON	SPV.0195.02 EXCAVATION, HAULING, AND DISPOSAL OF PESTICIDE CONTAMINATED SOIL TON
PROJECT 1100-56-71 CATEGORY CODE 0010			
26'HS'+00 - 27'HS'+00	LT	1,120	--
28'HS'+75 - 29'HS'+75	RT	2,490	--
30'HS'+60 - 31'HS'+35	LT	--	1,010
	TOTALS	**3,610**	**1,010**



R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
1100-56-21		
FEDERAL PROJECT NUMBER	4.01	6

PLAT OF RIGHT OF WAY REQUIRED FOR

FOND DU LAC - OSHKOSH
USH 151 - CTH D

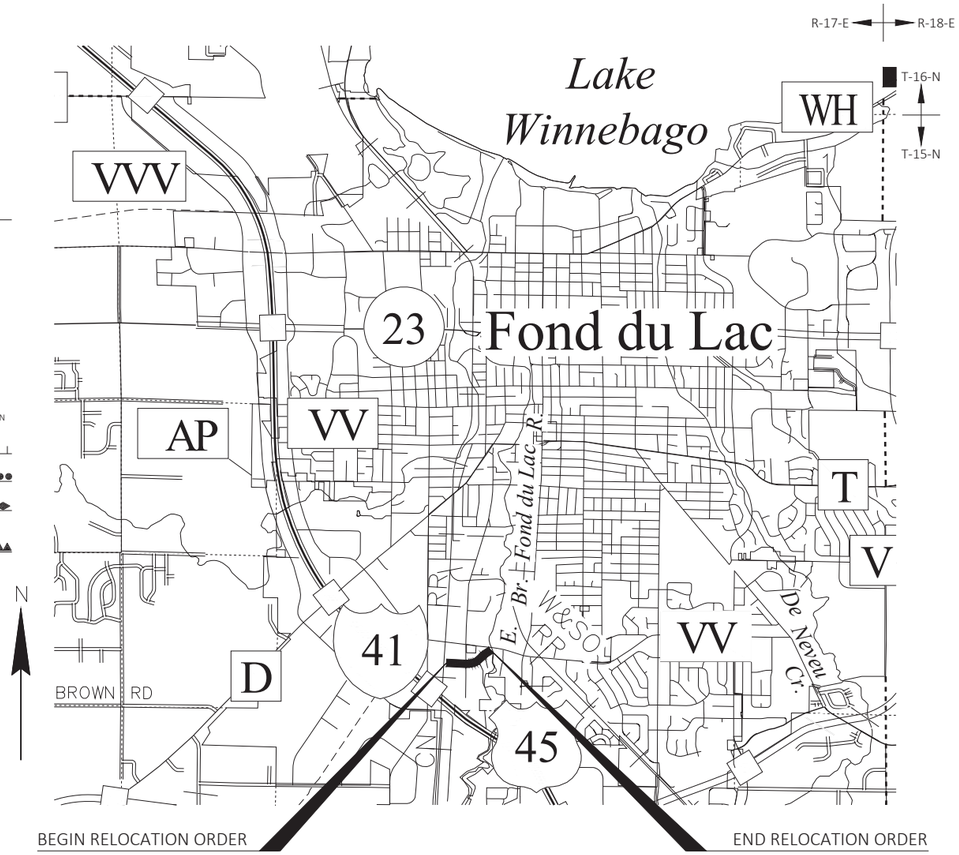
IH-41	FOND DU LAC COUNTY

CONSTRUCTION PROJECT NUMBER
1100-56-71

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
EXISTING CENTERLINE
CORPORATE LIMITS
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
BUILDING
BRIDGE
TO BE REMOVED
CULVERT

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND SURVEY MONUMENT (SEE FOUND MONUMENT TABLE)
GEODETIC SURVEY MONUMENT
NON-PERMITTED SIGN
PERMITTED SIGN
ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25
PARALLEL OFFSETS



BEGIN RELOCATION ORDER
25+37.05
Y 3376477.294
X 813687.104
1023.75' SOUTH AND 667.56' EAST
OF THE WEST QUARTER CORNER
OF SECTION 22, T15N, R17E

LAYOUT
SCALE 0 1 MI.

END RELOCATION ORDER
42+00.00
Y 376941.068
X 815215.382
559.97' SOUTH AND 2195.83' EAST
OF THE WEST QUARTER CORNER
OF SECTION 22, T15N, R17E

TOTAL NET LENGTH OF CENTERLINE = 0.315 MI.

CONVENTIONAL ABBREVIATIONS

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

CURVE DATA ABBREVIATIONS

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

CONVENTIONAL UTILITY SYMBOLS

FIRE HYDRANT		WATER	W	ELECTRIC POLE	
WATER VALVE	WV	GAS	G	ELECTRIC POLE W/ LIGHT	
WATER VALVE SERVICE	WVS	TELEPHONE	T	GUY WIRE ANCHOR	GUY
WELL	WELL	OVERHEAD TRANSMISSION LINES	OH	GUY POLE	GUY POLE
SANITARY MANHOLE	SAN	ELECTRIC	E	LIGHT POLE	
SEPTIC COVER	SEPTIC	CABLE TELEVISION	TV	TRAFFIC SIGNAL POLE	
STORM MANHOLE	SS	FIBER OPTIC	FO	ELECTRIC MANHOLE	EL
MANHOLE (GENERIC)	MH	SANITARY SEWER	SAN	ELECTRIC METER	
GAS VALVE	GV	STORM SEWER	SS	ELECTRIC PULLBOX	
GAS VAULT		COMBINED SEWER	SSS	ELECTRIC VAULT	
GAS VENT	GVT			TELEPHONE MANHOLE	TEL
CONTROL BOX				TELEPHONE PEDESTAL	
COMMUNICATIONS VAULT				CABLE TV MANHOLE	TV
ELECTRIC TOWER				CABLE TV PEDESTAL	

NOTES:

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

ALL NEW RIGHT-OF-WAY AND PERMANENT EASEMENT MONUMENTS WILL BE TYPE 2 MONUMENTS (TYPICALLY 1" X 18" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

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

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

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

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

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

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

THIS PLAT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES AND ACCESS RIGHTS.

ORIGINAL PLAT PREPARED BY

GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac
95 South Pioneer Road, Suite 300 • Fond du Lac, WI 54935
(920) 924-5720 • fax (920) 924-5725

9/12/2025
DATE

JAY W. PANETTI, PLS

WISCONSIN
JAY W. PANETTI
S-2747
WAUPUN, WI
LAND SURVEYOR

REVISION DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR THE DEPARTMENT

DATE: 9/12/2025

TREVIN PE

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\RW\DWG\040101-RP.DWG
PLOT DATE : 9/11/2025 4:04 PM
PLOT BY : JAY PANETTI
PLOT NAME :

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST(S) REQUIRED	FEE R/W S.F. REQUIRED NEW	EXISTING	TOTAL	P.L.E. S.F. PERM.	T.L.E. S.F. TEMP.
1	4.04, 4.05	MPI MORRIS LLC	TLE	0	0	0	0	17785
2	4.05	ZABEL HOLDINGS, LLC	TLE	0	0	0	0	21072
3	4.06	K&K STONE CO LLC	TLE	0	0	0	0	1585
4	4.06	NANCY A. FREUND LIFE TRUST DATED JANUARY 1, 2010	TLE	0	0	0	0	2491
6	4.06	MARIE B. WELLNITZ	TLE	0	0	0	0	3140
7	4.06	ANDREW D. SEIBEL	TLE	0	0	0	0	2326
8	4.06	DUNCAN & CATHLEEN SEFFERN	TLE	0	0	0	0	3471
9	4.06	JERRY D. LOEST	PLE	0	0	0	3252	0
101	4.04, 4.05, 4.06	ALLIANT ENERGY - ELECTRIC	RELEASE OF RIGHTS					
102	4.05	ANR PIPELINE COMPANY - GAS	RELEASE OF RIGHTS					
103	4.06	AT&T WISCONSIN - COMMUNICATION LINE	RELEASE OF RIGHTS					
104	4.06	SPECTRUM - COMMUNICATION LINE	RELEASE OF RIGHTS					

4

4

SHEET 2 OF 6 SHEETS

REVISION DATE

DATE 9/12/2025

GRID FACTOR

SCALE, FEET 0

HWY: IH-41

COUNTY: FOND DU LAC

STATE R/W PROJECT NUMBER 1100-56-21

CONSTRUCTION PROJECT NUMBER 1100-56-71

PLAT SHEET 4.02

PS&E SHEET 140

E

FILE NAME : 040102-RP.DWG
LAYOUT NAME - RW 1 IN 100 FT

PLOT DATE : 9/11/2025 2:55 PM PLOT BY : JAY PANETTI PLOT NAME : PLOT SCALE :



SHEET 3 OF 6 SHEETS

REVISION DATE	DATE 9/12/2025	SCALE, FEET 0 200 400	HWY: IH-41	STATE R/W PROJECT NUMBER 1100-56-21	PLAT SHEET 4.03
	GRID FACTOR		COUNTY: FOND DU LAC	CONSTRUCTION PROJECT NUMBER 1100-56-71	PS&E SHEET 141 E

FILE NAME : 040103-RP.DWG
LAYOUT NAME - RW 1 IN 400 FT

PLOT DATE : 9/11/2025 2:57 PM PLOT BY : JAY PANETTI PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 75

ALUMINUM MONUMENT
Y 377501.039
X 813019.548

FOUND MONUMENT TABLE			
POINT NUMBER	Y	X	DESCRIPTION
8238	376507.563	813622.508	1" IRON PIPE
8239	376441.660	813608.585	1" IRON PIPE
8240	376464.223	814286.004	1" IRON PIPE
8241	376692.236	814360.589	1" IRON PIPE
8242	376533.760	814359.371	1" IRON PIPE

FOUND MONUMENT INFORMATION SHOWN REPRESENTS TYPE AND LOCATION OF EXISTING MONUMENTS WITHOUT OPINION AS TO THEIR VALIDITY AND USE AS A PROPERTY CORNER.

TLE COORDINATE TABLE		
POINT	Y	X
T301	376444.312	813688.202
T302	376464.215	814285.752
T303	376449.202	814285.626
T304	376430.505	813724.260
T305	376372.124	813683.773

TLE COURSE TABLE - PARCEL 1		
COURSE	BEARING	DISTANCE
T301 - T302	N88° 05' 32"E	597.88'
T302 - T303	S00° 28' 45"W	15.01'
T303 - T304	S88° 05' 32"W	561.68'
T304 - T305	S34° 44' 29"W	71.05'
T305 - T301	N03° 30' 39"E	72.32'

BASIS OF EXISTING R/W		
ROUTE	BASIS	YEAR
CTH VVV HICKORY STREET	R/W PROJECT NO. 1107-03-28	2004
HORSESHOE LANE	PLAT OF SURVEY E-294	1968
	CSM #393	1972
	CSM #1198	1975
MORRIS STREET	R/W PROJECT NO. T03-1(23)	1962
	PLAT OF SURVEY E-294	1968
	CSM #393	1972

CHISELED CROSS
Y 374869.795
X 813019.179

CITY

FOND DU LAC

NW-SW

OF

SEC. COR. TO R/L
S00°00'29"W
1045.98'

SEC. COR. TO R/L
N00°00'29"E
1585.26'

SECTION LINE N00°00'29"E 2631.24'

CTH VVV
SOUTH HICKORY STREET

SEC. LINE TO TRAV. PT.
N88°05'32"E 668.07'

TRAV. PT. TO R/W
S01°54'28"E 33.00'

CANADIAN NATIONAL RAILROAD
P.L.

LOT 1
CSM #2206
V11/P195
DOC. #344957

LOT 2
CSM #2206
V11/P195
DOC. #344957

CSM #1198
V7/P158
DOC. #299632

BEGIN RELOCATION ORDER
25+37.05
Y 376477.294
X 813687.104
1023.75' SOUTH AND 667.56' EAST
OF THE WEST QUARTER CORNER
OF SECTION 22, T15N, R17E

LIMITED HIGHWAY EASEMENT
FOR STORM SEWER
DOC. #111920

LIMITED HIGHWAY
EASEMENT FOR
STORM SEWER
DOC. #111919

IP 8238
IP 8239
IP 8240
IP 8241
IP 8242

HORSESHOE LANE
R/L N88°05'32"E
R/L N85°42'45"E

MORRIS STREET

EASEMENT NATURAL GAS DOC. #981603

MATCH LINE
SEE SHEET 4.06

PC: 32+82.18

25+37.05
33.00' TLE
T301

25+72.63
48.00' TLE
T304

25+30.22
105.00' TLE
T305

31+34.93
33.00' TLE
T302

31+34.31
48.00' TLE
T303

PI: 31+86.38

TLE FOR SLOPES

101 ALLIANT ENERGY - ELECTRIC
BLANKET UTILITY EASEMENT
DOC. #125892
PARCEL 1

NO EASEMENT OF RECORD
PARCEL 1

REVOCABLE OCCUPANCY PERMIT
DOC. #634113

LIMITED HIGHWAY EASEMENT
FOR STORM SEWER
DOC. #114275

1
FDL-15-17-22-32-255-00
MPI MORRIS LLC

PLAT OF SURVEY
E-294

CSM #393
V3/P192
DOC. #266541

SIXTEENTH LINE

MATCH LINE
SEE SHEET 4.05

MATCH LINE
SEE SHEET 4.06

SHEET 4 OF 6 SHEETS

REVISION DATE	DATE 9/12/2025	SCALE, FEET 0 50 100	HWY: IH-41	STATE R/W PROJECT NUMBER 1100-56-21	PLAT SHEET 4.04
	GRID FACTOR		COUNTY: FOND DU LAC	CONSTRUCTION PROJECT NUMBER 1100-56-71	PS&E SHEET 142 E

FILE NAME : 040104-RP.DWG
LAYOUT NAME - RW 1 IN 100 FT

PLOT DATE : 9/11/2025 3:56 PM PLOT BY : JAY PANETTI PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 75

BASIS OF EXISTING R/W

ROUTE	BASIS	YEAR
IH-41	R/W PROJECT NO. 1107-03-28	2004
MORRIS STREET	R/W PROJECT NO. T03-1(23)	1962
	PLAT OF SURVEY E-294	1968

T 15 N
R 17 E
21 22

ALUMINUM MONUMENT
Y 377501.039
X 813019.548

CTH VVV
SOUTH HICKORY STREET

SEC. COR. TO R/L
S00°00'29"W 1840.16'

1260'RW'

1258'RW'

SEC. COR. TO R/L
N00°00'29"E 791.08'
1259'RW'+69.79

SECTION LINE N00°00'29"E 2631.24'

1256'RW'

1254'RW'

SEC. LINE TO TRAV. PT.
S49°49'25"E 691.81'

R/L N49°49'25"W

IH-41

T 15 N
R 17 E
21 22 28 27

CHISELED CROSS
Y 374869.795
X 813019.179

TLE COURSE TABLE - PARCELS 1 & 2		
COURSE	BEARING	DISTANCE
T201 - T202	N43° 39' 33"W	54.54'
T202 - T203	N03° 30' 39"E	702.14'
T203 - T204	S86° 29' 21"E	40.00'
T204 - T201	S03° 30' 39"W	739.22'

FOUND MONUMENT TABLE			
POINT NUMBER	Y	X	DESCRIPTION
8205	375914.108	814278.512	1" IRON PIPE
8206	375465.648	813549.093	1" IRON PIPE
8208	375593.933	813469.131	1" IRON PIPE
8236	376119.524	814363.068	3/4" REBAR
8237	375888.976	814360.883	3/4" REBAR
9176	375904.332	813275.181	1" IRON PIPE

FOUND MONUMENT INFORMATION SHOWN REPRESENTS TYPE AND LOCATION OF EXISTING MONUMENTS WITHOUT OPINION AS TO THEIR VALIDITY AND USE AS A PROPERTY CORNER.

IP 9176

CITY

OF

SW-SW

IP 8208

66'

80'

IP 8206

192.99'

T202

T201

T203

T204

TLE FOR SLOPES

40'

P.L.

CANADIAN NATIONAL RAILROAD

LIMITED HIGHWAY EASEMENT FOR STORM SEWER
DOC. #114275

SEE SHEET 4.04

MATCH LINE

PLAT OF SURVEY
E-294

1

FDL-15-17-22-32-255-00
MPI MORRIS LLC

PERMANENT LIMITED EASEMENT
DOC. #898252

PERMANENT LIMITED EASEMENT
DOC. #898253

EASEMENT AGREEMENT
DOC. #349685

CORRECTED EASEMENT AGREEMENT
DOC. #358714

RAILROAD EASEMENT
DOC. #309180
DOC. #315467
DOC. #319018

CONSENT AND REMOVAL OF RESTRICTION
DOC. #329919

AMENDING RIGHT OF WAY AGREEMENT (M/L)
DOC. #875438

IP 8205

TRANSPORTATION PROJECT PLAT
NO: 1107-07-20 - 4.01
DOC. #887348

BLANKET UTILITY EASEMENT
DOC. #125892

CONVEYANCE OF RIGHTS IN LAND
DOC. #795652

101 ALLIANT ENERGY - ELECTRIC
BLANKET UTILITY EASEMENT
DOC. #125892
PARCELS 1 & 2

102 ANR PIPELINE COMPANY - GAS
AMENDING RIGHT OF WAY AGREEMENT (M/L)
DOC. #875438
PARCEL 2

BLANKET RIGHT OF WAY CONTRACT
DOC. #90165
PARCELS 1 & 2

2

FDL-15-17-22-33-500-00
ZABEL HOLDINGS, LLC

FINDING, DETERMINATION AND DECLARATION
DOC. #112968

ORDER TO VACATE CONTROLLED-ACCESS HIGHWAY - PROJECT CA 03-1(7) FOND DU LAC COUNTY
DOC. #944843

FOND DU LAC

IP 8236

IP 8237

80'

40' 40'

MORRIS STREET

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T201	1252'RW'+77.98	175.44' RT
T202	1253'RW'+32.21	181.29' RT
T203	1257'RW'+51.49	744.50' RT
T204	1257'RW'+19.40	768.39' RT

TLE COORDINATE TABLE		
POINT	Y COORD	X COORD
T201	375348.609	813661.052
T202	375388.069	813623.398
T203	376088.888	813666.396
T204	376086.438	813706.321

SHEET 5 OF 6 SHEETS

4

REVISION DATE	DATE 9/12/2025	SCALE, FEET 0 50 100	HWY: IH-41	STATE R/W PROJECT NUMBER 1100-56-21	PLAT SHEET 4.05	
	GRID FACTOR		COUNTY: FOND DU LAC	CONSTRUCTION PROJECT NUMBER 1100-56-71	PS&E SHEET 143	E

FILE NAME : 040105-RP.DWG
LAYOUT NAME - RW 1 IN 100 FT

PLOT DATE : 9/11/2025 2:59 PM PLOT BY : JAY PANETTI PLOT NAME : PLOT SCALE :

BASIS OF EXISTING R/W

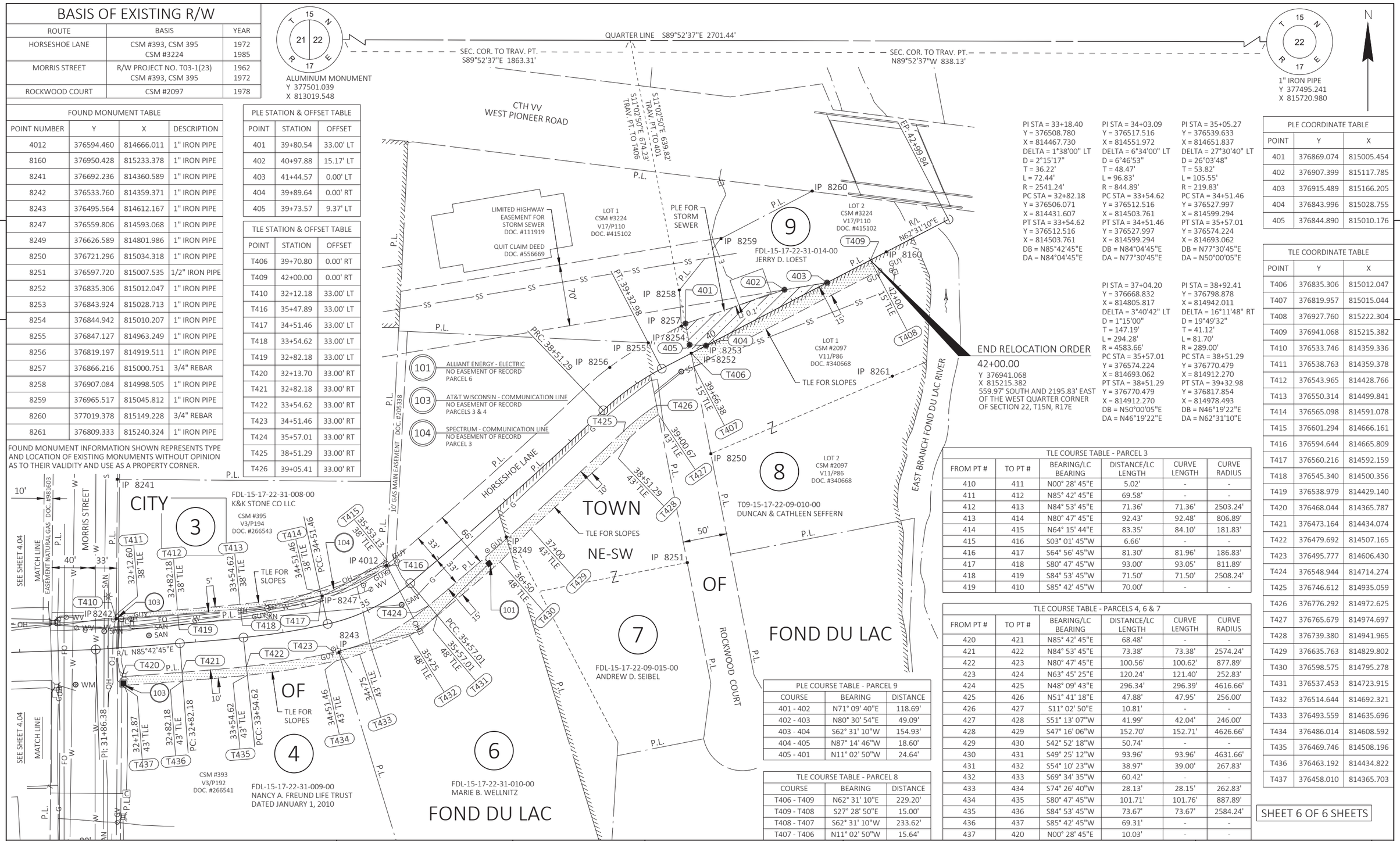
ROUTE	BASIS	YEAR
HORSESHOE LANE	CSM #393, CSM 395 CSM #3224	1972 1985
MORRIS STREET	R/W PROJECT NO. T03-1(23) CSM #393, CSM 395	1962 1972
ROCKWOOD COURT	CSM #2097	1978

FOUND MONUMENT TABLE			
POINT NUMBER	Y	X	DESCRIPTION
4012	376594.460	814666.011	1" IRON PIPE
8160	376950.428	815233.378	1" IRON PIPE
8241	376692.236	814360.589	1" IRON PIPE
8242	376533.760	814359.371	1" IRON PIPE
8243	376495.564	814612.167	1" IRON PIPE
8247	376559.806	814593.068	1" IRON PIPE
8249	376626.589	814801.986	1" IRON PIPE
8250	376721.296	815034.318	1" IRON PIPE
8251	376597.720	815007.535	1/2" IRON PIPE
8252	376835.306	815012.047	1" IRON PIPE
8253	376843.924	815028.713	1" IRON PIPE
8254	376844.942	815010.207	1" IRON PIPE
8255	376847.127	814963.249	1" IRON PIPE
8256	376819.197	814919.511	1" IRON PIPE
8257	376866.216	815000.751	3/4" REBAR
8258	376907.084	814998.505	1" IRON PIPE
8259	376965.517	815045.812	1" IRON PIPE
8260	377019.378	815149.228	3/4" REBAR
8261	376809.333	815240.324	1" IRON PIPE

FOUND MONUMENT INFORMATION SHOWN REPRESENTS TYPE AND LOCATION OF EXISTING MONUMENTS WITHOUT OPINION AS TO THEIR VALIDITY AND USE AS A PROPERTY CORNER.

PLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
401	39+80.54	33.00' LT
402	40+97.88	15.17' LT
403	41+44.57	0.00' LT
404	39+89.64	0.00' RT
405	39+73.57	9.37' LT

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T406	39+70.80	0.00' RT
T409	42+00.00	0.00' RT
T410	32+12.18	33.00' LT
T416	35+47.89	33.00' LT
T417	34+51.46	33.00' LT
T418	33+54.62	33.00' LT
T419	32+82.18	33.00' LT
T420	32+13.70	33.00' RT
T421	32+82.18	33.00' RT
T422	33+54.62	33.00' RT
T423	34+51.46	33.00' RT
T424	35+57.01	33.00' RT
T425	38+51.29	33.00' RT
T426	39+05.41	33.00' RT



PLE COORDINATE TABLE		
POINT	Y	X
401	376869.074	815005.454
402	376907.399	815117.785
403	376915.489	815166.205
404	376843.996	815028.755
405	376844.890	815010.176

TLE COORDINATE TABLE		
POINT	Y	X
T406	376835.306	815012.047
T407	376819.957	815015.044
T408	376927.760	815222.304
T409	376941.068	815215.382
T410	376533.746	814359.336
T411	376538.763	814359.378
T412	376543.965	814428.766
T413	376550.314	814499.841
T414	376565.098	814591.078
T415	376601.294	814666.161
T416	376594.644	814665.809
T417	376560.216	814592.159
T418	376545.340	814500.356
T419	376538.979	814429.140
T420	376468.044	814365.787
T421	376473.164	814434.074
T422	376479.692	814507.165
T423	376495.777	814606.430
T424	376548.944	814714.274
T425	376746.612	814935.059
T426	376776.292	814972.625
T427	376765.679	814974.697
T428	376739.380	814941.965
T429	376635.763	814829.802
T430	376598.575	814795.278
T431	376537.453	814723.915
T432	376514.644	814692.321
T433	376493.559	814635.696
T434	376486.014	814608.592
T435	376469.746	814508.196
T436	376463.192	814434.822
T437	376458.010	814365.703

PLE COURSE TABLE - PARCEL 9		
COURSE	BEARING	DISTANCE
401 - 402	N71° 09' 40"E	118.69'
402 - 403	N80° 30' 54"E	49.09'
403 - 404	S62° 31' 10"W	154.93'
404 - 405	N87° 14' 46"W	18.60'
405 - 401	N11° 02' 50"W	24.64'

TLE COURSE TABLE - PARCEL 8		
COURSE	BEARING	DISTANCE
T406 - T409	N62° 31' 10"E	229.20'
T409 - T408	S27° 28' 50"E	15.00'
T408 - T407	S62° 31' 10"W	233.62'
T407 - T406	N11° 02' 50"W	15.64'

TLE COURSE TABLE - PARCEL 3					
FROM PT #	TO PT #	BEARING/LC BEARING	DISTANCE/LC LENGTH	CURVE LENGTH	CURVE RADIUS
410	411	N00° 28' 45"E	5.02'	-	-
411	412	N85° 42' 45"E	69.58'	-	-
412	413	N84° 53' 45"E	71.36'	71.36'	2503.24'
413	414	N80° 47' 45"E	92.43'	92.48'	806.89'
414	415	N64° 15' 44"E	83.35'	84.10'	181.83'
415	416	S03° 01' 45"W	6.66'	-	-
416	417	S64° 56' 45"W	81.30'	81.96'	186.83'
417	418	S80° 47' 45"W	93.00'	93.05'	811.89'
418	419	S84° 53' 45"W	71.50'	71.50'	2508.24'
419	410	S85° 42' 45"W	70.00'	-	-

TLE COURSE TABLE - PARCELS 4, 6 & 7					
FROM PT #	TO PT #	BEARING/LC BEARING	DISTANCE/LC LENGTH	CURVE LENGTH	CURVE RADIUS
420	421	N85° 42' 45"E	68.48'	-	-
421	422	N84° 53' 45"E	73.38'	73.38'	2574.24'
422	423	N80° 47' 45"E	100.56'	100.62'	877.89'
423	424	N63° 45' 25"E	120.24'	121.40'	252.83'
424	425	N48° 09' 43"E	296.34'	296.39'	4616.66'
425	426	N51° 41' 18"E	47.88'	47.95'	256.00'
426	427	S11° 02' 50"E	10.81'	-	-
427	428	S51° 13' 07"W	41.99'	42.04'	246.00'
428	429	S47° 16' 06"W	152.70'	152.71'	4626.66'
429	430	S42° 52' 18"W	50.74'	-	-
430	431	S49° 25' 12"W	93.96'	93.96'	4631.66'
431	432	S54° 10' 23"W	38.97'	39.00'	267.83'
432	433	S69° 34' 35"W	60.42'	-	-
433	434	S74° 26' 40"W	28.13'	28.15'	262.83'
434	435	S80° 47' 45"W	101.71'	101.76'	887.89'
435	436	S84° 53' 45"W	73.67'	73.67'	2584.24'
436	437	S85° 42' 45"W	69.31'	-	-
437	420	N00° 28' 45"E	10.03'	-	-

SHEET 6 OF 6 SHEETS

REVISION DATE	DATE 9/12/2025	SCALE, FEET 0 50 100	HWY: IH-41	STATE R/W PROJECT NUMBER 1100-56-21	PLAT SHEET 4.06
	GRID FACTOR		COUNTY: FOND DU LAC	CONSTRUCTION PROJECT NUMBER 1100-56-71	PS&E SHEET 144 E

FILE NAME : 040106-RP.DWG
LAYOUT NAME - RW 1 IN 100 FT
PLOT DATE : 9/11/2025 4:03 PM PLOT BY : JAY PANETTI PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 75



5

5

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PLAN - IH 41	SHEET 145	E



5

5

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PLAN - IH 41	SHEET 146	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050101-PN.DWG
LAYOUT NAME - Sheet-02

PLOT DATE : 7/28/2026 5:23 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

LEGEND

- CONCRETE PAVEMENT REPAIR
- CONCRETE PAVEMENT REPAIR SHES
- CONCRETE PAVEMENT REPLACEMENT
- CONCRETE PAVEMENT REPLACEMENT SHES
- HMA PAVEMENT 4 LT 58-28 S REPLACEMENT
- JOINT SEALING

5

5

MATCH LINE STA 2180+00

MATCH LINE STA 2195+00

IH 41 SB

IH 41 NB

RAMP 'D'

RAMP 'A'

RAMP 'B'

USH 151 NB

USH 151 SB

EXIST R/W

REMOVE & REPLACE CABLE BARRIER

REMOVE & REPLACE BEAM GUARD (SEE DETAILS)

B-20-125

CP 6376

CP 10936

CP 6375

B-20-126

INTERSECTION IMPROVEMENTS (SEE DETAILS)

JOINT SEALING SEE DETAIL FOR "BRIDGE JOINT/APPROACH RUBBERING FOR CONCRETE PAVEMENT APPROACH SLAB"

CABLE BARRIER LON POST STA 2190+15.2

CABLE BARRIER END TERMINAL

CABLE BARRIER LON POST STA 2192+51.9

CABLE BARRIER END TERMINAL

JOINT SEALING SEE DETAIL FOR "BRIDGE JOINT/APPROACH RUBBERING FOR CONCRETE PAVEMENT APPROACH SLAB"

ALLIANT ENERGY

RAMP GATE

SOLAR PANEL POST

WETLAND LIMITS

CONTROL POINT TABLE			
POINT #	EASTING	NORTHING	ELEVATION
6375	817835.484	370937.196	852.508
6376	817624.724	370944.231	853.105
10936	817410.582	370774.359	863.038

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PLAN - IH 41	SHEET 147	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050101-PN.DWG
LAYOUT NAME - Sheet-03

PLOT DATE : 7/28/2026 5:23 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PLAN - IH 41	SHEET 148 E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050101-PN.DWG
LAYOUT NAME - Sheet-04

PLOT DATE : 7/28/2026 5:23 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

CONTROL POINT TABLE			
POINT #	EASTING	NORTHING	ELEVATION
6377	816290.821	373392.141	814.514
6382	816286.852	373168.008	822.459

MAIN ST

EXIST R/W

EXIST R/W

EXIST R/W

JOINT SEALING SEE DETAIL FOR "BRIDGE JOINT/APPROACH RUBBERING FOR CONCRETE PAVEMENT APPROACH SLAB"

REMOVE & REPLACE CABLE BARRIER

REMOVE & REPLACE CABLE BARRIER

MATCH LINE STA 2210+00

MATCH LINE STA 2225+00

2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224

CP 6382

IH 41 SB

IH 41 NB

WETLAND LIMITS

WETLAND LIMITS

CP 6377

B-20-69

REMOVE & REPLACE BEAM GUARD (SEE DETAILS)

JOINT SEALING SEE DETAIL FOR "BRIDGE JOINT/APPROACH RUBBERING FOR CONCRETE PAVEMENT APPROACH SLAB"

MAIN ST

EXIST R/W

N

5

5

LEGEND

- CONCRETE PAVEMENT REPAIR
- CONCRETE PAVEMENT REPAIR SHES
- CONCRETE PAVEMENT REPLACEMENT
- CONCRETE PAVEMENT REPLACEMENT SHES
- HMA PAVEMENT 4 LT 58-28 S REPLACEMENT
- JOINT SEALING

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PLAN - IH 41	SHEET 149	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050101-PN.DWG
LAYOUT NAME - Sheet-05

PLOT DATE : 7/28/2026 5:24 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

5

5

E. BR. FOND DU LAC RIVER

REMOVE & REPLACE CABLE BARRIER

CABLE BARRIER END TERMINAL

B-20-71

REMOVE & REPLACE BEAM GUARD (SEE DETAILS)

REMOVE ASPHALT FOR CABLE BARRIER INSTALLATION

CABLE BARRIER LON POST STA 233+81.0

EXIST R/W

CABLE BARRIER END TERMINAL

WETLAND LIMITS

MATCH LINE STA 2225+00

2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240

IH 41 SB

IH 41 NB

MATCH LINE STA 2240+00

WETLAND LIMITS

SIGN

SIGN

POST

NET LEC

ANR PIPELINE

REMOVE & REPLACE CABLE BARRIER

CABLE BARRIER LON POST STA 2227+84.5

CABLE BARRIER END TERMINAL

REMOVE & REPLACE BEAM GUARD (SEE DETAILS)

B-20-70

JOINT SEALING SEE DETAIL FOR "BRIDGE JOINT/APPROACH RUBBERING FOR CONCRETE PAVEMENT APPROACH SLAB"

EXIST R/W

REMOVE ASPHALT FOR CABLE BARRIER INSTALLATION

CITY OF FOND DU LAC

CITY OF FOND DU LAC

SAN

N

LEGEND

- CONCRETE PAVEMENT REPAIR
- CONCRETE PAVEMENT REPAIR SHES
- CONCRETE PAVEMENT REPLACEMENT
- CONCRETE PAVEMENT REPLACEMENT SHES
- HMA PAVEMENT 4 LT 58-28 S REPLACEMENT
- JOINT SEALING

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PLAN - IH 41	SHEET 150	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050101-PN.DWG
LAYOUT NAME - Sheet-06

PLOT DATE : 7/28/2026 5:24 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

LEGEND

- CONCRETE PAVEMENT REPAIR
- CONCRETE PAVEMENT REPAIR SHES
- CONCRETE PAVEMENT REPLACEMENT
- CONCRETE PAVEMENT REPLACEMENT SHES
- HMA PAVEMENT 4 LT 58-28 S REPLACEMENT
- JOINT SEALING

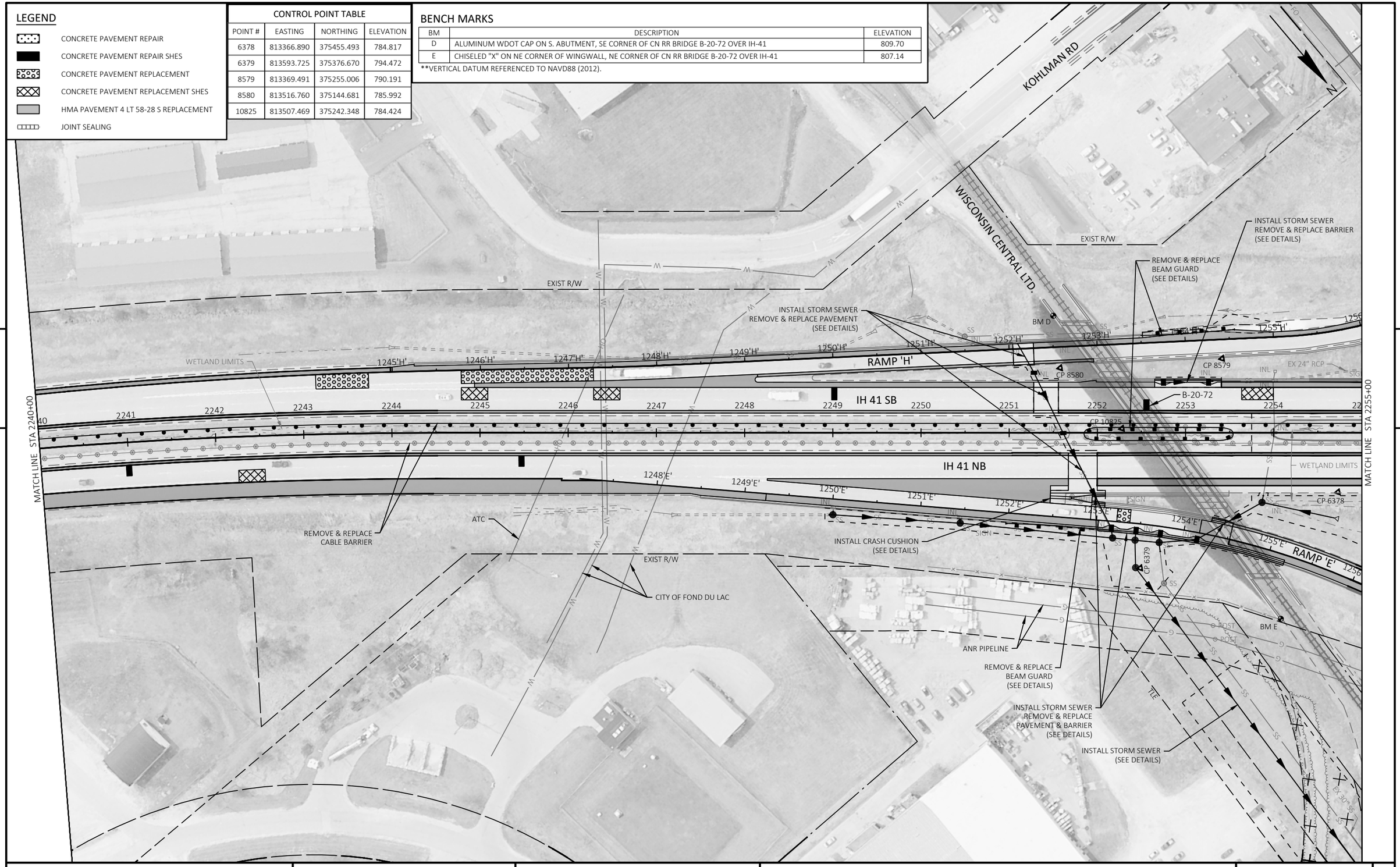
CONTROL POINT TABLE

POINT #	EASTING	NORTHING	ELEVATION
6378	813366.890	375455.493	784.817
6379	813593.725	375376.670	794.472
8579	813369.491	375255.006	790.191
8580	813516.760	375144.681	785.992
10825	813507.469	375242.348	784.424

BENCH MARKS

BM	DESCRIPTION	ELEVATION
D	ALUMINUM WDOT CAP ON S. ABUTMENT, SE CORNER OF CN RR BRIDGE B-20-72 OVER IH-41	809.70
E	CHISELED "X" ON NE CORNER OF WINGWALL, NE CORNER OF CN RR BRIDGE B-20-72 OVER IH-41	807.14

**VERTICAL DATUM REFERENCED TO NAVD88 (2012).



PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PLAN - IH 41	SHEET 151	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050101-PN.DWG
LAYOUT NAME - Sheet-07

PLOT DATE : 7/28/2026 5:24 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

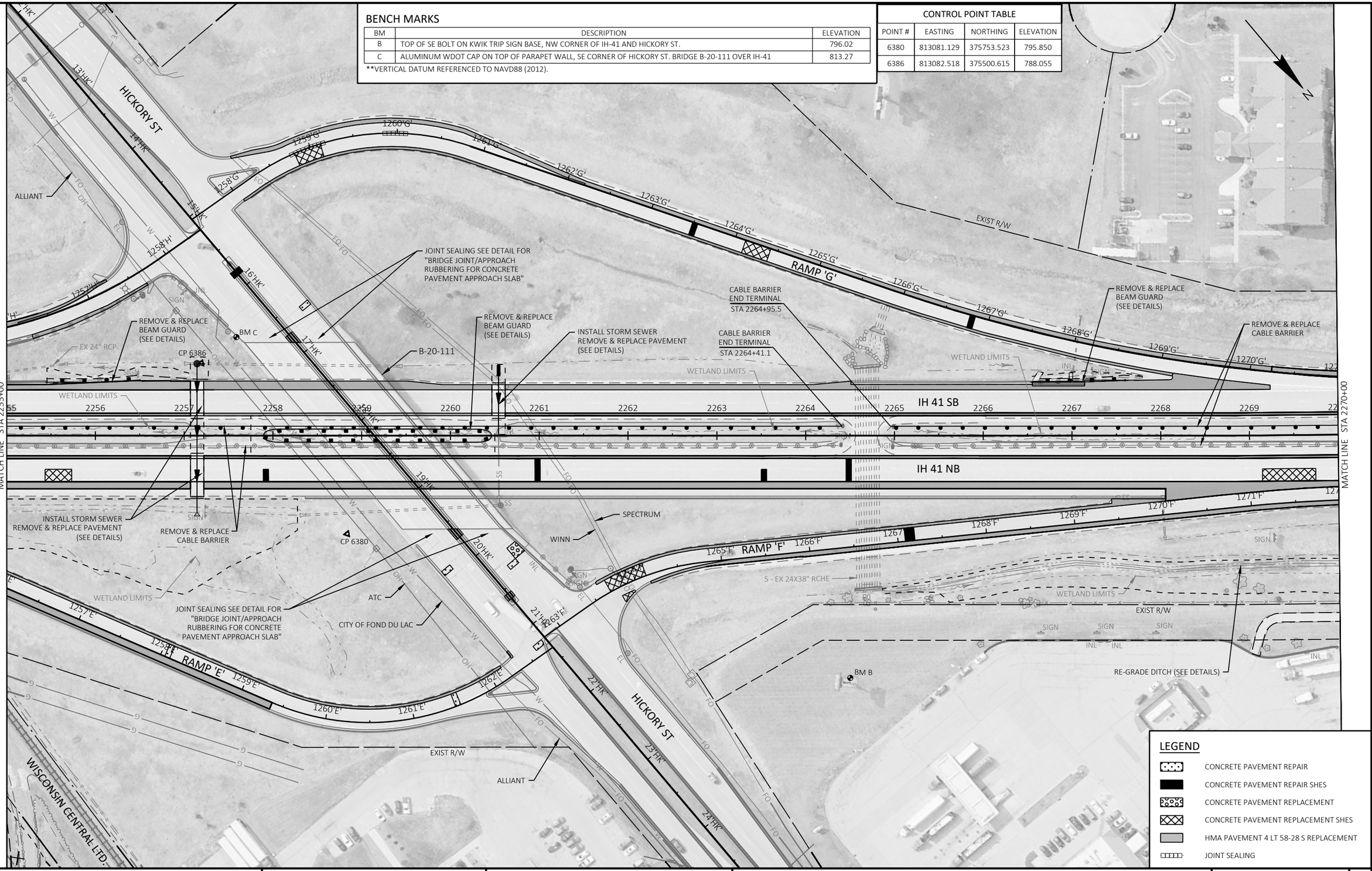
WISDOT/CADDS SHEET 44

BENCH MARKS

BM	DESCRIPTION	ELEVATION
B	TOP OF SE BOLT ON KWIK TRIP SIGN BASE, NW CORNER OF IH-41 AND HICKORY ST.	796.02
C	ALUMINUM WDOT CAP ON TOP OF PARAPET WALL, SE CORNER OF HICKORY ST. BRIDGE B-20-111 OVER IH-41	813.27

**VERTICAL DATUM REFERENCED TO NAVD88 (2012).

CONTROL POINT TABLE			
POINT #	EASTING	NORTHING	ELEVATION
6380	813081.129	375753.523	795.850
6386	813082.518	375500.615	788.055



LEGEND

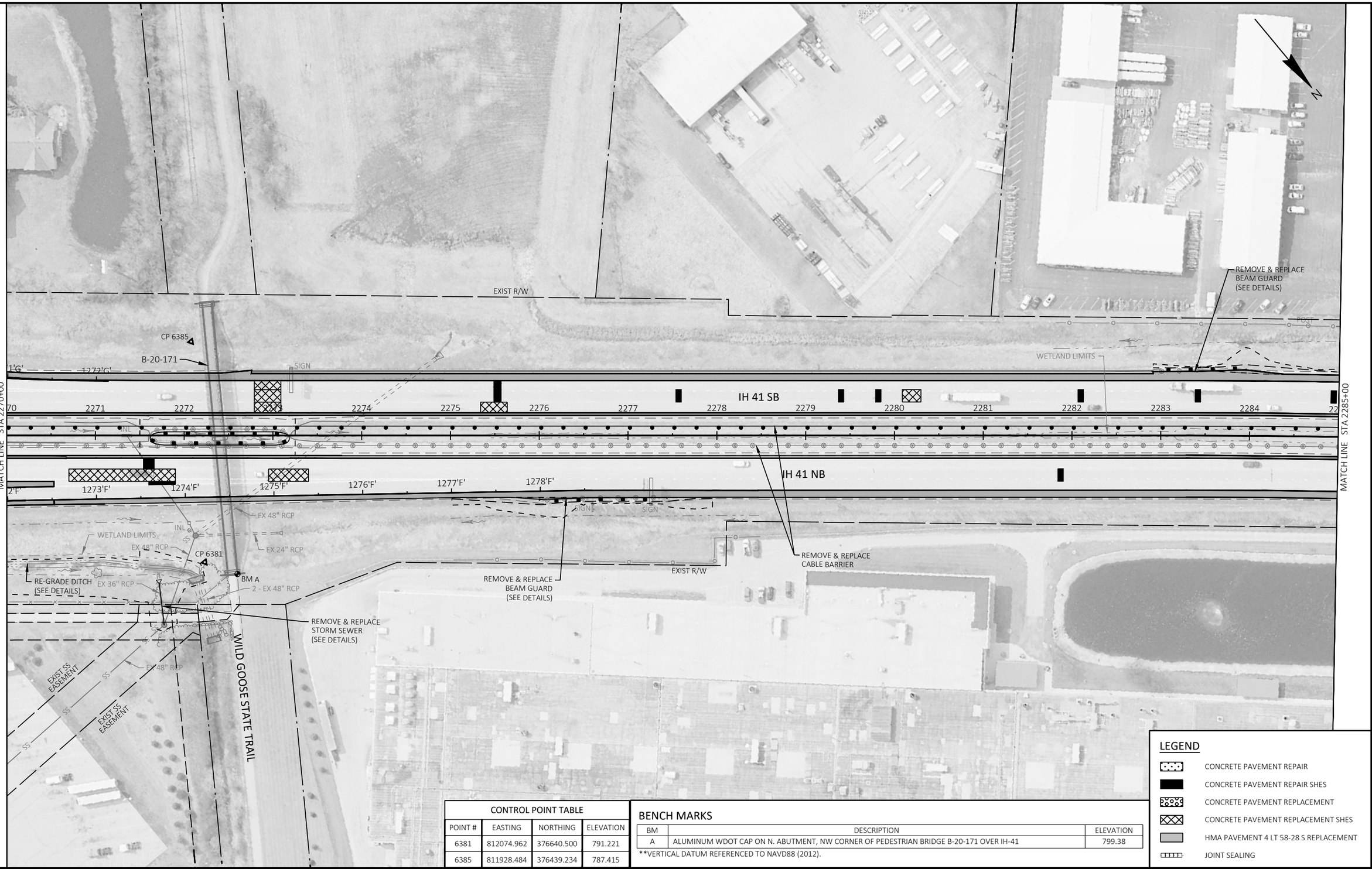
- CONCRETE PAVEMENT REPAIR
- CONCRETE PAVEMENT REPAIR SHES
- CONCRETE PAVEMENT REPLACEMENT
- CONCRETE PAVEMENT REPLACEMENT SHES
- HMA PAVEMENT 4 LT 58-28 S REPLACEMENT
- JOINT SEALING

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PLAN - IH 41	SHEET 152	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050101-PN.DWG
LAYOUT NAME - Sheet-08

PLOT DATE : 7/28/2026 5:24 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



5

5

CONTROL POINT TABLE			
POINT #	EASTING	NORTHING	ELEVATION
6381	812074.962	376640.500	791.221
6385	811928.484	376439.234	787.415

BENCH MARKS

BM	DESCRIPTION	ELEVATION
A	ALUMINUM WDOT CAP ON N. ABUTMENT, NW CORNER OF PEDESTRIAN BRIDGE B-20-171 OVER IH-41	799.38

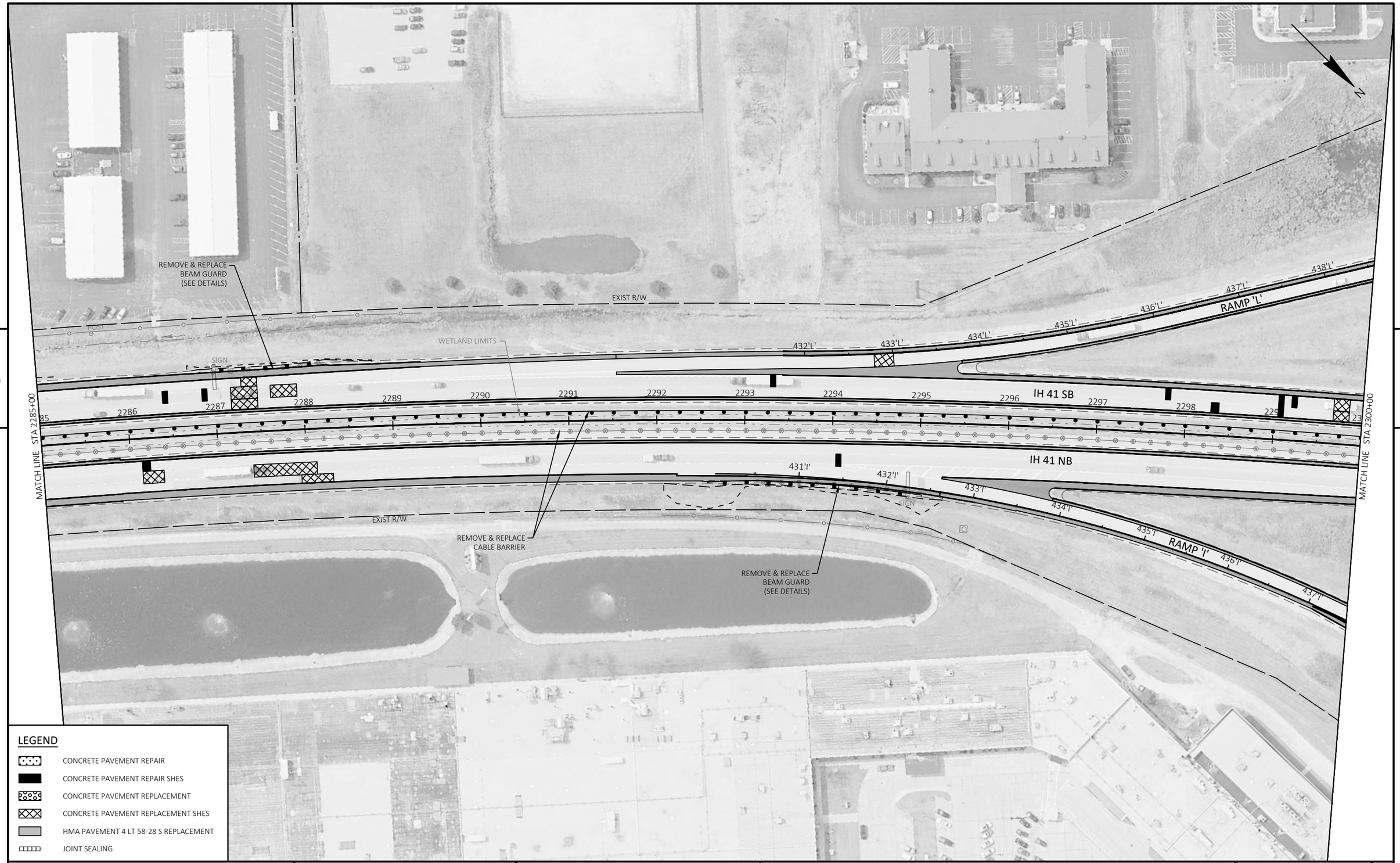
**VERTICAL DATUM REFERENCED TO NAVD88 (2012).

LEGEND

- CONCRETE PAVEMENT REPAIR
- CONCRETE PAVEMENT REPAIR SHES
- CONCRETE PAVEMENT REPLACEMENT
- CONCRETE PAVEMENT REPLACEMENT SHES
- HMA PAVEMENT 4 LT 58-28 S REPLACEMENT
- JOINT SEALING

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PLAN - IH 41	SHEET 153	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050101-PN.DWG
LAYOUT NAME - Sheet-09
PLOT DATE : 7/28/2026 5:25 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PLAN - IH 41	SHEET 154	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050101-PN.DWG
LAYOUT NAME - Sheet-10

PLOT DATE : 7/28/2026 5:25 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

CONTROL POINT TABLE			
POINT #	EASTING	NORTHING	ELEVATION
6383	809739.970	378786.454	792.041
6384	809614.098	378661.630	799.340

5

5

EXIST R/W

RAMP 'L'

RAMP 'K'

RAMP 'I'

RAMP 'J'

CTH D

MILITARY RD

IH 41 SB

IH 41 NB

CABLE BARRIER END TERMINAL

CABLE BARRIER LON POST STA 2303+67.5

CABLE BARRIER END TERMINAL

CABLE BARRIER LON POST STA 2305+55.0

CP 6384

CP 6383

B-20-113

WETLAND LIMITS

REMOVE & REPLACE CABLE BARRIER

REMOVE & REPLACE BEAM GUARD (SEE DETAILS)

REMOVE & REPLACE CABLE BARRIER

MATCH LINE STA 2300+00

MATCH LINE STA 2315+00

UT

SIGN

N

LEGEND

- CONCRETE PAVEMENT REPAIR
- CONCRETE PAVEMENT REPAIR SHES
- CONCRETE PAVEMENT REPLACEMENT
- CONCRETE PAVEMENT REPLACEMENT SHES
- HMA PAVEMENT 4 LT 58-28 S REPLACEMENT
- JOINT SEALING

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PLAN - IH 41	SHEET 155	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050101-PN.DWG
LAYOUT NAME - Sheet-11

PLOT DATE : 7/28/2026 5:25 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

5

5

MATCH LINE STA 2315+00

CTH VVV/ROLLING MEADOWS DR

EXIST R/W

CABLE BARRIER END TERMINAL STA 2319+08.1

CABLE BARRIER END TERMINAL STA 2319+63.9

455'K'

456'K'

457'K'

2315

2316

2317

2318

2319

EX 18" CMP

2320

2321

2322

2323

IH 41 SB

2324

2325

2326

2327

2328

2329

2330

NET LEC

FO

CABLE BARRIER LON POST STA 2327+09.6

CABLE BARRIER END TERMINAL

END CONSTRUCTION STA 2328+98.63

IH 41 NB

EX 18" RCP

MP

SIGN

453'J

454'J

REMOVE & REPLACE CABLE BARRIER

REMOVE & REPLACE CABLE BARRIER

SAN

W

EXIST R/W

CITY OF FOND DU LAC

CITY OF FOND DU LAC

END PROJECT STA 2328+39.91

CTH VV/PIONEER RD

EXIST R/W

N

LEGEND

- CONCRETE PAVEMENT REPAIR
- CONCRETE PAVEMENT REPAIR SHES
- CONCRETE PAVEMENT REPLACEMENT
- CONCRETE PAVEMENT REPLACEMENT SHES
- HMA PAVEMENT 4 LT 58-28 S REPLACEMENT
- JOINT SEALING

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	PLAN - IH 41	SHEET 156	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050101-PN.DWG
LAYOUT NAME - Sheet-12

PLOT DATE : 7/28/2026 5:26 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

N

MATCH LINE STA 37+00

HORSESHOE LN

MORRIS ST

BM H

BM I

TLE

EXIST R/W

TEMPORARY SLOPE INTERCEPT

TEMPORARY ROADWAY

TREE REMOVAL, TYP

WETLAND TYP.

CULVERT PIPE
TEMPORARY 18-INCH

TEMPORARY SLOPE INTERCEPT

35+41.59; 27.3 RT; EL=781.88
36+79.32; 23.1 RT; EL=773.50
140 LF OF CPT 18-INCH REQ'D

NOTE: TEMPORARY ACCESS LAYOUT FOR INFORMATION ONLY. LAYOUT TO BE TERMINED IN FIELD SUBJECT TO APPROVAL OF ENGINEER

BENCH MARKS

BM	DESCRIPTION	ELEVATION
H	SW BOLT (AT ARROW) ON FLANGE OF HYDRANT, NW CORNER OF MORRIS ST. AND HORSESHOE LN.	791.95
I	NW BOLT (BURY BOLT) ON FLANGE OF HYDRANT, N. SIDE OF HORSESHOE LN, 300' E. OF MORRIS ST.	789.96

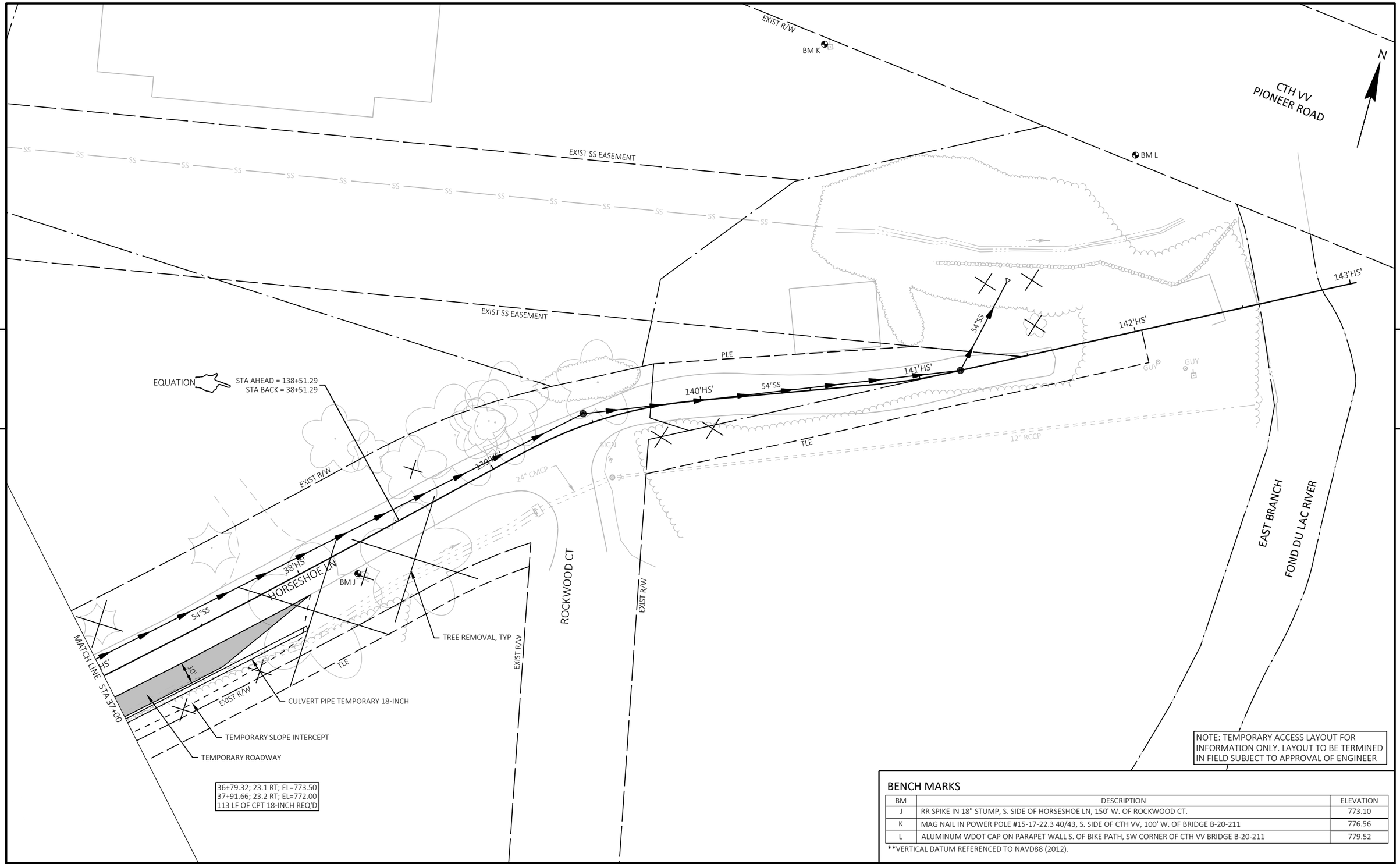
**VERTICAL DATUM REFERENCED TO NAVD88 (2012).

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	PLAN - HORSESHOE LANE - TEMPORARY	SHEET 157	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050201-PP.DWG
LAYOUT NAME - 01

PLOT DATE : 8/24/2026 9:45 AM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



5

5

NOTE: TEMPORARY ACCESS LAYOUT FOR INFORMATION ONLY. LAYOUT TO BE TERMINED IN FIELD SUBJECT TO APPROVAL OF ENGINEER

BENCH MARKS

BM	DESCRIPTION	ELEVATION
J	RR SPIKE IN 18" STUMP, S. SIDE OF HORSESHOE LN, 150' W. OF ROCKWOOD CT.	773.10
K	MAG NAIL IN POWER POLE #15-17-22.3 40/43, S. SIDE OF CTH VV, 100' W. OF BRIDGE B-20-211	776.56
L	ALUMINUM WDOT CAP ON PARAPET WALL S. OF BIKE PATH, SW CORNER OF CTH VV BRIDGE B-20-211	779.52

**VERTICAL DATUM REFERENCED TO NAVD88 (2012).

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	PLAN - HORSESHOE LANE - TEMPORARY	SHEET 158	E

BENCH MARKS

BM	DESCRIPTION	ELEVATION
H	SW BOLT (AT ARROW) ON FLANGE OF HYDRANT, NW CORNER OF MORRIS ST. AND HORSESHOE LN.	791.95

**VERTICAL DATUM REFERENCED TO NAVD88 (2012).

N

WISCONSIN CENTRAL LTD.

HORSESHOE LN

+08
18.5' CE
GRAV

+51
22' CE
ASPH

ALLIANT ENERGY

SPECTRUM

AT&T

EXIST R/W

25'HS'

26'HS'

27'HS'

28'HS'

29'HS'

30'

12'

18'

MATCH LINE STA 30'HS'+00

12" CMCP

54"SS

TREE REMOVAL, TYP

54"SS

EXIST R/W

TLE

SLOPE INTERCEPT, TYP.

+80
22' CE
ASPH

ALLIANT ENERGY

+70
77' CE
ASPH

27+52.00; 28.0 RT; EL=790.20
28+08.00; 28.0 RT; EL=789.80
56 LF OF CPCS 12-INCH REQ'D
2 - AEW REQ'D

29+22.00; 28.0 RT; EL=789.50
30+19.99; 27.0 RT; EL=789.20
98 LF OF CPCS 12-INCH REQ'D
2 - AEW REQ'D

5

5

VCL = 50.00'
K = 36.15

VPC STA 26'HS'+05.00
VPC EL 793.94

VPT STA 26'HS'+55.00
VPT EL 793.41

VPI STA 29'HS'+75.00
VPI EL 792.20

-1.76%

PROPOSED R/L PROFILE

-0.38%

EXISTING R/L PROFILE

VPI STA 25'HS'+00.00
VPI EL 795.79

VPI STA 26'HS'+30.00
VPI EL 793.50

VPC STA 29'HS'+25.00
VPC EL 792.39

VCL = 100.00'
K = 202.09

EXISTING PROFILE ELEVATIONS AT R/L
PROPOSED PROFILE ELEVATIONS AT R/L

795.79	**795.79**	795.35	**795.35**	794.91	**794.91**	794.47	**794.47**	794.03	**794.03**	793.64	**793.64**	793.43	**793.43**	793.33	**793.33**	793.24	**793.24**	793.14	**793.14**	793.05	**793.05**	792.95	**792.95**	792.86	**792.86**	792.77	**792.77**	792.67	**792.67**	792.58	**792.58**	792.48	**792.48**	792.39	**792.39**	792.28	**792.28**	792.14	**792.14**	791.97	**791.97**

798 796 794 792 790 788 786 784

24 25 26 27 28 29 30

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	PLAN AND PROFILE: HORSESHOE LANE - FINAL	SHEET 159	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050202-PP.DWG
LAYOUT NAME - 01

PLOT DATE : 7/28/2026 6:15 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

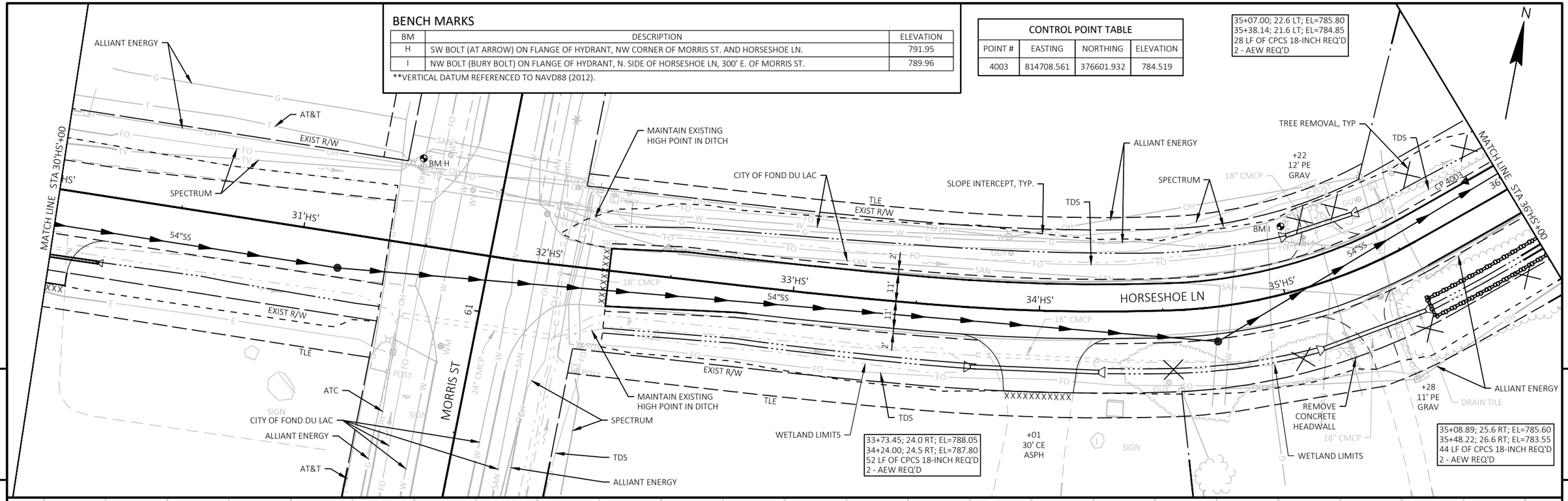
BENCH MARKS

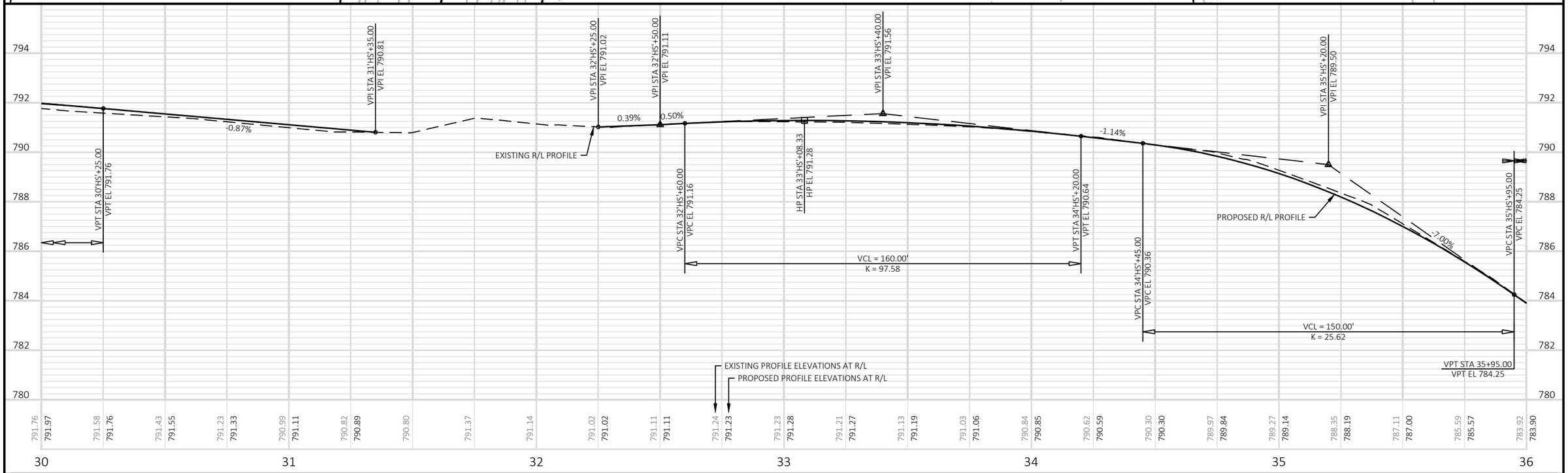
BM	DESCRIPTION	ELEVATION
H	SW BOLT (AT ARROW) ON FLANGE OF HYDRANT, NW CORNER OF MORRIS ST. AND HORSESHOE LN.	791.95
I	NW BOLT (BURY BOLT) ON FLANGE OF HYDRANT, N. SIDE OF HORSESHOE LN, 300' E. OF MORRIS ST.	789.96

**VERTICAL DATUM REFERENCED TO NAVD88 (2012).

CONTROL POINT TABLE			
POINT #	EASTING	NORTHING	ELEVATION
4003	814708.561	376601.932	784.519

35+07.00; 22.6 LT; EL=785.80
35+38.14; 21.6 LT; EL=784.85
28 LF OF CPCS 18-INCH REQ'D
2 - AEW REQ'D

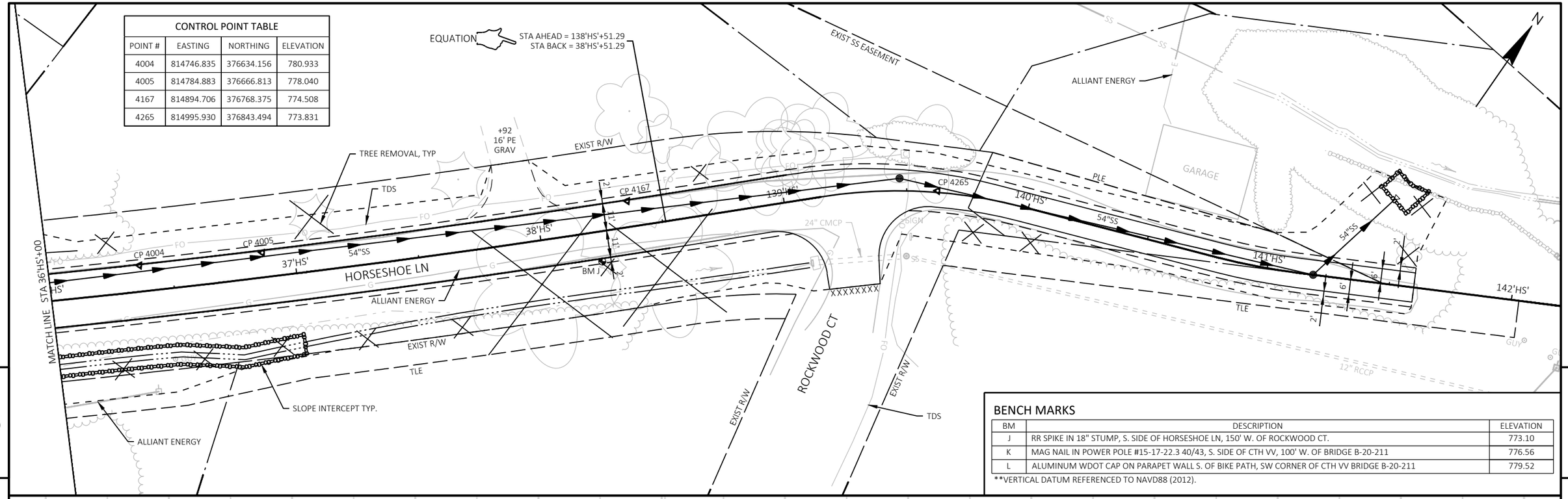




PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	PLAN AND PROFILE: HORSESHOE LANE - FINAL	SHEET 160 E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050202-PP.DWG
LAYOUT NAME - 02
PLOT DATE : 7/28/2026 6:15 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

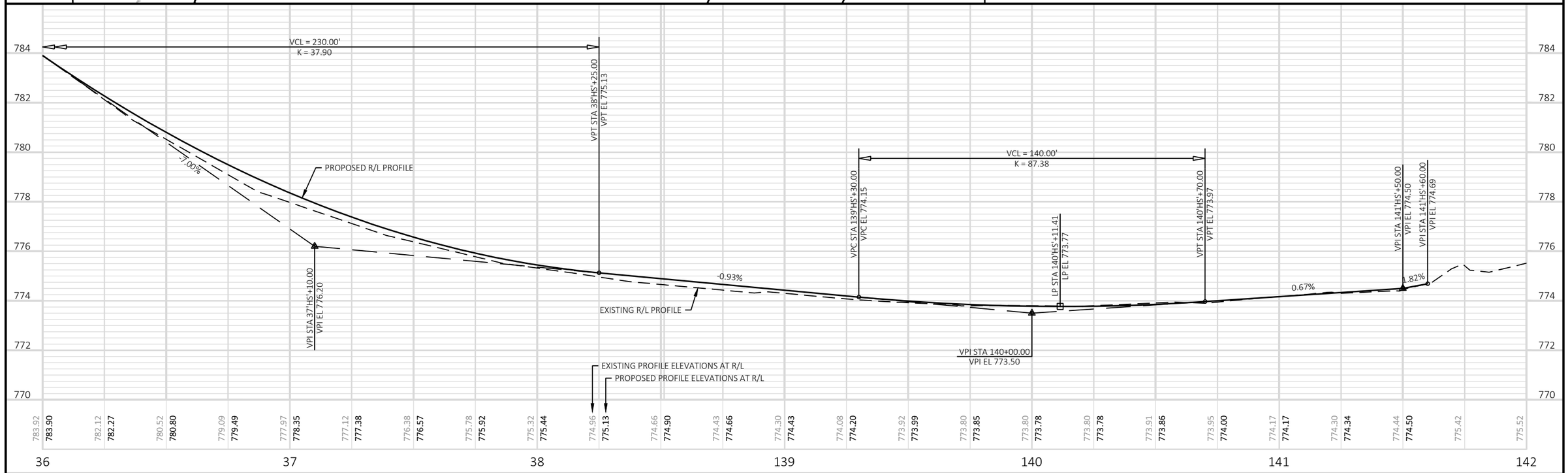
CONTROL POINT TABLE			
POINT #	EASTING	NORTHING	ELEVATION
4004	814746.835	376634.156	780.933
4005	814784.883	376666.813	778.040
4167	814894.706	376768.375	774.508
4265	814995.930	376843.494	773.831



BENCH MARKS

BM	DESCRIPTION	ELEVATION
J	RR SPIKE IN 18" STUMP, S. SIDE OF HORSESHOE LN, 150' W. OF ROCKWOOD CT.	773.10
K	MAG NAIL IN POWER POLE #15-17-22.3 40/43, S. SIDE OF CTH VV, 100' W. OF BRIDGE B-20-211	776.56
L	ALUMINUM WDOT CAP ON PARAPET WALL S. OF BIKE PATH, SW CORNER OF CTH VV BRIDGE B-20-211	779.52

**VERTICAL DATUM REFERENCED TO NAVD88 (2012).



PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	PLAN AND PROFILE: HORSESHOE LANE - FINAL	SHEET 161	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-050202-PP.DWG
LAYOUT NAME - 03
PLOT DATE : 7/28/2026 6:16 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

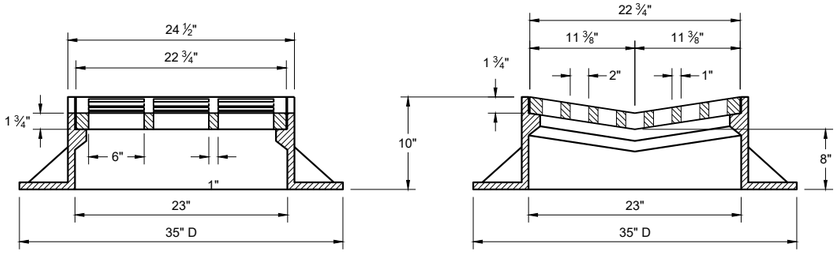
08A05-22B	INLET COVERS TYPE B, B-A, C, MS, MS-A, DW AND WM
08A05-22C	INLET COVERS TYPE F, HM, HM-S, S, T, HM-GJ AND HM-GJ-S
08A05-22D	INLET COVERS TYPE V, V-B, AND VV-B
08A05-22E	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L AND M
08B09-04	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER
08B11-03	MANHOLE VARIABLE TEE AND SPECIAL 4-FT DIAMETER
08C06-03	INLETS 3-FT AND 4-FT DIAMETER
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08C08-03	INLETS MEDIAN 1 AND 2 GRATE
08D01-24A	CONCRETE CURB AND GUTTER
08D01-24B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-08A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D04-07	CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPES A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A14-01	DRIVEWAYS WITHOUT CURB AND GUTTER
09B04-13	PULL BOX
11A01-06	MAINTENANCE CROSSOVER FOR FREEWAYS
13A05-06A	SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY
13A05-06B	SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY
13C09-18A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-18B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-18C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-18D	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
14B22-07A	CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE)
14B22-07B	CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE)
14B26-05A	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05B	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05C	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05D	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05E	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05F	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05G	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05H	STEEL THRIE BEAM BULLNOSE TERMINAL
14B32-11A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11C	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11E	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11F	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11G	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11H	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
14B35-02A	32-INCH SINGLE-FACED NJ SHAPE CONCRETE BARRIER TO 32-INCH SSCB TRANSITION
14B35-02B	32-INCH SINGLE-FACED NJ SHAPE CONCRETE BARRIER TO 32-INCH SSCB TRANSITION
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)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

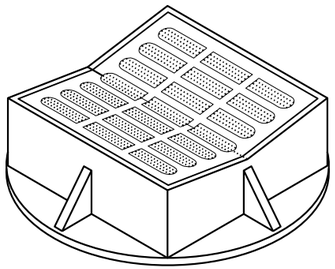
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Standard Detail Drawing List

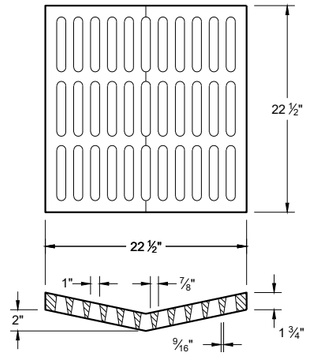
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-06A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06D	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06E	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06F	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06G	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B52-03A	CABLE BARRIER TYPE 1 LAYOUT
14B52-03B	CABLE BARRIER TYPE 1 LAYOUT
14B52-03C	CABLE BARRIER TYPE 1 LAYOUT
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15A04-08B	BARRIER WALL DELINEATOR WITH REFLECTIVE SHEETING
15A04-08C	DELINEATOR POST WITH REFLECTIVE SHEETING
15A04-08E	DELINEATOR POST WITH REFLECTIVE SHEETING
15B01-08A	FENCE WOVEN WIRE
15B01-08B	FENCE WOVEN WIRE
15C02-10A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-10B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-10C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-10D	ON RAMP LANE CLOSURE
15C02-10E	OFF RAMP LANE CLOSURE
15C02-10F	ADVANCED WIDTH RESTRICTION SIGNING
15C02-10G	TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE
15C02-10H	MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-16A	PAVEMENT MARKING SYMBOLS
15C07-16B	PAVEMENT MARKING WORDS
15C07-16C	PAVEMENT MARKING ARROWS
15C08-24A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C11-11B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C31-08A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-08B	PAVEMENT MARKING MAJOR SPLIT FREEWAY TO FREEWAY
15C31-08C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15C31-08D	PAVEMENT MARKING LANE DROP AND LANE REDUCTION
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C36-01	PARKING STALL MARKING
15D04-01	TRAFFIC CONTROL, RAMP CONSTRUCTION STAGING
15D12-17A	TRAFFIC CONTROL, LANE CLOSURE
15D12-17B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D12-17C	TRAFFIC CONTROL, DYNAMIC LATE MERGE SYSTEM
15D12-17D	TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
15D12-17E	TRAFFIC CONTROL, LANE CLOSURE, TRAFFIC QUEUE WARNING SYSTEM
15D12-17F	TRAFFIC CONTROL, LANE CLOSURE, WITH TEMPORARY TAPE RUMBLE STRIPS
15D12-17G	TRAFFIC CONTROL, LANE CLOSURE , DIGITAL SPEED REDUCTION SYSTEM
15D15-08A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-08B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-08C	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-08D	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-08E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D16-07	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D30-12A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D39-03	TRAFFIC CONTROL, DROP-OFF SIGNING
15D42-05	TRAFFIC CONTROL, TWO LANE FULL FREEWAY CLOSURE
15D47-03A	TRAFFIC CONTROL, INGRESS/EGRESS WITH BARRIER
15D47-03B	TRAFFIC CONTROL, INGRESS/EGRESS WITHOUT BARRIER

6





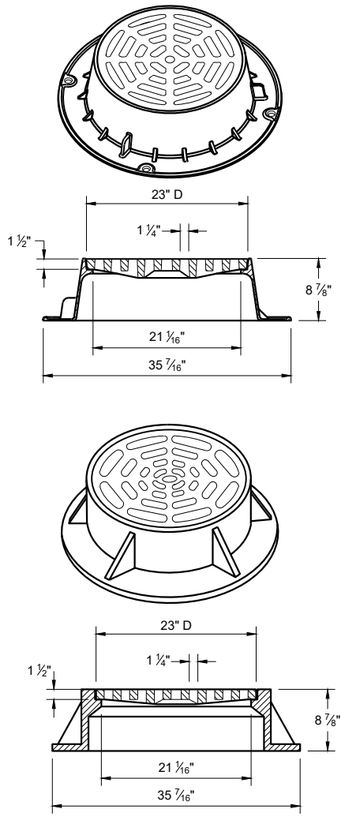
TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS POSSIBLE

NOTED AS TYPE B - A ON THE DRAINAGE TABLE



TYPE "C"

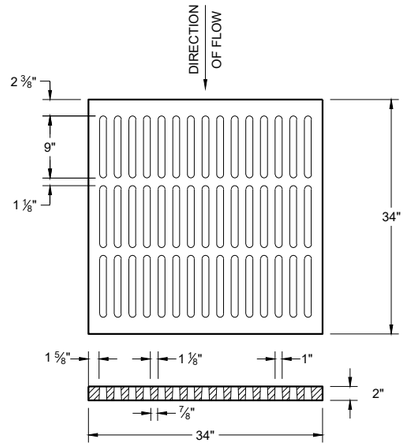
NOTE: EITHER CASTING IS ACCEPTABLE

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.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

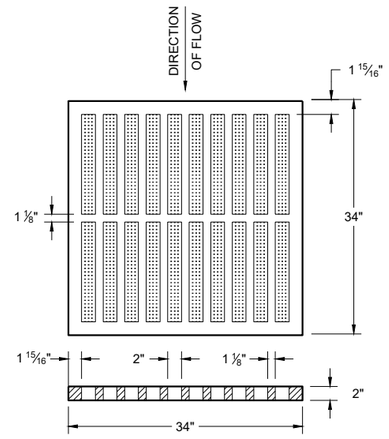
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS PERMITTED

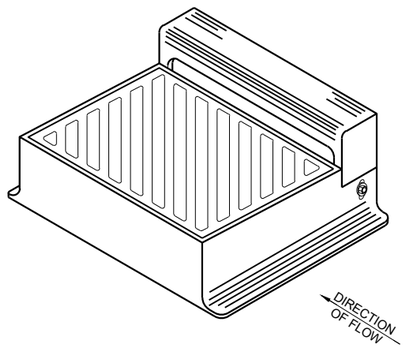
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



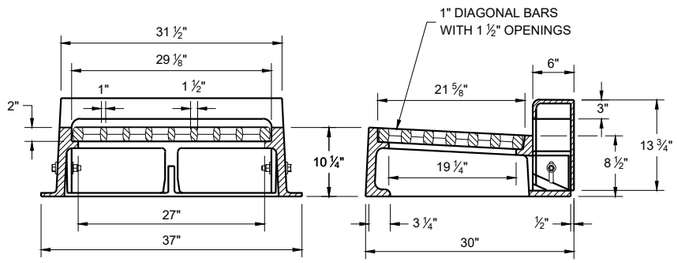
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON THE DRAINAGE TABLE

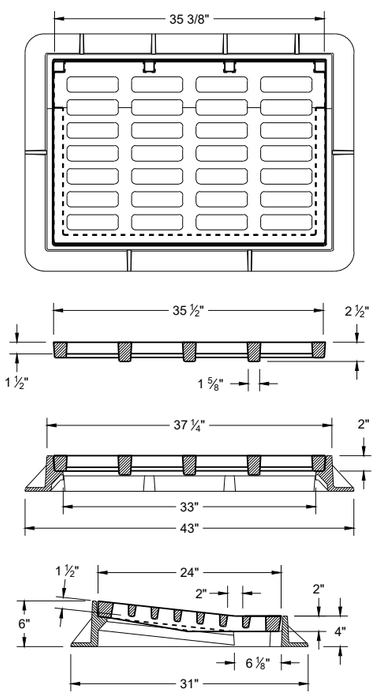


DIAGONAL SLOTS SHALL BE ORIENTEDTO THE DIRECTION OF FLOW AS ILLUSTRATED.
GRATES ARE MANUFACTURED TO BE REVERSIBLE.



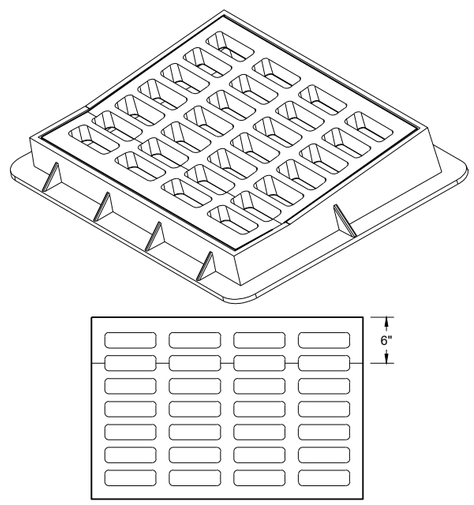
TYPE "WM"

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"



TYPE "DW"

NOTES: FOR USE IN A SUMP CONDITION. THIS OPTION IS ONLY TO BE USED IF NO OTHER INLETS ARE APPLICABLE.



INLET COVERS
TYPES B, B-A, C,
MS, MS-A ,DW AND WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

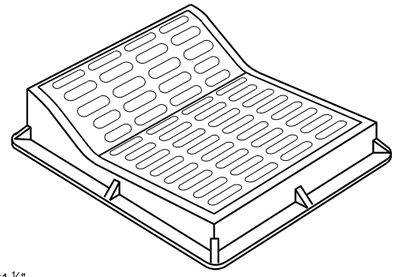
APPROVED
February 2025
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

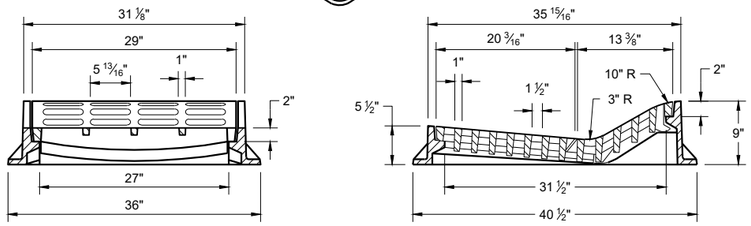
FHWA

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.

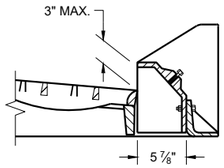
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.





TYPE "F"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

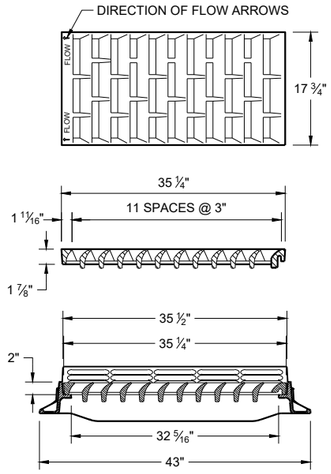


ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

USE WITH TYPES "G" AND "J" CONCRETE CURB AND GUTTER, 30 INCH
NOTED AS TYP "HM-GJ" ON DRAINAGE TABLE

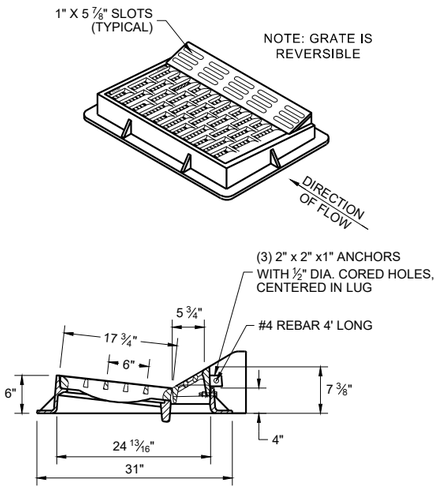
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.



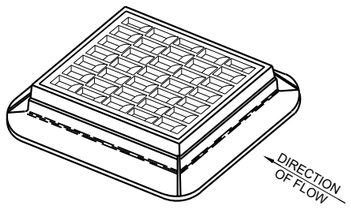
TYPE "HM"

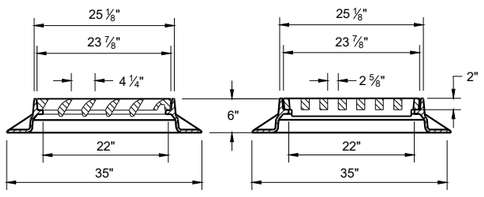
USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"



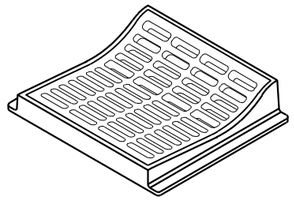
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

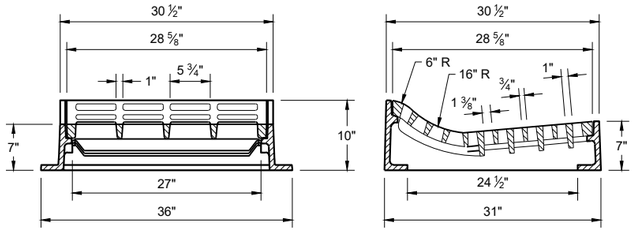
NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.





TYPE "S"





TYPE "T"

USE WITH TYPES "R" AND "T" CONCRETE CURB AND GUTTER, 36"

INLET COVERS
TYPES F, HM, HM-S, S, T, HM-GJ AND HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

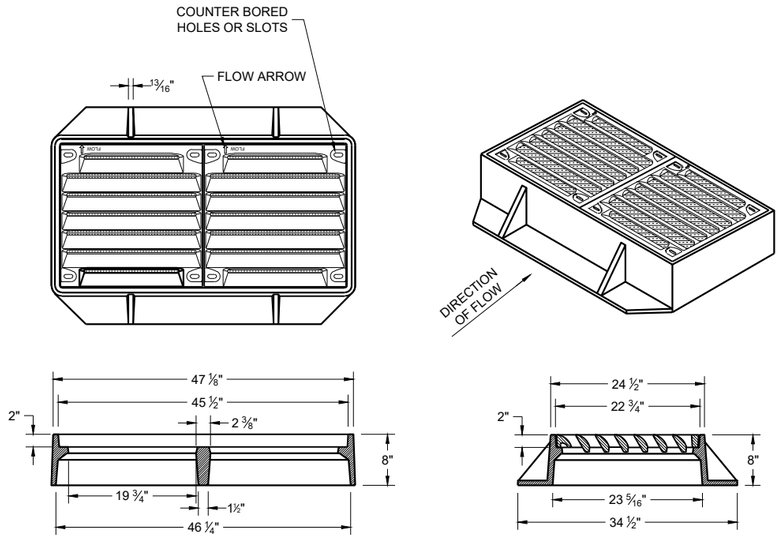
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SDD 08A05-22c

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.

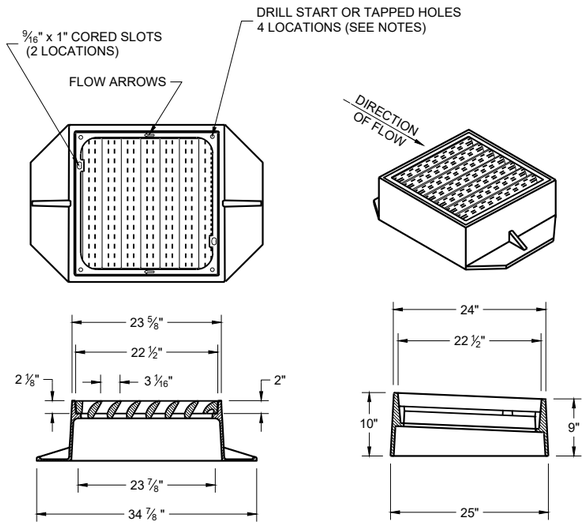
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



TYPE "VV-B"

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER
ALL DRILLING AND TAPPING GRATES AND FRAMES BY CASTING MANUFACTURER

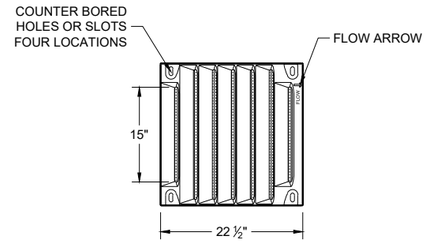
TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 35B
⅜" DIA. X 1/16" DRILL START IN 8 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



TYPE "V"

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER ALL DRILLING AND TAPPING GRATES AND FRAMES BY CASTING MANUFACTURER

TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A
⅜" DIA. X 1/16" DRILL START IN 4 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



BOLT DOWN GRATE FOR TYPE "V" AND "VV-B" COVER

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER NOTED AS TYPE "V-B" OR "VV-B" (FOR DOUBLE GRATE) ON DRAINAGE TABLE

TAP ½" -13 HOLES IN FOUR LOCATIONS PER GRATE IN FRAME TO BOLT GRATE(S).
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A

GRATE - CAST DUCTILE IRON ASTM A536, 55+KSI YIELD
BOLTS - ½" -13 STAINLESS STEEL BOLTS WITH WASHERS
TORQUE BOLTS TO MANUFACTURER SPECIFICATION DO NOT OVERTIGHTEN.

INLET COVERS
TYPES V, V-B, AND VV-B

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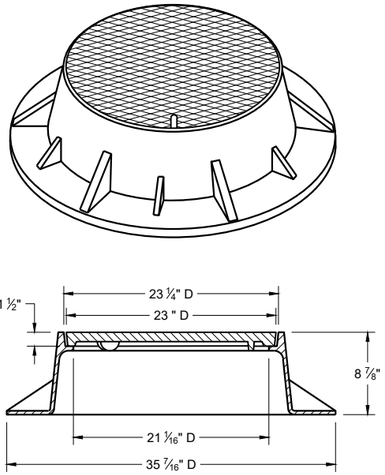
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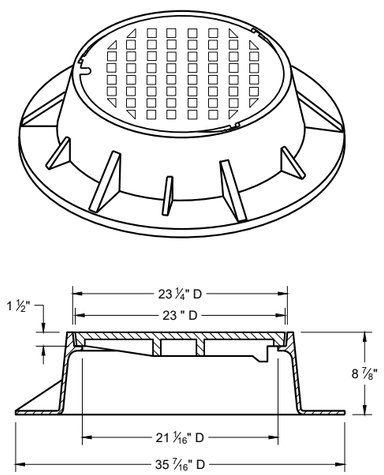
GENERAL NOTES

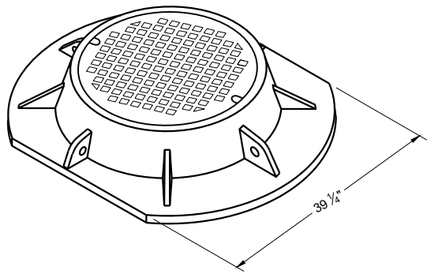
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

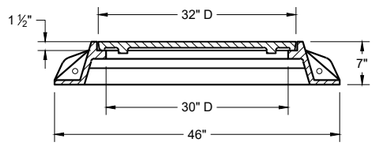
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

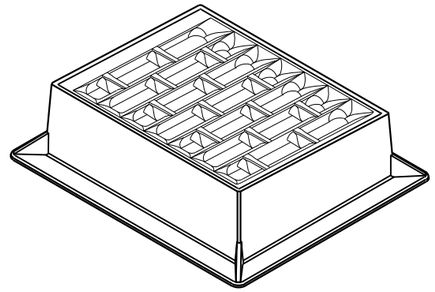


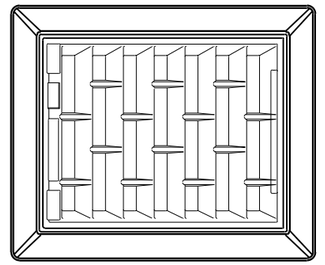


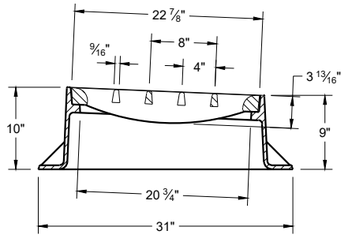


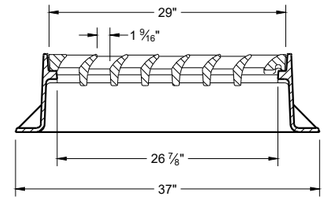


TYPE "K"

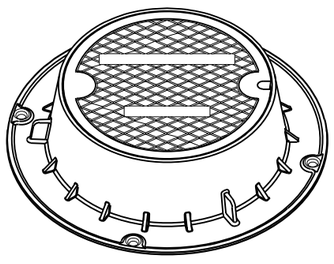


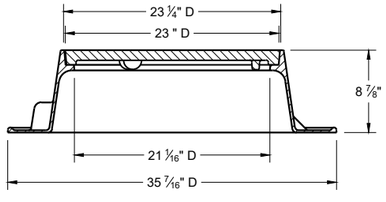






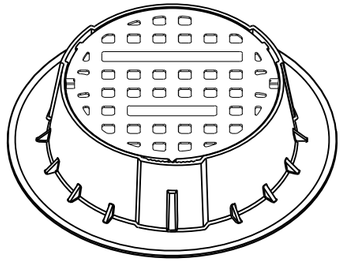
INLET COVER TYPE "BW"

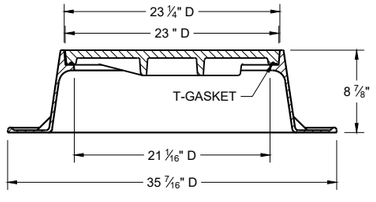




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

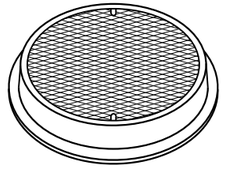


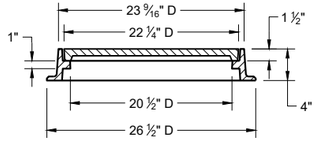


TYPE "J" SPECIAL

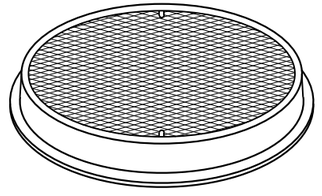
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

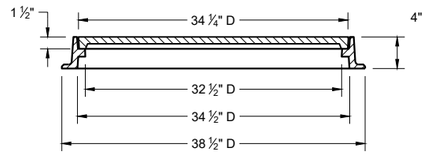
NOTE: EITHER CASTING IS ACCEPTABLE





TYPE "L"





TYPE "M"

INLET COVERS TYPES BW
MANHOLE COVERS TYPES K, J, J-S, L, AND M

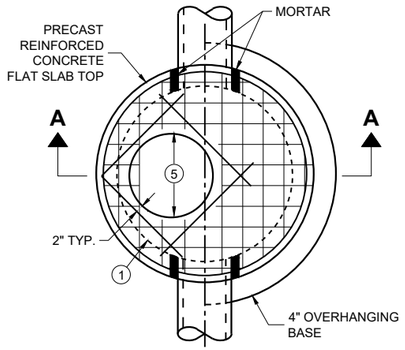
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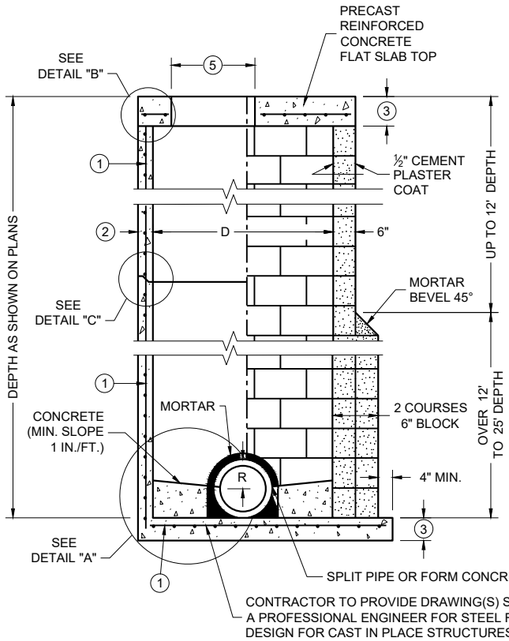
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PLAN VIEW

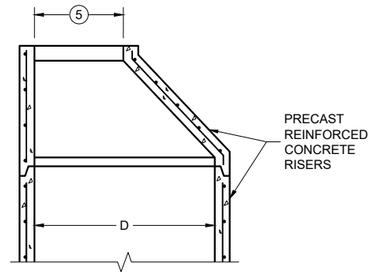
CIRCULAR OPENING



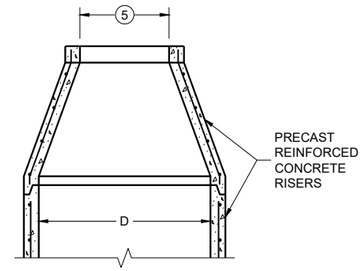
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

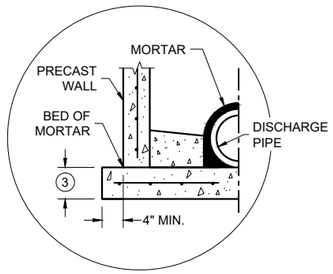
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)



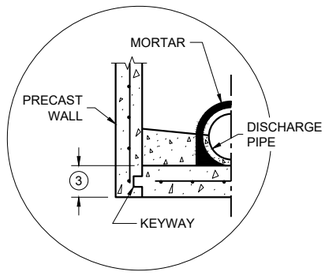
OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

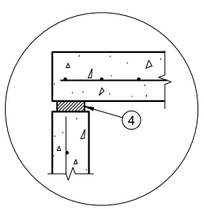


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

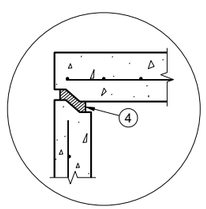


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

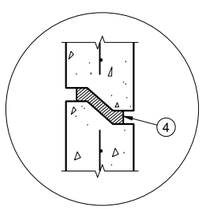
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

DETAIL "C"

MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) (5) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42 *	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL IMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

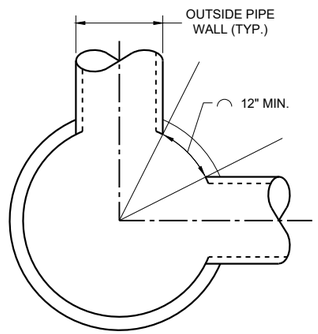
(1) FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.

(5) SEE MANHOLE COVER OPENING MATRIX.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

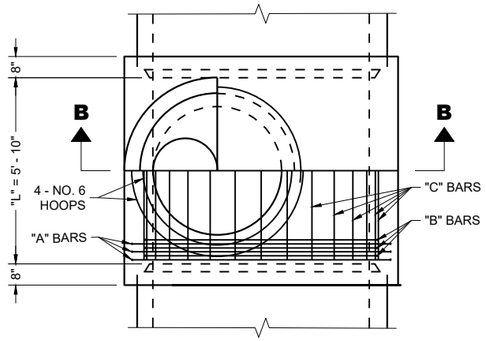
MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

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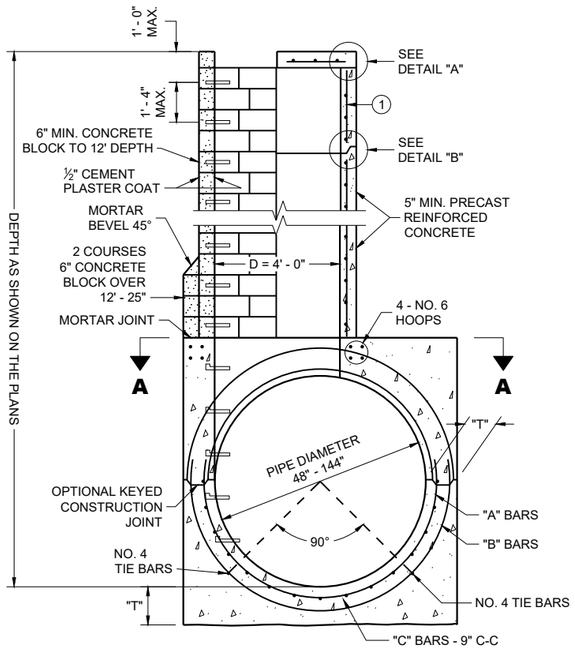
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MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER



HALF SECTION A - A



SECTION B - B

MANHOLE VARIABLE SPECIAL 4-FT DIAMETER

NOTES FOR MANHOLE VARIABLE SPECIAL 4-FT DIAMETER

NOTE: ALL "A", "B", AND "C" BAR STEEL REINFORCING IS THE SAME DIAMETER WHICH VARIES WITH DEPTH.

NO. 5 BARS TO 20' DEPTH
NO. 6 BARS OVER 20' TO 30' DEPTH
NO. 7 BARS OVER 30' TO 40' DEPTH

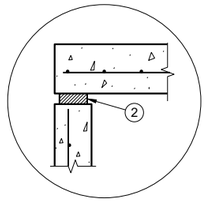
THE "A" AND "B" BARS MAY BE PLACED IN ONE OR TWO SEGMENTS, AND SHALL LAP 24 BAR DIAMETERS.

"C" BARS SHALL HAVE STANDARD HOOKED ENDS.

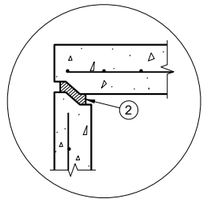
NOTE: "T" THROUGHOUT LENGTH "L" SHALL BE 13" FOR PIPE DIAMETER 48" TO 84" AND 15" FOR PIPE DIAMETER GREATER THAN 84".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT.)					
2 DIA.	X	X		X	
3 DIA.			X		X

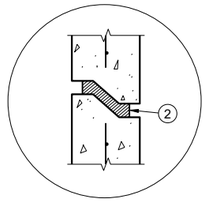


TOP WITH PLAIN END JOINT



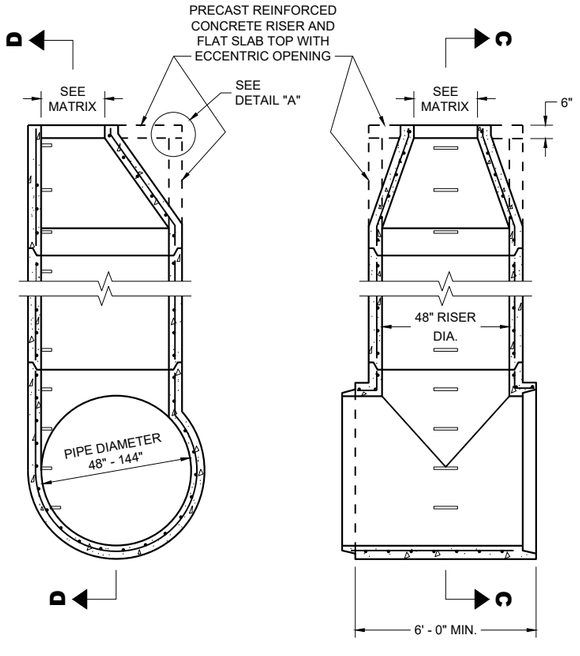
TOP WITH TONGUE AND GROOVE JOINT

DETAIL "A"



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



SECTION C - C **SECTION D - D**

MANHOLE VARIABLE TEE 4-FT DIAMETER

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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 4T-L", "MANHOLES 4S-M", ETC. THE VARIABLE TEE IS DENOTED BY 4T AND THE VARIABLE SPECIAL IS DENOTED BY 4S. THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES VER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES ROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE OR CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

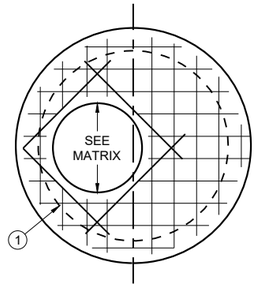
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST MANHOLES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO DESIGNATION M199.

(2) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.



PLAN VIEW

PRECAST REINFORCED CONCRETE FLAT SLAB TOP WITH ECCENTRIC OPENING

MANHOLE VARIABLE TEE AND SPECIAL 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

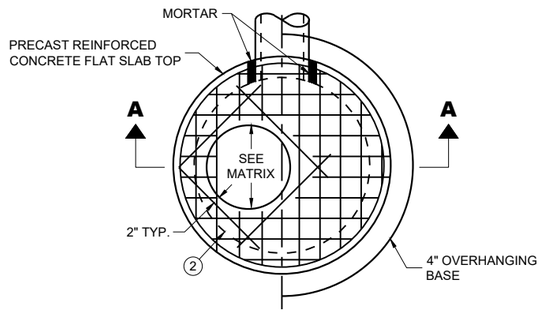
APPROVED
December 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

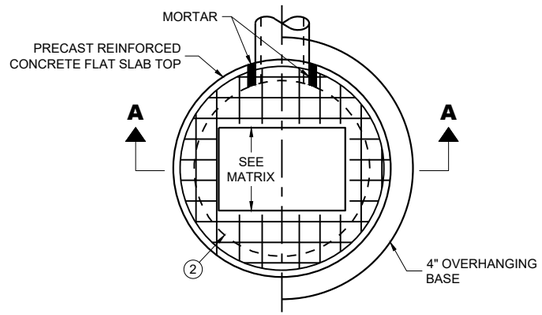
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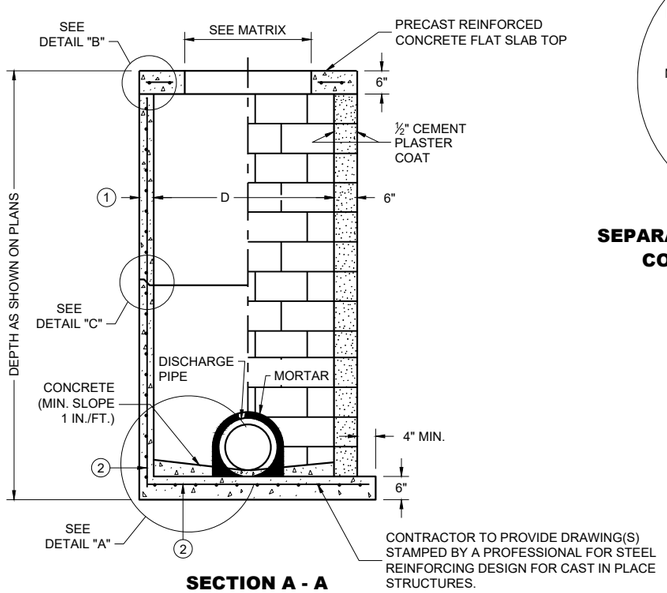
SDD 08B11-03



PLAN VIEW CIRCULAR OPENING



PLAN VIEW RECTANGULAR OPENING



SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (2)

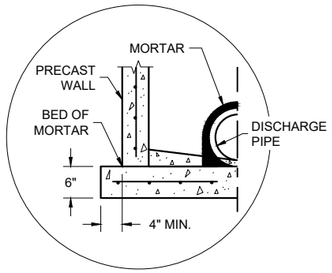
CIRCULAR INLETS WITH FLAT TOP

CATCH BASIN COVER OPENING MATRIX

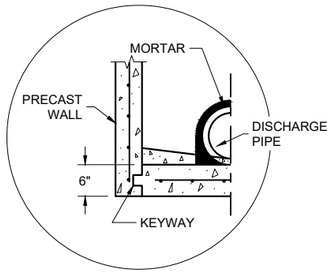
INLET SIZE	INLET COVER TYPE / OPENING SIZE (FT.)	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V V-B	WM	Z
3-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
4-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
	2 X 2.5			X				X	X	X	X	
	2 X 3						X					
	2.5 X 3					X						

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

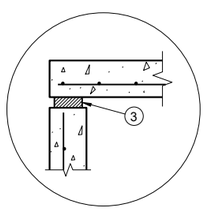


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

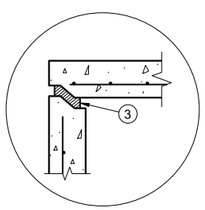


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

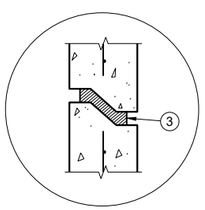
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

DETAIL "C"

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.

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DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

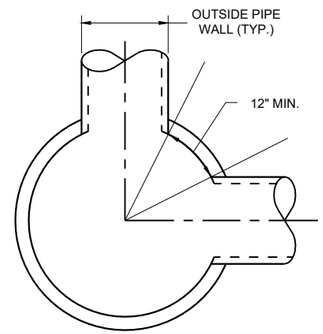
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

(1) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT DIAMETER AND 5 INCHES FOR 4-FT DIAMTER PRECAST INLETS.

(2) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(3) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.



MINIMUM HORIZONTAL PIPE SEPARATION

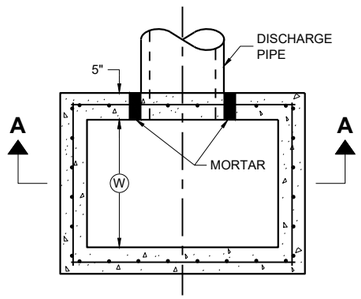
DETAIL "D"

INLETS 3-FT AND 4-FT DIAMETER

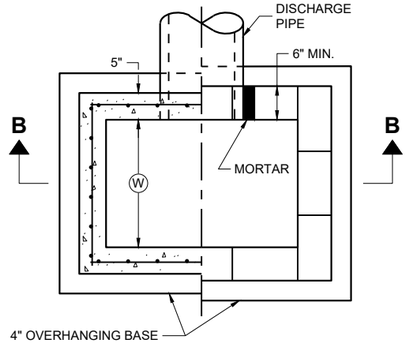
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

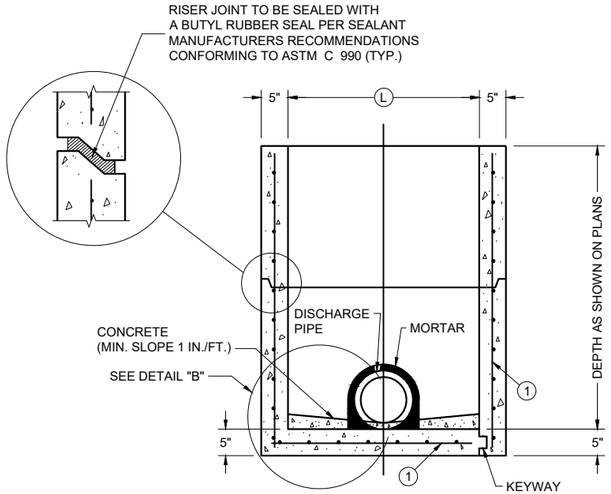
FHWA



PLAN VIEW



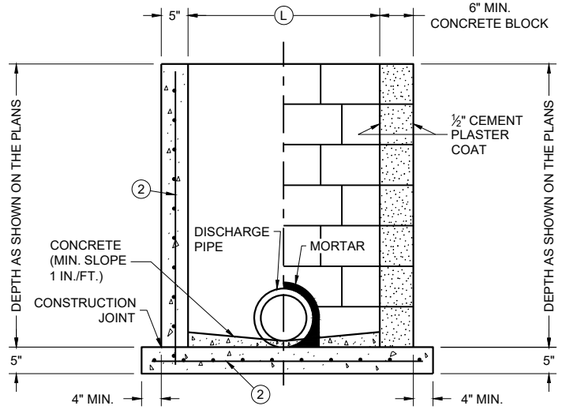
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

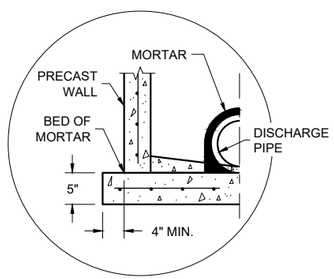
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

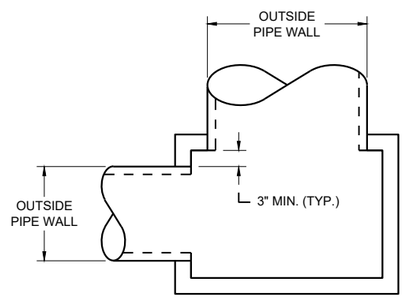
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

GENERAL NOTES

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ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

(1) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913
(2) CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

CATCH BASIN COVER MATRIX

INLET SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE									
			ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM	V V-B
2 X 2-FT	2	2	X	X				X				
2 X 2.5-FT	2	2.5			X			X	X	X	X	
2 X 3-FT	2	3					X					
2.5 X 3-FT	2.5	3				X						
2 X 3.5-FT	2	3.5										X

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2 X 2-FT	12	12
2 X 2.5-FT	12	18
2 X 3-FT	12	24
2.5 X 3-FT	18	24
2 X 3.5-FT	12	30

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT

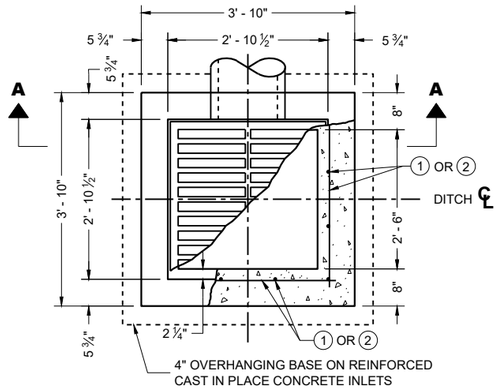
STATE OF WISCONSIN
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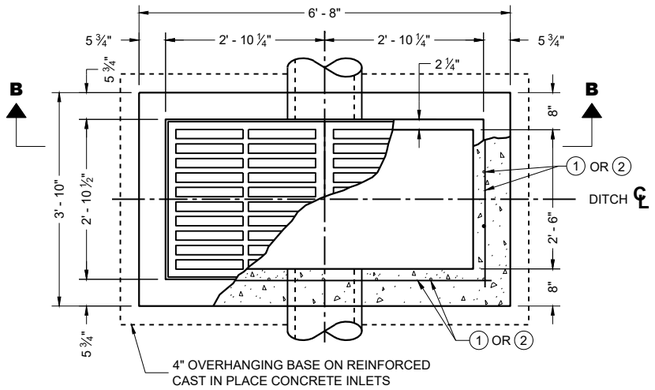
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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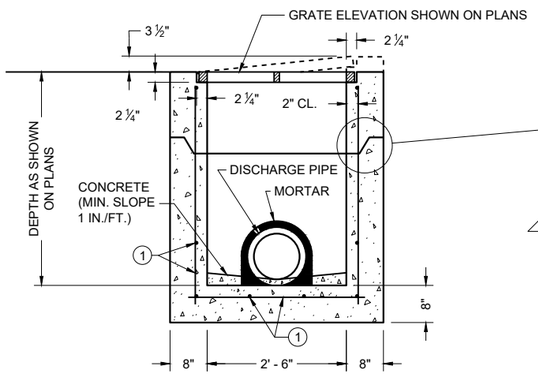
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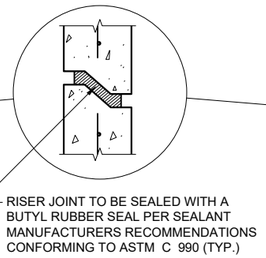
PLAN VIEW

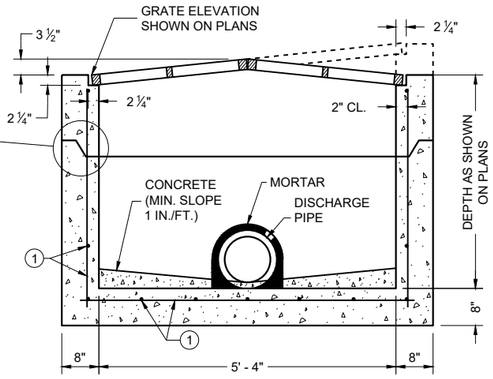


PLAN VIEW

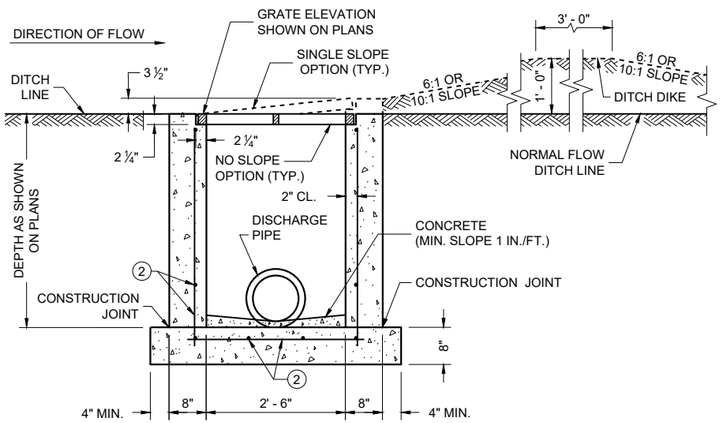


PRECAST REINFORCED CONCRETE SECTION A - A



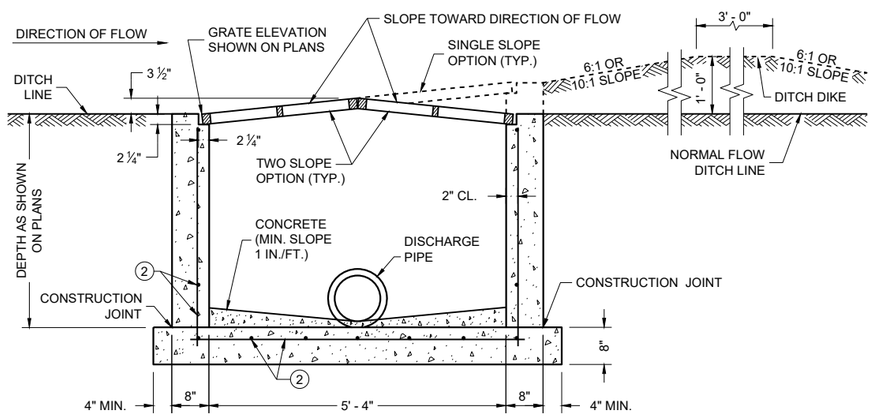


PRECAST REINFORCED CONCRETE SECTION B - B



REINFORCED CAST IN PLACE CONCRETE SECTION A - A

INLETS MEDIAN 1 GRATE



REINFORCED CAST IN PLACE CONCRETE SECTION B - B

INLETS MEDIAN 2 GRATE

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ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

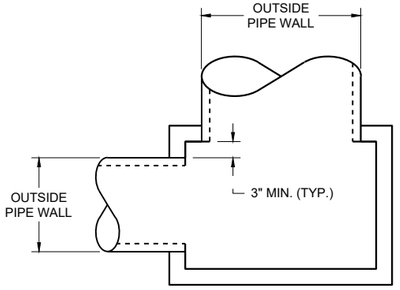
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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(2) CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.



DETAIL "A"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42

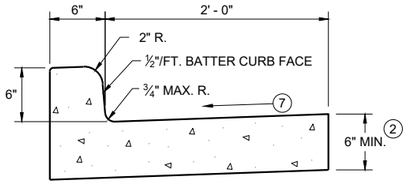
INLETS
MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

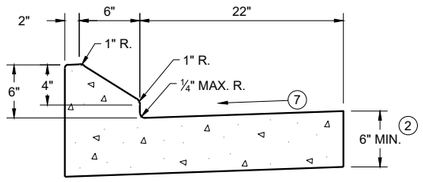
APPROVED
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/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

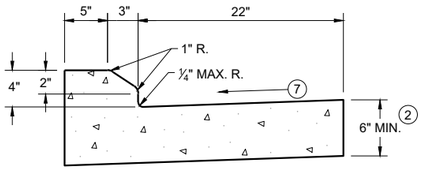
6
SDD 08C08-03



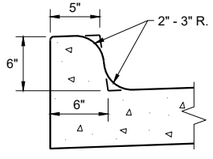
TYPES A (1) & D



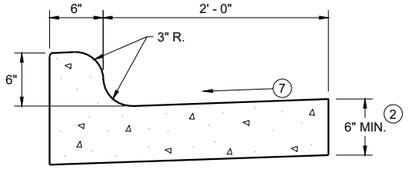
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

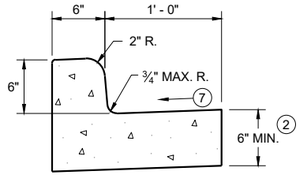


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



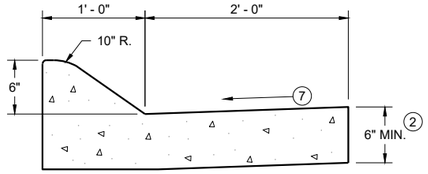
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

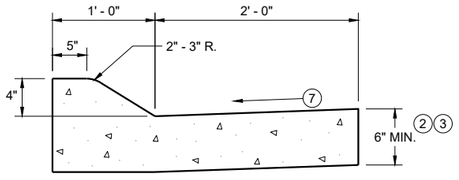


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

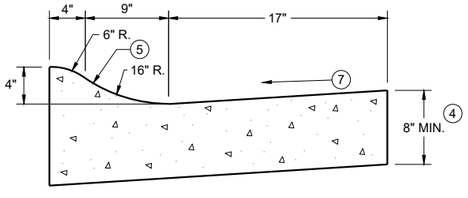


6" SLOPED CURB TYPES A (1) & D



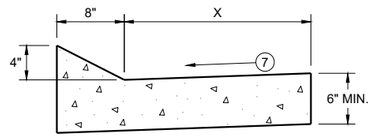
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T
CONCRETE CURB AND GUTTER 30"

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

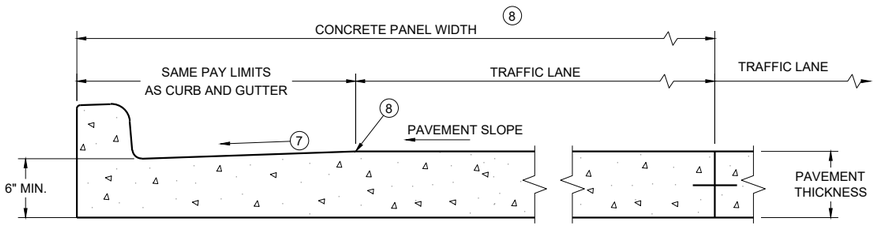


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

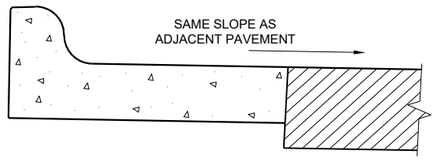
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER *

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

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

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

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

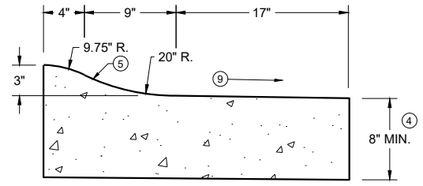
(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

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

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

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

(9) SLOPE TO BE REVERSE SLOPE MATCHING THE SLOPE OF THE PAVEMENT AND THE CIRCULATORY ROADWAY

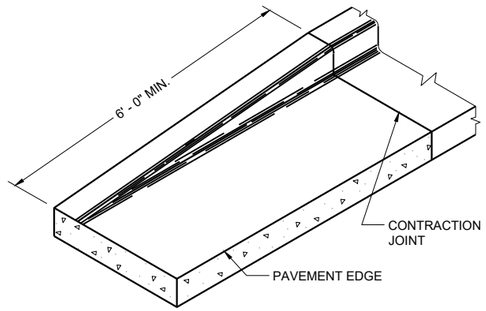


3" SLOPED CURB TYPES R (1) & T

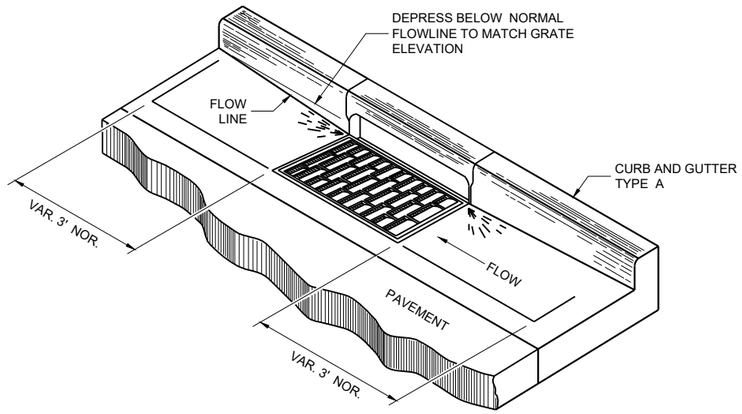
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-24a



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

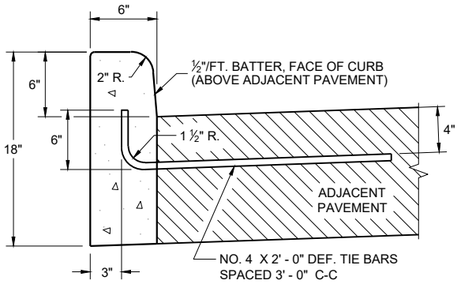
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

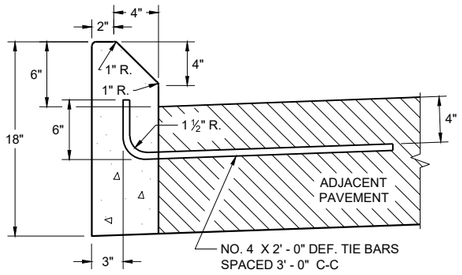
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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

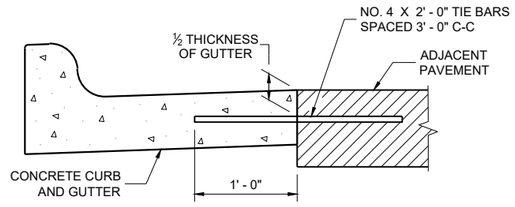


TYPES A (1) & D

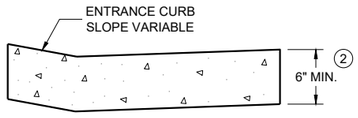


TYPES G (1) & J

CONCRETE CURB

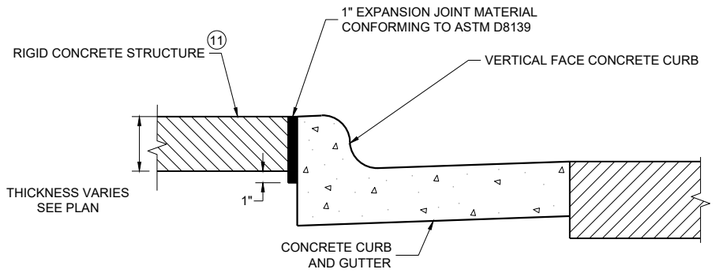


TYPICAL TIE BAR LOCATION (1)

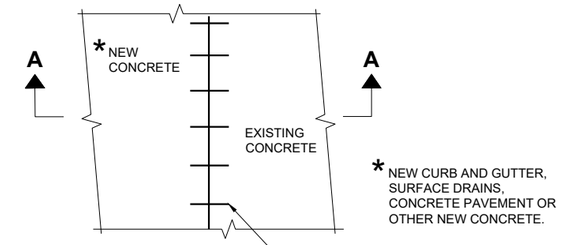


DRIVEWAY ENTRANCE CURB (10)

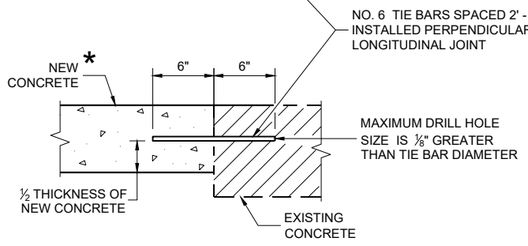
(WHEN DIRECTED BY THE ENGINEER)



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6
SDD 08D01-24b

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.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

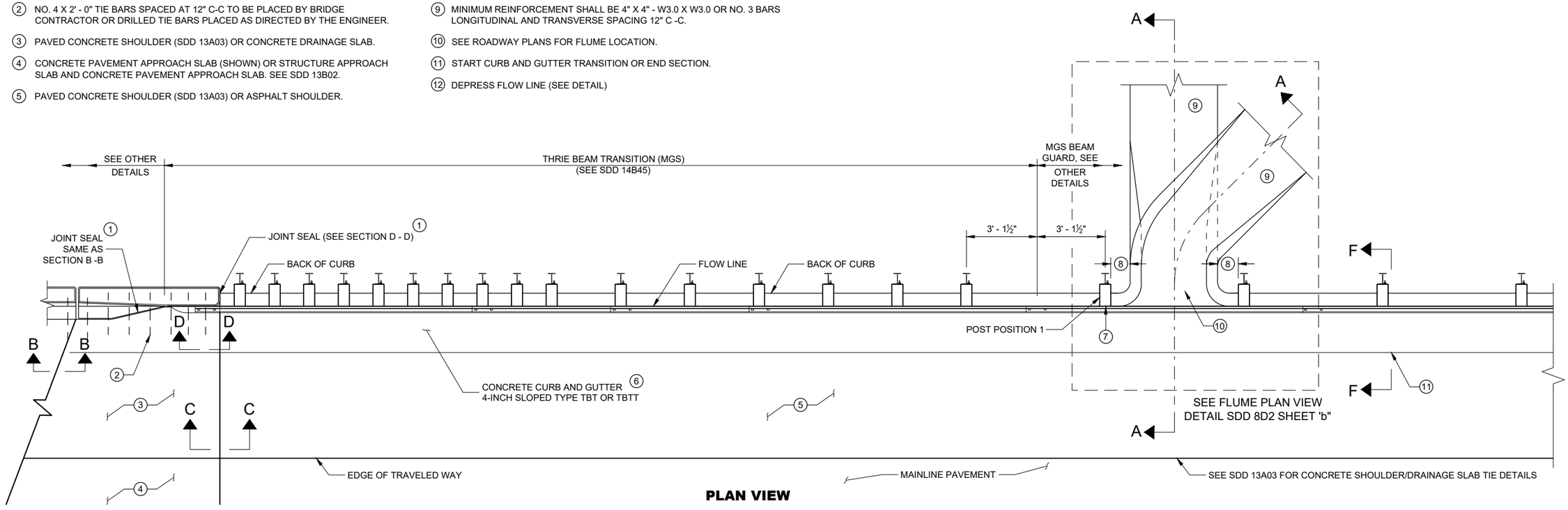
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

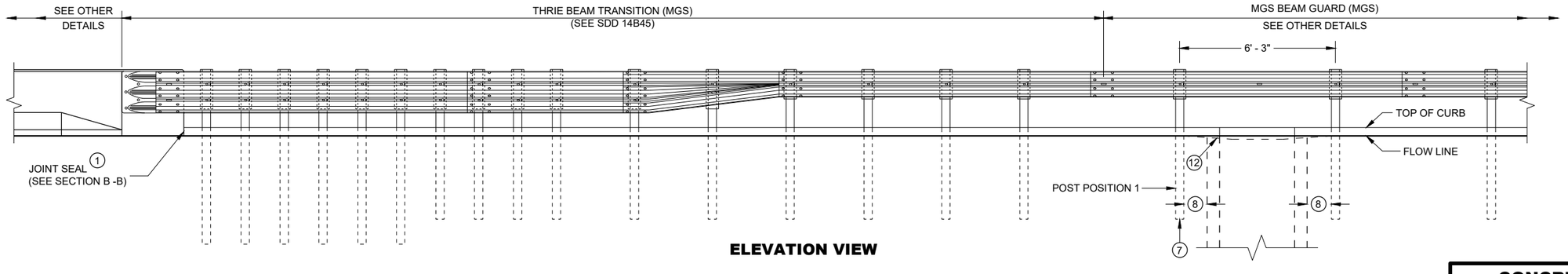
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



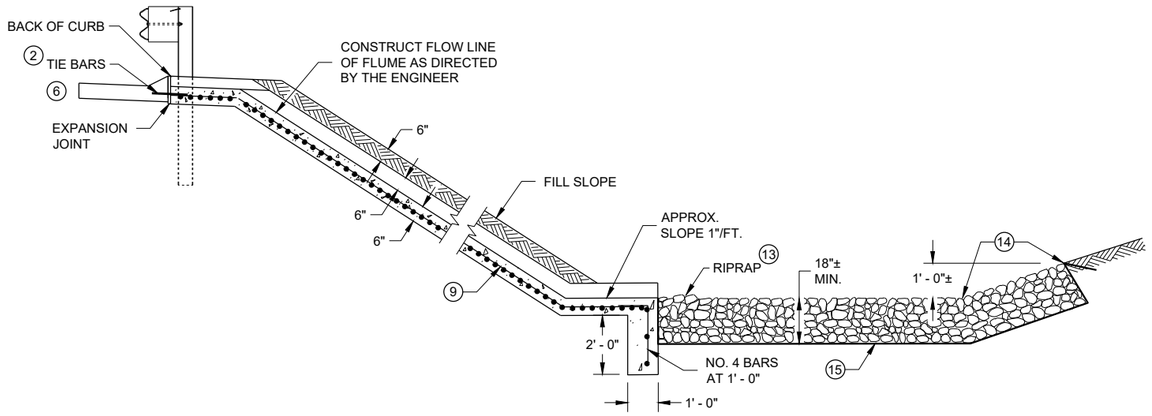
ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

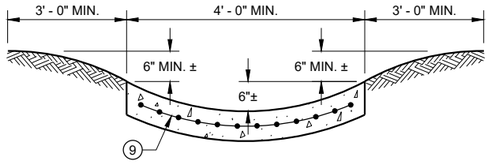
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D02 - 08a

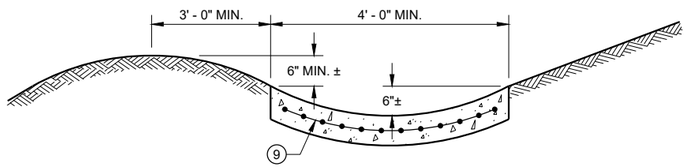
SDD 08D02 - 08a



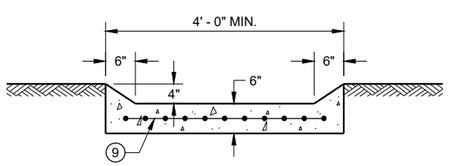
SECTION A - A



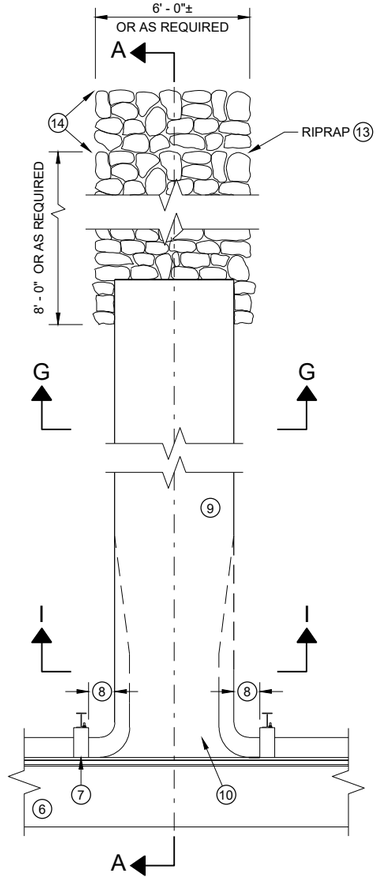
SECTION G - G



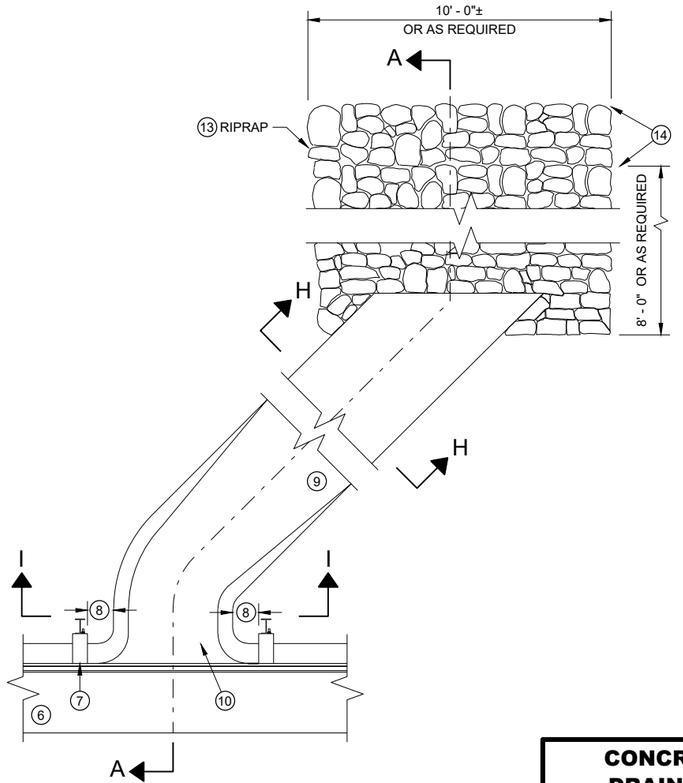
SECTION H - H



SECTION I - I



PLAN VIEW PERPENDICULAR FLUME



PLAN VIEW SKEWED FLUME

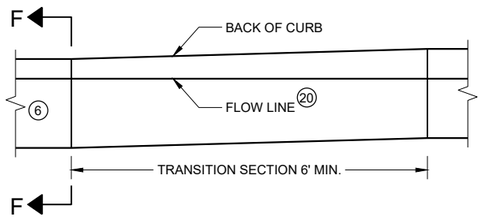
GENERAL NOTES

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.

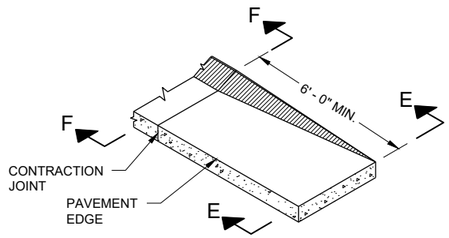
ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

1. USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
2. NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
3. PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.
4. CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.
5. PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.
6. CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.
7. PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)
8. CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.
9. MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.
10. SEE ROADWAY PLANS FOR FLUME LOCATION.
11. START CURB AND GUTTER TRANSITION OR END SECTION.
12. DEPRESS FLOW LINE (SEE DETAIL)
13. MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.
14. LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH AS REQUIRED.
15. GEOTEXTILE TYPE HR.

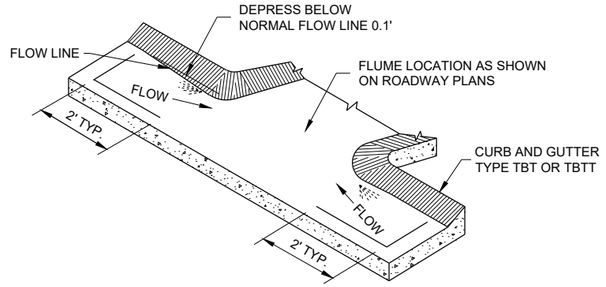
CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES



**CURB AND GUTTER TRANSITION SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT**



**CURB AND GUTTER END SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT**



**CURB AND GUTTER FLOW LINE DEPRESSION
AT FLUMES CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE TBT OR TBTT**

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.

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(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)

(13) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(14) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(15) GEOTEXTILE TYPE HR.

(16) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C - C.

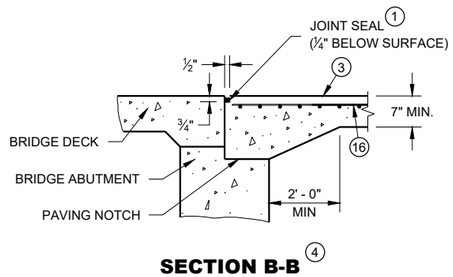
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(18) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

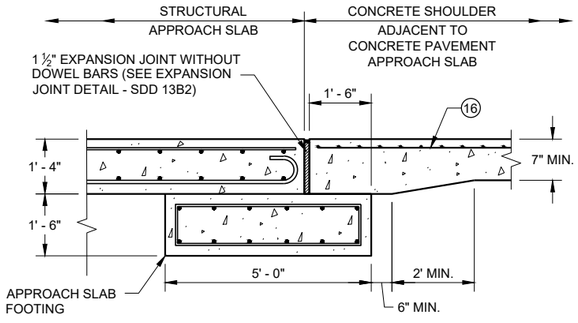
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

(20) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

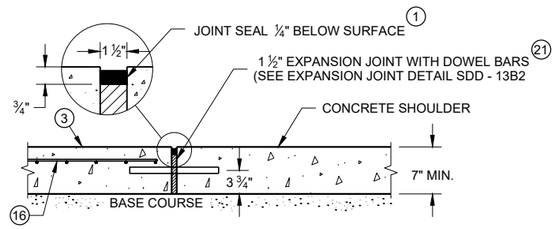
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



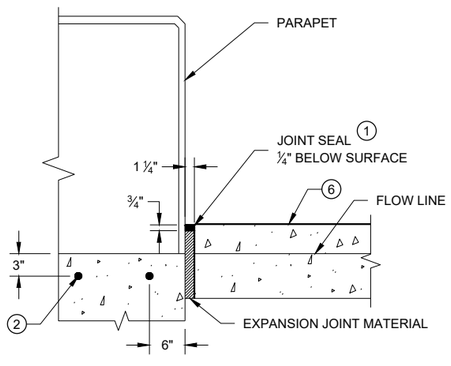
SECTION B-B (4)



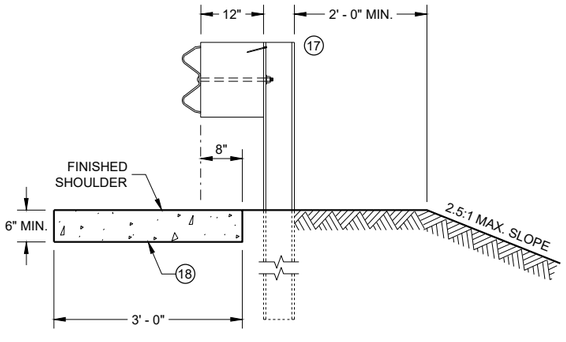
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



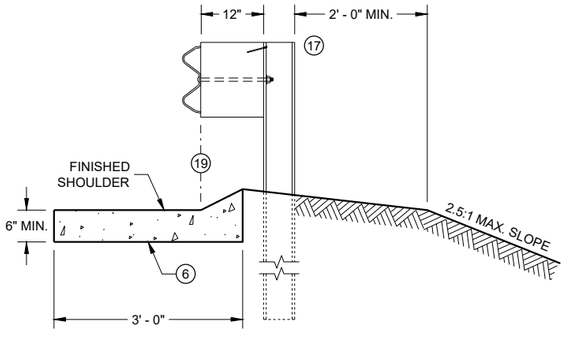
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

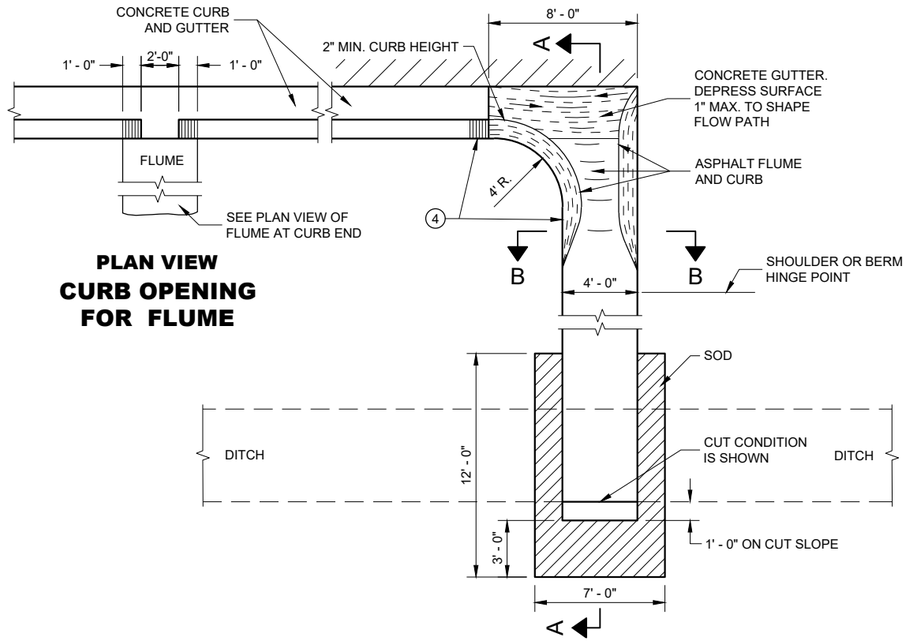
SDD 08D02 - 08c

6

SDD 08D02 - 08c

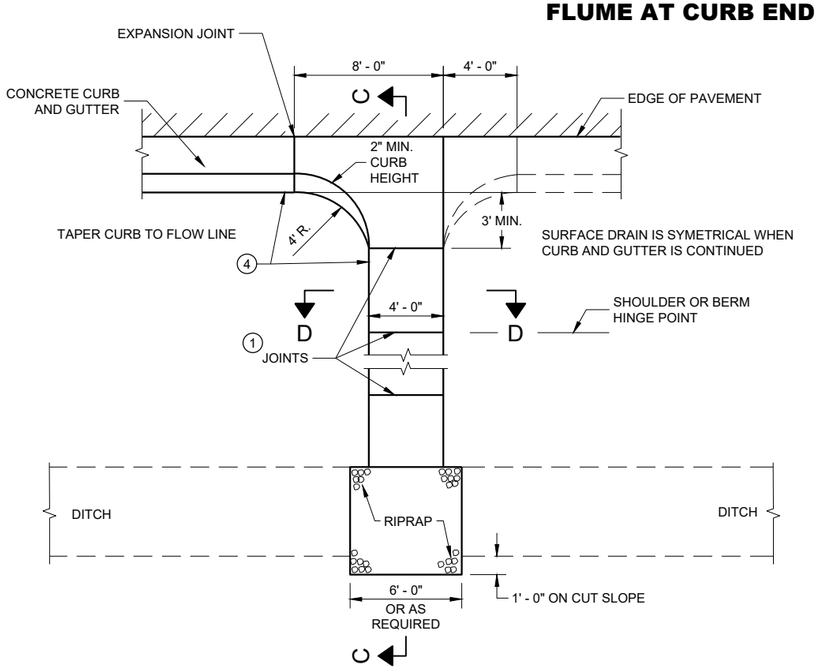
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



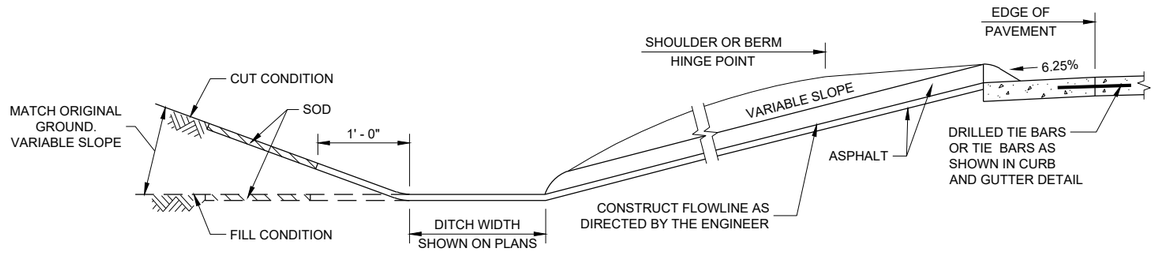
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

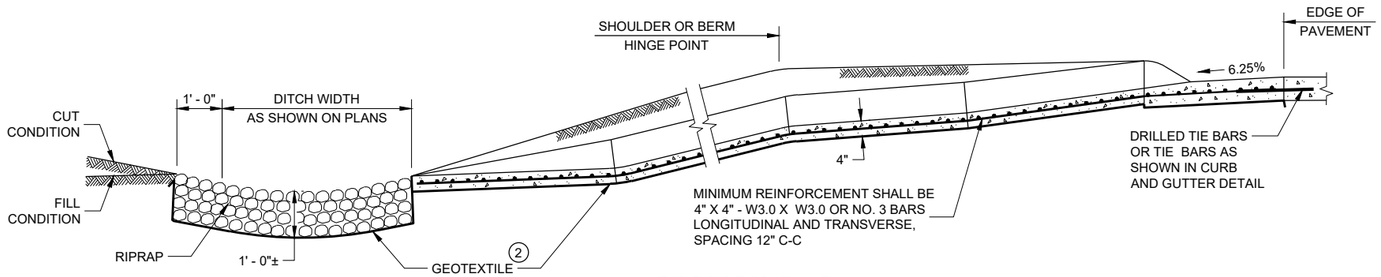
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

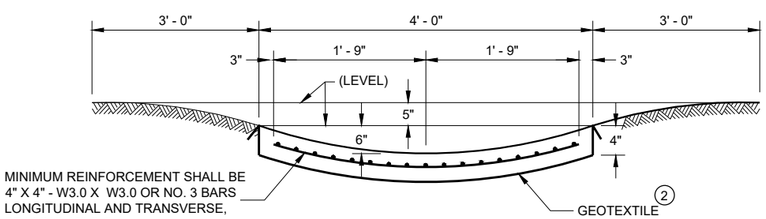


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

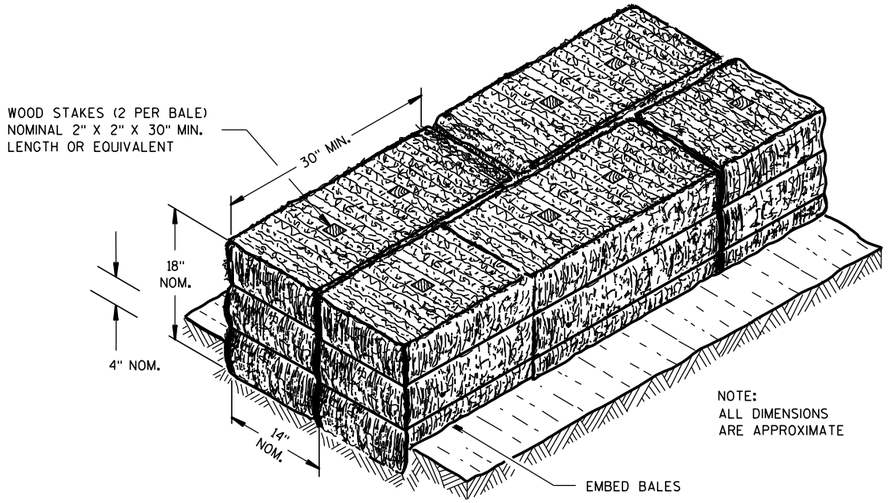
FHWA

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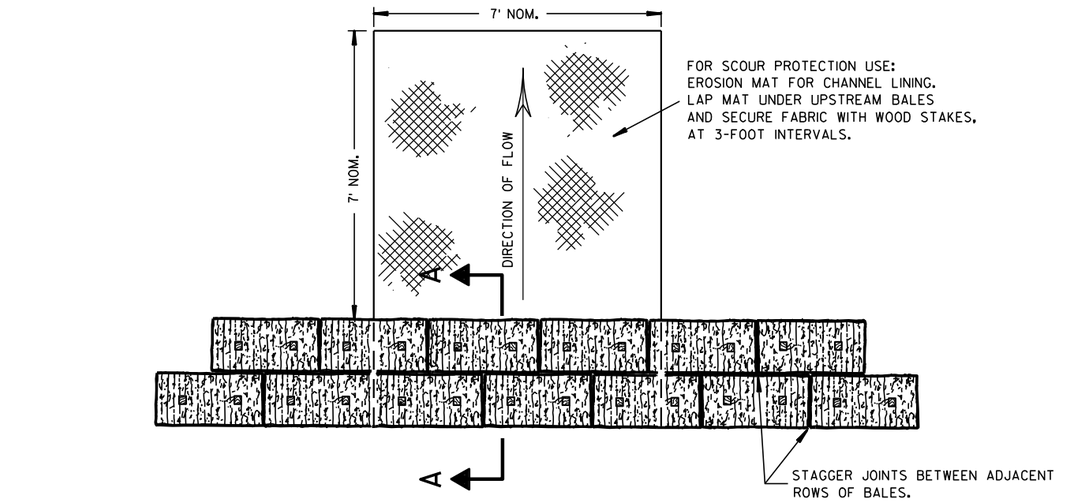
SDD 08D04 - 07

6

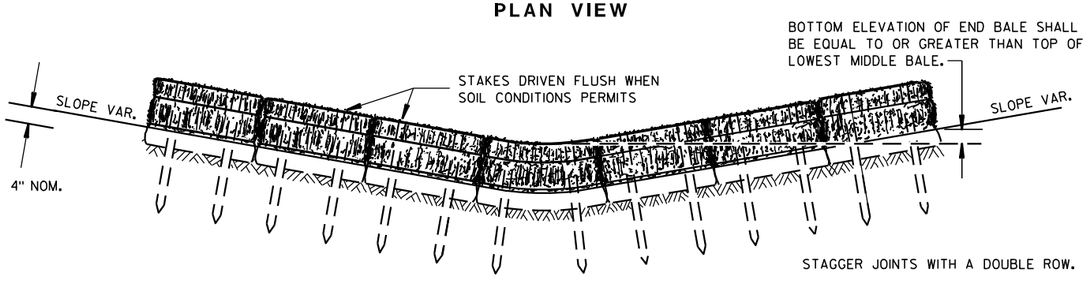
SDD 08D04 - 07



SECTION A-A



PLAN VIEW



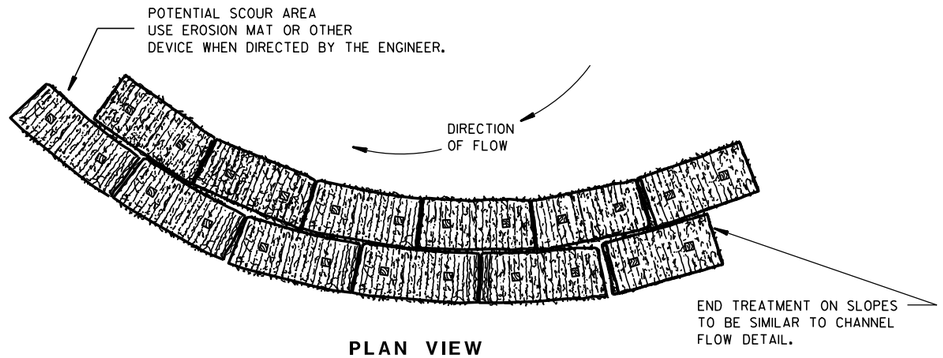
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

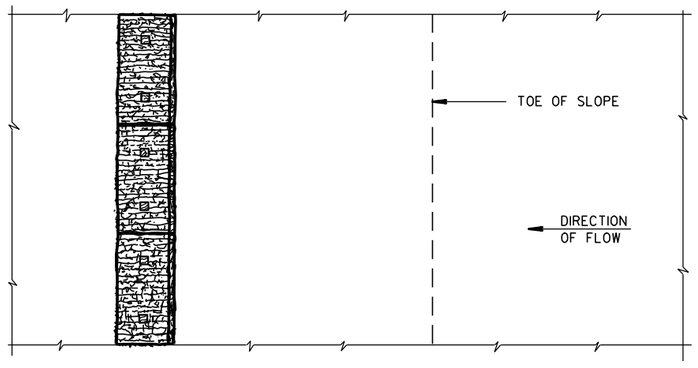
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

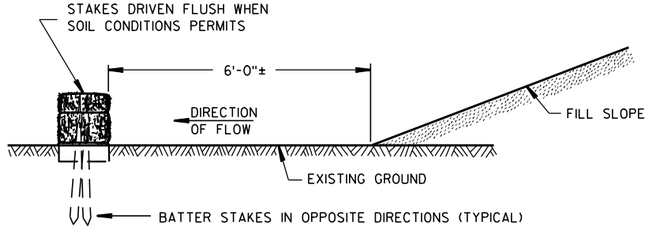


PLAN VIEW

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

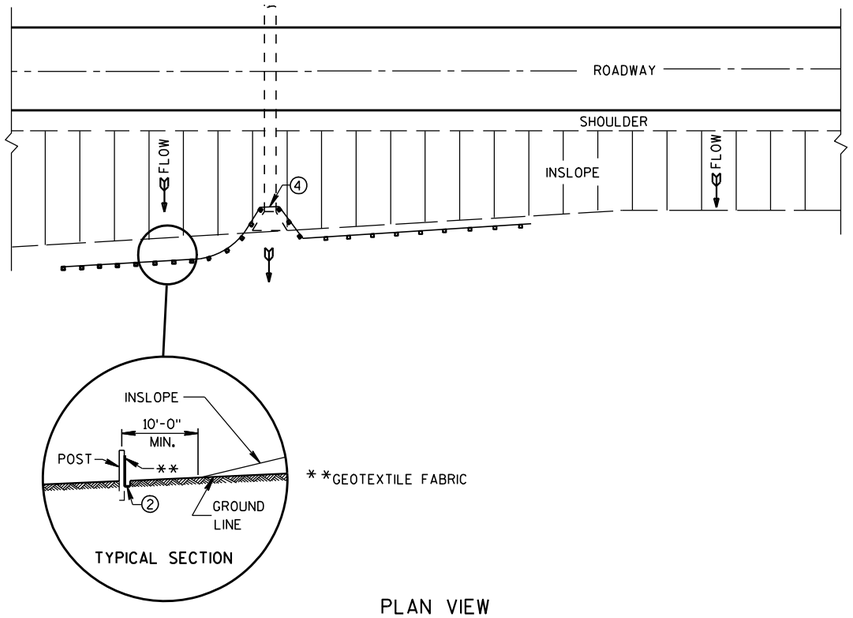
APPROVED
6/04/02 DATE
/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

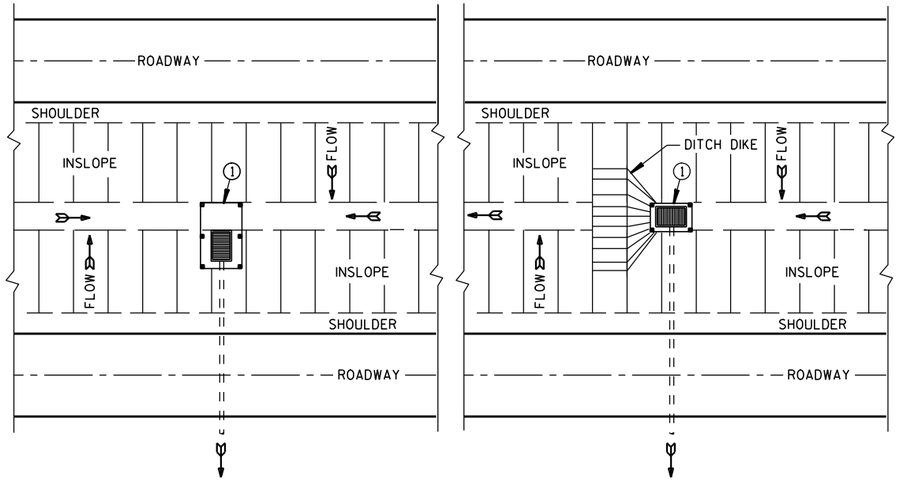
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



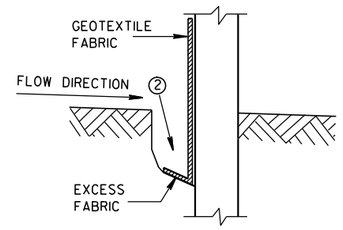
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

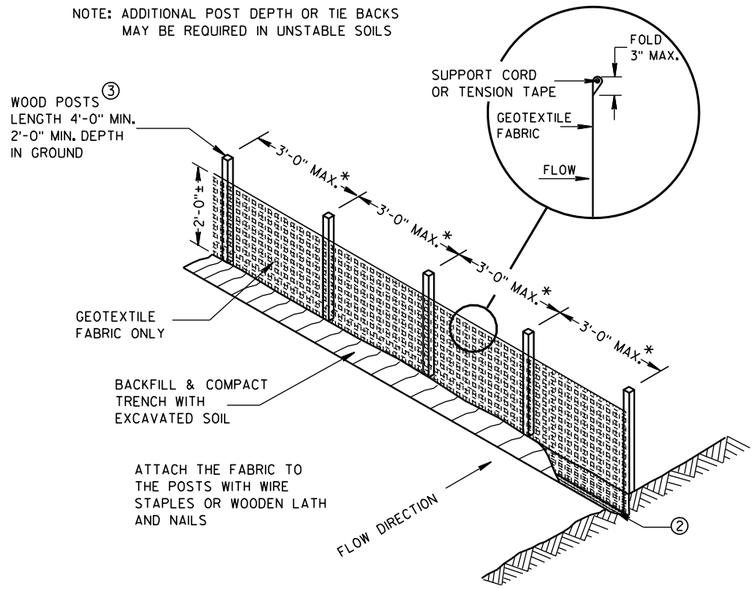
GENERAL NOTES

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

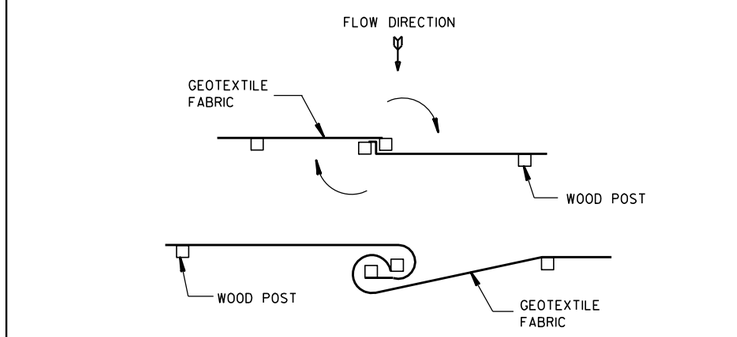
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL 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.



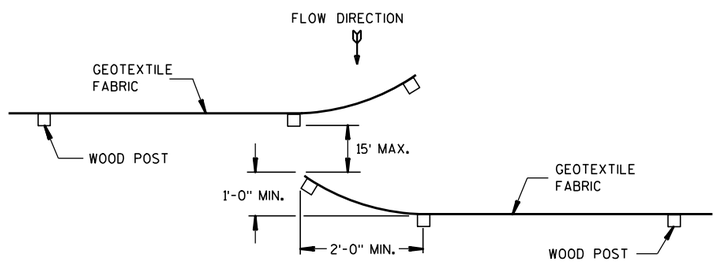
TRENCH DETAIL



SILT FENCE

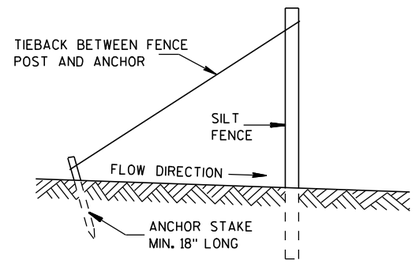


TWIST METHOD



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

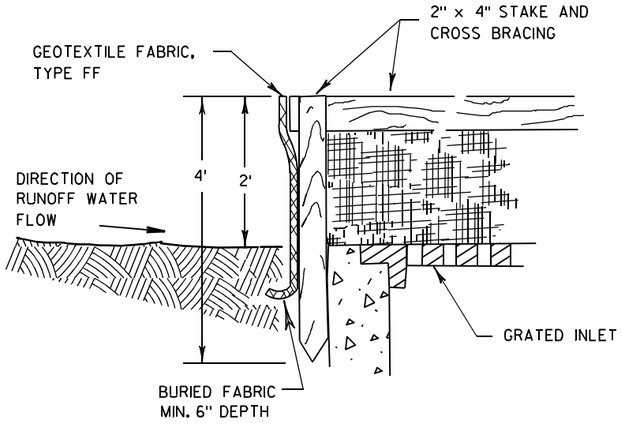
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

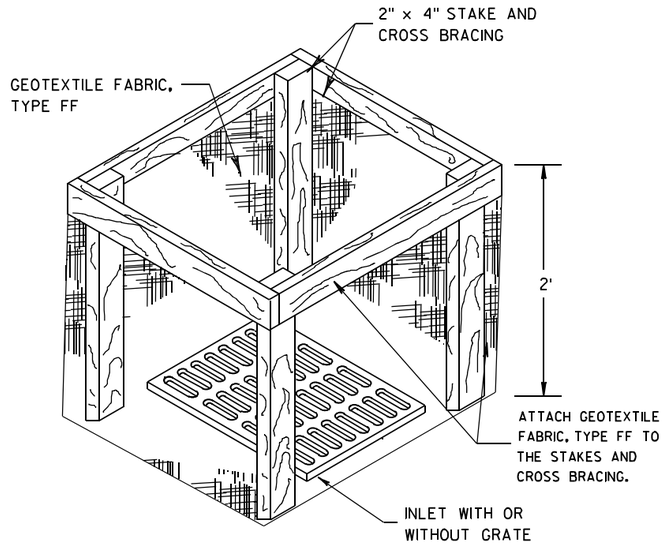
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S.D.D. 8 E 9-6

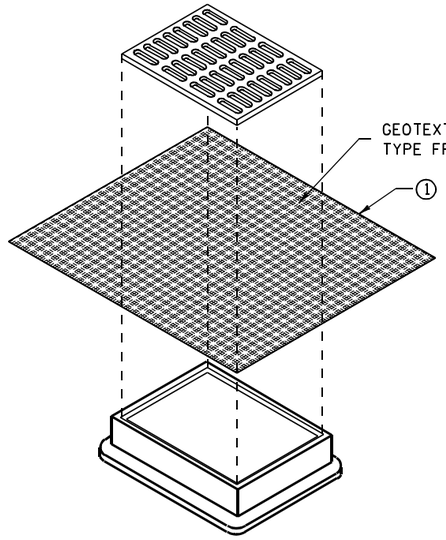
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S.D.D. 8 E 9-6



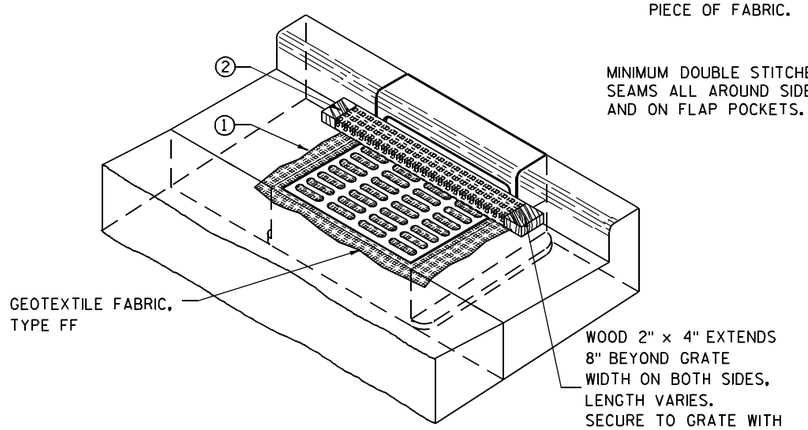


INLET PROTECTION, TYPE A

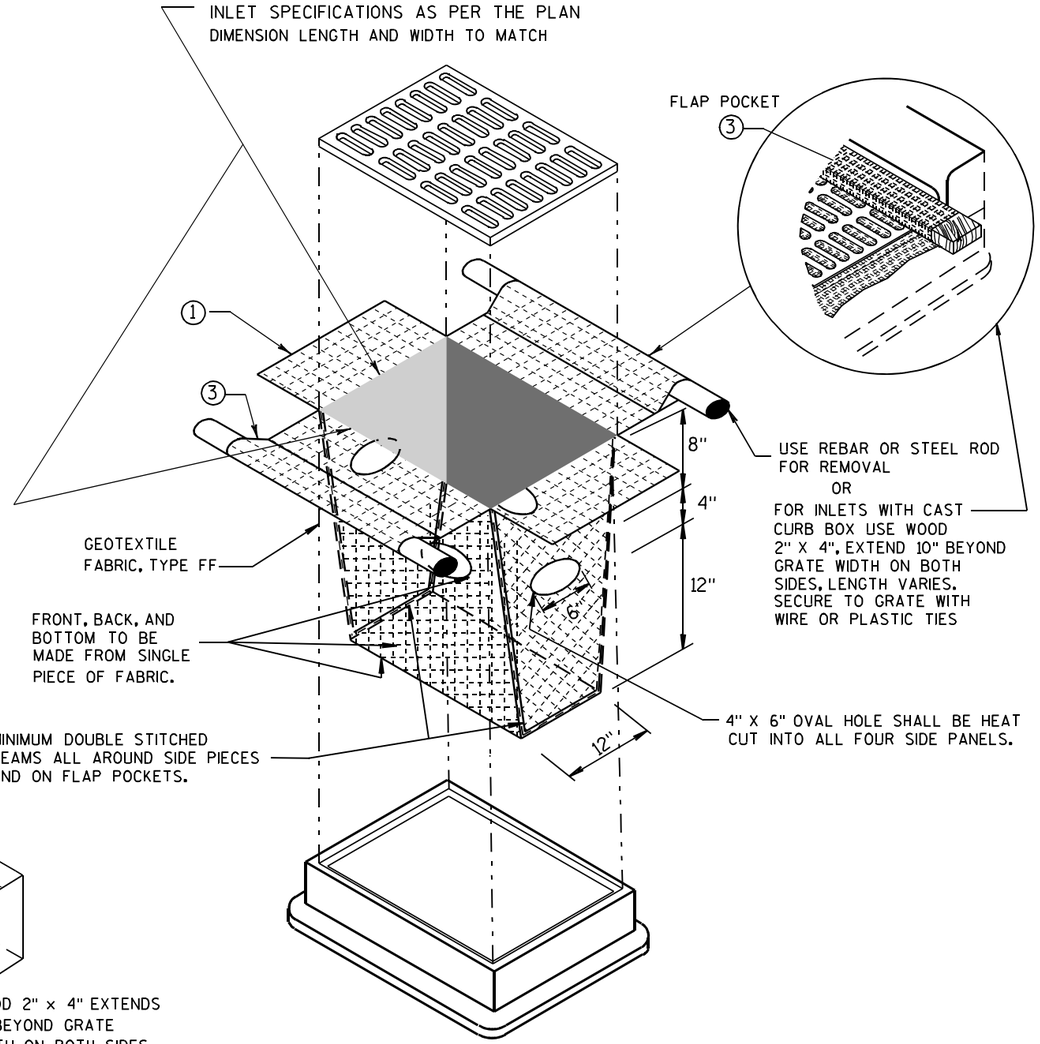


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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.

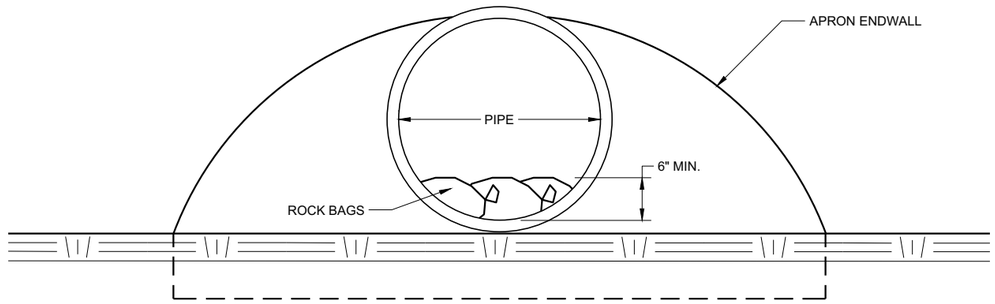
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

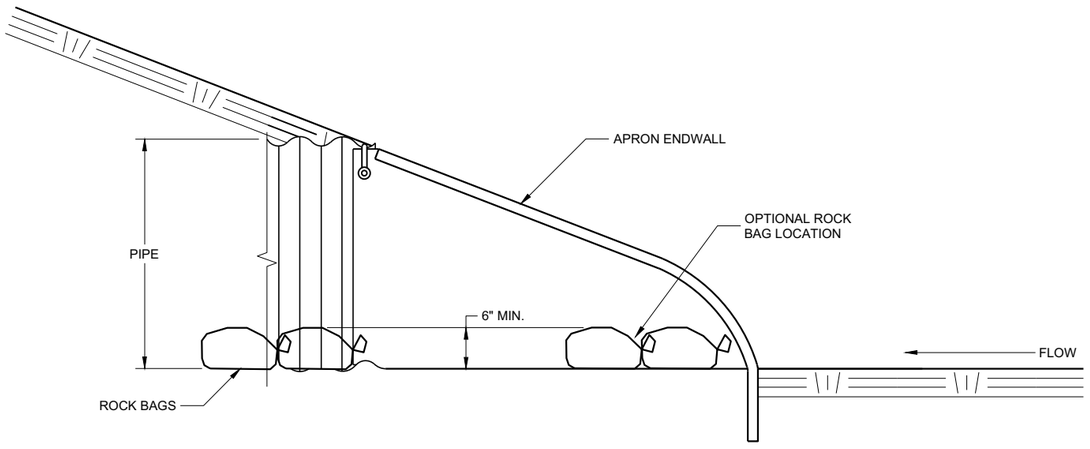
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

METAL APRON ENDWALLS

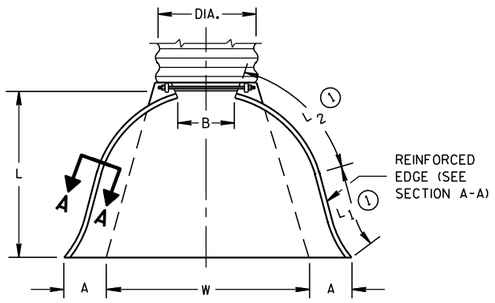
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

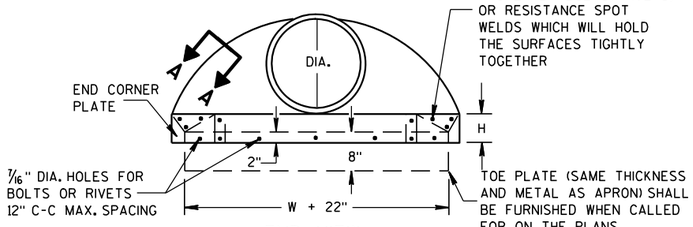
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

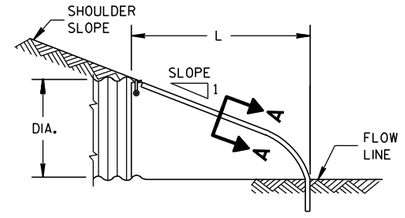
*MINIMUM
**MAXIMUM



PLAN VIEW

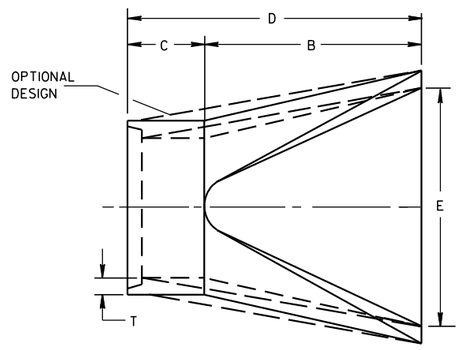


END VIEW

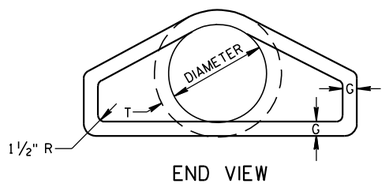


SIDE ELEVATION

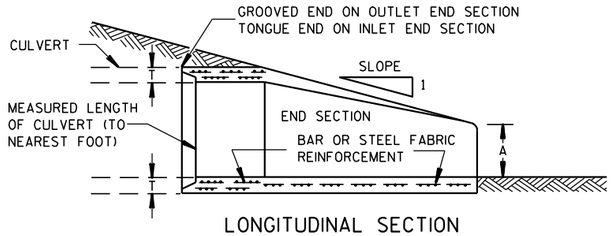
METAL ENDWALLS



PLAN

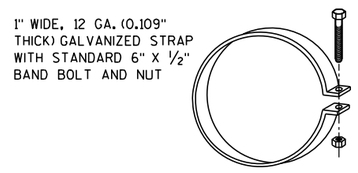


END VIEW



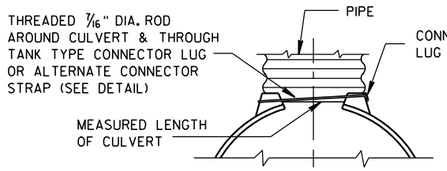
LONGITUDINAL SECTION

CONCRETE ENDWALLS

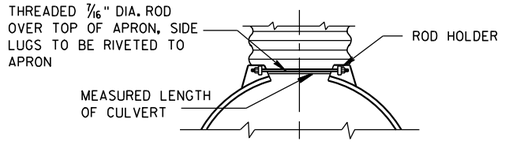


ALTERNATE FOR TYPE 1 CONNECTION

END SECTION CONNECTOR STRAP

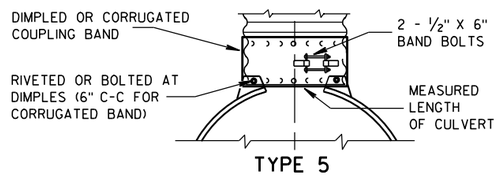


TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE

TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

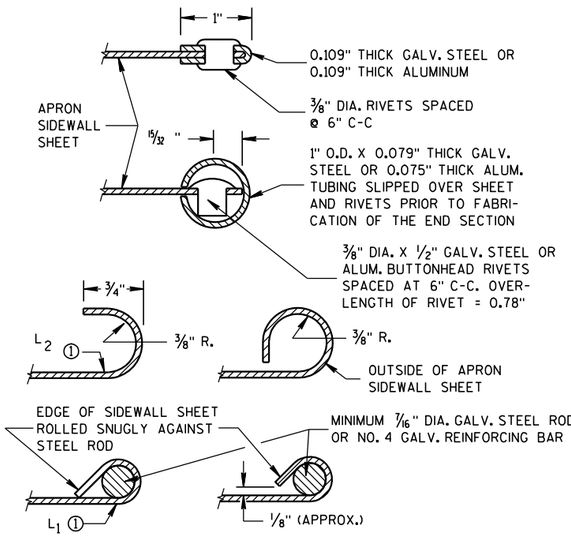
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

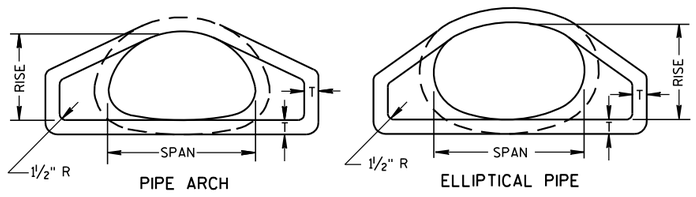
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

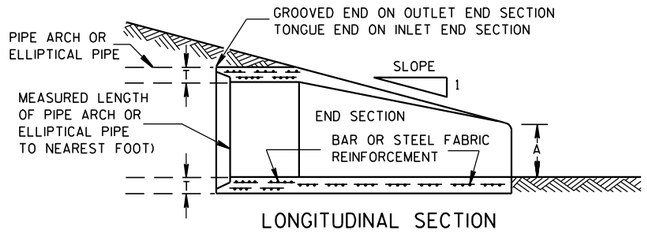
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

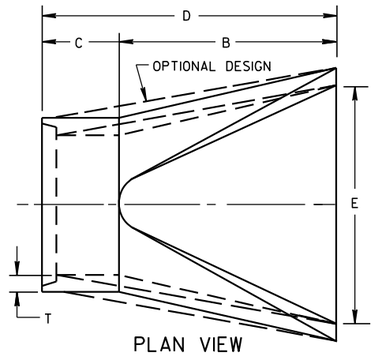
S.D.D. 8 F 1-11



END VIEW

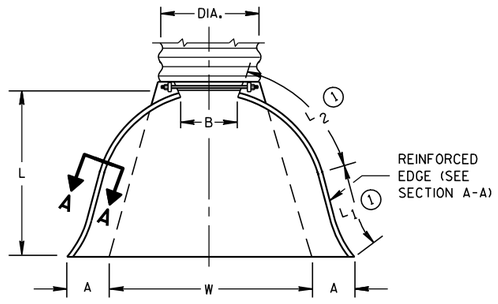


LONGITUDINAL SECTION

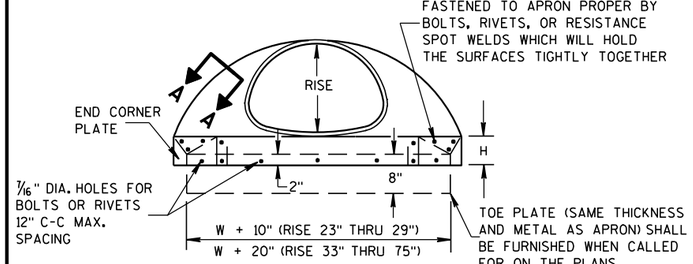


PLAN VIEW

CONCRETE ENDWALLS

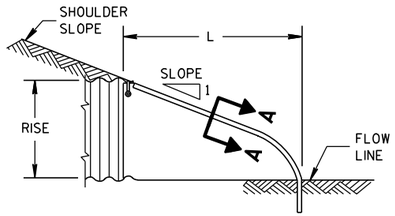


PLAN VIEW



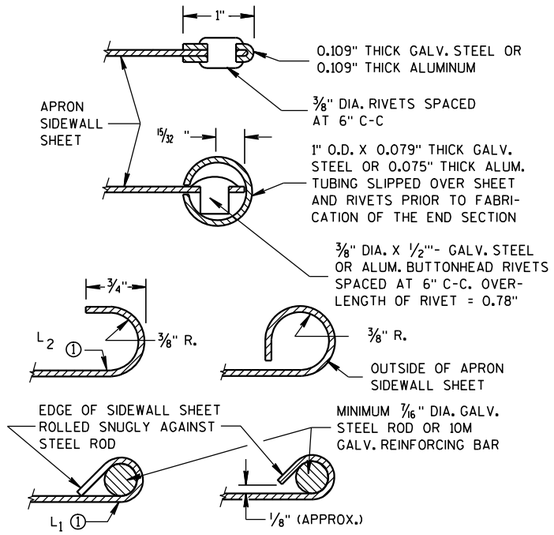
END VIEW

END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

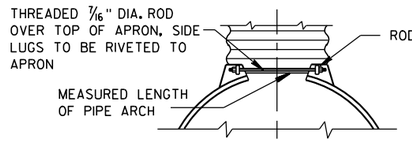
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

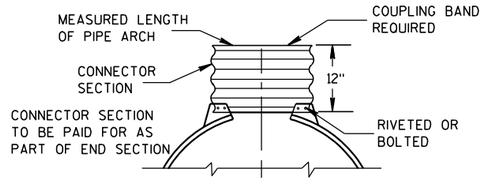
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



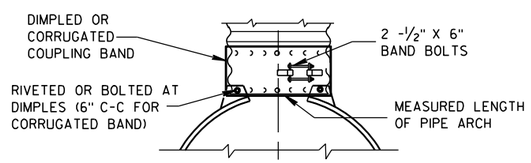
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

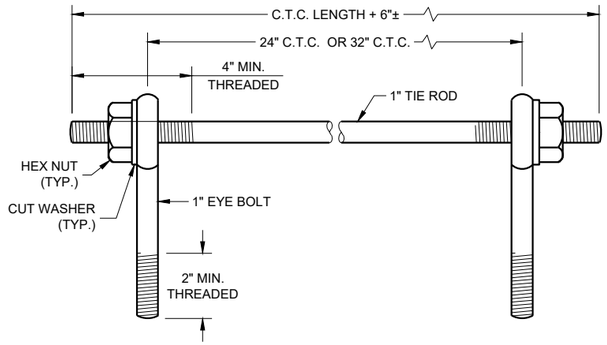
FHWA

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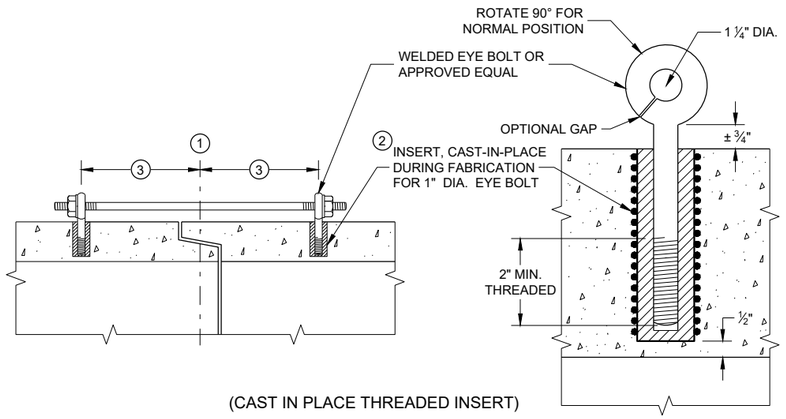
S.D.D. 8 F 2-1

6

S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

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

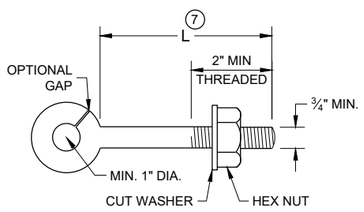
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

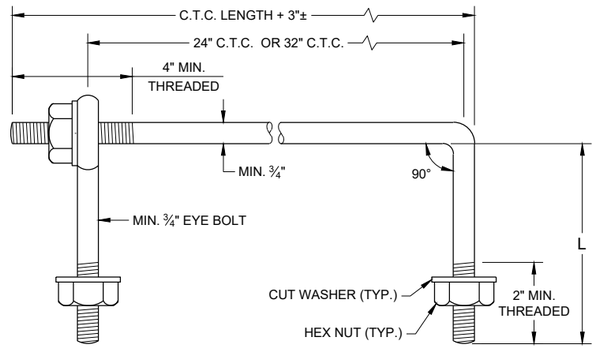
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

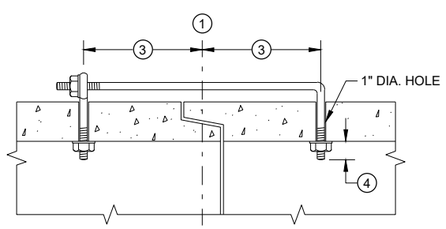


EYE BOLT (7)

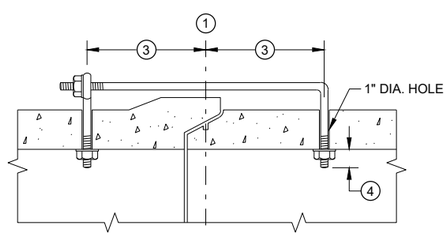
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

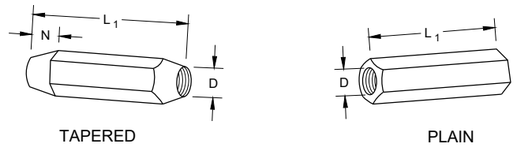
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

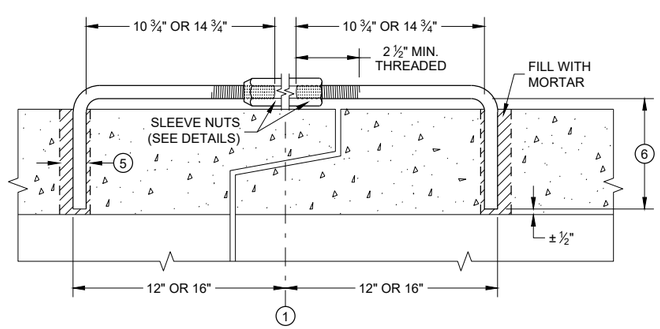
PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



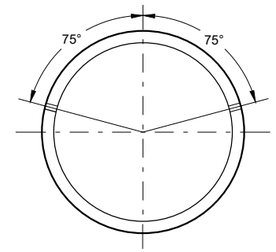
RIGHT AND LEFT THREADS

SLEEVE NUTS



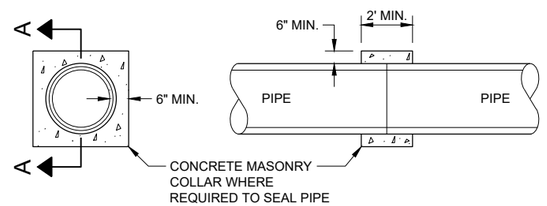
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

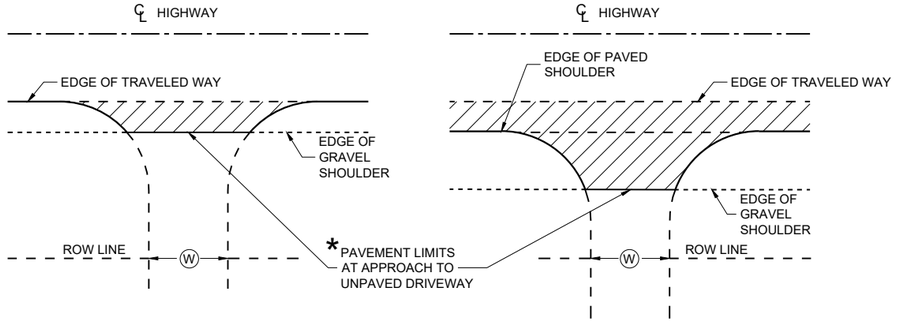
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 08F04 - 08

SDD 08F04 - 08

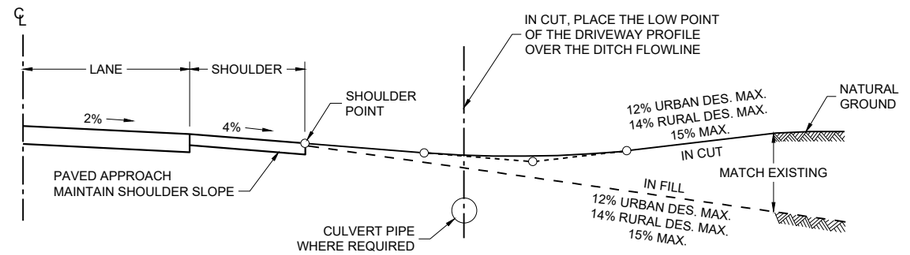


* WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

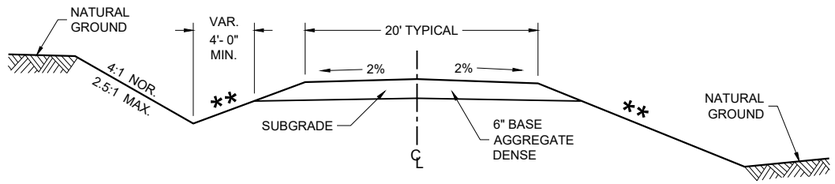
PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL (NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

Ⓦ : DRIVEWAY WIDTHS (MEASURED AT ROW LINE)
~ COMMERCIAL & INDUSTRIAL 16' MIN. - 35' MAX.
~ RESIDENTIAL & AGRICULTURAL (NONCOMMERCIAL) 16' MIN. - 24' MAX.

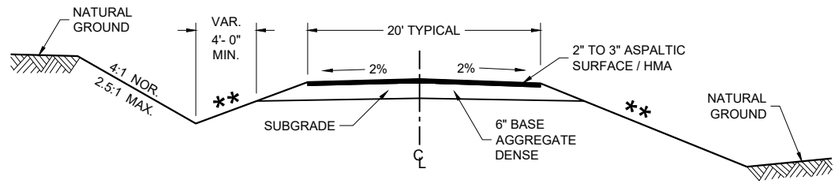


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



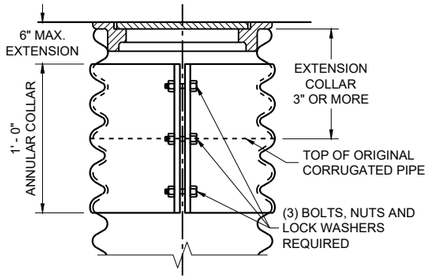
IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

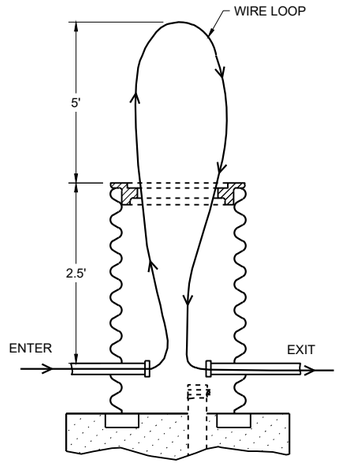
DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

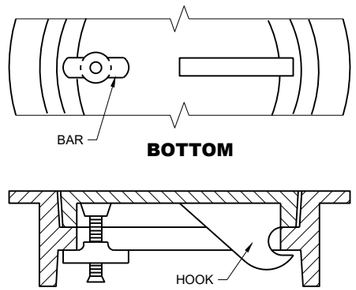
APPROVED
November 2025 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA



CORRUGATED PIPE EXTENDER



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



BOTTOM

SECTION

ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

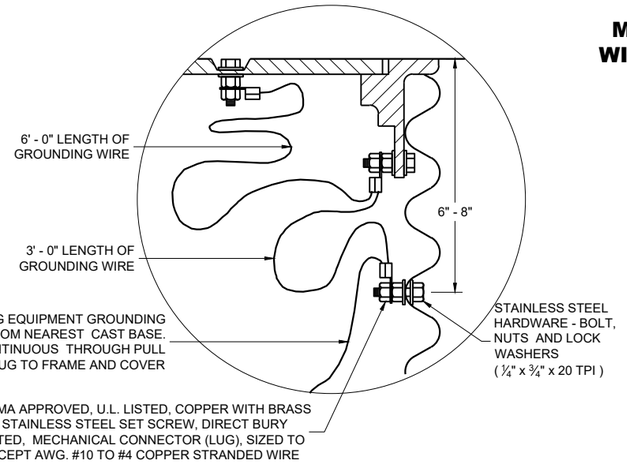
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

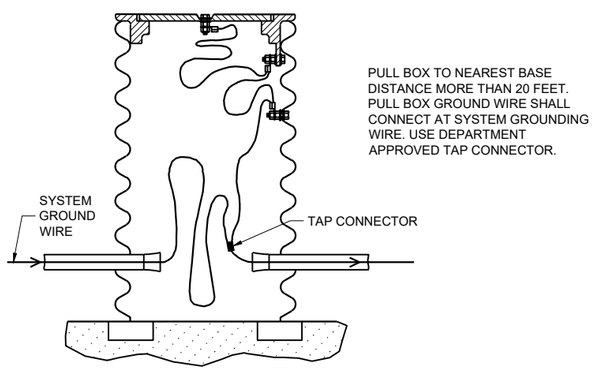
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

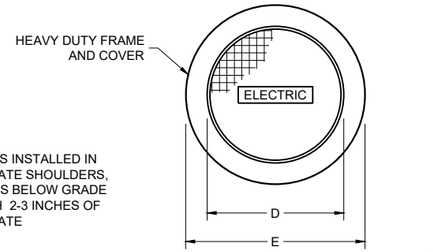
WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



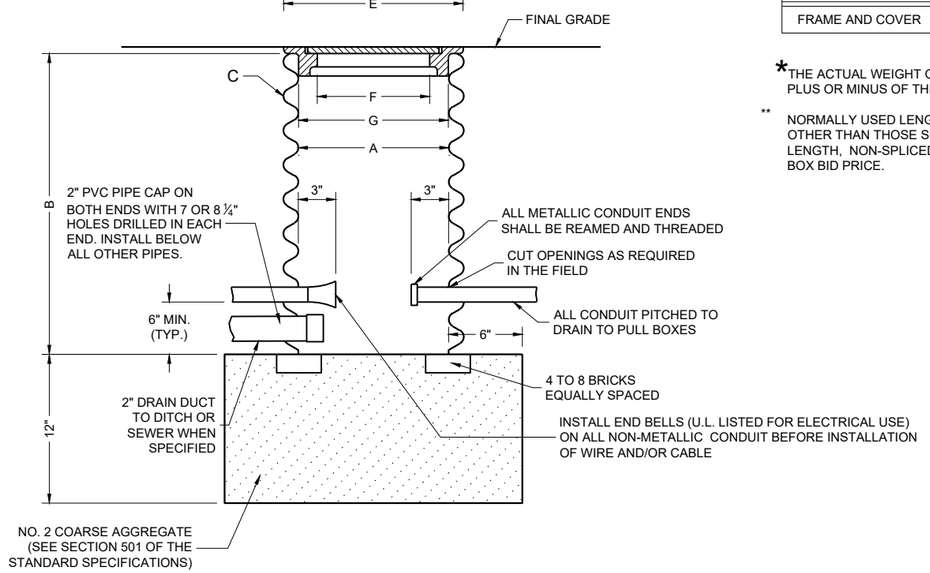
EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE



PULL BOX

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 ¼	10 ¼	10 ¼	16 ¼	16 ¼	16 ¼	22 ¼	22 ¼	22 ¼
FRAME	E	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½	26 ½	26 ½	26 ½
FRAME	F	8 ½	8 ½	8 ½	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½
FRAME	G	11 ½	11 ½	11 ½	17 ½	17 ½	17 ½	23 ½	23 ½	23 ½
WEIGHT IN POUNDS*										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

*THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

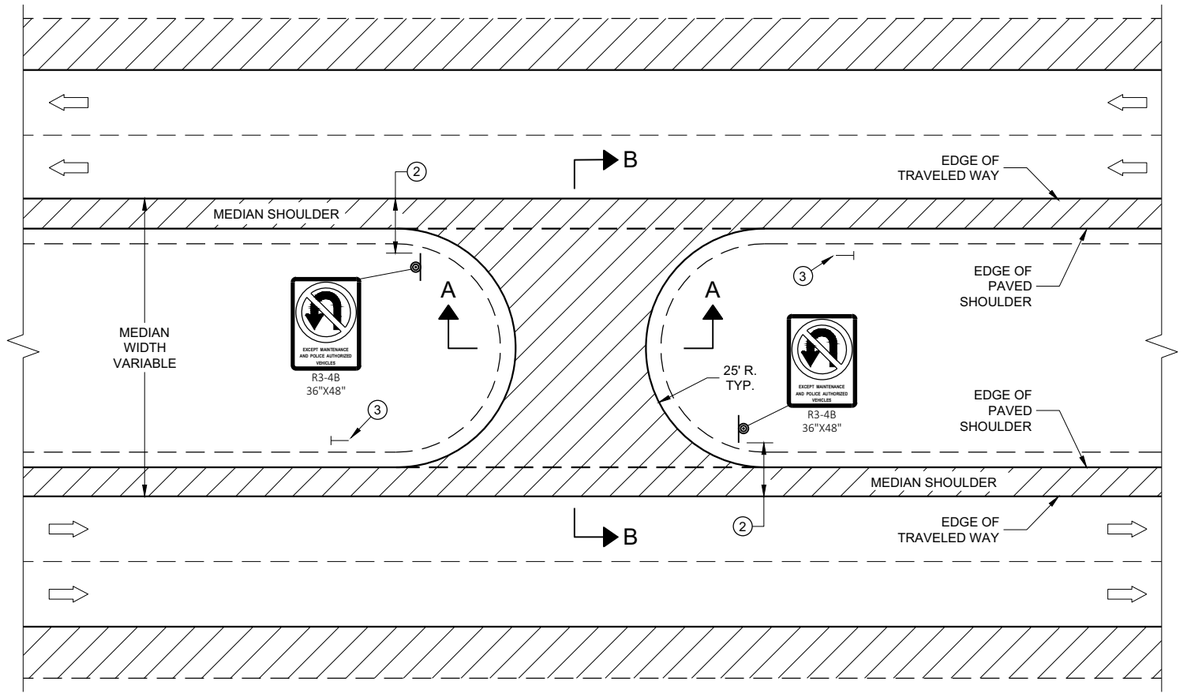
APPROVED
November 2024
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

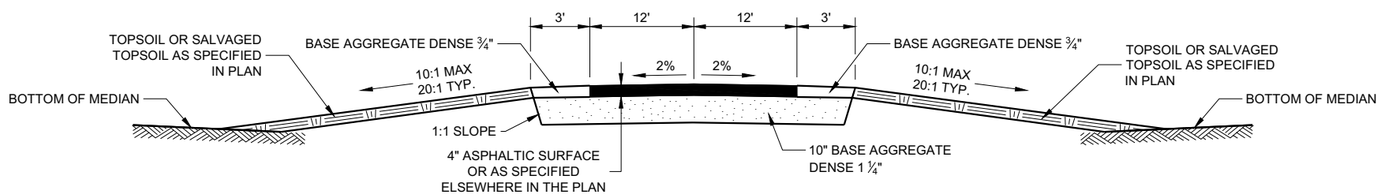
FHWA

6

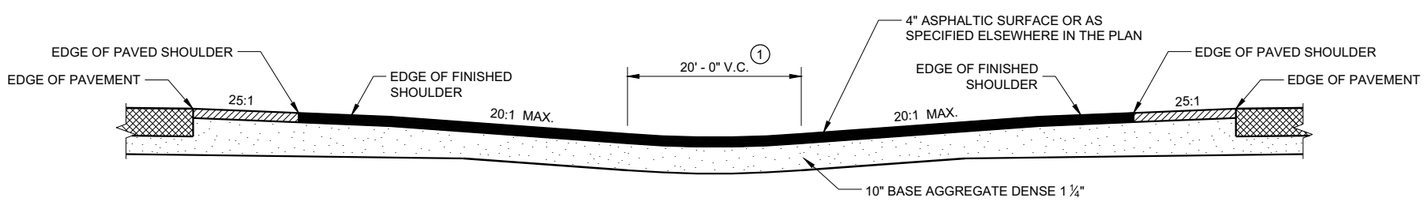
SDD 09B04-13



PLAN VIEW



SECTION A-A



SECTION B-B

GENERAL NOTES

1. ADJUST VERTICAL CURVE LOCATION LATERALLY TO MAINTAIN 20:1 MAX.
2. SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.
3. INSTALL DELINEATOR. SEE STANDARD DETAIL DRAWING 15A4.

LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR
- DIRECTION OF TRAFFIC

MAINTENANCE CROSSOVER FOR FREEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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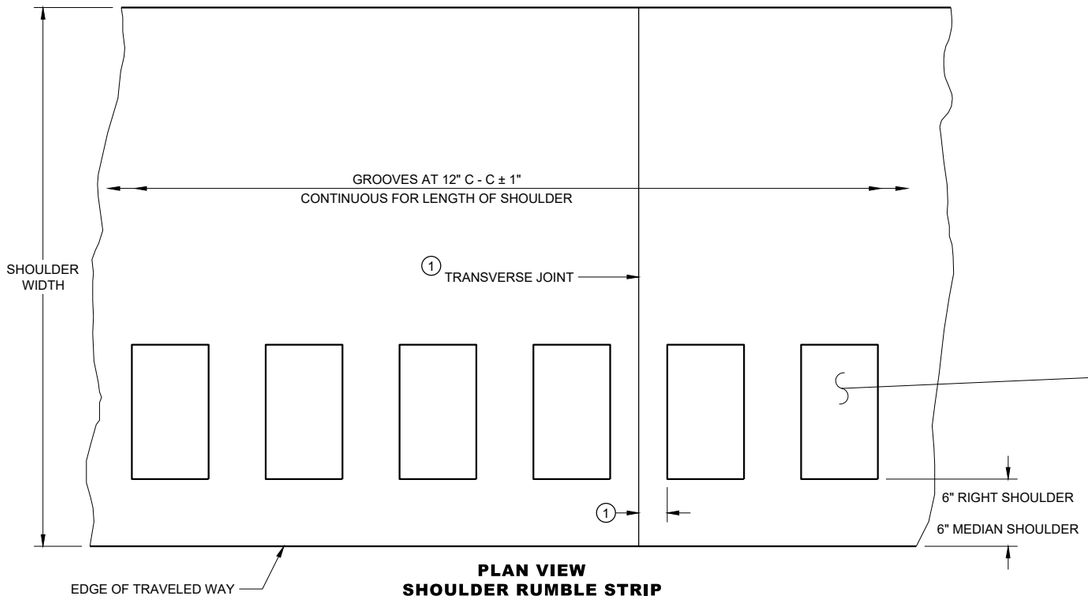
SDD 11A01 - 06
SDD 11A01 - 06

GENERAL NOTES

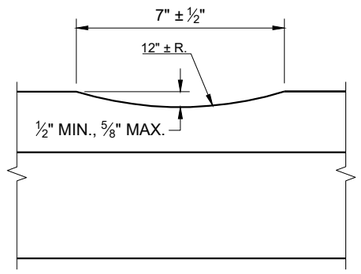
SDD 13A5, SHEET "b" SHOWS THE LOCATION OF THE RUMBLE STRIPS AT RAMP AND GORE LOCATIONS.

RUMBLE STRIPS ON EXPRESSWAYS:
DO NOT INSTALL SHOULDER RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL AND PRIVATE DRIVEWAYS, ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, 25' IN ADVANCE OF BRIDGE DECKS, 25' IN ADVANCE OF BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSINGS.

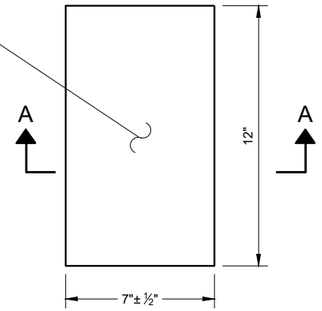
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6 INCHES AWAY FROM TRANSVERSE JOINTS.



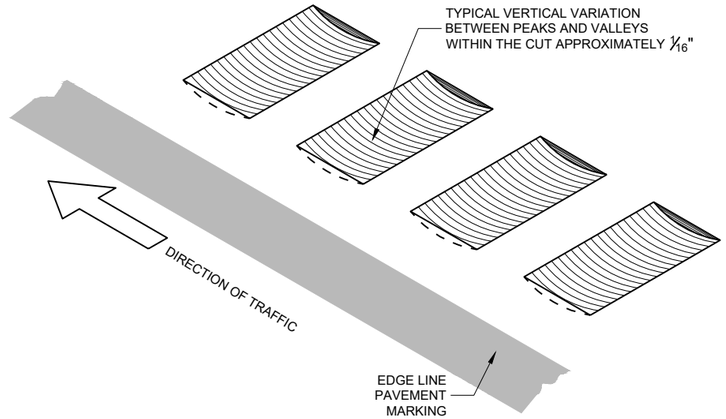
PLAN VIEW
SHOULDER RUMBLE STRIP



SECTION A - A

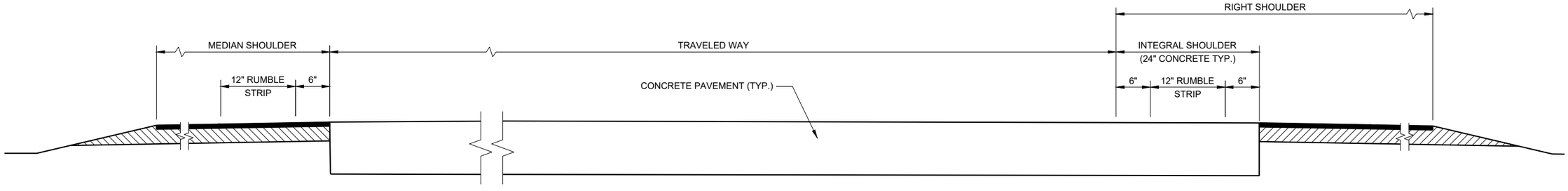


PLAN VIEW
(SINGLE GROOVE)



ISOMETRIC

PLACEMENT DETAIL FOR RUMBLE STRIP



SECTION VIEW

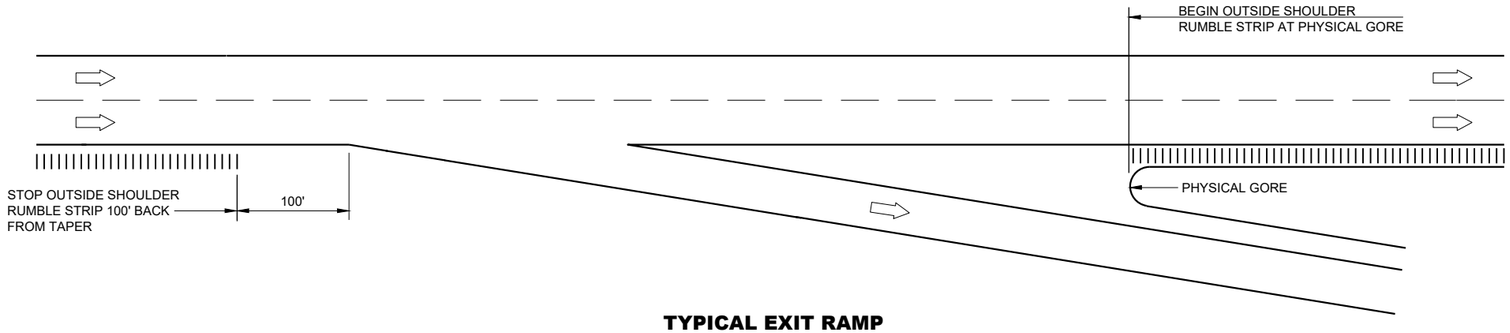
TYPICAL SHOULDER RUMBLE STRIPS
(ONE ROADWAY IS SHOWN)

SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 13A05-06a



TYPICAL EXIT RAMP

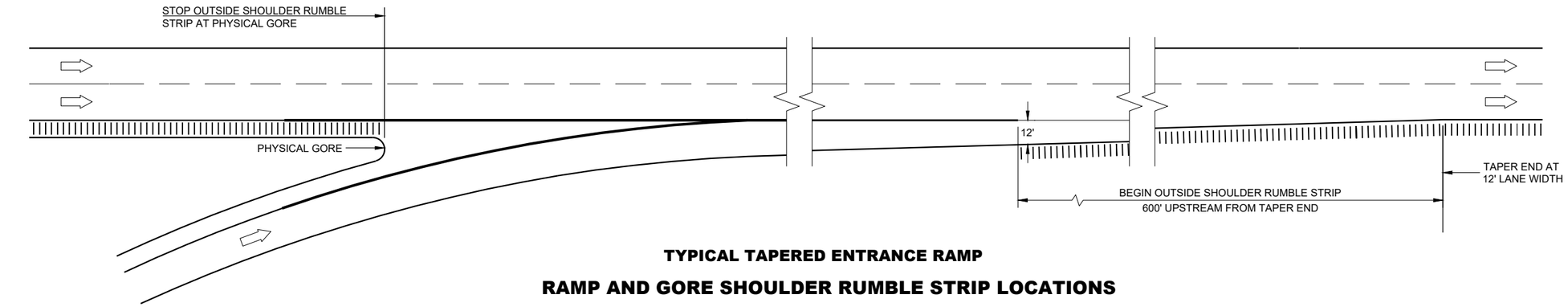
GENERAL NOTES

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

RUMBLE STRIPS ON EXPRESSWAYS:
DO NOT INSTALL SHOULDER RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIALAND PRIVATE DRIVEWAYS, ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, 25' IN ADVANCE OF BRIDGE DECKS, 25' IN ADVANCE OF BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSINGS.

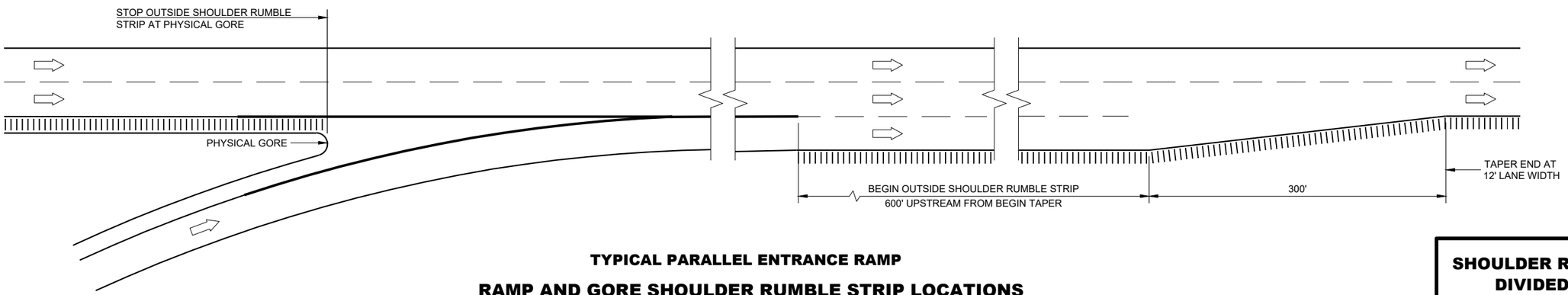
LEGEND

DIRECTION OF TRAFFIC



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE SHOULDER RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE SHOULDER RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY DESIGN STANDARDS
UNIT SUPERVISOR

FHWA

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SDD 13A05-06b

6

SDD 13A05-06b

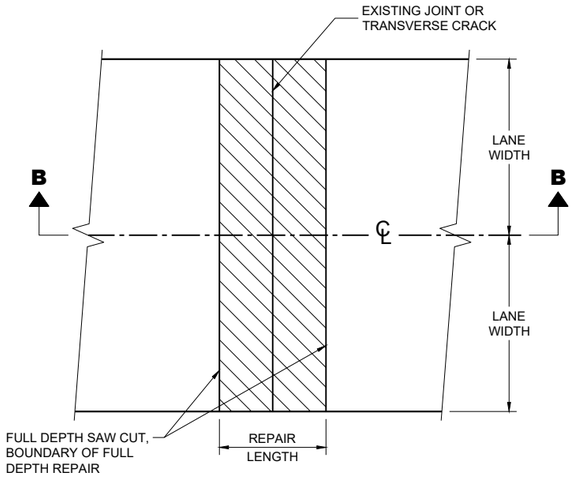
GENERAL NOTES

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.

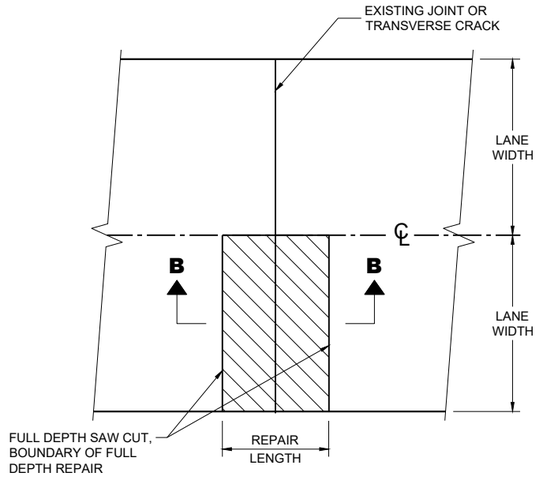
PROVIDE A 6 FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREA TO ADJACENT TRANSVERSE JOINT OR CRACK.

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

(1) DOWEL BARS MAY NOT BE PRESENT.

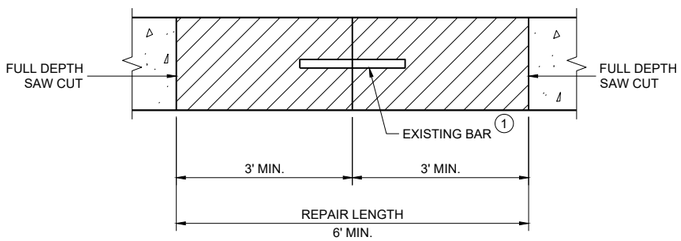


PLAN VIEW
(DOUBLE LANE REPAIR)



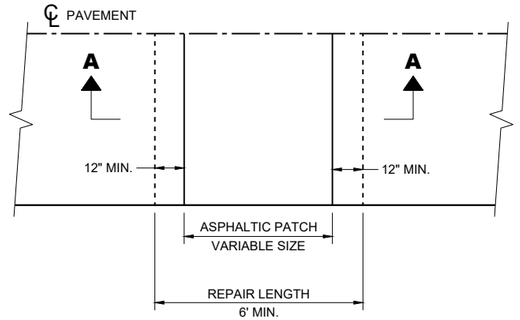
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL

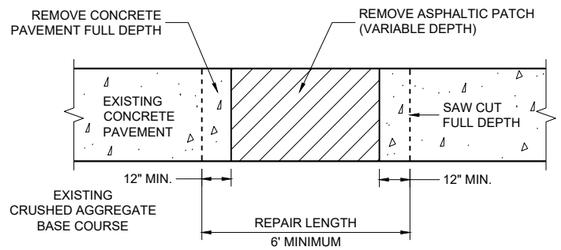


SECTION B - B

CONCRETE REMOVAL



PLAN VIEW

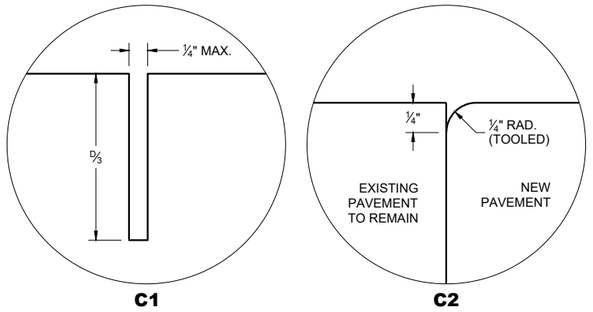


SECTION A - A

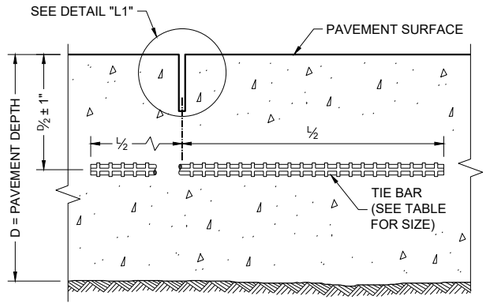
HMA PATCH REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

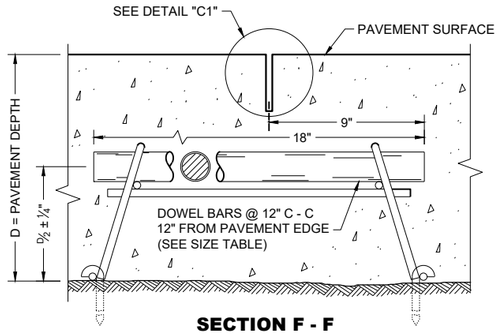


TRANSVERSE JOINTS



SECTION C - C

SAWED LONGITUDINAL JOINT



SECTION F - F

DOWELED CONTRACTION JOINT

GENERAL NOTES

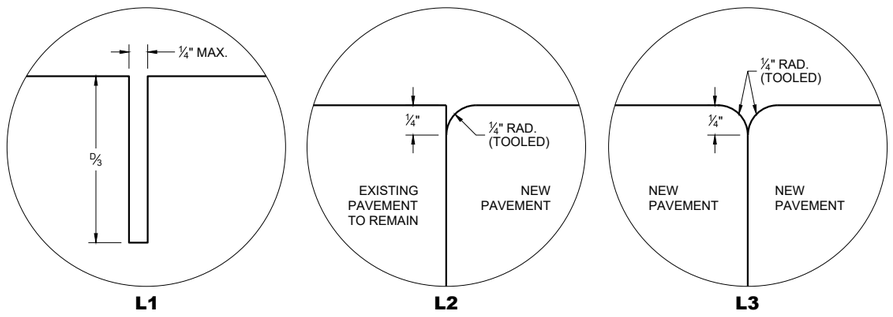
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

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

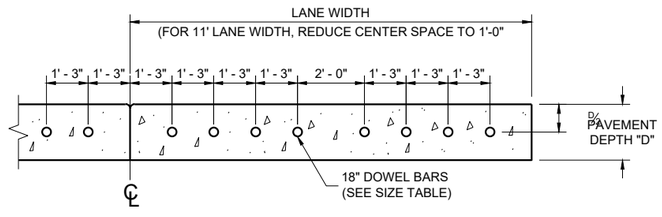
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

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.

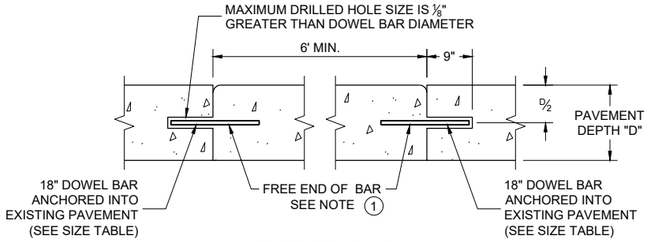


LONGITUDINAL JOINTS



SECTION E - E

DRILLED DOWEL BAR CONSTRUCTION JOINT



SECTION D - D

TIE BAR TABLE

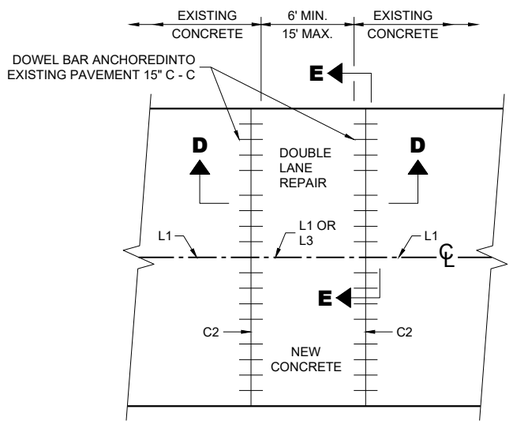
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4*	30"	24" **

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

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

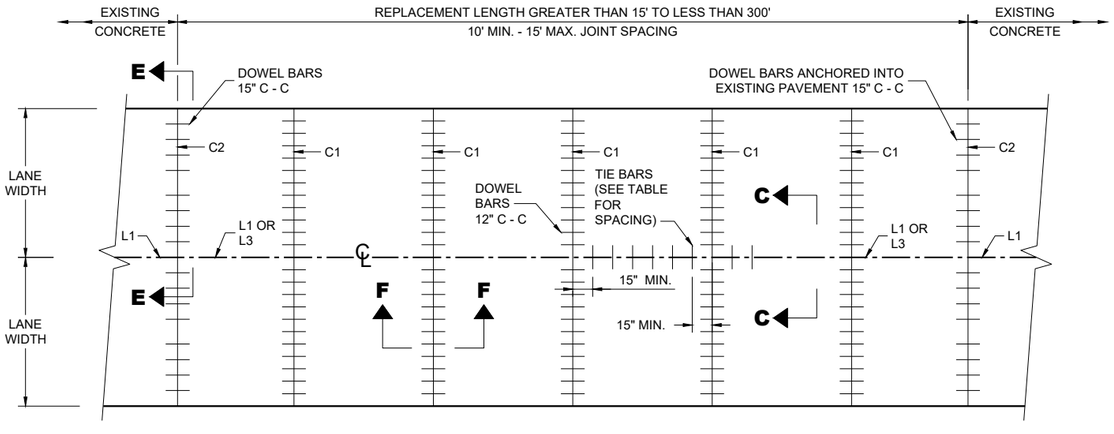
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	NONE	12'
7", 7 ½"	1"	1"	14'
8" & ABOVE	1 ¼"	1 ¼"	15'



PLAN VIEW

MULTILANE CONCRETE PAVEMENT REPAIR

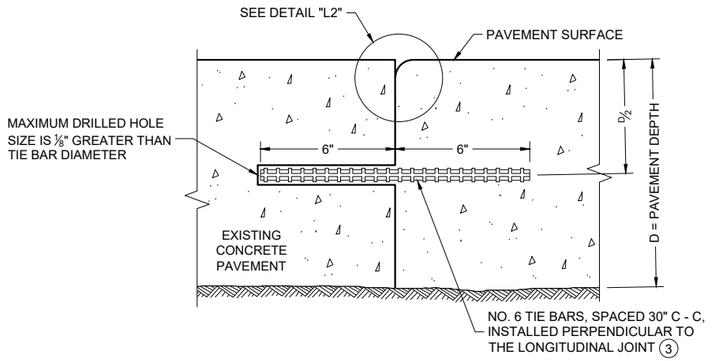


PLAN VIEW

MULTILANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

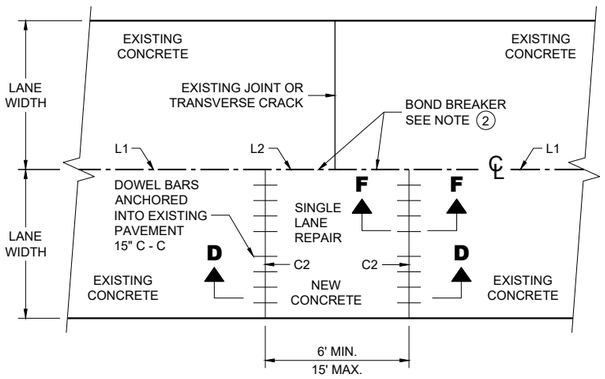


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT

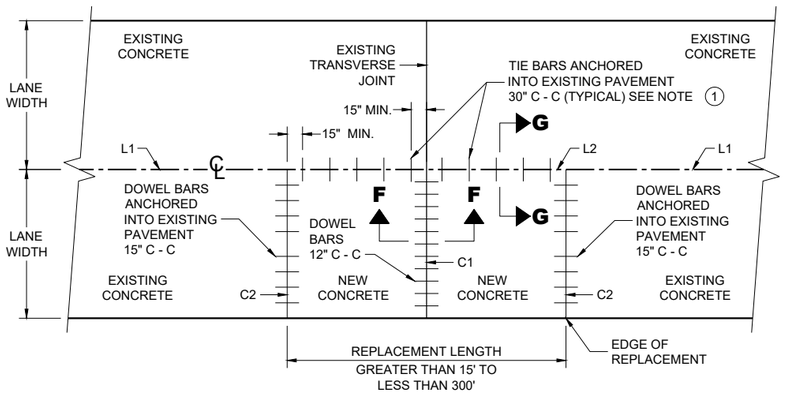
GENERAL NOTES

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

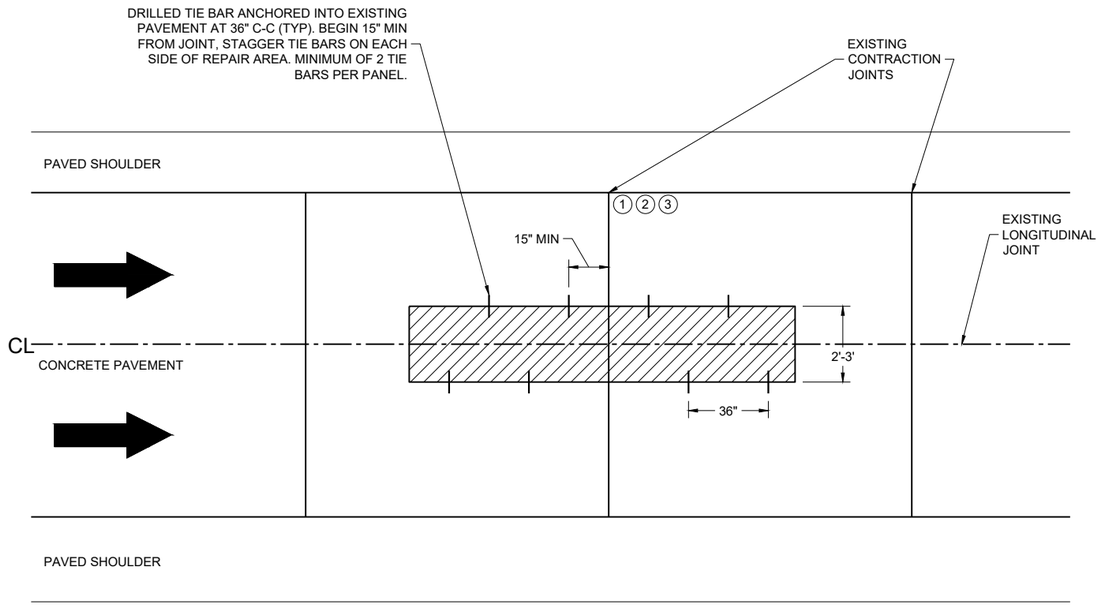
SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

6

CONCRETE REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

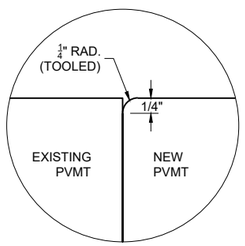
SDD 13C09-18c



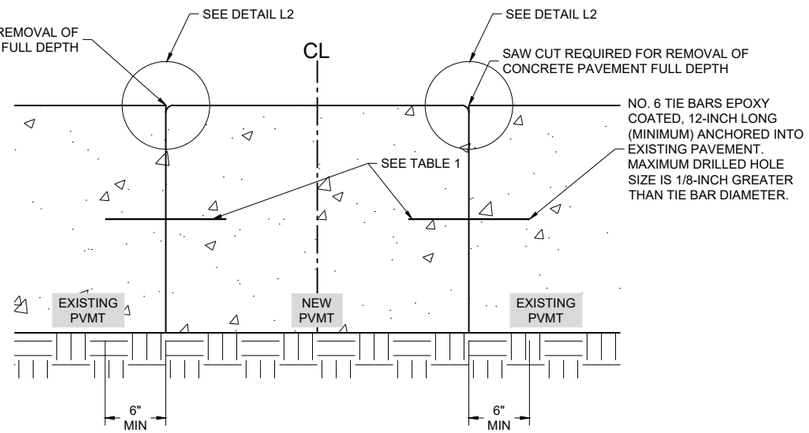
PLAN VIEW

GENERAL NOTES

1. TIE BARS MIN 15" FROM JOINT.
2. LOCATION AND WIDTH OF PATCH ARE VARIABLE DEPENDING ON FIELD CONDITION
3. PRESERVE OR REESTABLISH EXISTING CONTRACTION JOINTS, KEEPING PATCH MATERIALS OUT OF REMAINING CONTRACTION JOINT.



DETAIL L2



SECTION VIEW

TABLE 1	
PATCH WIDTH	TIE BAR LENGTH
24"	12"
36"	18"

CONCRETE PAVEMENT CENTERLINE JOINT REPAIR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
NOVEMBER 2025 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUPERVISOR

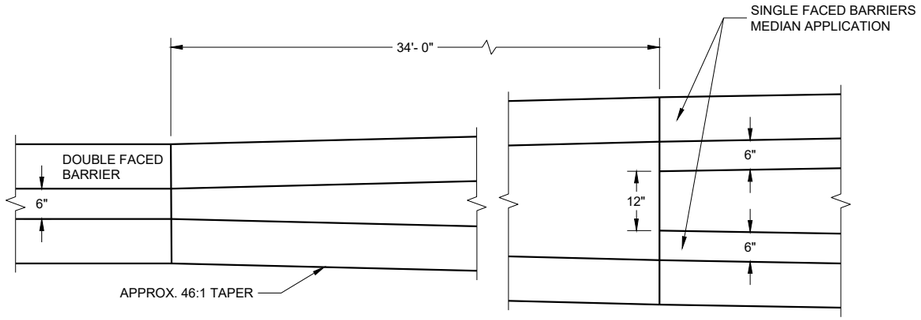
FHWA

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SDD 13C09-18d

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SDD 13C09-18d

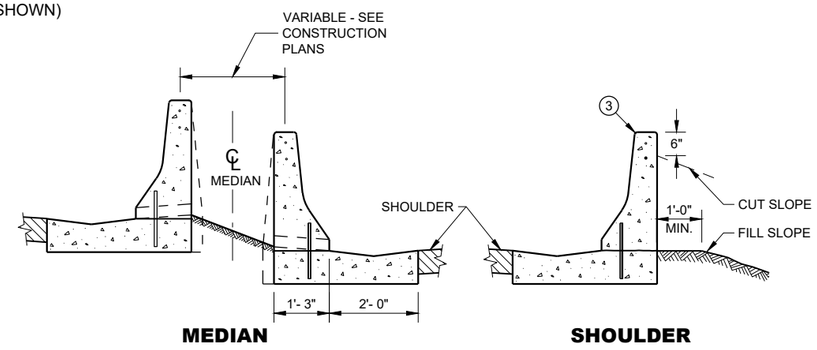


PLAN VIEW

TRANSITION DETAILS OF DOUBLE FACED TO SINGLE FACED CONCRETE MEDIAN BARRIER

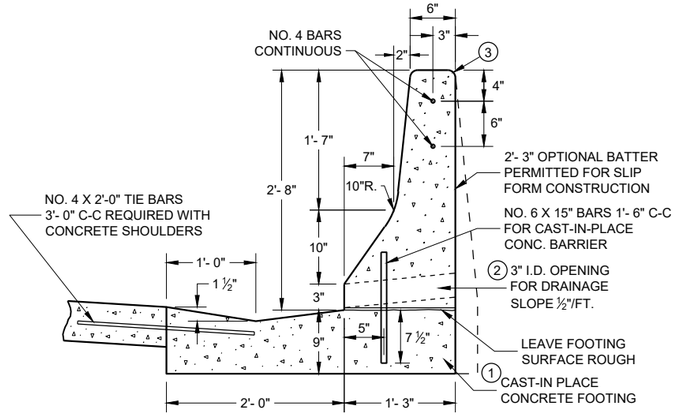
(FOOTINGS ARE NOT SHOWN)

HIGH SIDE CONCRETE BARRIER DETAIL



MEDIAN **SHOULDER**

TYPICAL APPLICATIONS



SECTION VIEW

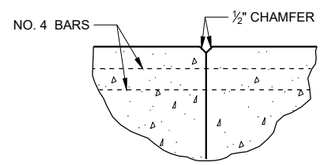
GENERAL NOTES

SPLICES OF LONGITUDINAL BARS SHALL BE MADE WITH BARS LAPPED AT LEAST 18-INCHES AND FIRMLY TIED OR FASTENED TOGETHER.

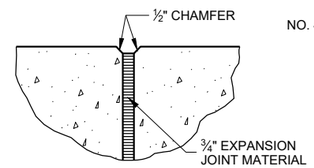
ALL BAR STEEL REINFORCEMENT SHALL CONFORM TO REQUIREMENTS OF AASHTO M31, GRADE 60.

4000 PSI AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.

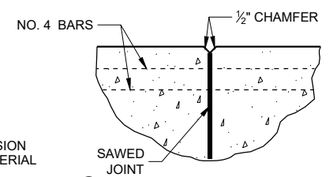
1. BARRIER SHALL BE INSTALLED ON A CONCRETE SHOULDER INSTEAD OF THE CONCRETE FOOTING WHEN SPECIFIED OR SHOWN ELSEWHERE IN THE CONTRACT.
2. OPENINGS FOR DRAINAGE SHALL BE PLACED AT LOW POINTS OF VERTICAL CURVES OR WHERE DIRECTED BY THE ENGINEER.
3. 3/4 -INCH BEVEL OR 1-INCH RADIUS (TYPICAL).
4. NO. 4 BARS SHALL BE CONTINUED THROUGH CONSTRUCTION JOINTS.
5. EXPANSION JOINTS SHALL BE PLACED AT EXISTING EXPANSION JOINTS IN THE PAVEMENT AND AT STRUCTURES. SEE REINFORCEMENT AT BARRIER END DETAIL.
6. SAWED CONTRACTION JOINTS SHALL BE PROVIDED ACROSS THE FULL WIDTH OF THE BARRIER FOOTING, AND IN FRONT, TOP AND BACK FACE OF THE BARRIER AT EXISTING PAVEMENT JOINTS AND AT UNIFORM INTERVALS BETWEEN WITH A MAXIMUM SPACING OF 25 FEET.



4 **CONSTRUCTION JOINT**



5 **EXPANSION JOINT**



6 **CONTRACTION JOINT**

JOINT DETAILS

CONCRETE BARRIER (DOUBLE FACED)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/16/2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

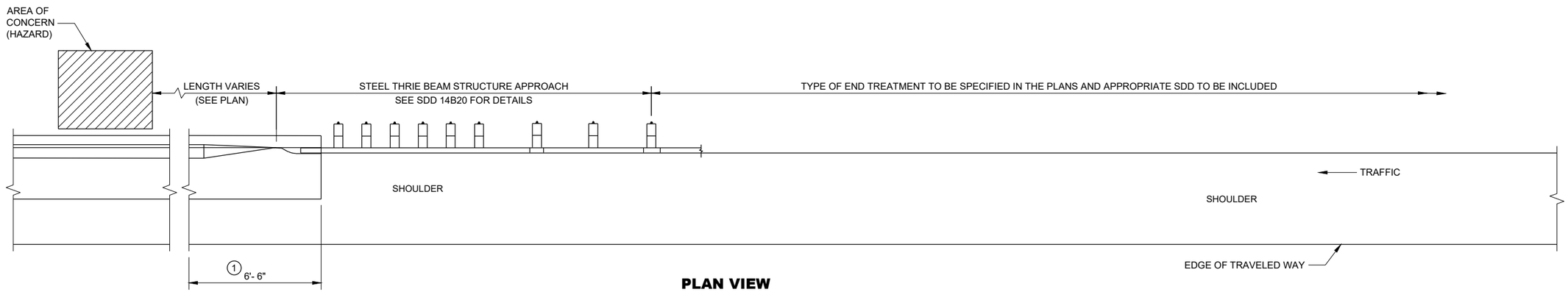
FHWA

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SDD 14B22 - 07a

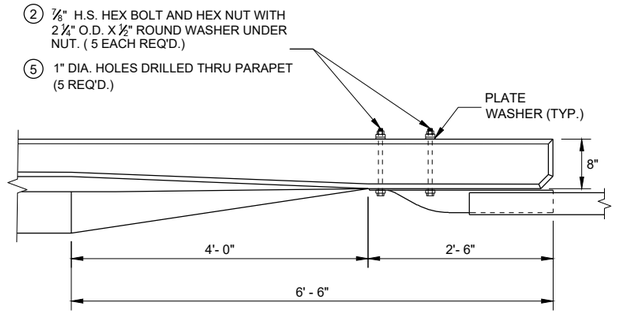
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SDD 14B22 - 07a



PLAN VIEW

TRANSITION TO STEEL PLATE BEAM GUARD AND END TERMINAL



PLAN VIEW

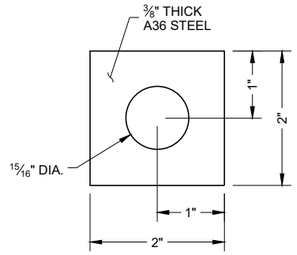
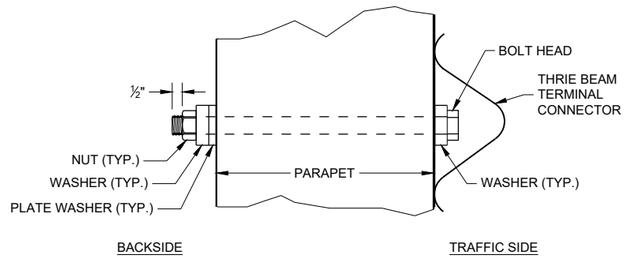


PLATE WASHER DETAIL

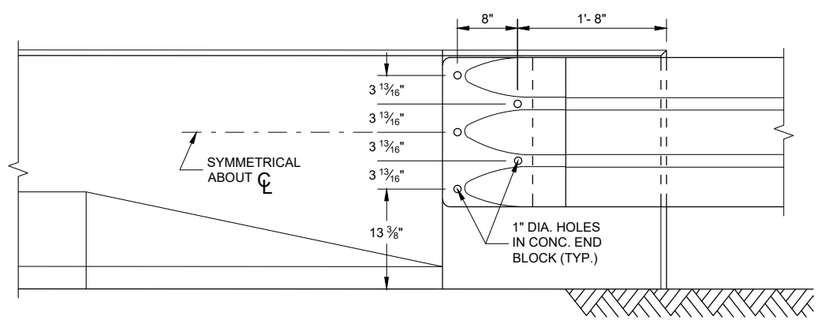


THRIE BEAM BOLT DETAIL

GENERAL NOTES

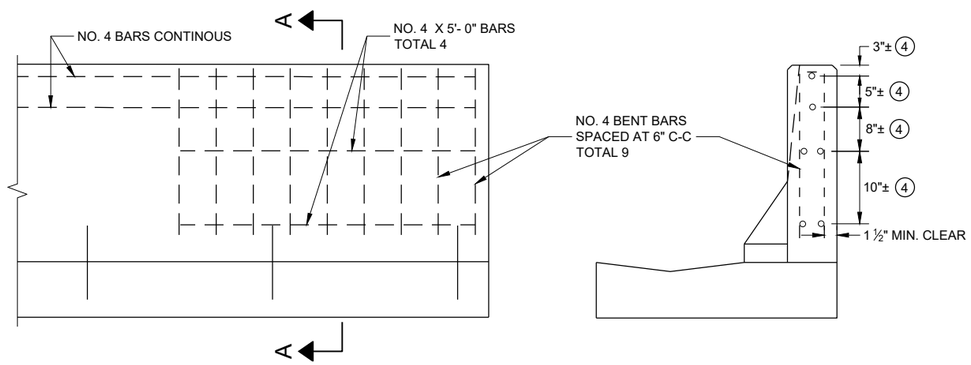
1. A SPECIAL END IS REQUIRED ON THE CONCRETE BARRIER TO TRANSITION TO A CONNECTION WITH THE STEEL THRIE BEAM STRUCTURE APPROACH. SEE THE DETAILS ON THIS SHEET.
2. BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE 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.
3. REINFORCEMENT REQUIRED AT EXPANSION JOINTS AND WHERE CONCRETE BARRIER IS TERMINATED.
4. PLACE REINFORCEMENT SUCH THAT IT WILL NOT CONFLICT WITH THE BOLT HOLES IN THE THRIE BEAM TERMINAL CONNECTOR.
5. INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

   DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.



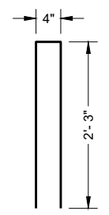
FRONT VIEW

CONCRETE BARRIER TRANSITION TO THRIE BEAM



FRONT VIEW **SECTION A - A**

3 REINFORCEMENT AT BARRIER END



BENT BAR DETAIL

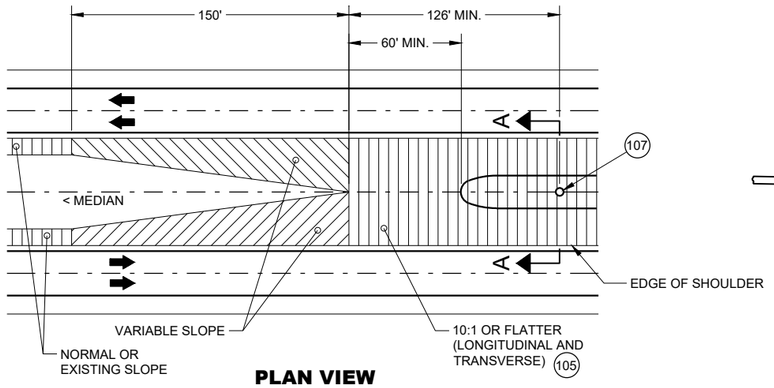
CONCRETE BARRIER, SINGLE FACED (WITH ANCHORAGE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

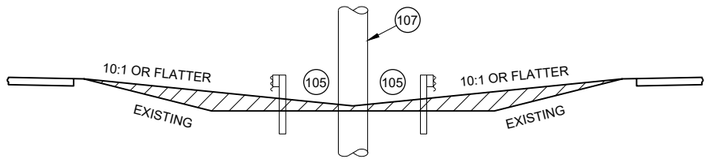
APPROVED
8/16/2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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SDD 14B22 - 07b



PLAN VIEW
GRADING AT BULLNOSE
(ALL INSTALLATIONS)



SECTION A -A
MEDIAN GRADING
(ALL INSTALLATIONS)

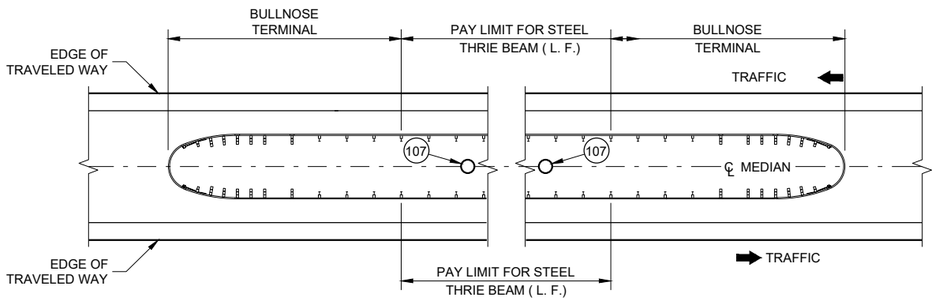
GENERAL NOTES

THRIE BEAM RAILS MAY NEED TO BE FIELD BENT TO FIT THE LOCATION.

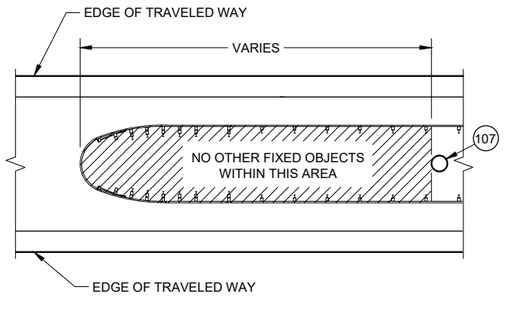
SEE STANDARD DETAIL DRAWINGS 14B26 SHEETS a-h.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 ½". MINIMUM DIAMETER OF THE ROCK REMOVAL IS 12" DIAMETER

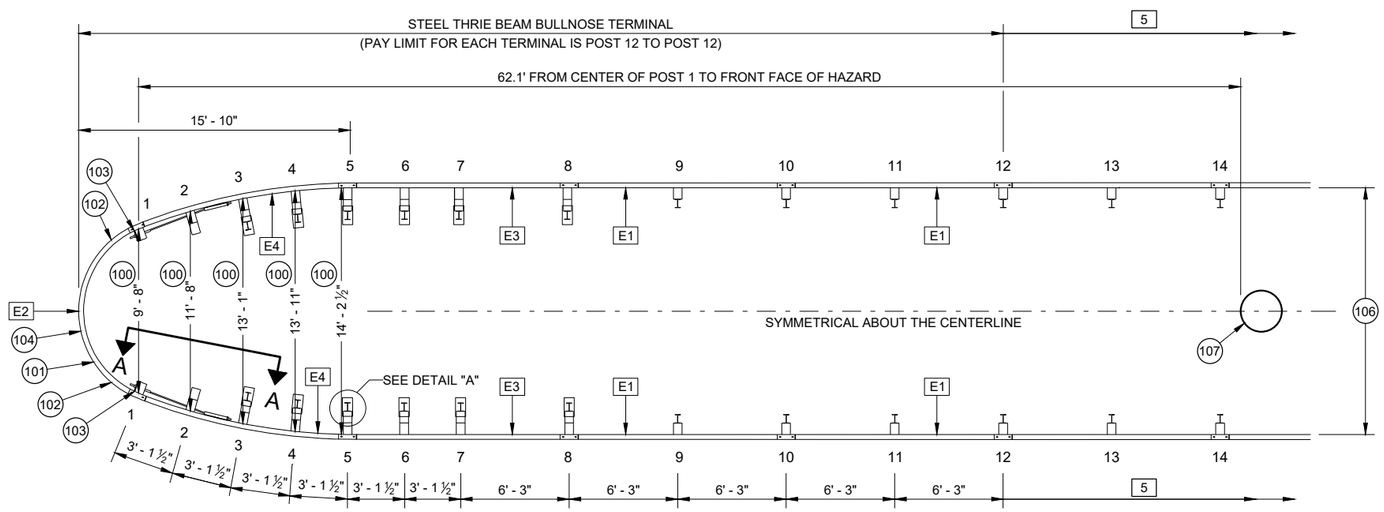
- E1 UNBENT STANDARD THRIE BEAM RAIL B1 (POST 8 TO POST 10 AND POST 10 TO POST 12)
- E2 SLOTTED THRIE BEAM RAIL E1 (POST 1 TO POST 1)
- E3 SLOTTED THRIE BEAM RAIL B3 (POST 5 TO POST 8)
- E4 SLOTTED THRIE BEAM RAIL E4 (POST 1 TO POST 5)
- 5 BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.
- (100) DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.
- (101) U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.
- (102) NOSE CABLE WITH SWAGGED END BUTTONS.
- (103) NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).
- (104) THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.
- (105) MINIMUM WORKING WIDTH 4' - 2".
- (106) MAX. WIDTH OF SYSTEM IS 14' - 2 ½" MEASURED FROM THE BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.
- (107) FIXED OBJECT OR OTHER HAZARD.
- (108) PLAN IS TO PROVIDE STATION OFFSET TO CENTER OF POST 5 IN PLANS.



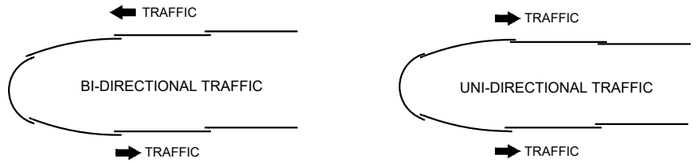
MEDIAN HAZARD PROTECTION PAY LIMITS



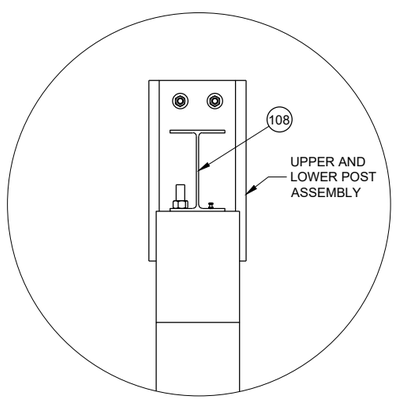
HAZARD FREE AREA
INSIDE BULLNOSE



PLAN VIEW
TYPICAL BULLNOSE LAYOUT



LAPPING DETAIL



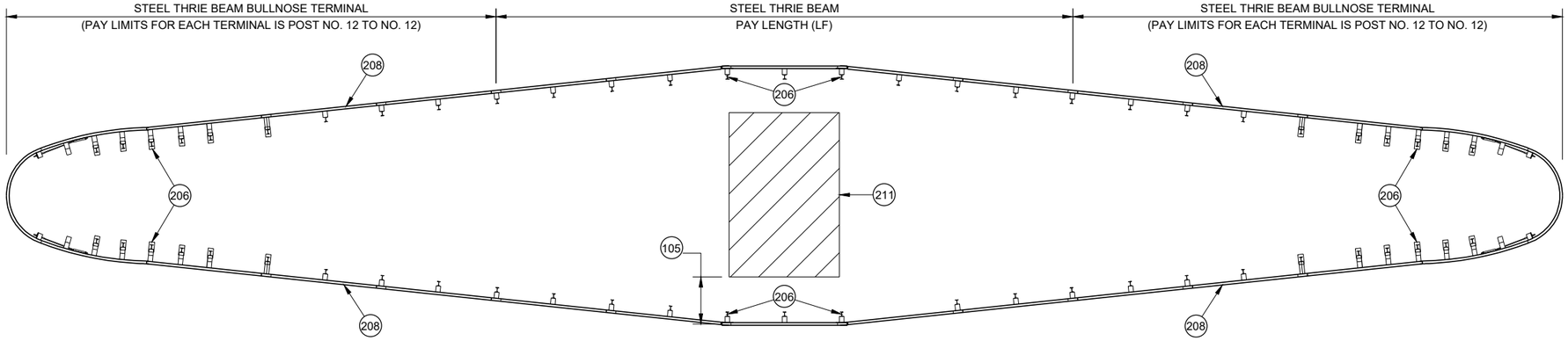
DETAIL "A"

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B26 - 05a



VARIABLE WIDTH BULLNOSE

GENERAL NOTES

200 6' - 3" ASYMMETRICAL 10-GAUGE W-BEAM TO THRIE BEAM GUARD TRANSITION. SEE SDD 14B45 FOR MORE INFORMATION.

201 W-BEAM RAIL. SEE SDD 14B42 FOR MORE INFORMATION.

202 SEE POST NO. 9 AND ALL STEEL THRIE BEAM POST BEYOND DETAIL.

203 SEE SDD 14B42 FOR INSTALLATION INFORMATION.

204 SEE SDD 14B45 FOR INSTALLATION DETAILS. REPLACE ASYMMETRICAL W-BEAM TO THRIE BEAM TRANSITION AND W-BEAM RAIL WITH E1. PAY FOR MODIFIED THRIE BEAM TRANSITION.

205 CONCRETE BARRIER OR BRIDGE RAIL.

206 SEE PLAN FOR STATION AND OFFSET TO CENTER OF POST.

207 SEE PLAN FOR STATION AND OFFSET TO CENTER OF SPLICE.

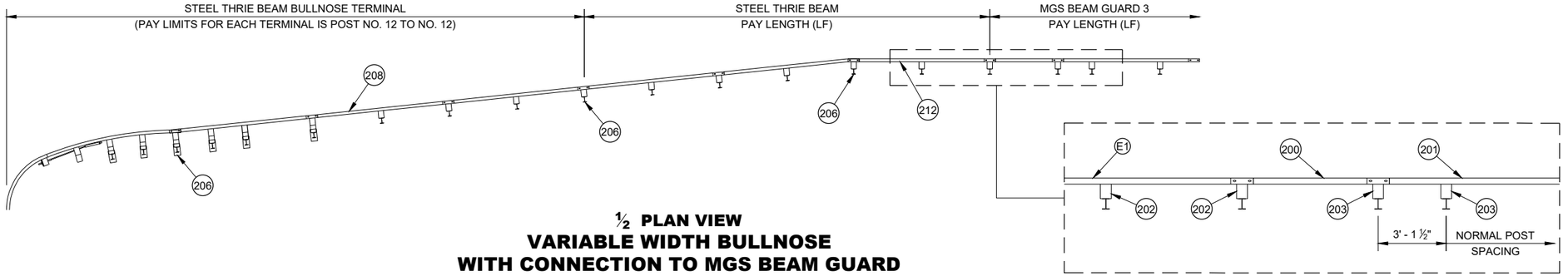
208 SEE PLAN FOR FLARE RATE.

209 A MINIMUM OF 25 FT OF THRIE BEAM TANGENT BEFORE TRANSITIONING TO BEAM GUARD OR THRIE BEAM TRANSITION.

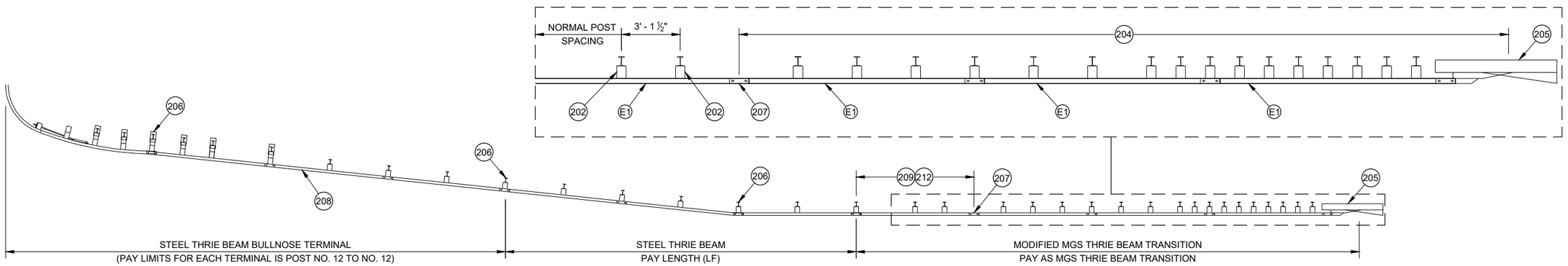
210 NOT ALL BULLNOSE HARDWARE SHOWN. SEE OTHER SHEETS IN 14B26.

211 WIDER HAZARD TO BE SHIELDED.

212 TRANSITION RAIL HEIGHT TO 31" OVER THE LENGTH OF A 12' - 6" BEAM SECTION.



½ PLAN VIEW
VARIABLE WIDTH BULLNOSE
WITH CONNECTION TO MGS BEAM GUARD



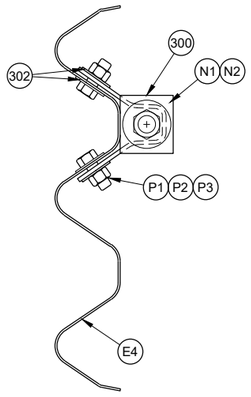
½ PLAN VIEW
VARIABLE WIDTH BULLNOSE
WITH CONNECTION TO RIGID BARRIER

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

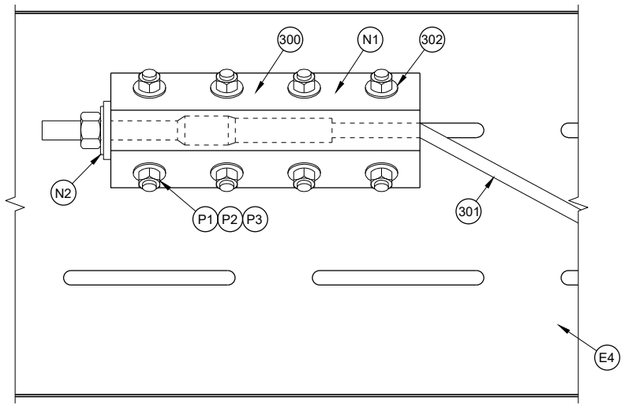
6

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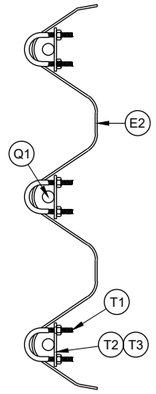


PROFILE VIEW

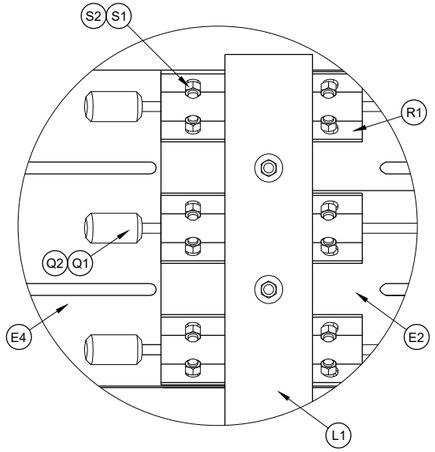
CABLE ANCHOR ASSEMBLY CONNECTION



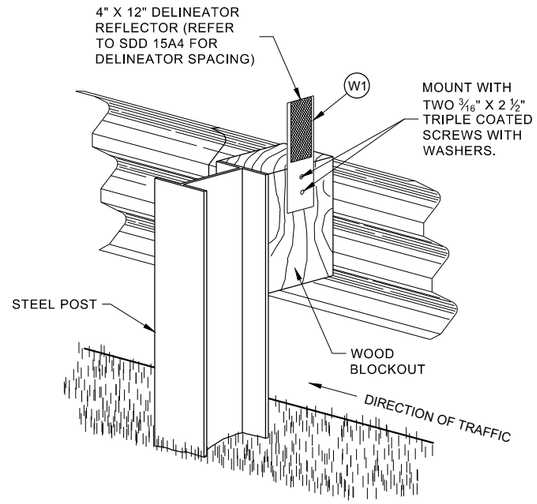
CABLE ANCHOR ASSEMBLY



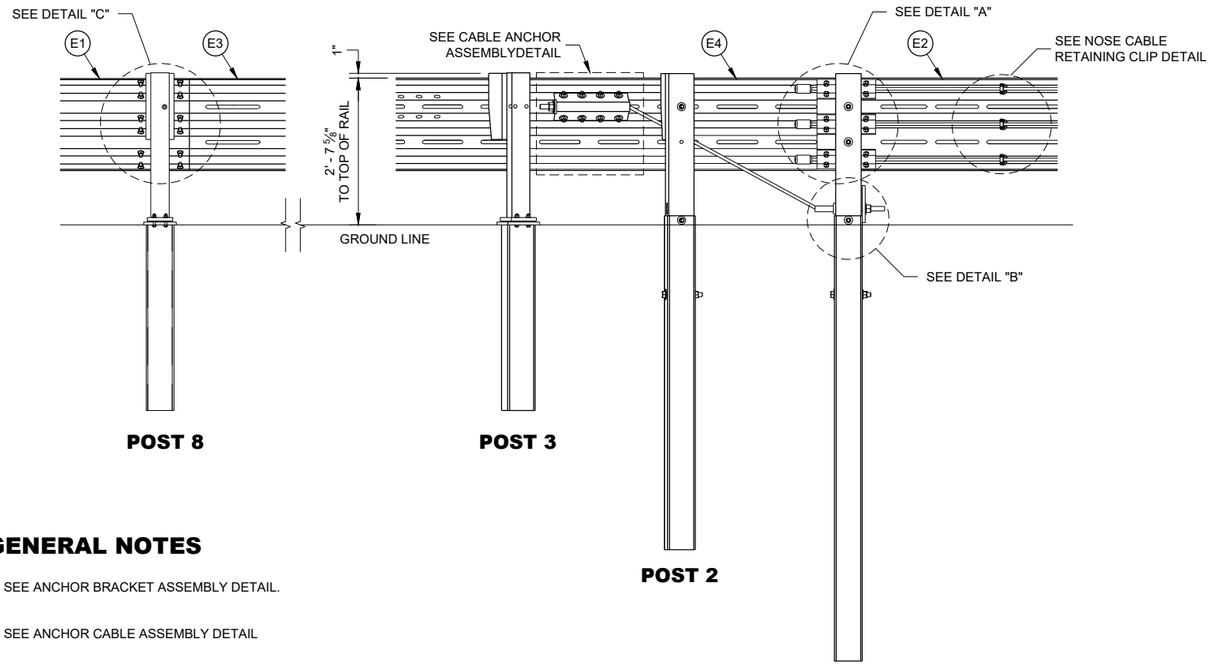
NOSE CABLE RETAINING CLIP



DETAIL "A"

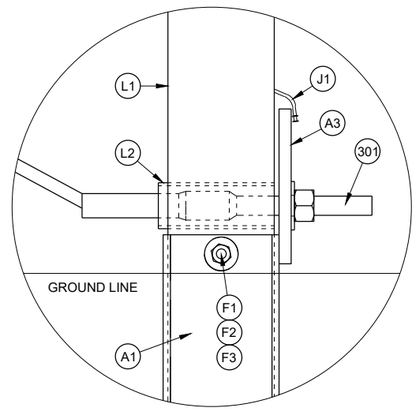


ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

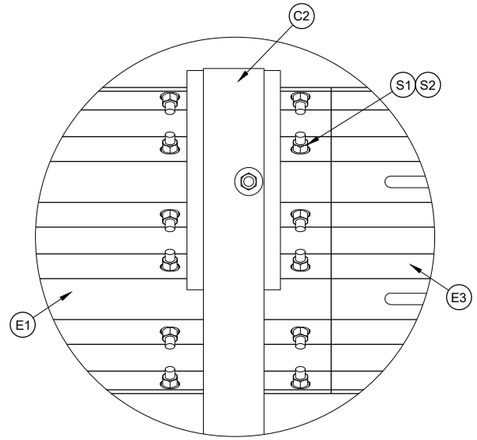


POST 8 **POST 3** **POST 2** **POST 1**

CROSS SECTION A - A



DETAIL "B"



DETAIL "C" THRIE BEAM SPLICE

GENERAL NOTES

(300) SEE ANCHOR BRACKET ASSEMBLY DETAIL.

(301) SEE ANCHOR CABLE ASSEMBLY DETAIL

(302) ONE WASHER BETWEEN BOLT HEAD AND RAIL AND BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

(303) ONE WASHER BETWEEN BOLD HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

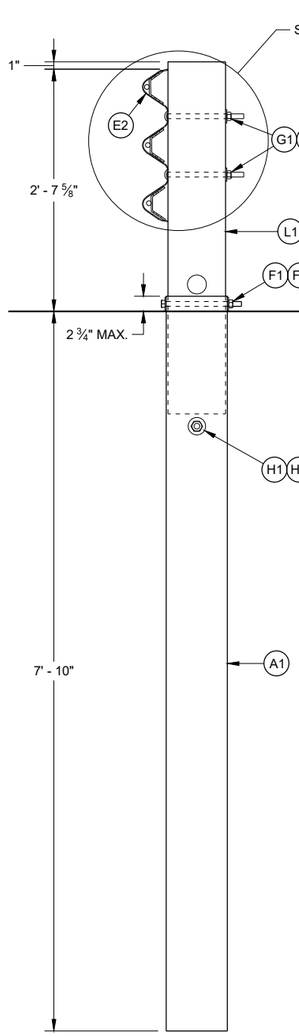
STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

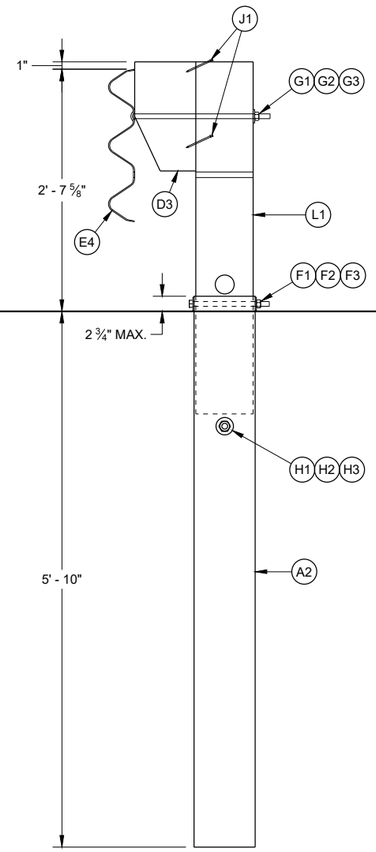
6

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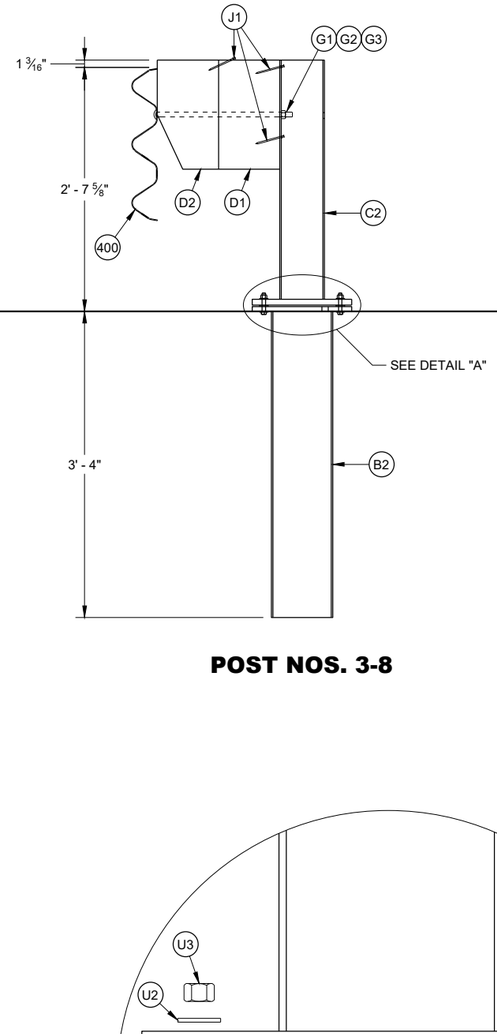
SDD 14B26 - 05c



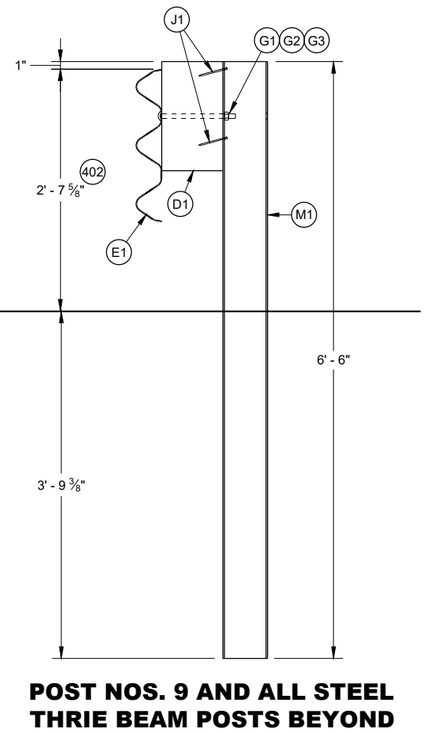
POST NO. 1



POST NO. 2



POST NOS. 3-8



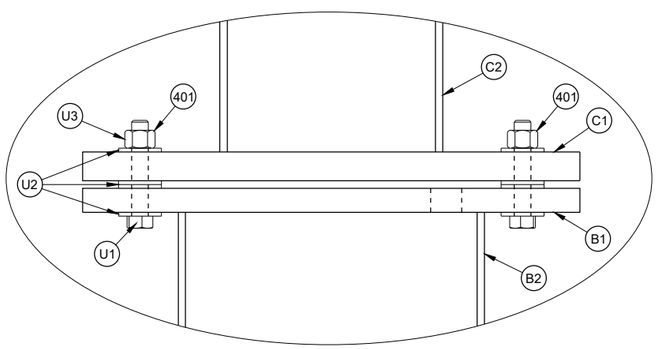
POST NOS. 9 AND ALL STEEL THRIE BEAM POSTS BEYOND

GENERAL NOTES

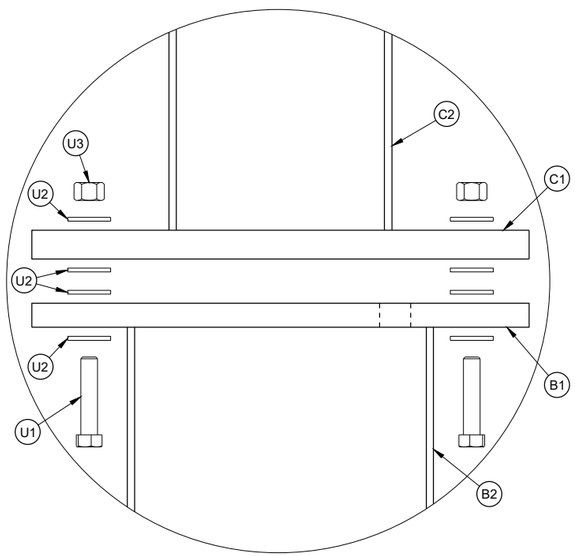
400 RAIL CAN BE E3 OR E4 DEPENDING ON POST LOCATION.

401 TORQUE BOLD BETWEEN 60-75 FT-LB

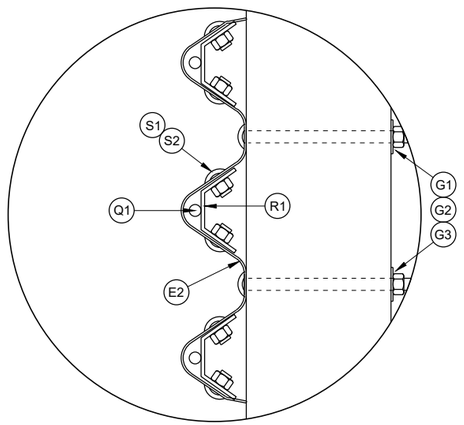
402 HEIGHT WILL VARY WITHIN HEIGHT TRANSITION TO OTHER HARDWARE. SEE NOTE 213, SHEET "b".



DETAIL "A"



EXPLODED VIEW
DETAIL "A"



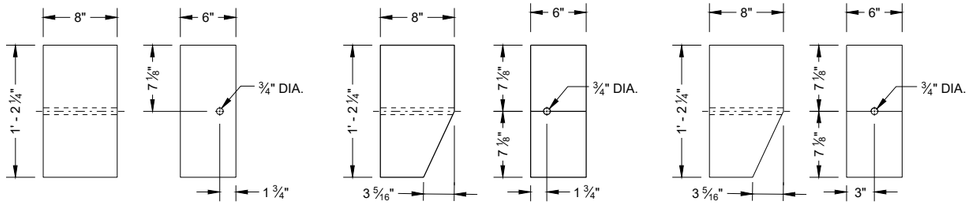
DETAIL "B"

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

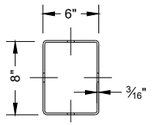
SDD 14B26 - 05d



ELEVATION PROFILE
BLOCKOUT (D1)

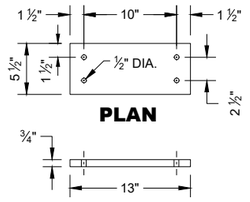
ELEVATION PROFILE
BLOCKOUT (D2)

ELEVATION PROFILE
BLOCKOUT (D3)



PLAN

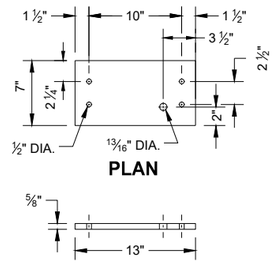
PART	LENGTH "X"
A1	8' - 0"
A2	6' - 0"
B2	3' - 4"



PLAN

PROFILE

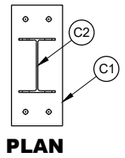
UPPER SHEAR PLATE (C1)



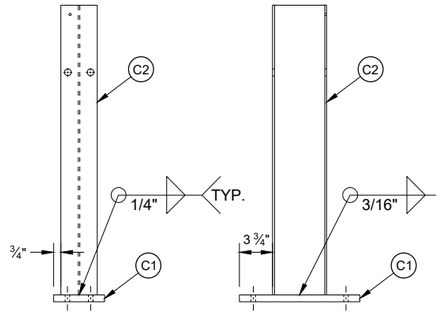
PLAN

PROFILE

LOWER SHEAR PLATE (B1)

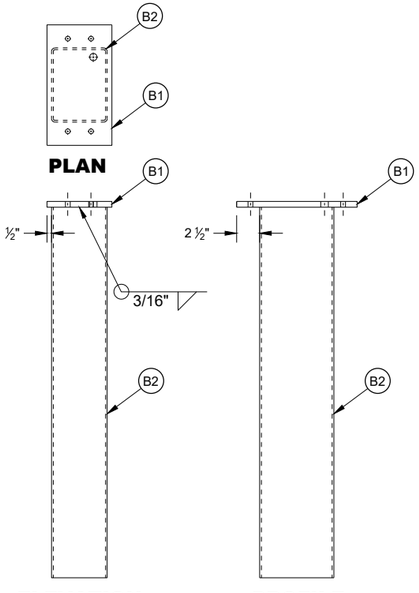


PLAN



ELEVATION PROFILE

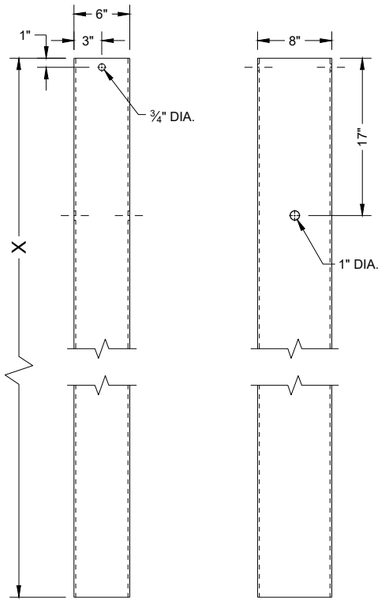
UPPER POST ASSEMBLY



PLAN

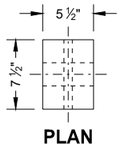
ELEVATION PROFILE

LOWER POST ASSEMBLY

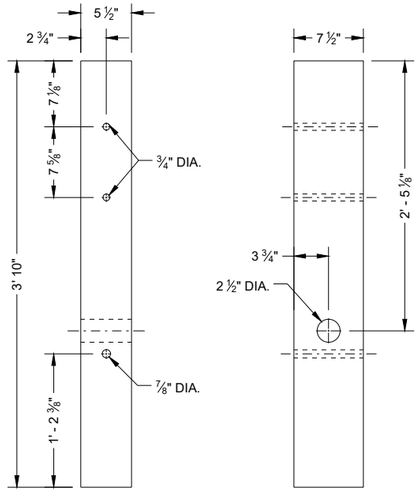


ELEVATION PROFILE

FOUNDATION TUBE

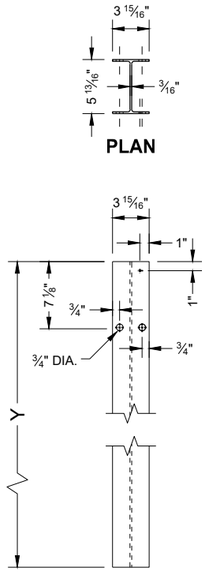


PLAN



ELEVATION PROFILE

BCT POST (L1)



PLAN

ELEVATION

POST

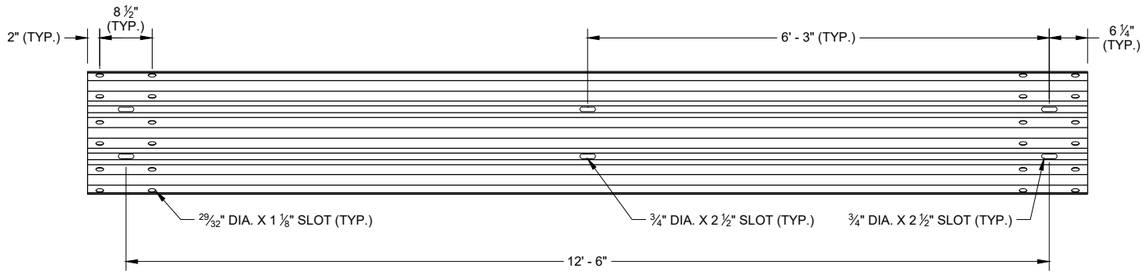
PART	LENGTH "Y"
M1	6' - 6"
M2	5' - 8 5/8"
C2	2' - 7 5/8"

STEEL THRIE BEAM BULLNOSE TERMINAL

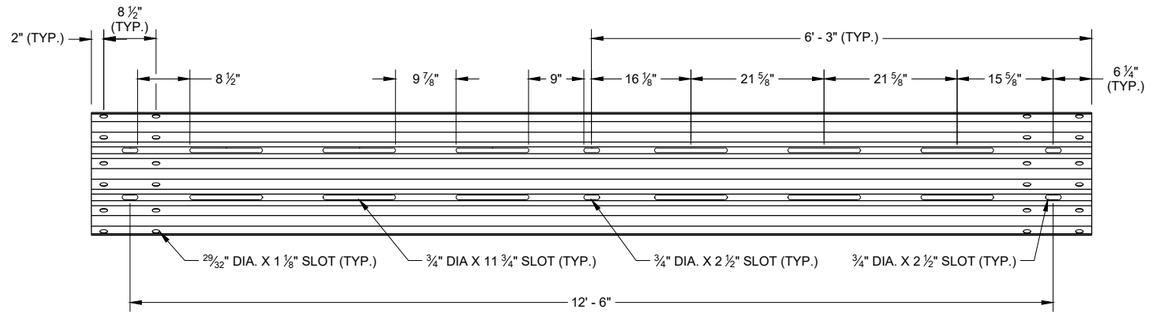
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

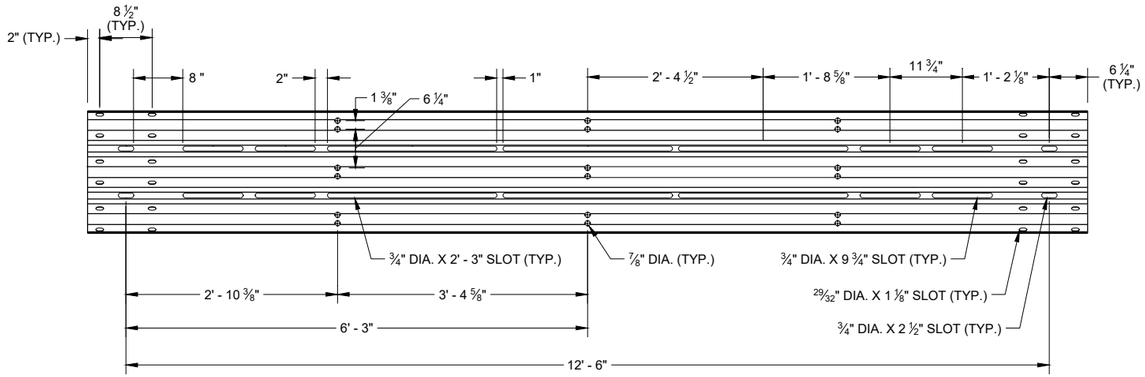
SDD 14B26 - 05e



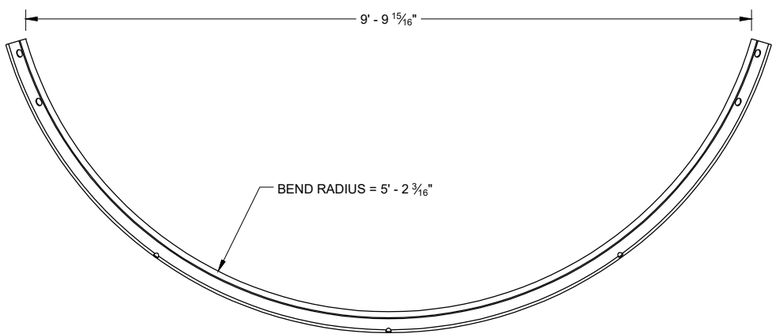
SLOTTED THRIE BEAM RAIL E1



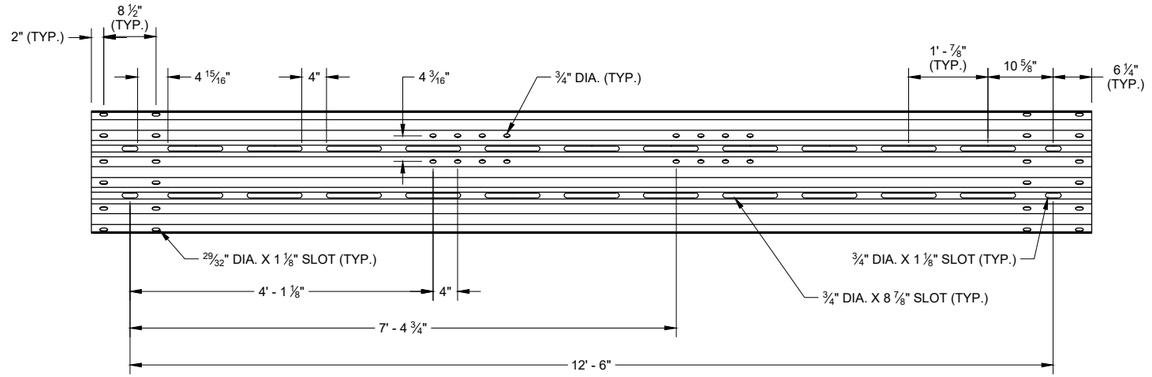
SLOTTED THRIE BEAM RAIL E3



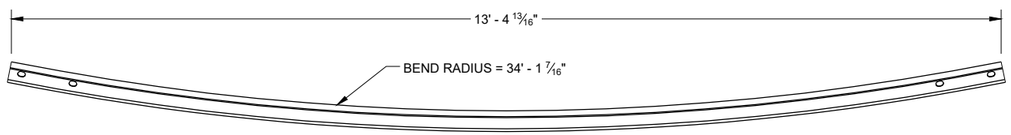
ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E2



PLAN VIEW
SLOTTED THRIE BEAM RAIL E2



ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E4

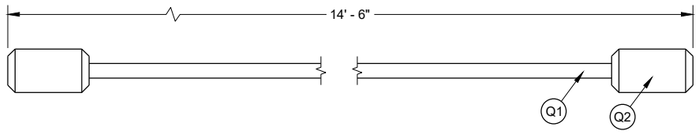


PLAN VIEW
SLOTTED THRIE BEAM RAIL E4

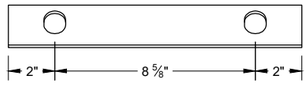
STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

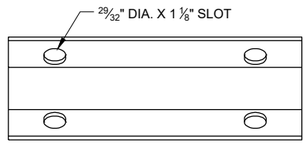
6
SDD 14B26 - 05f



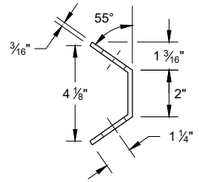
NOSE CABLE AND SWAGE BUTTON



PLAN VIEW

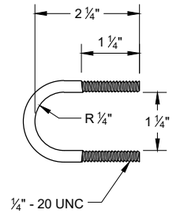


ELEVATION VIEW

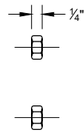


PROFILE VIEW

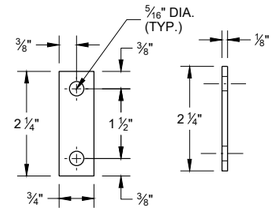
NOSE CABLE ANCHOR (R1)



U - BOLT (T1)

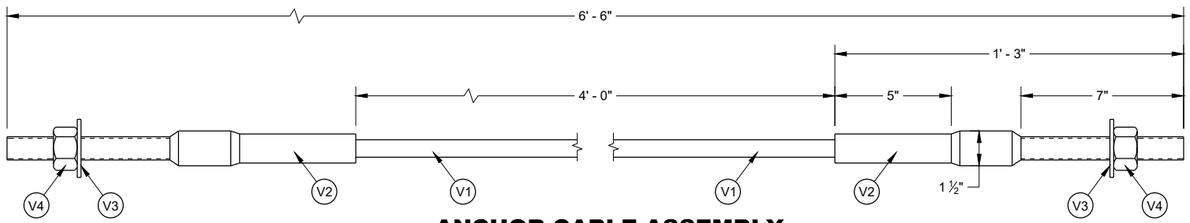


U - BOLT NUT (T3)

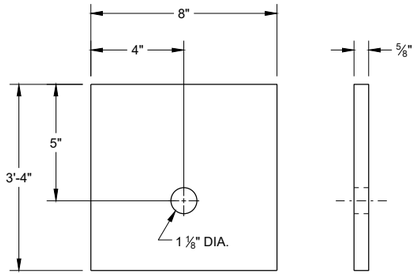


ELEVATION VIEW **PROFILE VIEW**

U - BOLT PLATE WASHER (T2)

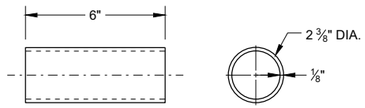


ANCHOR CABLE ASSEMBLY



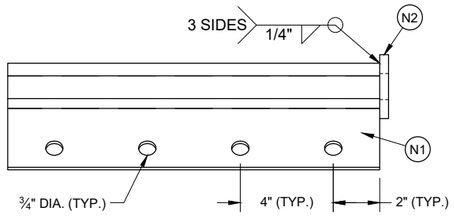
ELEVATION VIEW **PROFILE VIEW**

BCT BEARING PLATE (A3)

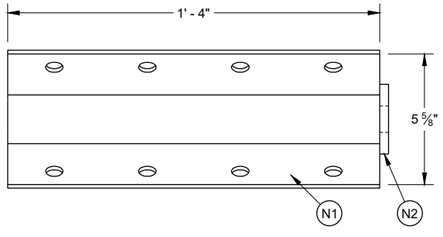


ELEVATION VIEW **PROFILE VIEW**

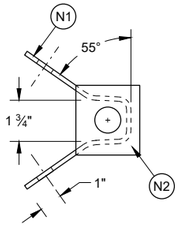
BCT POST SLEEVE (L2)



PLAN VIEW

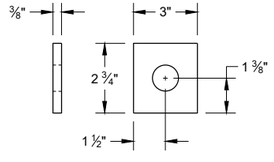


ELEVATION VIEW



PROFILE VIEW

ANCHOR BRACKET ASSEMBLY (N1)



ANCHOR BRACKET END PLATE (N2)

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B26 - 05g

BILL OF MATERIALS LIST

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
A1	LONG FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A2	FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A3	BEARING PLATE AT 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	LOWER SLIP POST 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
B2	LOWER SLIP POST ASSEMBLY - TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
C1	UPPER SLIP POST 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
C2	UPPER SLIP POST ASSEMBLY - POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 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
D1	BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D2	TAPERED BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D3	TAPERED BLOCK FOR BCT POST - WOOD	WISDOT SPEC. 614
E1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E2	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
E3	THRIE BEAM RAIL - PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E4	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
F1	5/8" DIA. HEX HEAD GROUND STRUT AND YOKE 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
F2	5/8" DIA. GROUND STRUT AND YOKE 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)
F3	GROUND STRUT AND YOKE 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
G1	5/8 " DIA. 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 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G2	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 TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G3	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
H1	7/8" DIA. SOIL 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 7/8" ASTM A563DH OR SAE J995 GRADE 5
H2	SOIL TUBE 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 7/8" ASTM F844 TYPE 1 (HARDEN WASHER ONLY)
H3	SOIL TUBE 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 7/8" ASTM A563DH OR SAE J995 GRADE 5
J1	16D DOUBLE HEAD NAIL	ASTM A153 HOT DIPPED CLASS D DOUBLE HEAD ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)
L1	BCT TIMBER POST	WISDOT SPEC. 614 S4S FINISH ON 4 SIDE
L2	BCT POST SLEEVE	AASHTO M111/ASTM A123 2 3/8" OD ASTM 53 GRADE B
M1	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 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	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 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
N1	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
N2	ANCHOR BRACKET - 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

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
P1	5/8" DIA. 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 HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
P2	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)
P3	SOIL TUBE 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
Q1	5/8" DIA. NOSE CABLE	6X19 AASTHO M30 / ASTM A741 XIPS INDEPENDENT WIRE CORE (IWRC) PR 6X25 XIPS, IWRC NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
Q2	NOSE CABLE-SWAGE BUTTON	COLD TUFF BUTTON, S-409 SIZE NO. 12 STOCK NUMBER 1040395 OR ANY OTHER SIMILAR SIZED WAGED-GRIP-BUTTON FERRULES. ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FIELD SWAGED PER MANUFACTURERS RECOMMENDATION. NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
R1	NOSE CABLE 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
S1	5/8" DIA. SPLICE BOLT - 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
S2	SPLICE - 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 5/8" ASTM A563DH OR SAE J995 GRADE 5
T1	1/4" DIA. NOSE CABLE - U 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
T2	U-BOLT - PLATE 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)
T3	U-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
U1	7/16" DIA. SLIP POST ASSEMBLY - BREAKAWAY BOLT	ASTM A153 OR B695 CLASS 55 OR F2329 UNC FULLY THREADED HEX HEAD TAP BOLT ASTM A449 OR SAE J429 GRADE 5
U2	7/16" DIA. SLIP POST ASSEBLY - BREAKAWAY BOLT - WASHER	ASTM F436 TYPE I (HARDEN TYPICALLY USED WITH STEEL) GALV. AASHTO M111/ASTM A 123 OR GALV. HOT DIP. TO POST BOLT CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 55, F2329
U3	SLIP POST ASSEBLY - 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 / STM 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
V1	¾" DIA. BCT CABLE	AASHTO M30 / ASTM A741 6X19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6X19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN BREAKING STRENGTH OF 42.7 KIPS
V2	ANCHOR CABLE-SWAGE FITTING	UNC ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FACTORY SWAGED. 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."
V3	1" DIA. ANCHOR CABLE-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)
V4	1" DIA. ANCHOR CABLE-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
W1	REFLECTOR	SEE SDD 15A4

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SDD 14B26 - 05h

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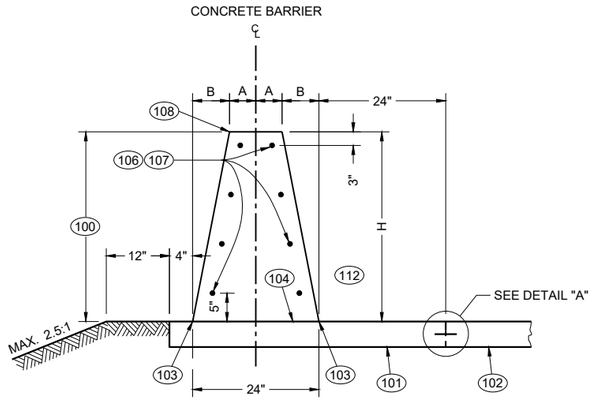
SDD 14B26 - 05h

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

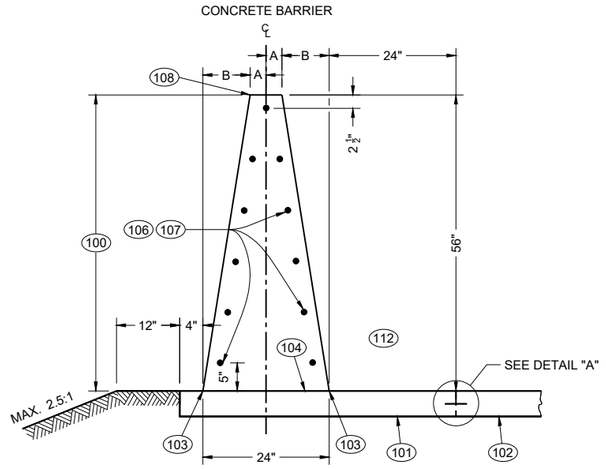
APPROVED
November 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA



32 - INCH, 36 - INCH OR 42 - INCH SINGLE SLOPE CONCRETE BARRIER

(TYPE S32, TYPE S36, TYPE S42)

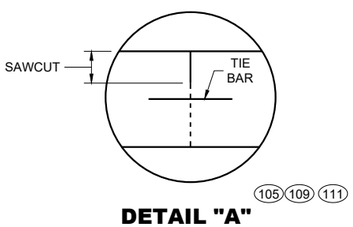


56 - INCH SINGLE SLOPE CONCRETE BARRIER

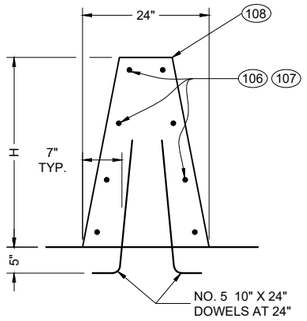
(TYPE S56)

TABLE "A"

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

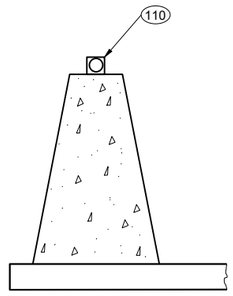


DETAIL "A"



SINGLE SLOPE CONCRETE BARRIER ON BRIDGE

(NON OUTER PARAPET APPLICATION)



DELINEATION

GENERAL NOTES

WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.

LOCATE EXPANSION JOINTS IN CONCRETE BARRIER SHALL AT ALL DECK AND PRINCIPAL WALL JOINTS. FILL EXPANSION JOINT WITH EXPANSION JOINT MATERIAL. SEAL THE EXPANSION JOINT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.

2" CLEAR COVER TYPICAL

ANCHORS ARE REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN IN THIS SDD OR DETAIL SHOWN ON SDD 14B33. ANCHORS INCIDENTAL TO CBSS.

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'.

ALL REBAR SHALL BE EPOXY COATED M31 TYPE S. SEE STANDARD SPECIFICATION 505.

CONCRETE BARRIER, UPPER CONCRETE BARRIER, LOWER CONCRETE BARRIER, CONCRETE BARRIER PAD, AND FOOTINGS ARE TERMS USED TO DESCRIBE PARTS OF SINGLE SLOPE CONCRETE BARRIER BID ITEMS. THESE PARTS ARE INCIDENTAL TO THE SINGLE SLOPE CONCRETE BARRIER BID ITEMS.

(100) CONCRETE BARRIER

(101) CONCRETE BARRIER PAD

(102) PAVEMENT

(103) WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 1 ½", USE TYPE A SINGLE SLOPE BARRIER.

(104) OPTIONAL CONSTRUCTION JOINT.

(105) CONSTRUCTION JOINTS MAY BE ELIMINATED WHEN CONCRETE SHOULDER IS LESS THAT 10'.

(106) STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL IS 2' BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.

(107) NO. 5 CONTINUOUS BARS EVENLY SPACED (SEE TABLE "A").

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

(109) 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", OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.

(110) SEE SDD 15A04 FOR DELINEATOR DETAILS AND SPACING.

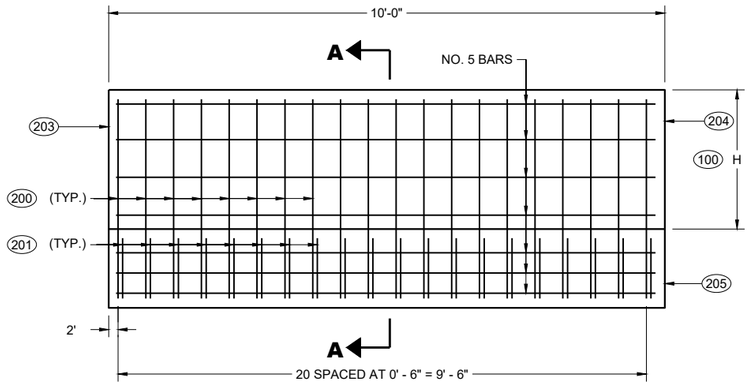
(111) SEE SDD 13C01 FOR DETAILS TYPING CONCRETE BARRIER TO ADJACENT CONCRETE

(112) TRAFFIC SIDE

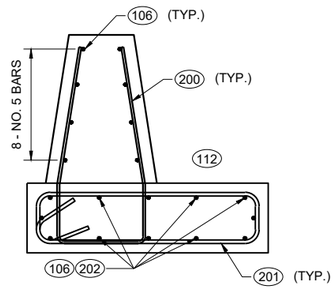
CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

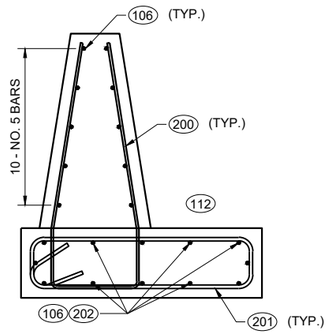
6
SDD 14B32-11a



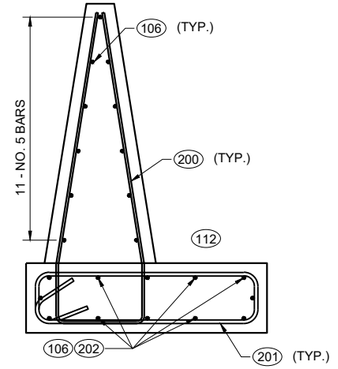
END ANCHOR SINGLE
SLOPE CONCRETE BARRIER



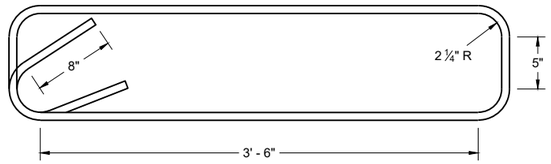
32" AND 36" CBSS



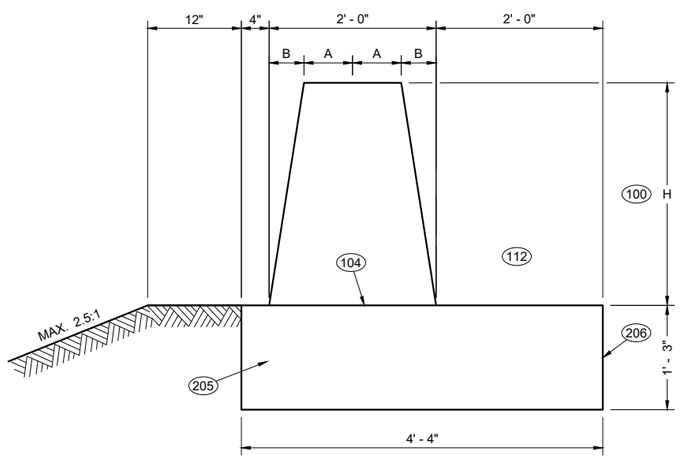
42" CBSS



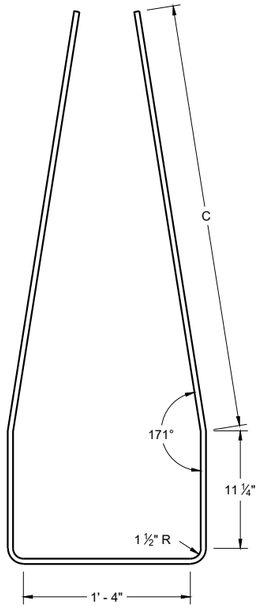
56" CBSS



STIRRUP BAR
BENDING DETAIL



SECTION A - A



V1 BAR
BENDING DETAIL

TABLE "B"

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

GENERAL NOTES

(200) V1 BARS ARE NO. 5 BARS. (SEE BAR BENDING DETAIL)

(201) STIRRUPS ARE NO. 6 BARS. (SEE BAR BENDING DETAIL)

(202) TWELVE (12) NO. 5 BARS EVENLY SPACED

(203) END OF INSTALLATION OR EXPANSION JOINT.

(204) SEE COLD JOINT DETAIL TO CONNECT END ANCHOR SINGLE SLOPE CONCRETE BARRIER TO SINGLE SLOPE CONCRETE BARRIER.

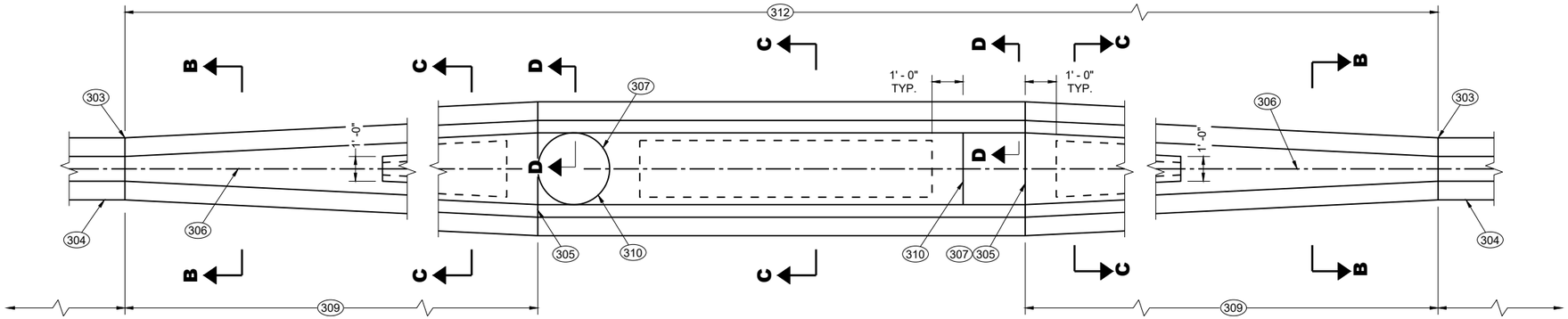
(205) FOOTING

(206) DO NOT TIE TO FOOTING TO ADJACENT PAVEMENT.

CONCRETE BARRIER
SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

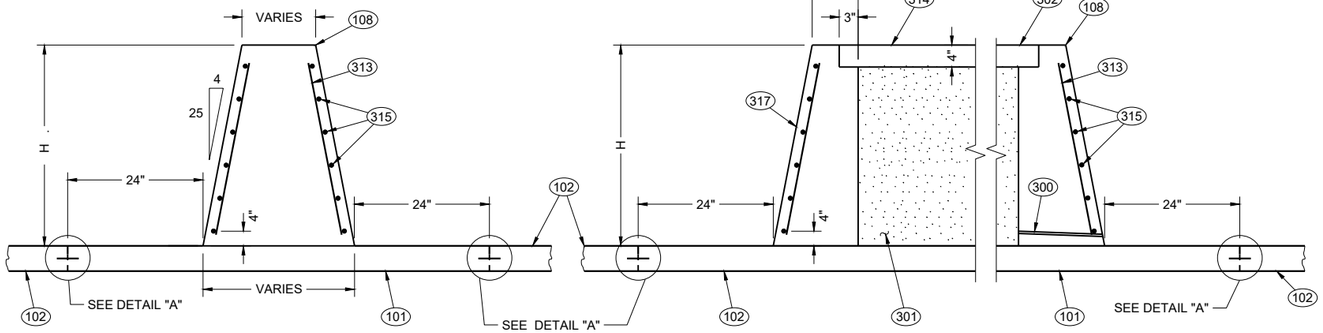
6
SDD 14B32-11b



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

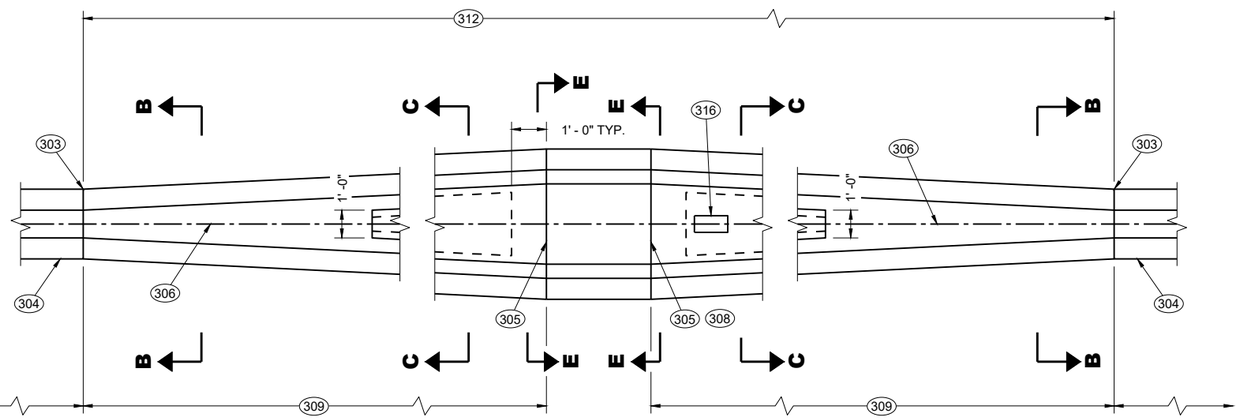
TABLE "C"

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

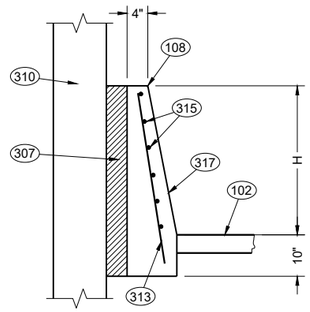


SECTION B - B

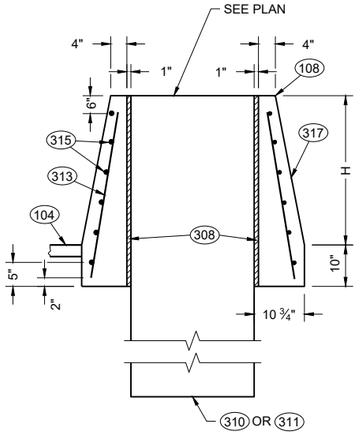
SECTION C - C



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



SECTION D - D



SECTION E - E

GENERAL NOTES

(300) INSTALL 1 INCH DIAMETER DRAIN PIPE EVERY 20 FEET OF CROSS SECTION B -B. MINIMUM ONE DRAIN CAVITY.

(301) BETWEEN CONCRETE BARRIER WALLS FILL WITH FOUNDATION BACKFILL.

(302) LEVEL THE TOP OF CONCRETE BARRIER CAP ACROSS TOP OF BARRIER. ADJUST HEIGHT OF CONCRETE BARRIER WALL ON LOW SIDE OF OFFSET OR SUPERELEVATED ROADWAYS TO PROVIDE LEVEL GRADE ACROSS TOP OF CONCRETE CAP.

(303) USE COLD JOINTS BETWEEN FIXED OBJECT PROTECTION AND CONCRETE BARRIER ANCHOR.

(304) INSTALL END ANCHOR SINGLE SLOPE CONCRETE BARRIER.

(305) SEE COLD JOINT DETAIL

(306) CENTERLINE OF CONCRETE BARRIER.

(307) INSTALL 4" EXPANDED POLYSTYRENE BETWEEN COLUMN AND CONCRETE BARRIER.

(308) INSTALL 1" EXPANDED POLYSTYRENE BETWEEN PEDESTAL AND CONCRETE BARRIER.

(309) 20:1 MIN. TRANSITION.

(310) COLUMN

(311) PEDESTAL

(312) LIMITS OF PAYMENT FOR LARGE FIXED OBJECT PROTECTION (SEE PLAN)

(313) NO. 4 BARS SPACED 12" CENTER TO CENTER (TYP.)

(314) USE NO. 3 BAR SPACED 12 INCHES CENTER TO CENTER (PLACED IN EACH DIRECTION) OR EQUIVALENT WIRE MESH.

(315) SEE TABLE "C" FOR BAR INFORMATION

(316) ELECTRICAL PULL BOX FOR SIGN FLUSH WITH TOP OF CONCRETE BARRIER.

(317) VARIABLE SLOPE

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

(400) END ANCHOR SINGLE SLOPE CONCRETE BARRIER.

(401) PARAPET, SIGN BRIDGE BASE, LIGHT POLE BASE OR OTHER OBJECT SINGLE SLOPE CONCRETE BARRIER CANNOT TIE INTO.

(402) JOINT SEAL CONFORMING TO STANDARD SPECIFICATION 415.2.6

(403) EXPANSION JOINT MATERIAL.

(404) INLET (SEE PLAN)

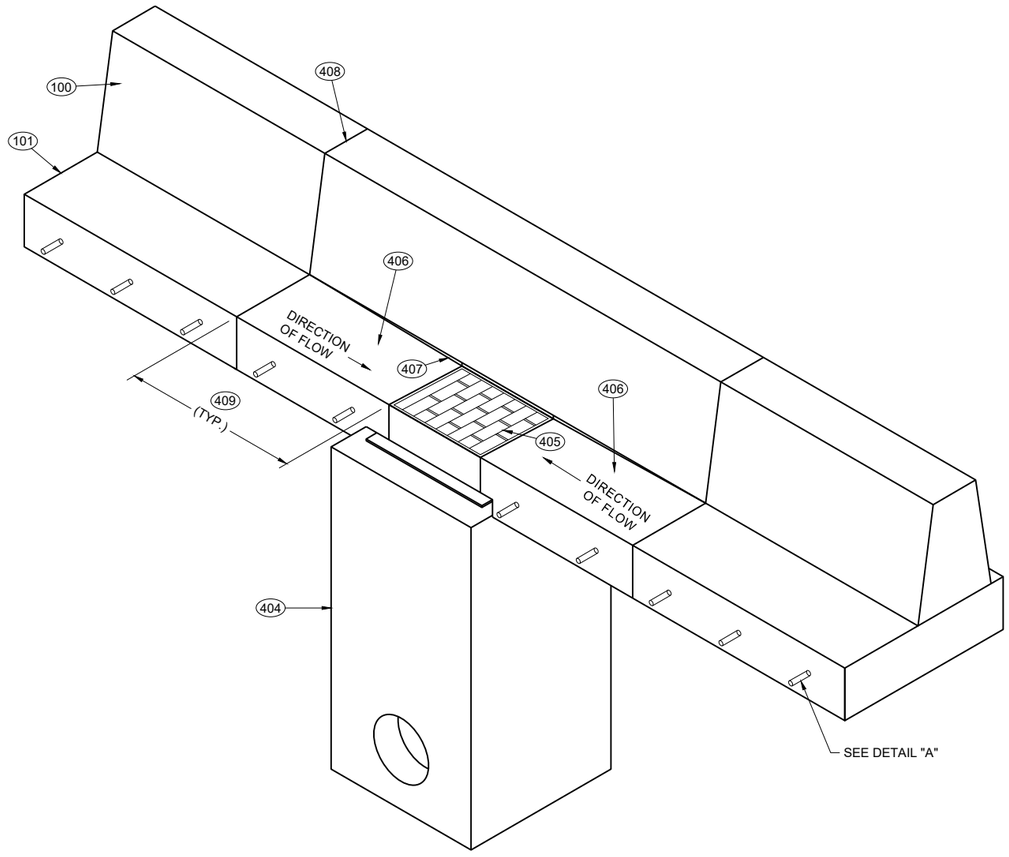
(405) INLET COVER BW (SEE PLAN)

(406) WARP PAN TO MATCH INLET COVER.

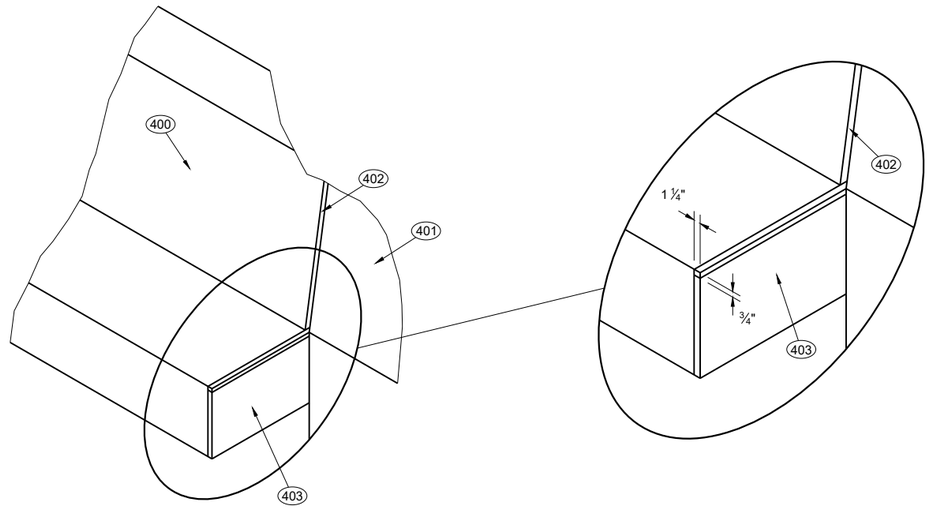
(407) EXTEND BARRIER SLOPE TO INLET. SEE PLAN FOR THE LENGTH OF EXTENSION.

(408) CONTRACTION JOINT.

(409) WHEN ADJACENT TO CONCRETE PAVEMENT OR SHOULDER, JOINT SHOULD MATCH CONCRETE JOINTS. OTHERWISE, 3' (TYP.). SEE SDD 13C18 FOR MORE INFORMATION.



DRAINAGE DETAIL



EXPANSION JOINT DETAIL

6

SDD 14B32-11d

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B32-11d

GENERAL NOTES

USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

(500) SEE TABLE "A" FOR DIMENSIONS

(501) SEE TABLE "D"

(502) MULTIPLE HEIGHT TRANSITION MAY BE USED IN SEQUENCE TO GET APPROPRIATE HEIGHT.

(503) COLD JOINT

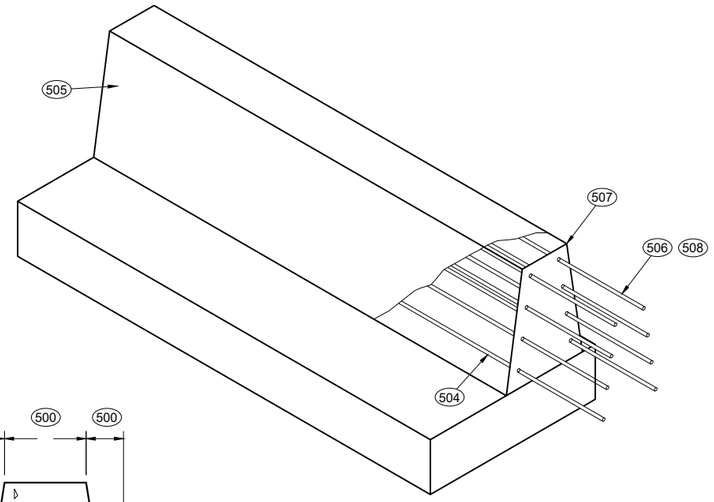
(504) BARRIER REBAR (SEE OTHER DETAILS FOR BAR SIZE, QUANTITY AND LOCATION). SINGLE SLOPE BARRIER SHOWN. SIMILAR DETAIL CAN BE USED FOR COLD JOINT IN

(505) END ANCHORS AND TRANSITIONS.

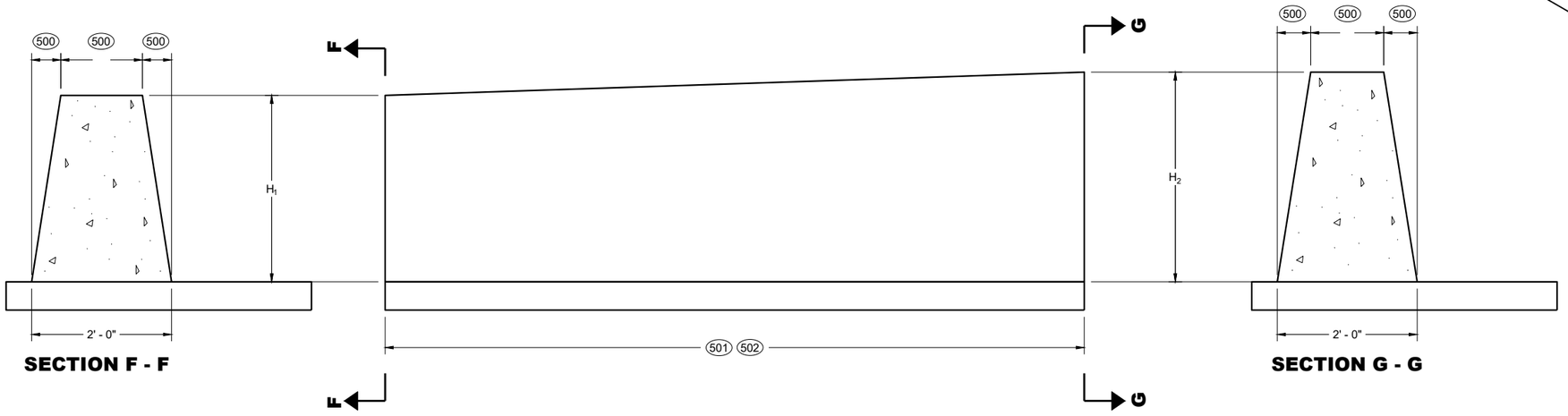
(506) NO. 5 REBAR FOR SPLICE. 3' OF SPLICE REBAR IS LAPPED AND TIED TO BARRIER REBAR. EXTEND 3' OF SPLICE REBAR BEYOND END OF POUR. ALL BARS ARE FIRMLY TIED OR CONNECTED. EVERY REBAR IN THE BARRIER SECTION REQUIRES A SPLICE BAR.

(507) END OF POUR.

(508) LAP AND TIE 3' OF NEXT POUR'S REBAR TO SPLICE REBAR.



COLD JOINT DETAIL



SECTION F - F

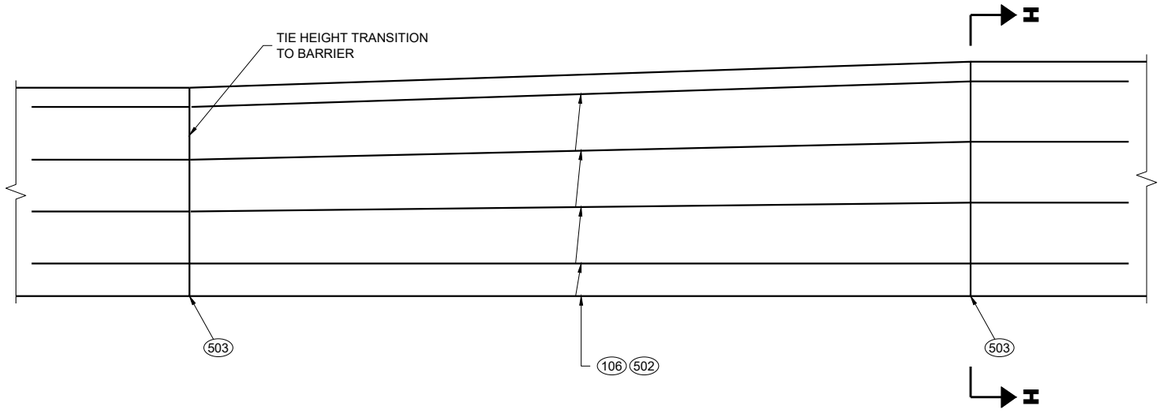
SECTION G - G

DOUBLE COLD JOINT HEIGHT TRANSITION

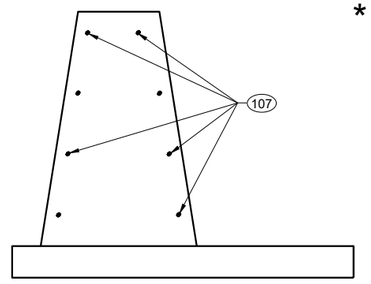
TABLE "D"

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.



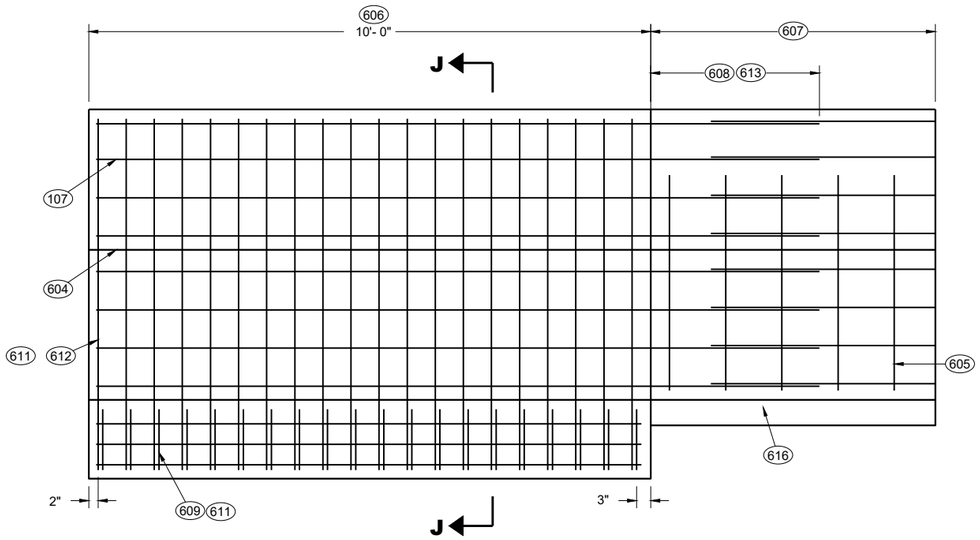
STEEL REINFORCEMENT DETAIL



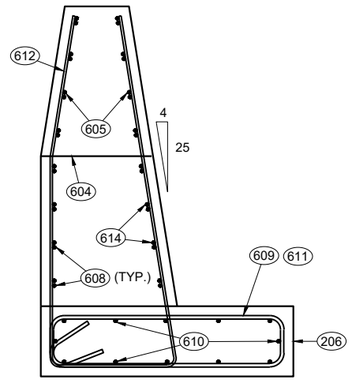
SECTION H - H

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



END ANCHOR MEDIAN BARRIER AND RETAINING WALL



SECTION J - J
END ANCHOR AND MEDIAN WALL END ANCHOR REINFORCEMENT DETAIL

GENERAL NOTES

600 UPPER CONCRETE BARRIER

601 LOWER CONCRETE BARRIER

602 MAX HEIGHT 36".

603 VERTICAL OFFSET FROM TOP ROADWAY SURFACES

604 OPTIONAL CONSTRUCTION JOINT WHEN HEIGHT IS GREATER THAN 1 ½".

605 NO. 4 BARRIER LOOP BARS ARE NOT REQUIRED FOR ROADWAY OFFSETS ARE LESS THAN 1'- 0", EXCEPT WHEN USED IN ANCHORS. BARRIER LOOP BARS ARE SPACED 12" CENTER TO CENTER OUTSIDE OF MEDIAN BARRIER AND RETAINING WALL END ANCHOR.

606 SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL ANCHOR

607 SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL (SEE OTHER DETAILS)

608 NO. 5 REBAR 3' OF LAP OF LONGITUDINAL STEEL.

609 NO. 6 REBAR END ANCHOR FOOTING LOOP

610 TWELVE (12) NO. 5 BARS EVENLY SPACED.

611 SS ANCHOR END LOOP AND END ANCHOR FOOTING LOOP ARE SPACED 6" CENTER TO CENTER.

612 END ANCHOR LOOP BAR IS NO. 5 REBAR.

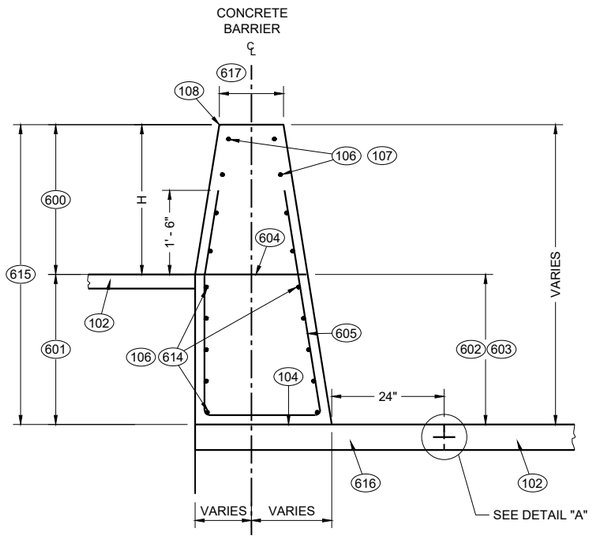
613 SEE COLD JOINT DETAIL.

614 SEE TABLE "E" FOR REQUIRED REBAR

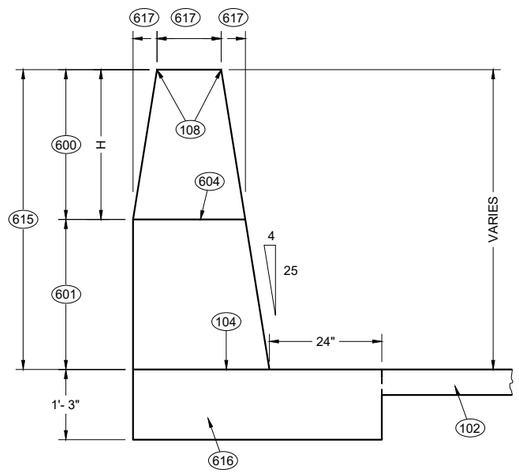
615 TOTAL BARRIER HEIGHT (SEE PLAN FOR HEIGHT)

616 FOR SOME LOCATIONS, NO PAN IS NEEDED. SEE OTHER DETAILS.

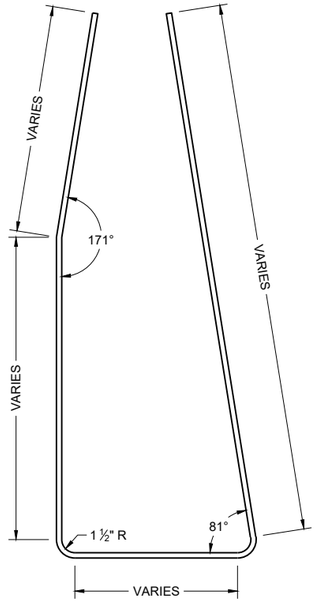
617 SEE TABLE "A" FOR DIMENSIONS



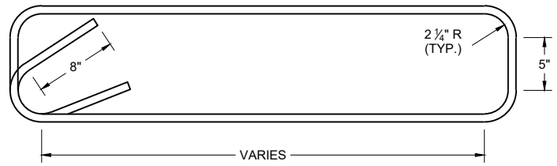
SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL (TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)
(BETWEEN ADJACENT ROADWAYS)



SECTION J - J
MEDIAN BARRIER AND RETAINING WALL END ANCHOR DIMENSIONS



LOOP BAR BENDING DETAIL



END ANCHOR STIRRUP BAR BENDING DETAIL

TABLE "E"

HEIGHT BETWEEN ROADWAY	QUANTITY OF NO. 6 BARS
0 TO 3"	0
GREATER THAN 3" TO 8"	2
GREATER THAN 8" TO 12"	4
GREATER THAN 12" TO 36"	8

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B32-11f

GENERAL NOTES

700 END ANCHOR SINGLE SLOPE CONCRETE BARRIER

701 SEE EXPANSION JOINT DETAIL

702 END ANCHOR SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL

703 PAY LIMIT FOR SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL

704 SEE COLD JOINT DETAIL

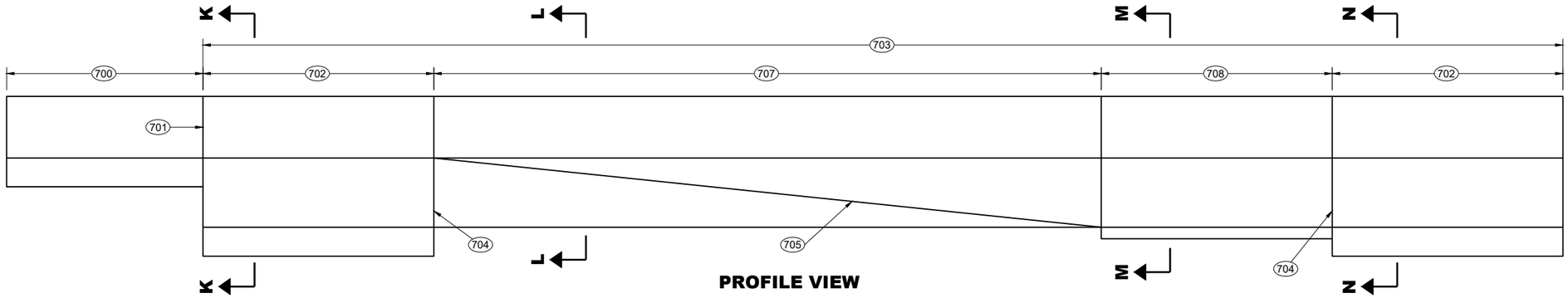
705 LOW SIDE SHOULDER

706 HIGH SIDE SHOULDER

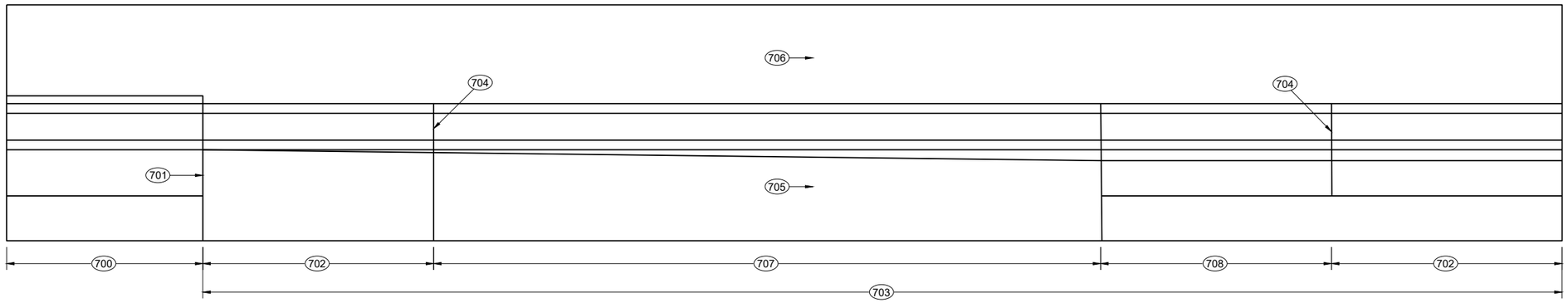
707 SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL INSTALLED WITHOUT A PAN.

708 SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL INSTALLED WITH A PAN.

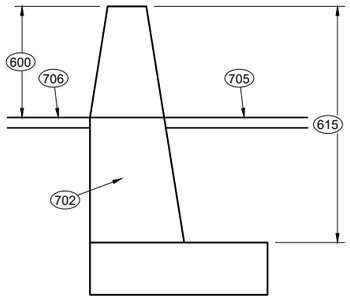
709 EXCAVATION AND COMPACTION



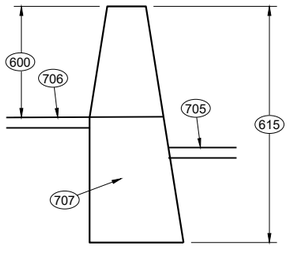
PROFILE VIEW
SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL



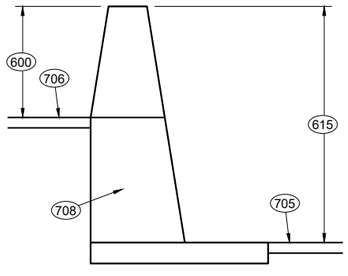
PLAN VIEW
SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL



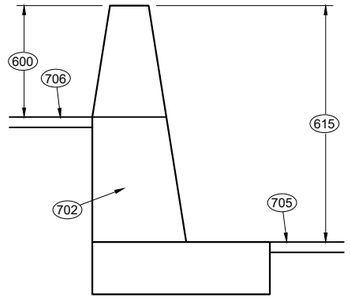
SECTION K - K



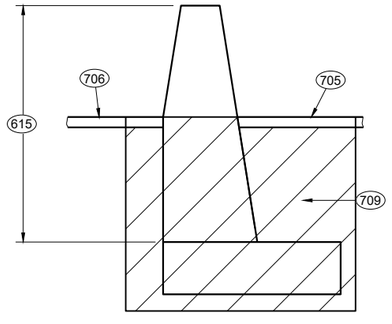
SECTION L - L



SECTION M - M



SECTION N - N

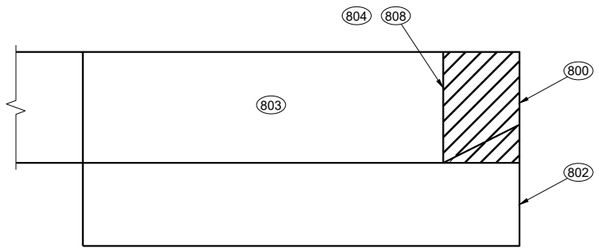


CONCRETE BARRIER
SINGLE SLOPE (CBSS)

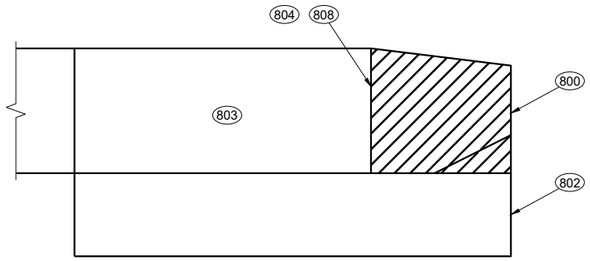
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B32-11g

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REMOVAL AREA OF
32" CONCRETE THRIE BEAM ANCHORAGE



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

GENERAL NOTES

END ANCHORAGE MAY OR MAY NOT BE PRESENT ON EXISTING BARRIER.

REMOVE THRIE BEAM ANCHORAGE AS SHOWN.

(800) AREA OF BARRIER REMOVAL AN NEW CONCRETE AND STEEL IS INSTALLED.

(801) MINIMUM LENGTH OF REMOVAL IS 15'

(802) FOOTING BELOW GROUND MAY REMAIN IN PLACE.

(803) CONCRETE BARRIER SINGLE SLOPE THRIE BEAM ANCHOR TO REMAIN.

(804) SAW CUT

(805) NEW SINGLE SLOPE CONCRETE BARRIER.

(806) CONCRETE BARRIE SINGLE SLOPE TO REMAIN.

(807) SINGLE SLOPE CONCRETE BARRIER OR CONCRETE BARRIER SINGLE SLOPE THRIE BEAM ANCHOR TO REMAIN.

(808) SEE CONNECTION DETAIL.

(809) NO. 5 CONTINUOUS BAR.

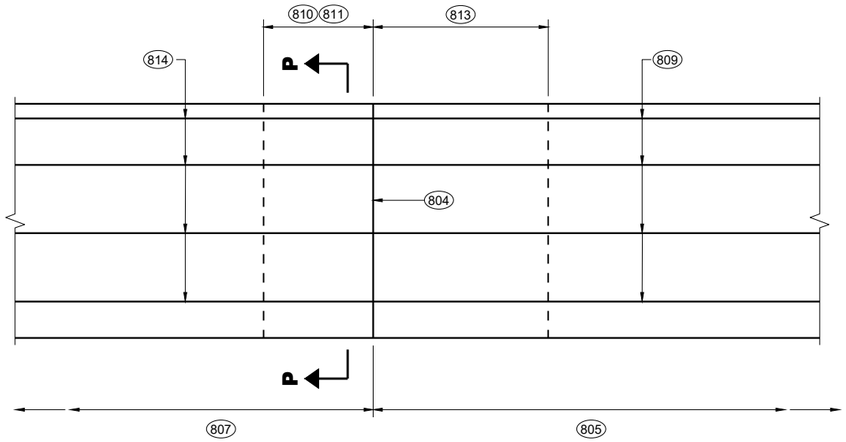
(810) 3' MIN. DRILL HOLES. USES NO. 5 ADHESIVE ANCHORS.

(811) THE NUMBER OF DRILL HOLES IS EQUAL TO THE NUMBER OF HORIZONTAL REBAR IN BARRIER. DRILL HOLES ARE TO BE A MINIMUM OF 4" FROM EDGE OF CONCRETE.

(812) EXISTING REBAR IN EXISTING BARRIER OR END ANCHOR.

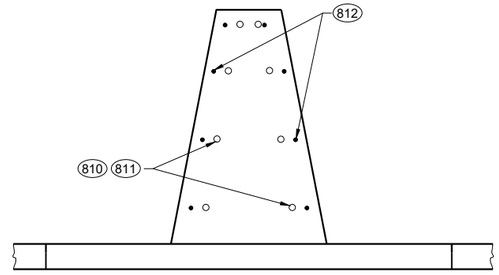
(813) 3' BAR OVERLAP

(814) EXISTING REINFORCEMENT

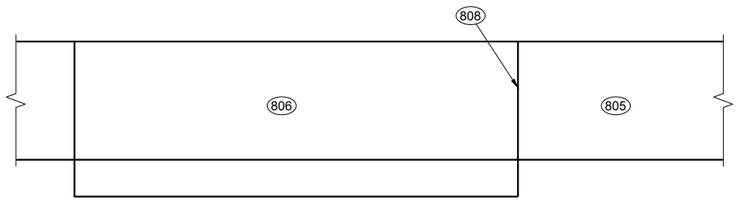


CONNECTION DETAIL

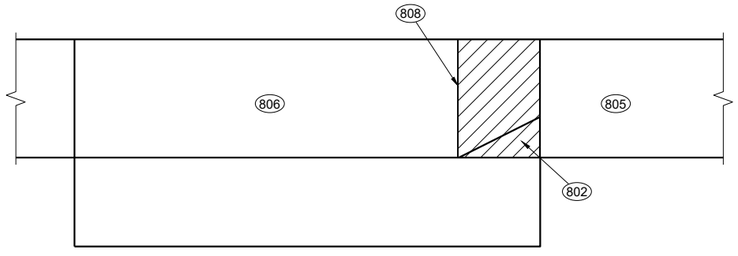
SINGLE SLOPE CONCRETE BARRIER TO
NEW SINGLE SLOPE CONCRETE BARRIER



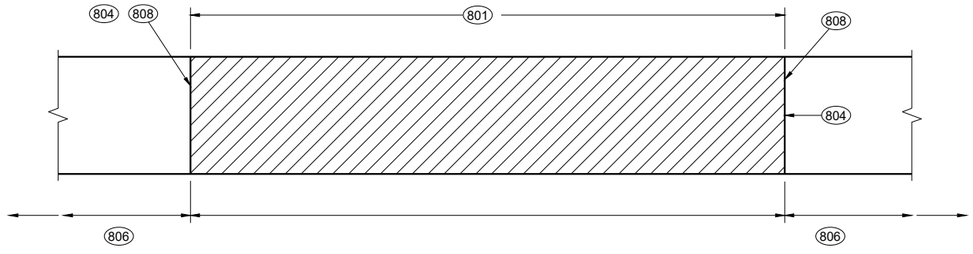
SECTION P - P



CONCRETE BARRIER EXTENSION NEAR END ANCHORAGE



CONCRETE BARRIER EXTENSION NEAR THRIE BEAM TERMINAL



BARRIER REMOVAL AND REPLACEMENT

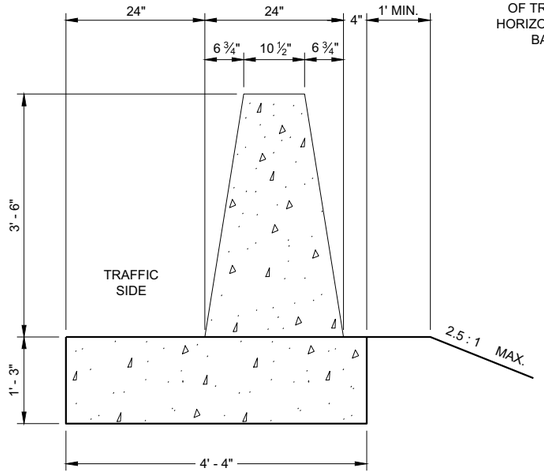
RETROFIT OR REPAIR SINGLE SLOPE CONCRETE BARRIER

CONCRETE BARRIER
SINGLE SLOPE (CBSS)

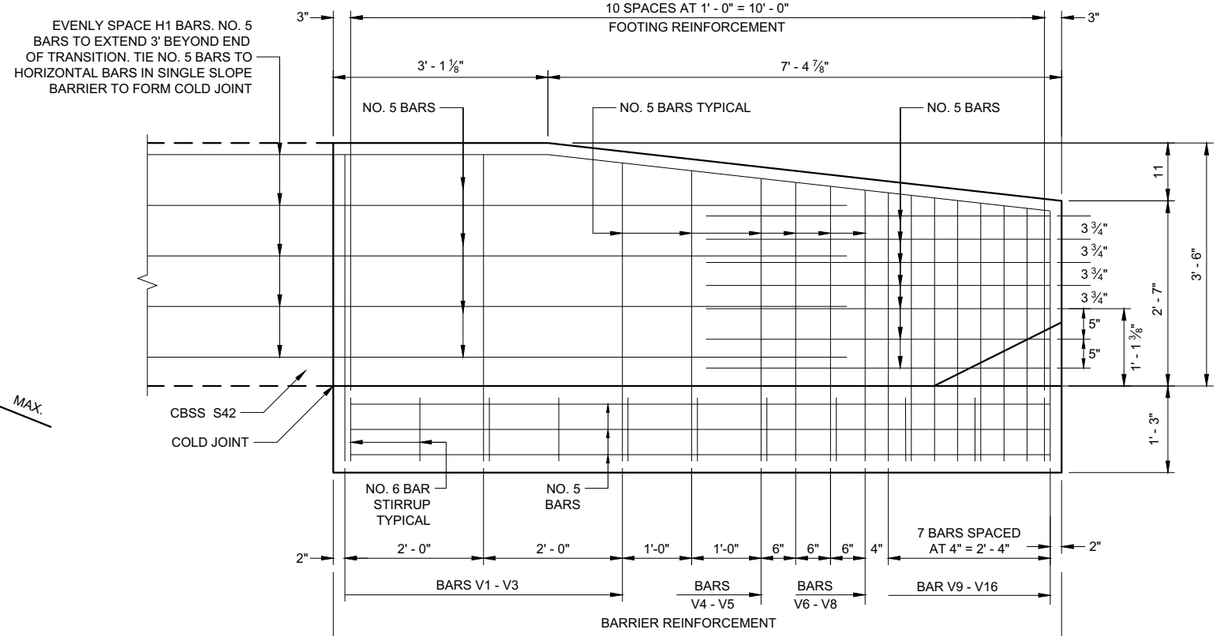
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

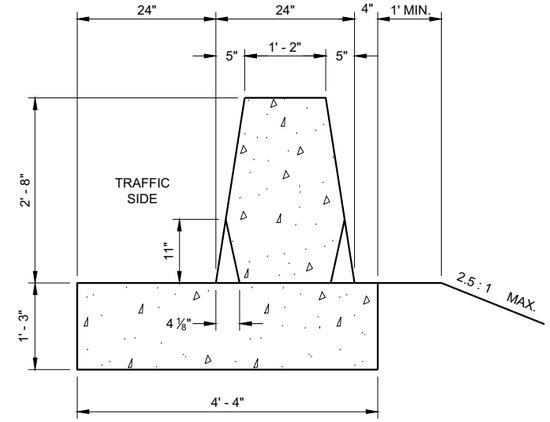
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SDD 14B32-11h



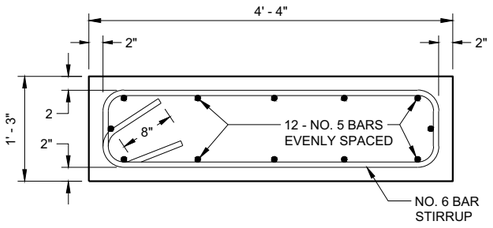
SECTION A - A



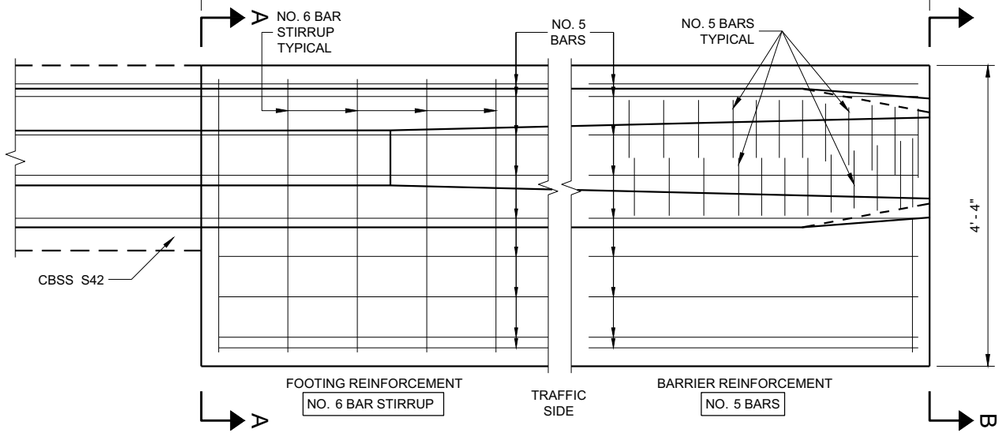
ELEVATION VIEW



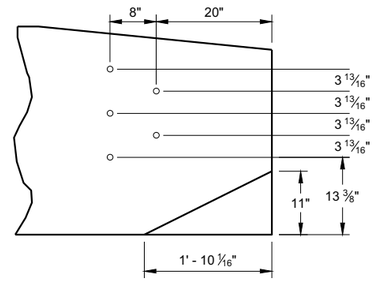
SECTION B - B



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

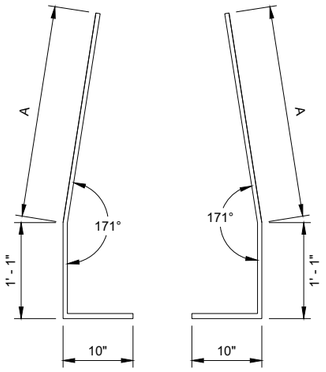
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B33 - 02g

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BAR CHART
BAR POSITIONS
1 - 11

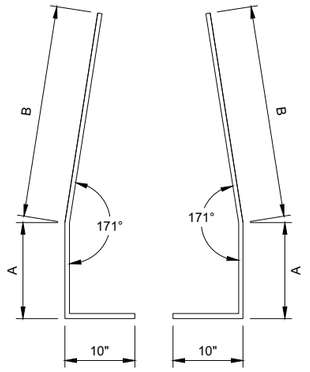
BAR	A
V1	3' - 4 ½"
V2	3' - 4 ½"
V3	3' - 2 ½"
V4	3' - 1"
V5	2' - 11 ½"
V6	2' - 11"
V7	2' - 10 ½"
V8	2' - 9 ½"
V9	2' - 9"
V10	2' - 8 ½"
V11	2' - 8"



BAR BENDING DETAIL
SECTIONS V1 - V4

BAR CHART
BAR POSITIONS
12 - 13

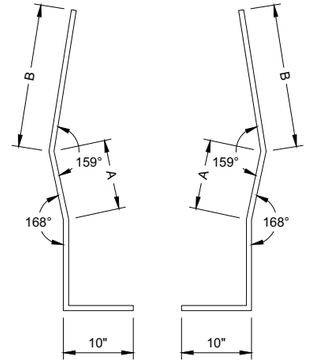
BAR	A	B
V12	1' - 3"	2' - 6"
V13	1' - 8"	2' - 1 ½"



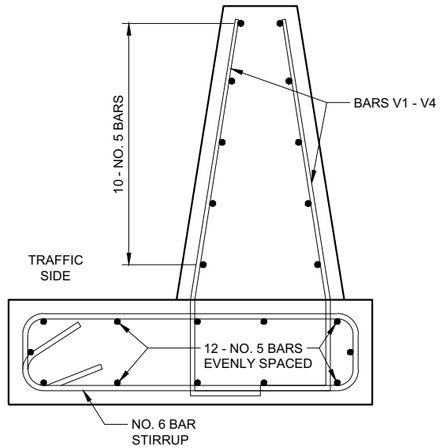
BAR BENDING DETAIL
SECTIONS V12 - V13

BAR CHART
BAR POSITIONS
14 - 16

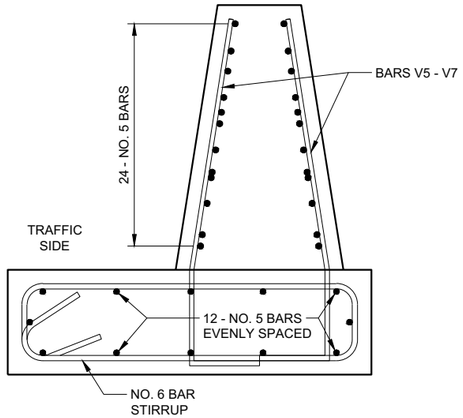
BAR	A	B
V14	6"	2' - 1"
V15	8"	1' - 11"
V16	10"	1' - 8 ½"



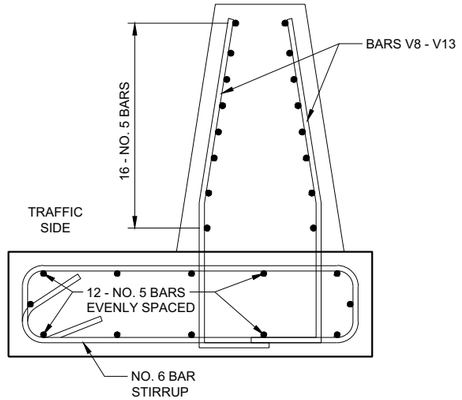
BAR BENDING DETAIL
SECTIONS V14 - V16



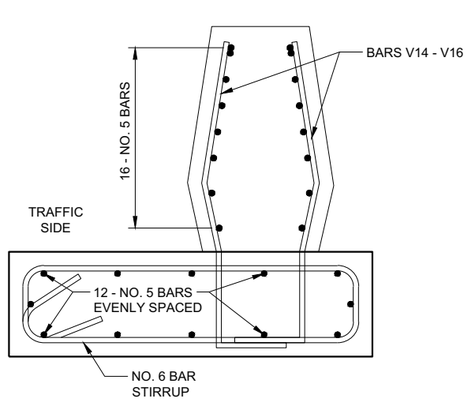
BAR DETAIL
SECTIONS 1 - 4



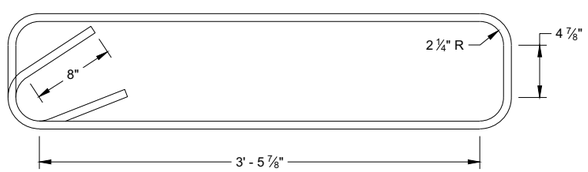
BAR DETAIL
SECTIONS 5 - 7



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

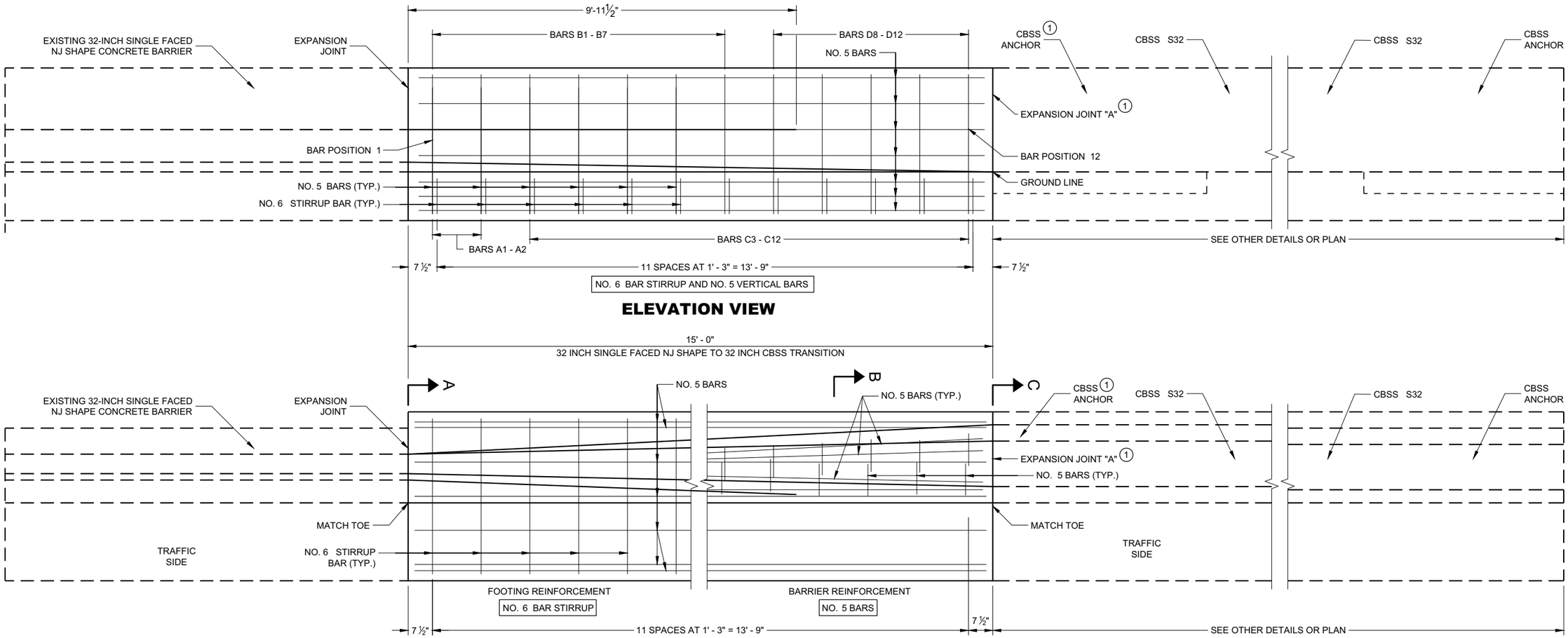
APPROVED
February 2020
DATE

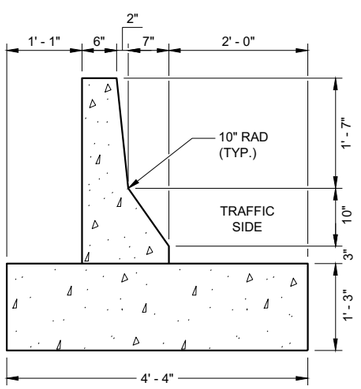
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

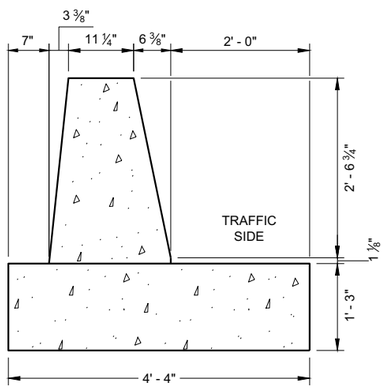
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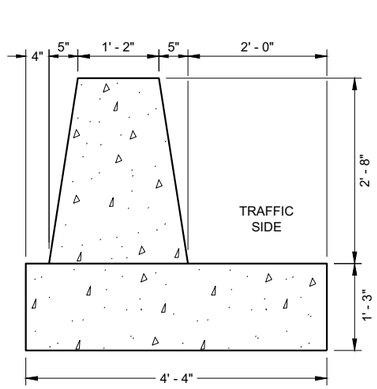




SECTION A - A



SECTION B - B



SECTION C - C

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.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

32 - INCH SINGLE FACED NJ SHAPE CONCRETE BARRER TO 32 - INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

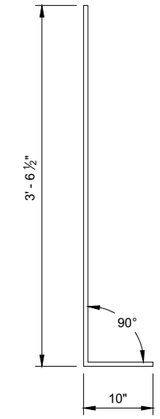
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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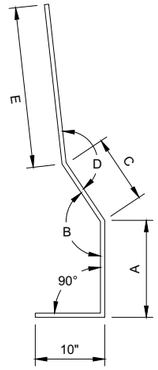
"A" BAR POSITIONS 1 - 2



"A" BAR BENDING DETAIL

"B" BAR CHART BAR POSITIONS 1 - 7

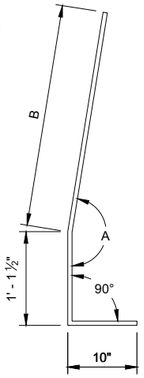
BAR	A	B	C	D	E
B1	1' - 2 ¼"	148°	1' - 1 ¼"	154°	1' - 5"
B2	1' - 2 ¼"	151°	1' - 1"	158°	1' - 5"
B3	1' - 2"	154°	1' - ¾"	161°	1' - 5 ¼"
B4	1' - 2"	157°	1' - ½"	164°	1' - 5 ¼"
B5	1' -1 ½"	159°	1' - ¼"	168°	1' - 5 ¼"
B6	1' -1 ½"	162°	1' - ¼"	173°	1' - 5 ¼"
B7	1' -1 ½"	165°	1' - ¼"	176°	1' - 5 ¼"



"B" BAR BENDING DETAIL

"C" BAR CHART BAR POSITIONS 3 - 12

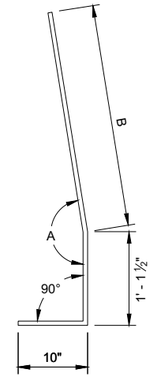
BAR	A
C3	178°
C4	178°
C5	177°
C6	176°
C7	174°
C8	174°
C9	174°
C10	173°
C11	173°
C12	172°



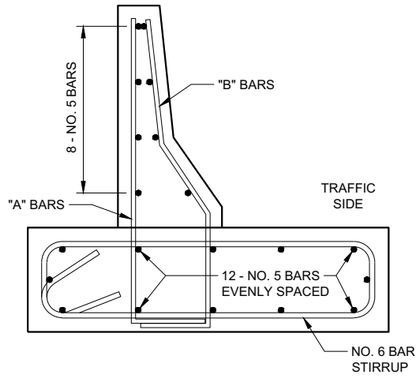
"C" BAR BENDING DETAIL

"D" BAR CHART BAR POSITIONS 8 - 12

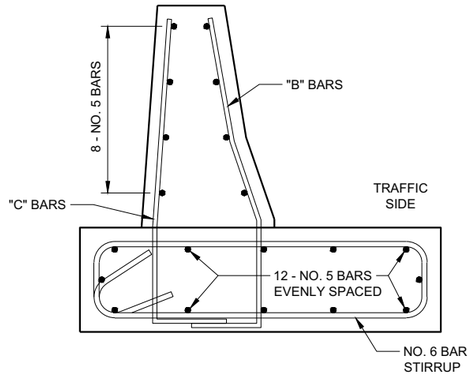
BAR	A
D8	169°
D9	170°
D10	170°
D11	171°
D12	171°



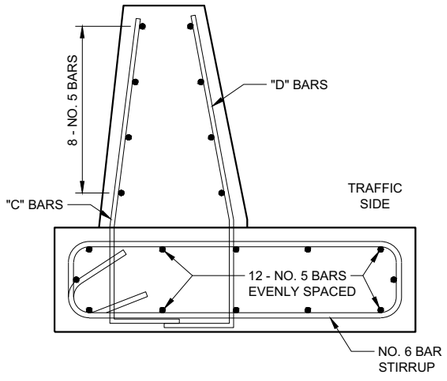
"D" BAR BENDING DETAIL



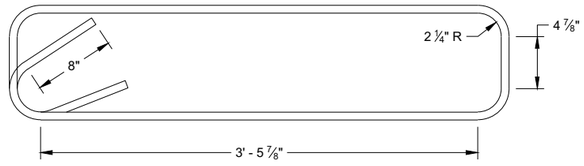
BAR DETAIL BAR POSITIONS 1 - 2



BAR DETAIL BAR POSITIONS 3 - 7



BAR DETAIL BAR POSITIONS 8 - 12



STIRRUP BAR BENDING DETAIL

32 - INCH SINGLE FACED NJ SHAPE CONCRETE BARRIER TO 32 - INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD 14B35 - 02b

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SDD 14B35 - 02b

(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.

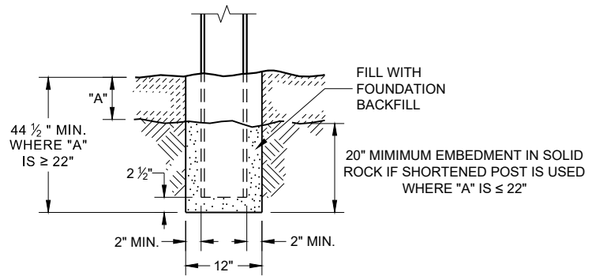
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

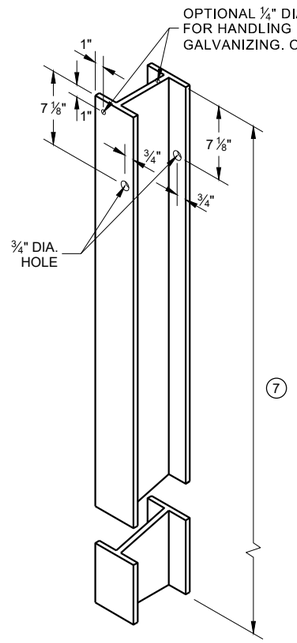
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

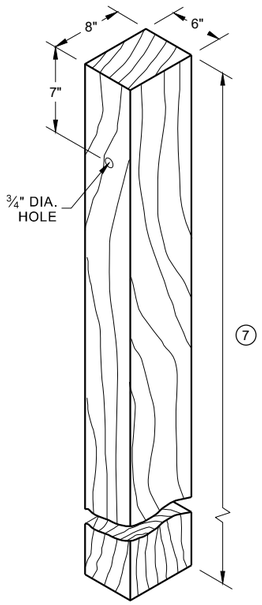
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



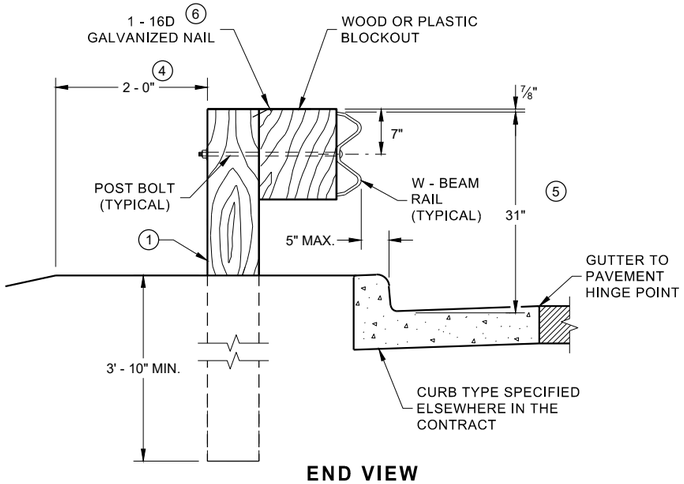
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



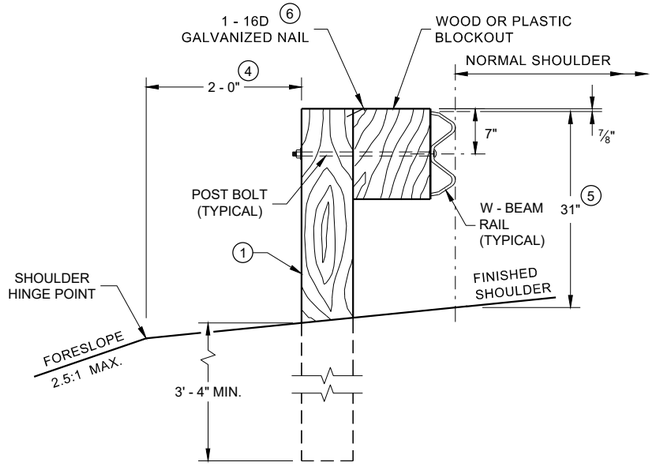
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



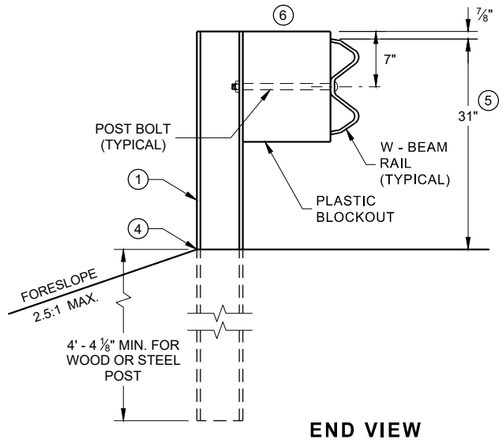
WOOD POST (6" X 8") NOMINAL (1)



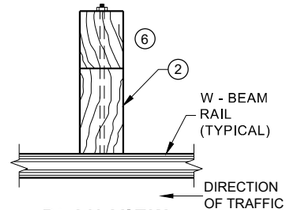
END VIEW
LOCATED ALONG A CURBED ROADWAY



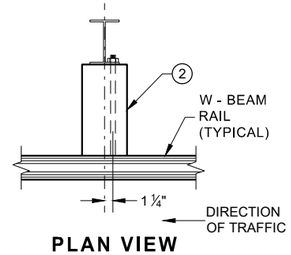
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



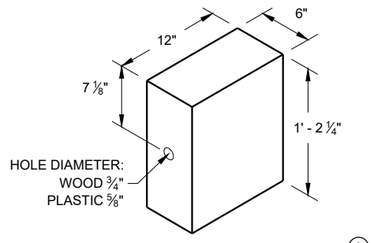
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

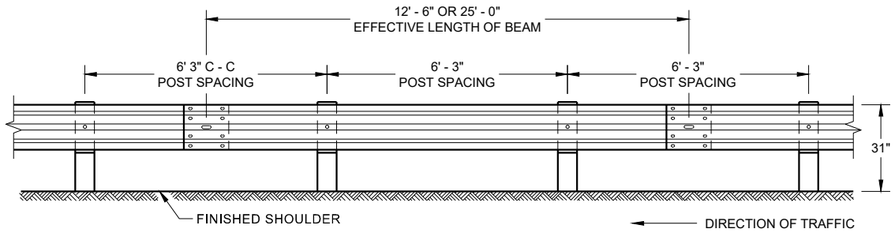
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

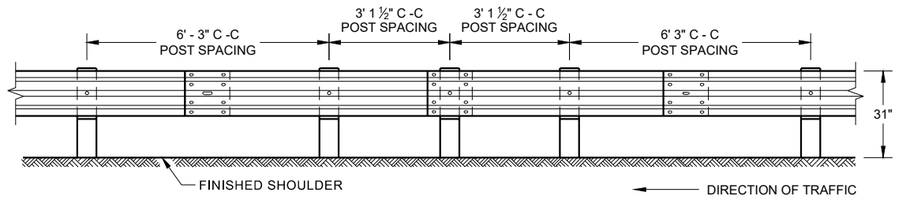
SDD 14B42 - 07a

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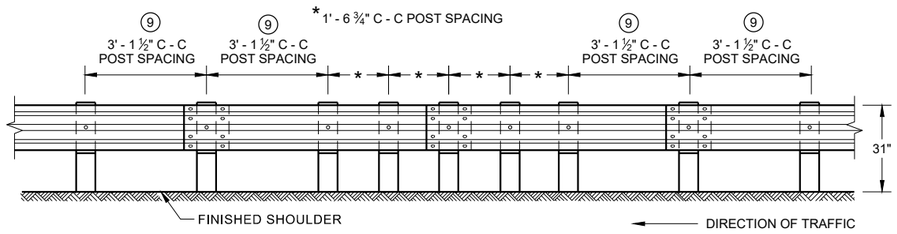
SDD 14B42 - 07a



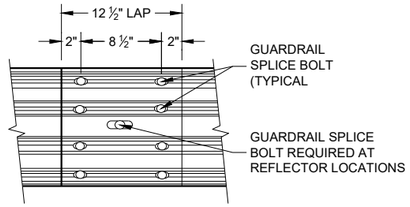
FRONT VIEW
POST SPACING STANDARD INSTALLATION



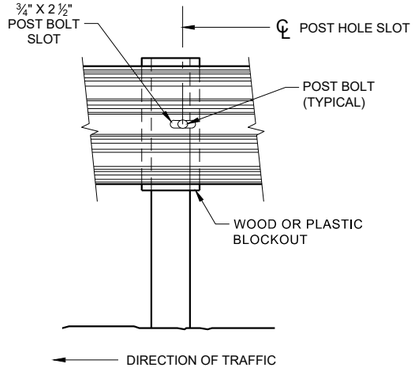
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



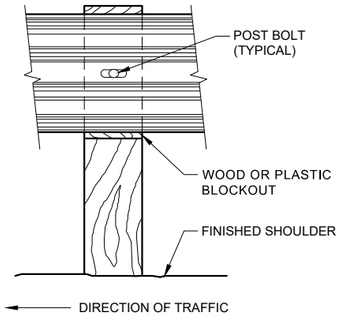
FRONT VIEW
QUARTER POST SPACING (QS)



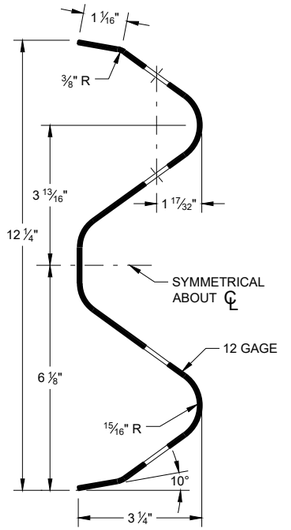
FRONT VIEW
MID-SPAN BEAM SPLICE



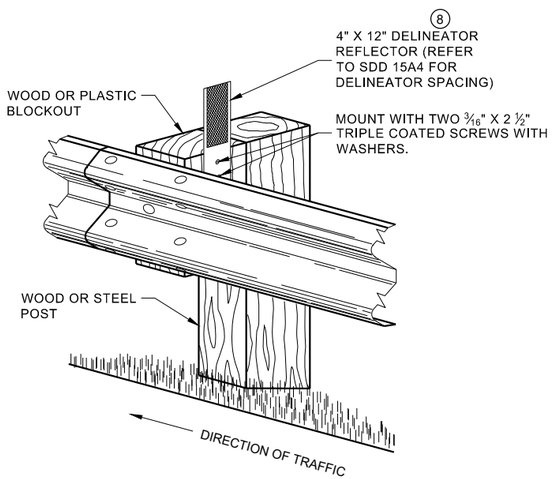
FRONT VIEW AT STEEL POST



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.

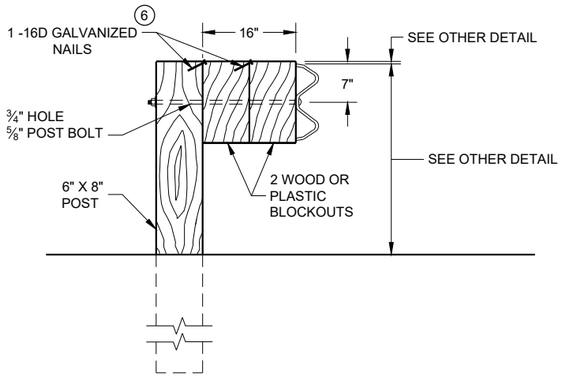
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
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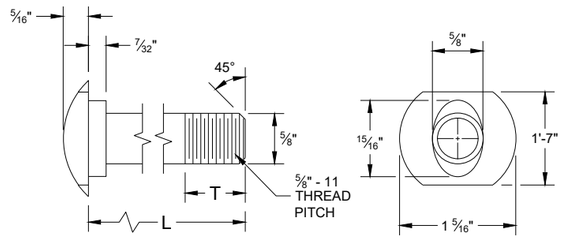


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

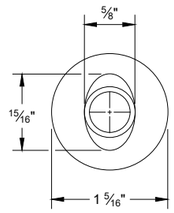
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

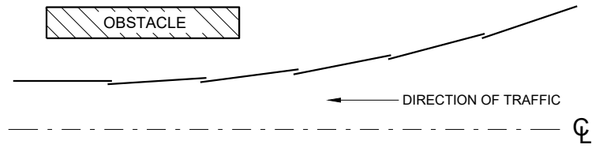


POST BOLT TABLE

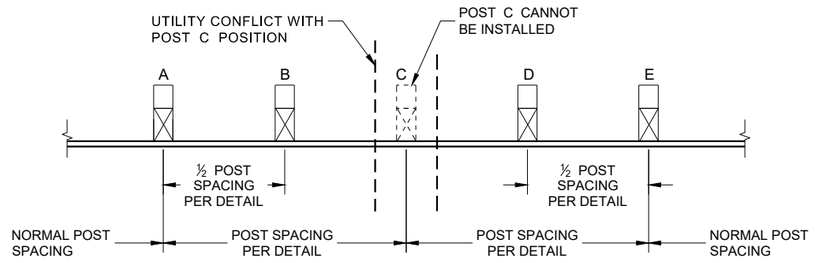
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



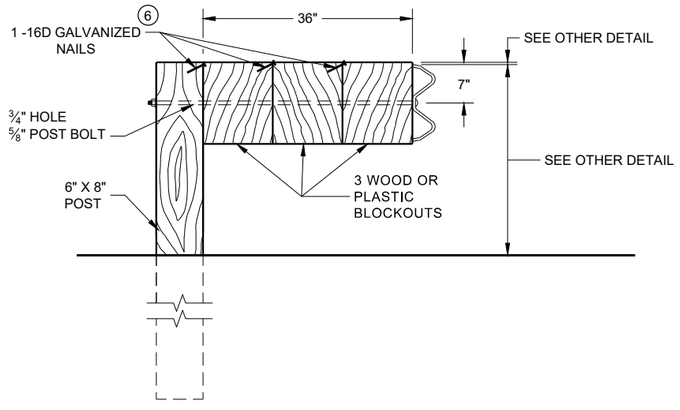
ALTERNATE BOLT HEAD



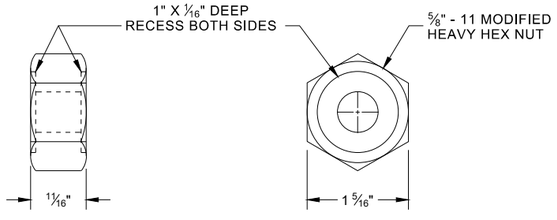
PLAN VIEW
BEAM LAPPING DETAIL



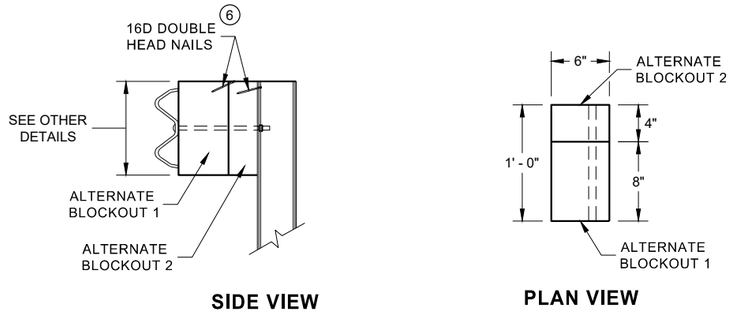
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW

PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

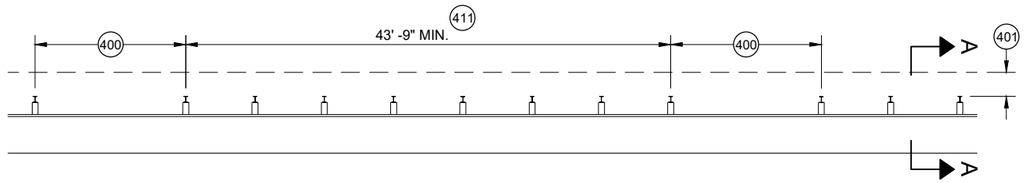
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

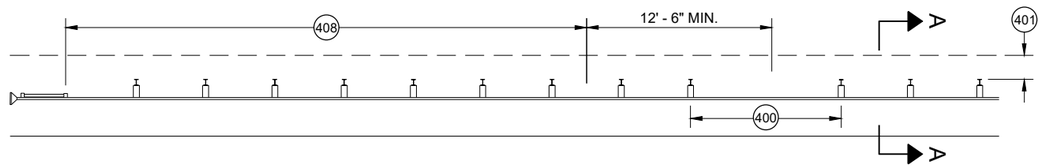
6

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

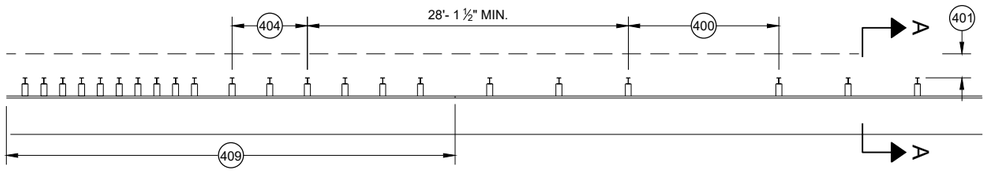
SDD 14B42 - 07c



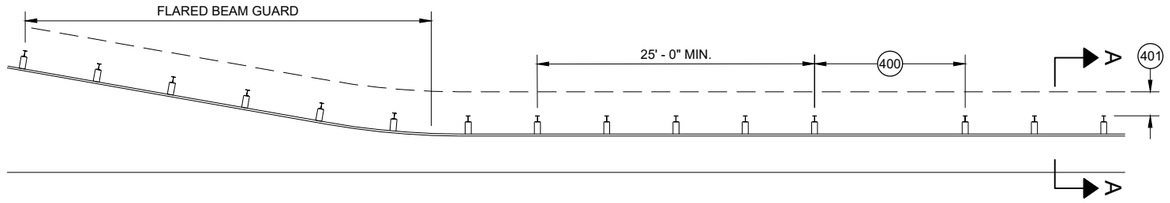
MISSING POST IN MGS GUARDRAIL



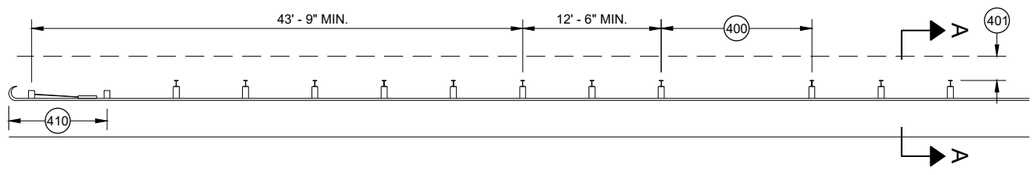
MISSING POST IN MGS GUARDRAIL NEAR EAT



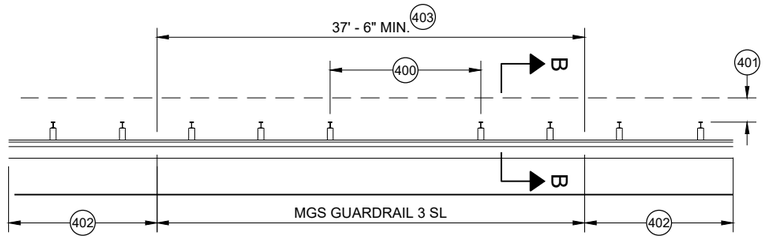
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

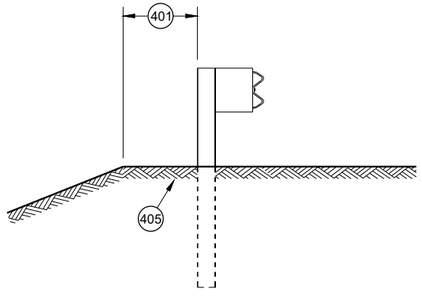


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

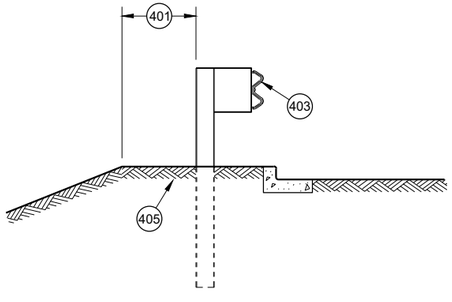


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

SDD 14B42 - 07d

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

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

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

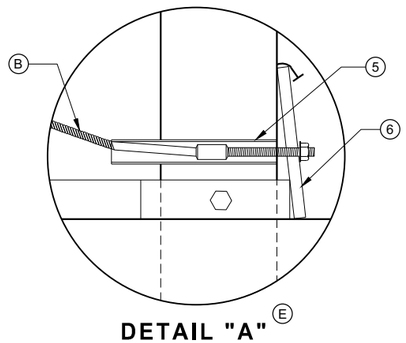
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

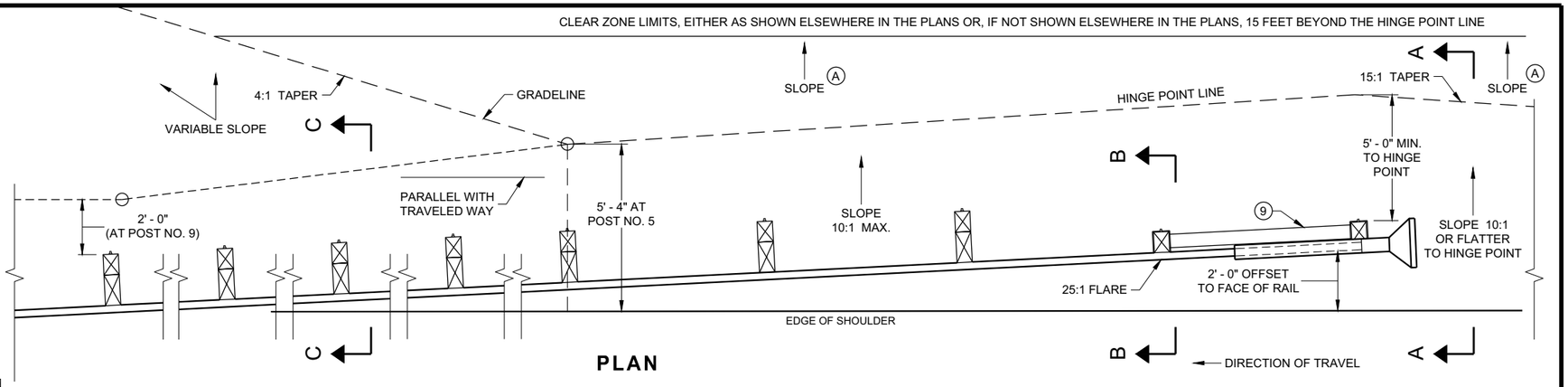
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

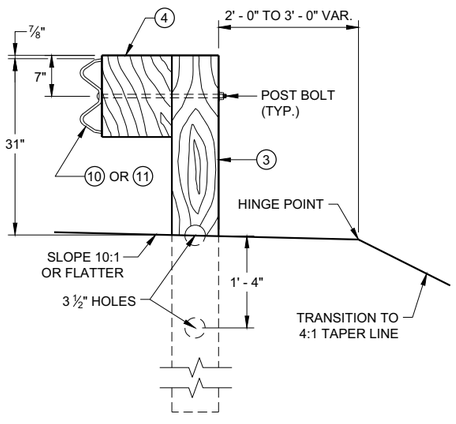
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

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

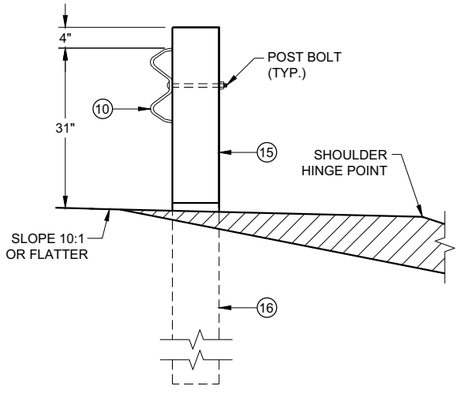


DETAIL "A" (E)

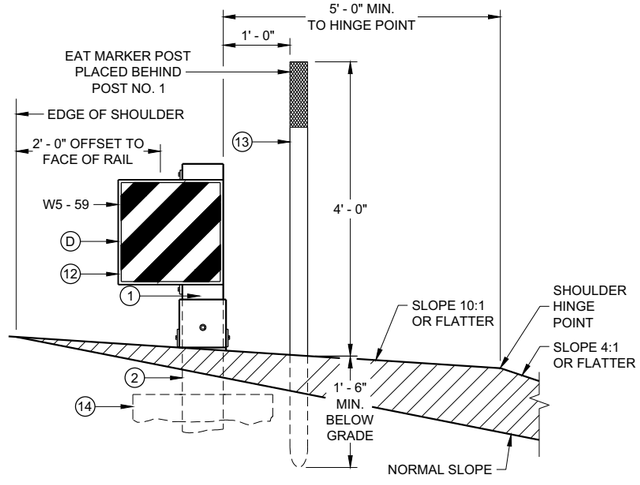




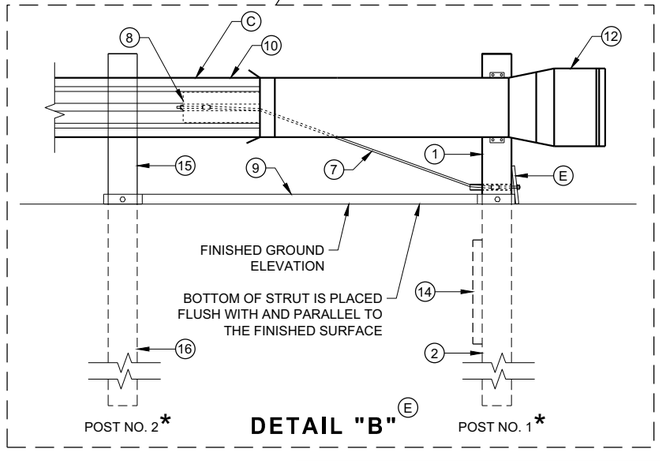
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



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)

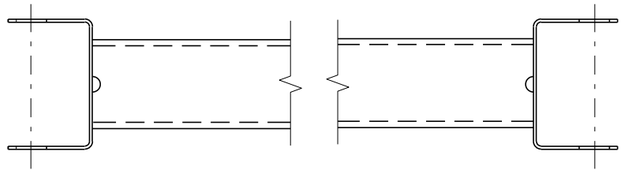
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

SDD 14B44 - 04a

6

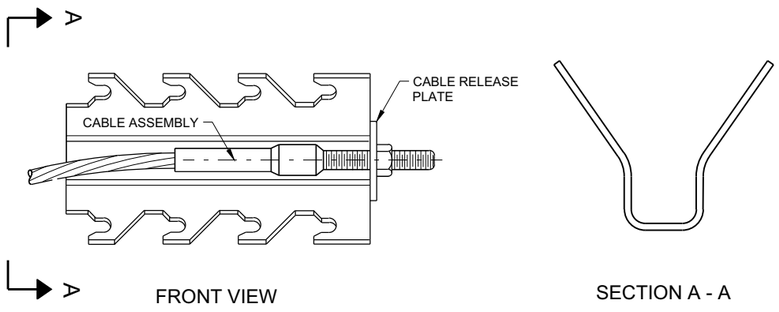
6



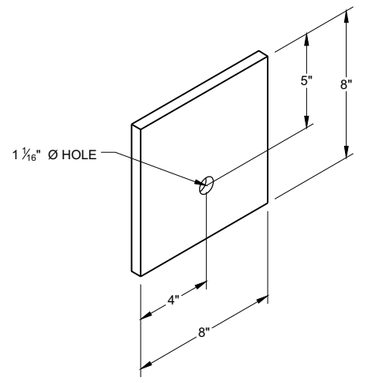
GENERIC GROUND STRUT ⑨ Ⓔ

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 ⑨ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

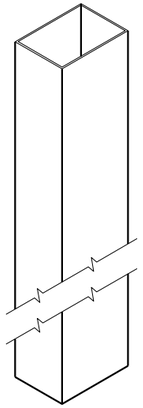
6

SDD 14B44 - 04b

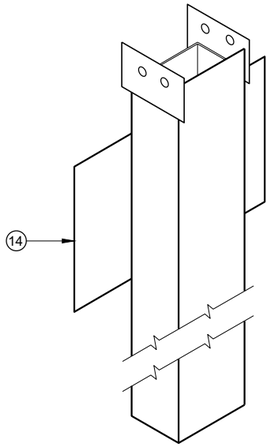
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

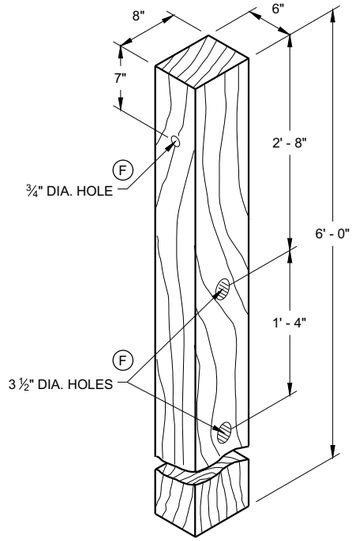
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



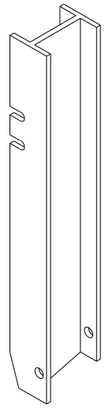
UPPER POST NO. 1 (1) (E)



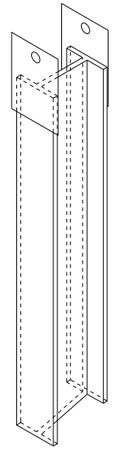
LOWER POST NO. 1 (2) (E)



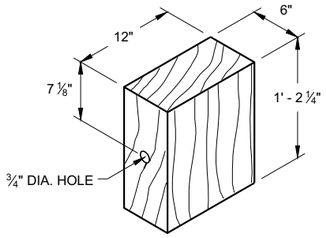
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



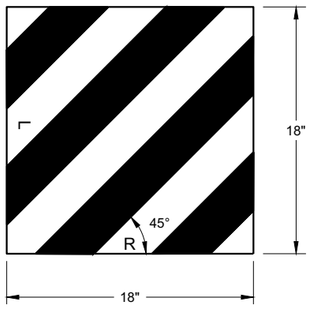
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

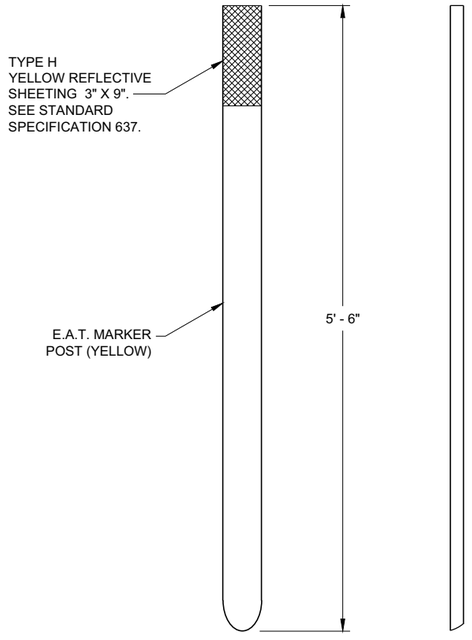


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



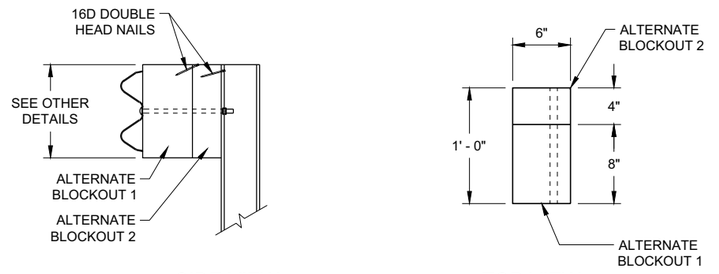
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

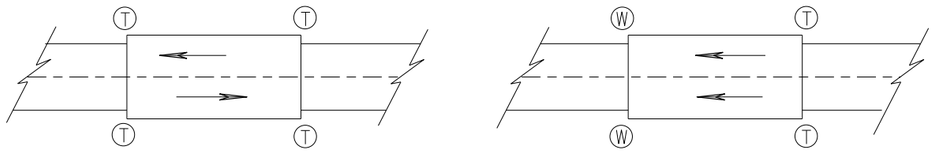
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

6

SDD 14B44 - 04c



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.

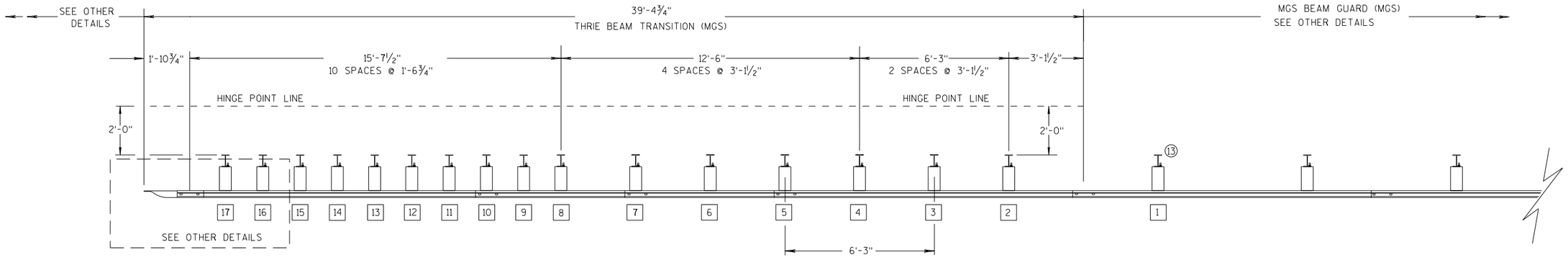
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

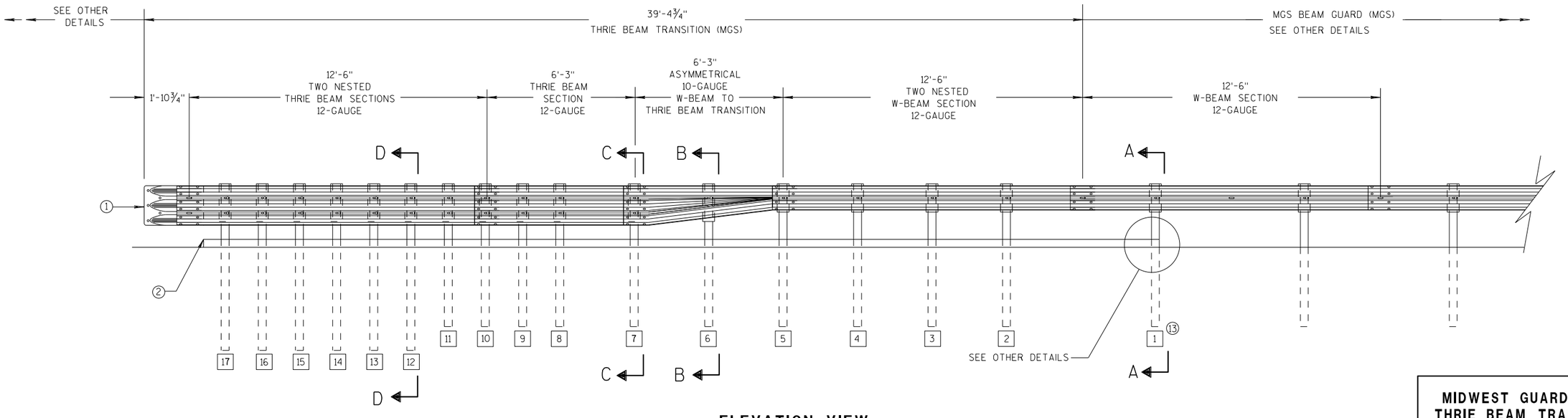
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(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

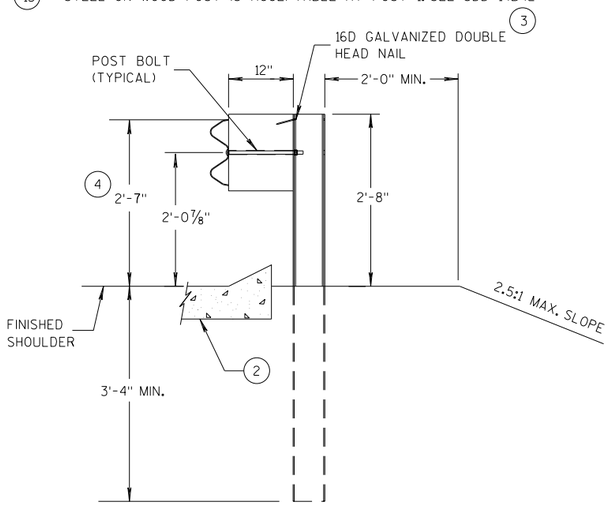
GENERAL NOTES

(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.

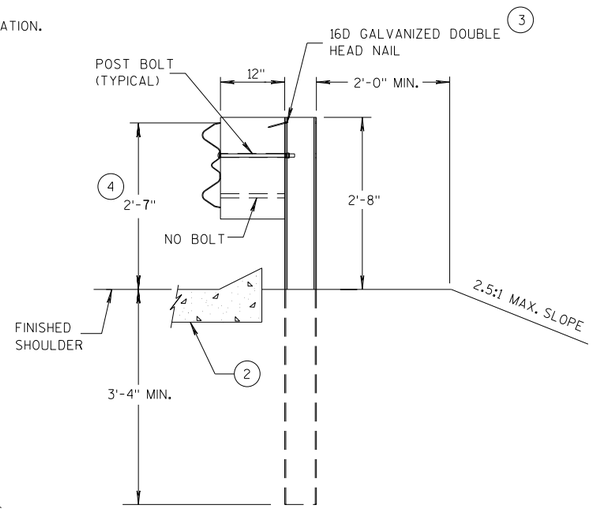
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



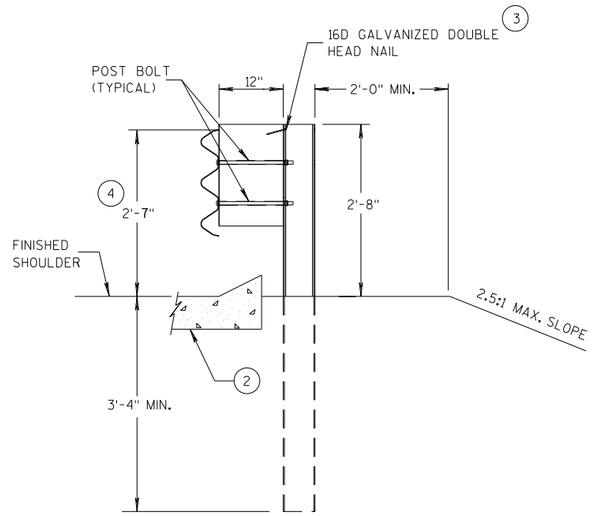
SECTION A-A (13)

POSTS 1-5



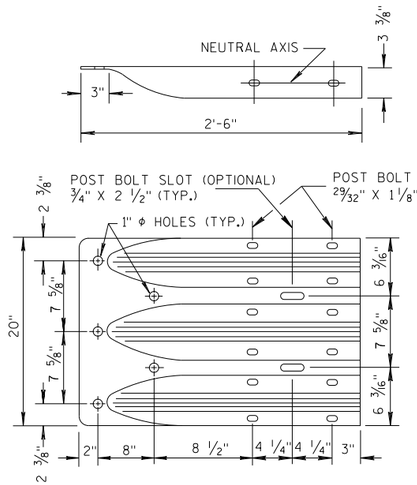
SECTION B-B

POST 6

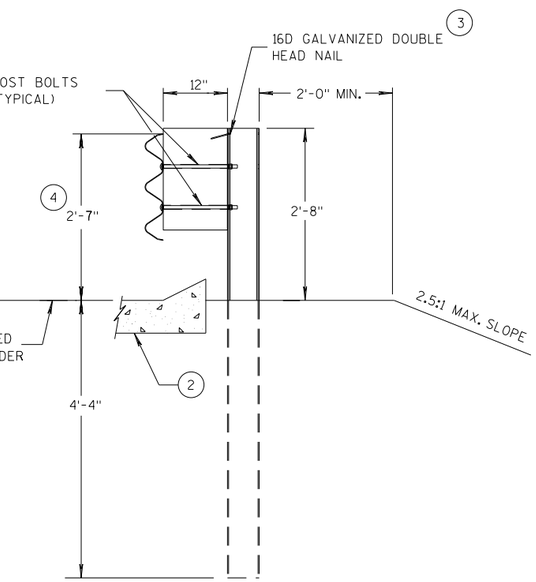


SECTION C-C

POSTS 7-11

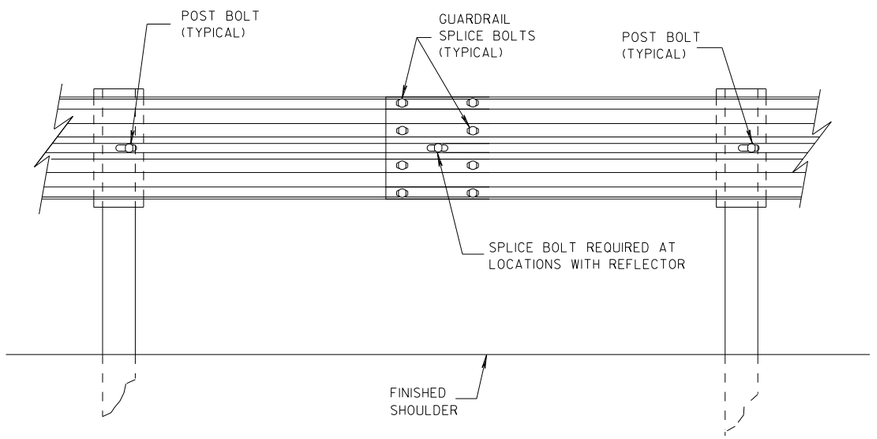


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

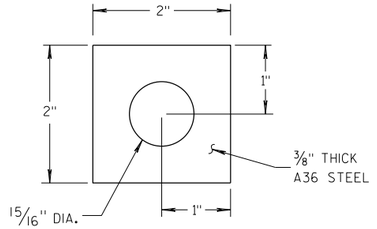
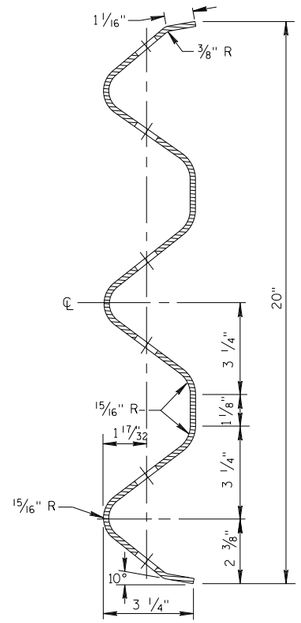


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

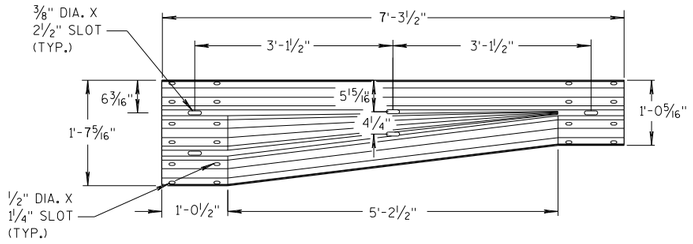
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 225

6

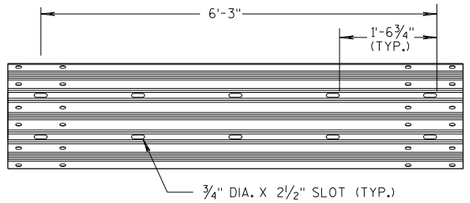
S.D.D. 14 B 45-5b

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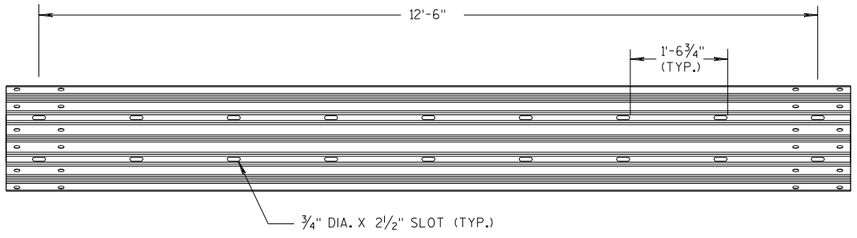
S.D.D. 14 B 45-5b



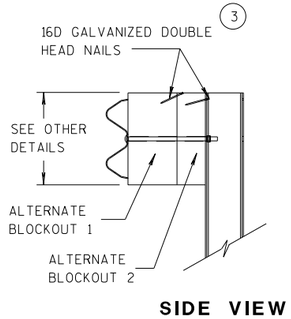
W-BEAM TO THRIE BEAM TRANSITION SECTION



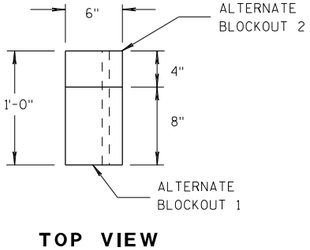
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

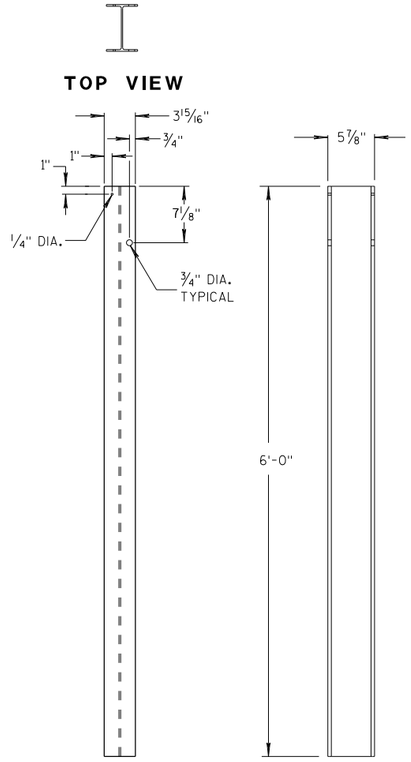


SIDE VIEW



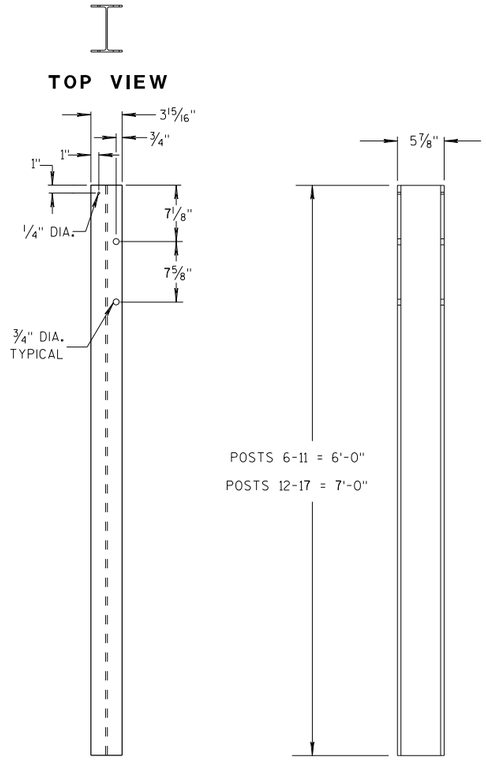
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



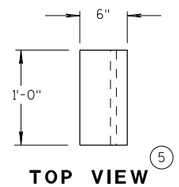
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

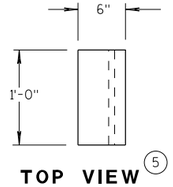


FRONT VIEW SIDE VIEW

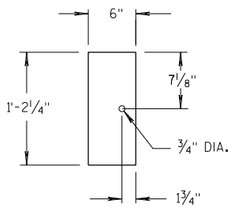
STEEL POSTS 6-17



TOP VIEW (5)

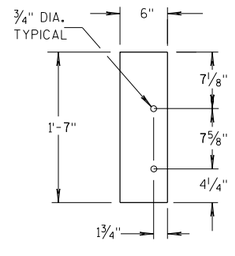


TOP VIEW (5)



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.

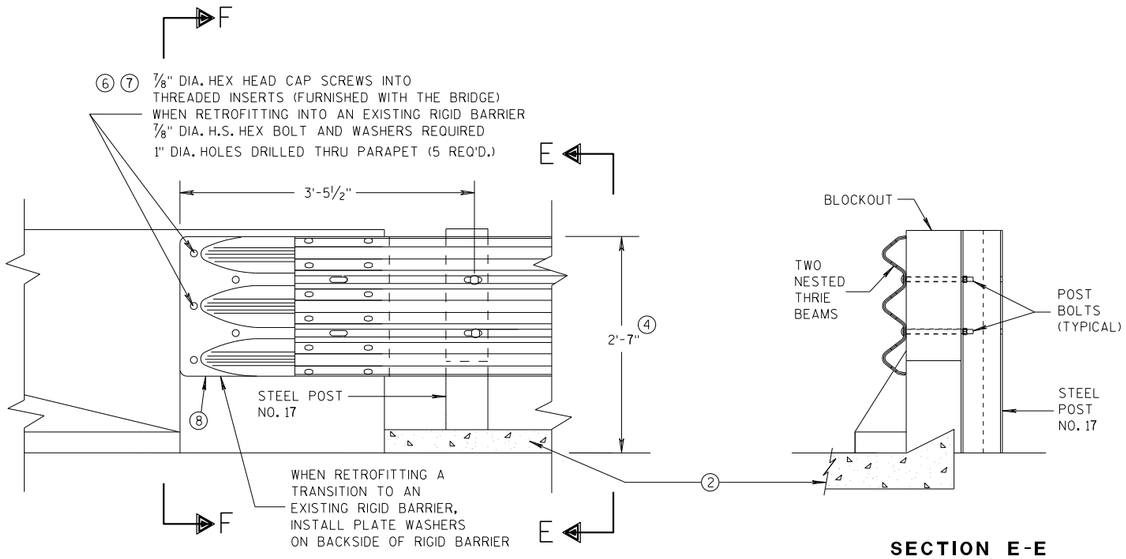
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

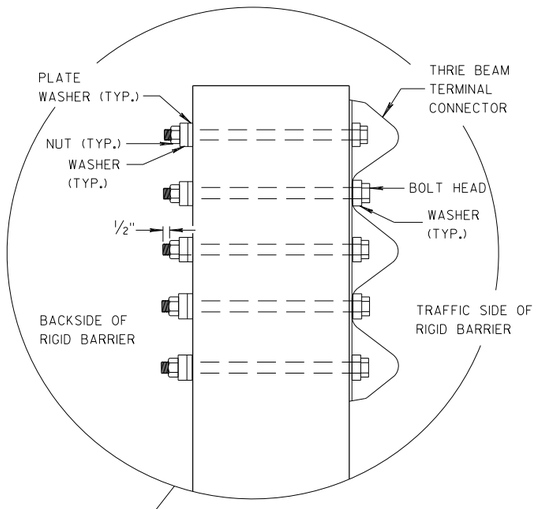
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

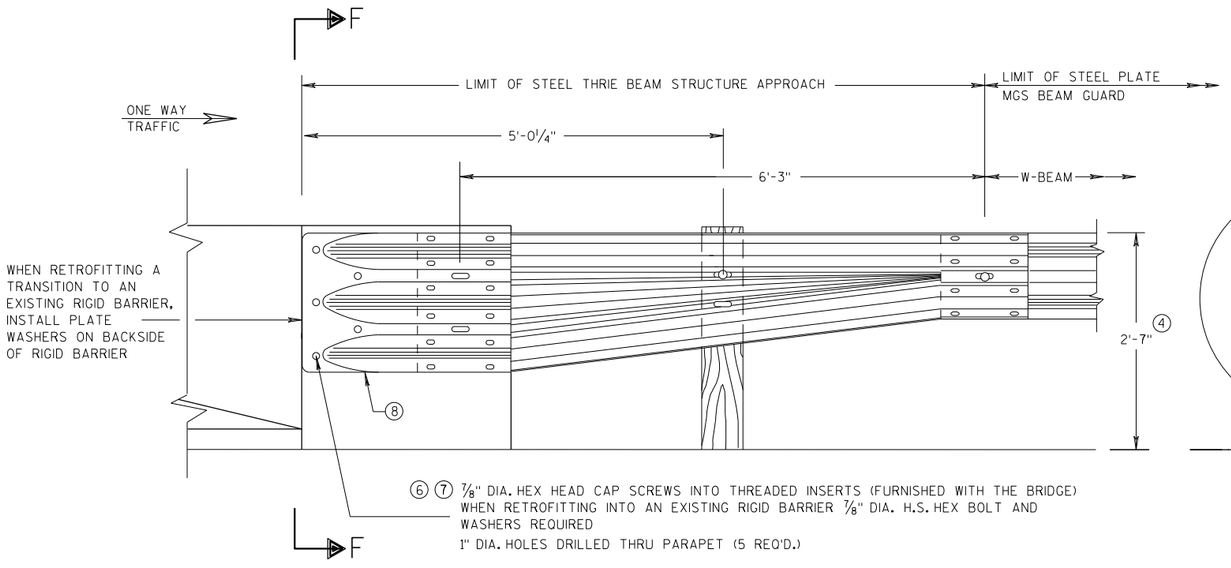
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

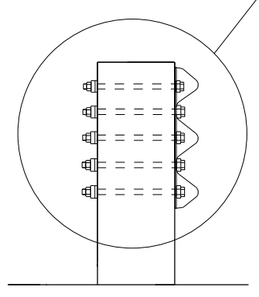
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

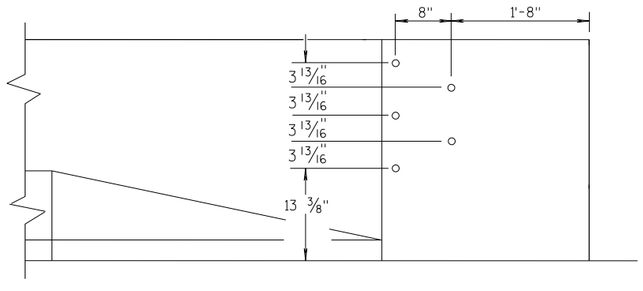




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D UNIT SUPERVI
NT
FHWA

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S.D.D. 14 B 45-5d

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S.D.D. 14 B 45-5d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

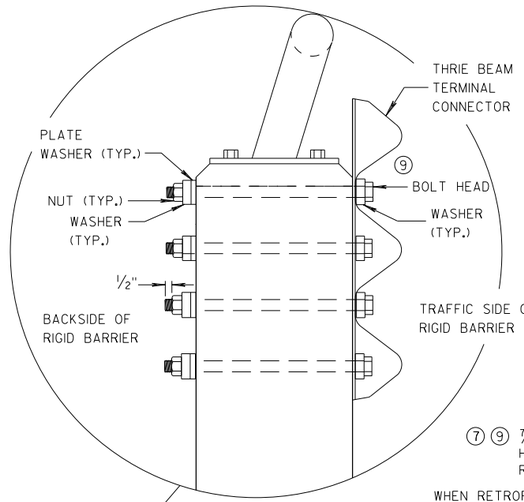
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

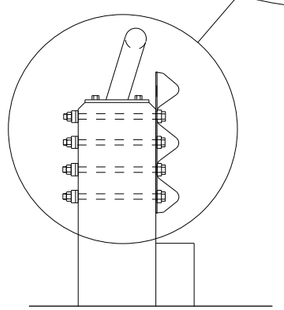
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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.

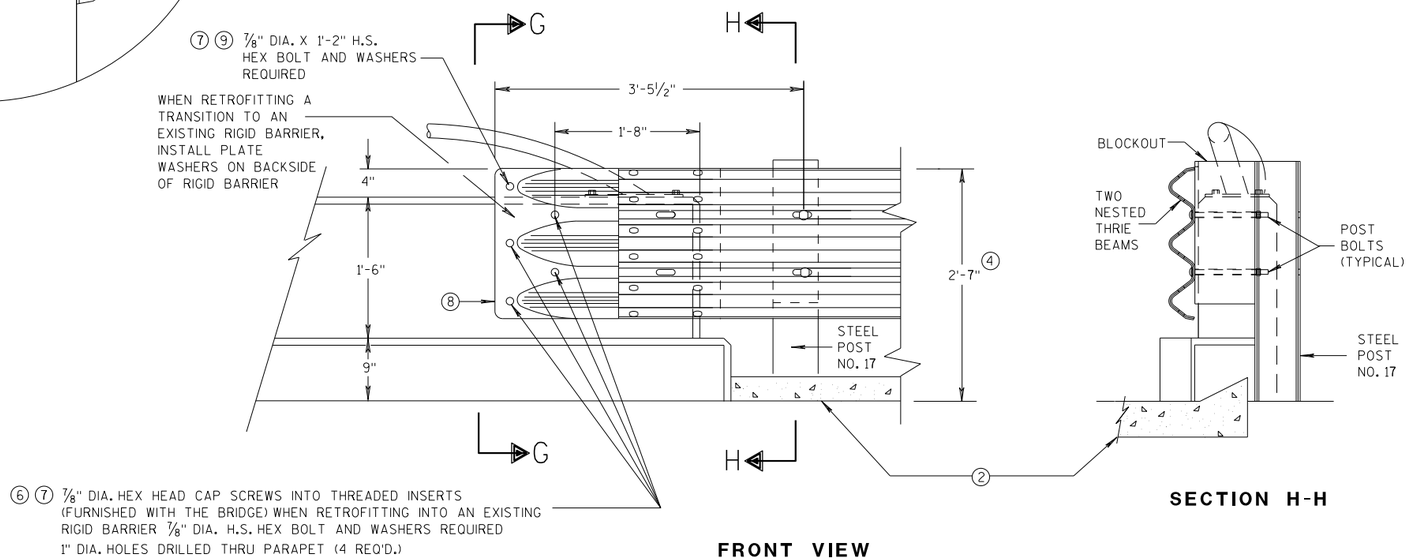
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





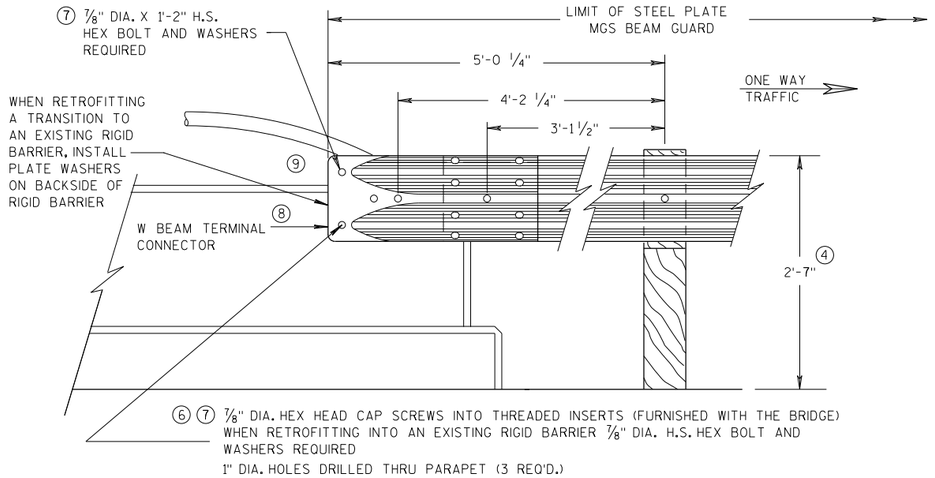
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
FHWA

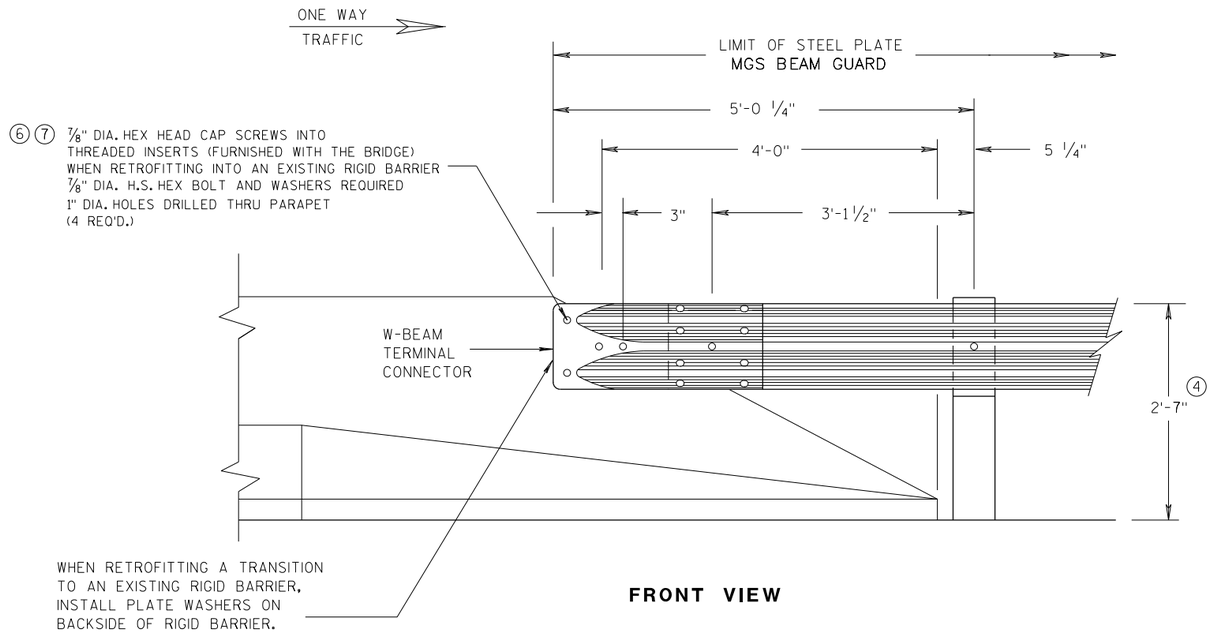
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVI NT

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S.D.D. 14 B 45-5e

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S.D.D. 14 B 45-5e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

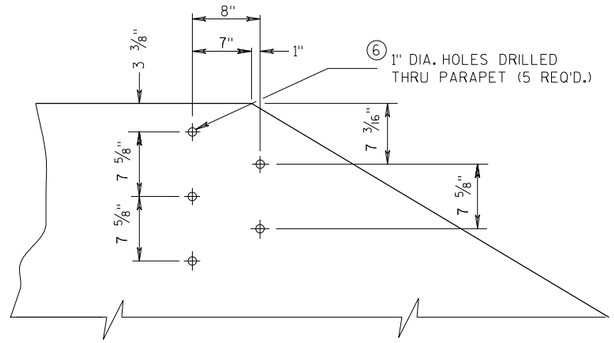
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

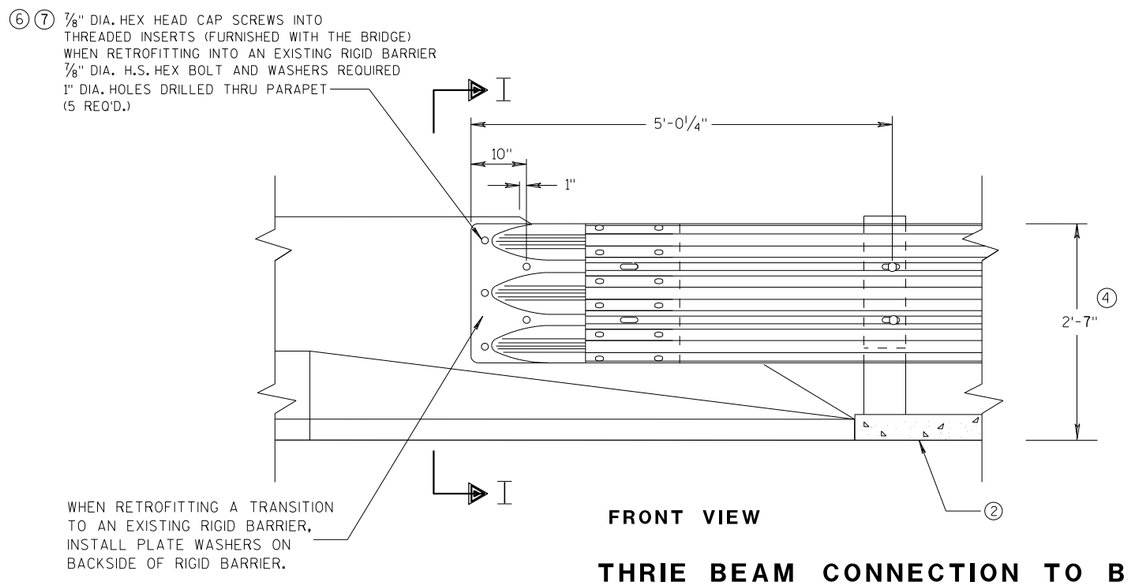
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

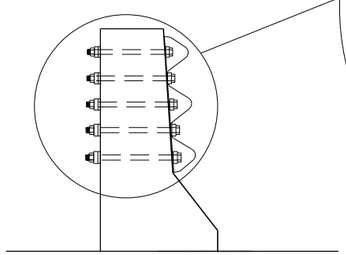
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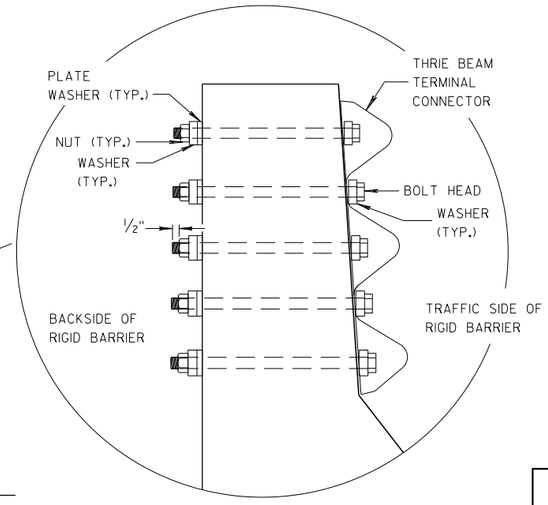
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

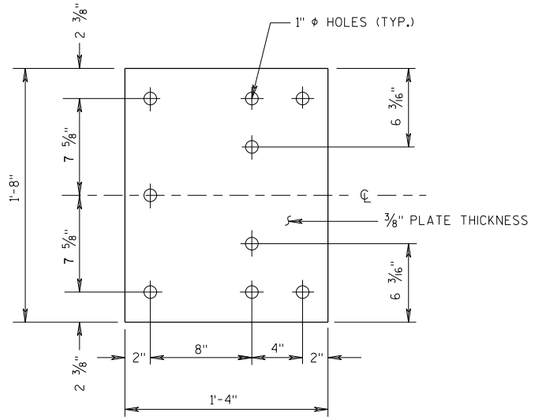
APPROVED
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/S/ Rodney Taylor — ROADWAY STANDARDS I[illegible]ENT UNIT SUPERVI
FHWA

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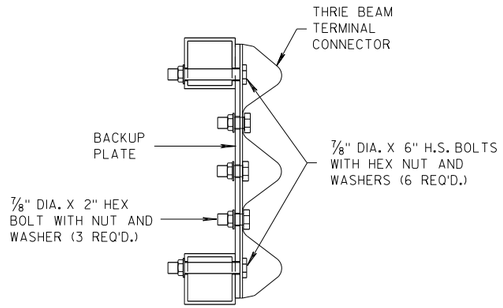
S.D.D. 14 B 45-5f

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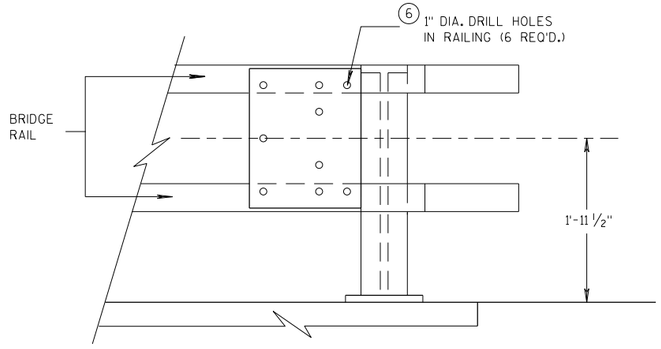
S.D.D. 14 B 45-5f



BACK-UP PLATE DETAIL



SECTION J-J

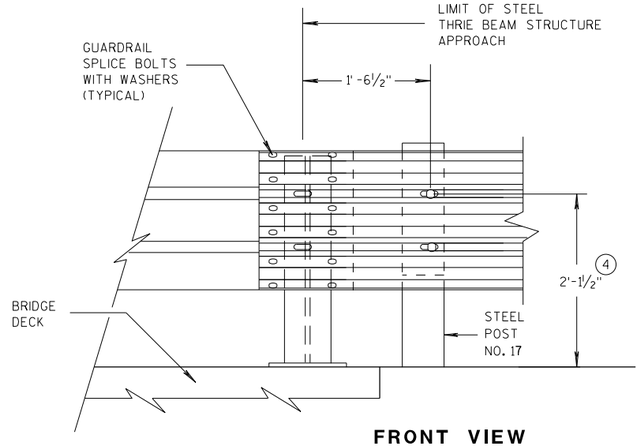


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

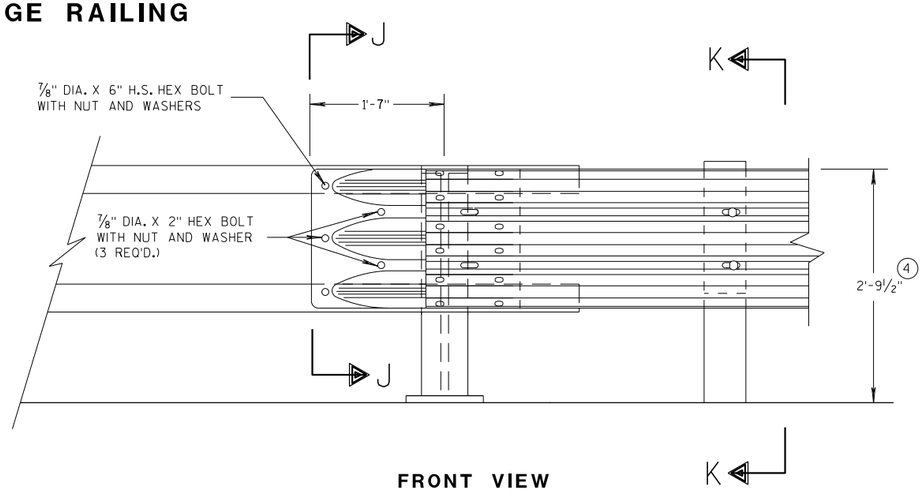
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

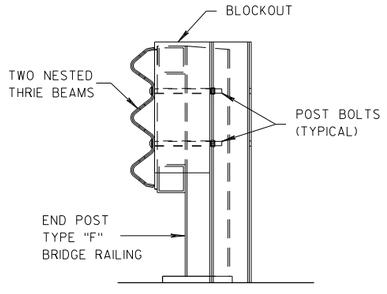


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE
FHWA

/S/ Rodney Taylor 230
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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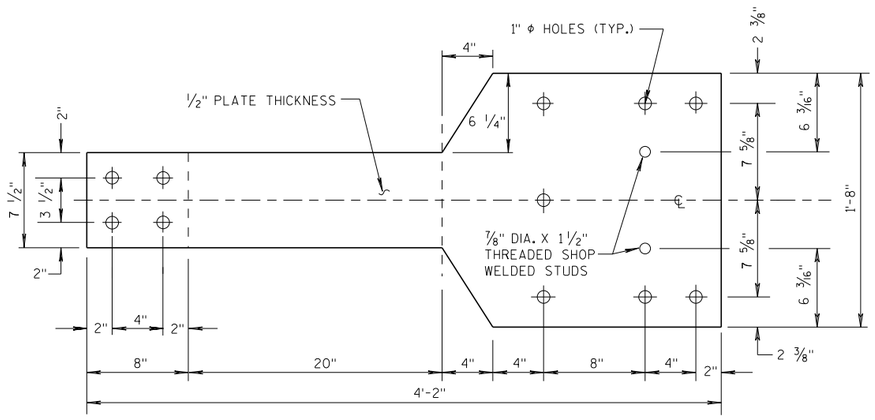
S.D.D. 14 B 45-5g

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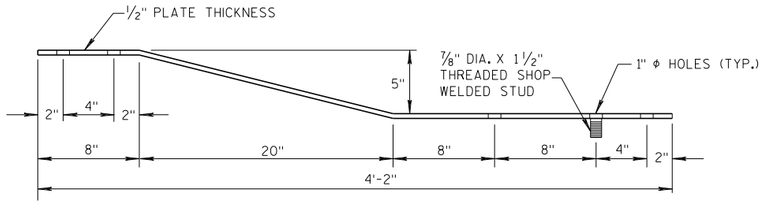
S.D.D. 14 B 45-5g

GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

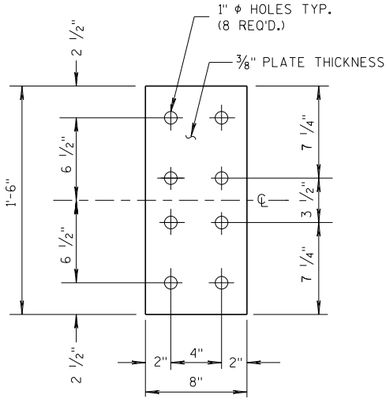


FRONT VIEW



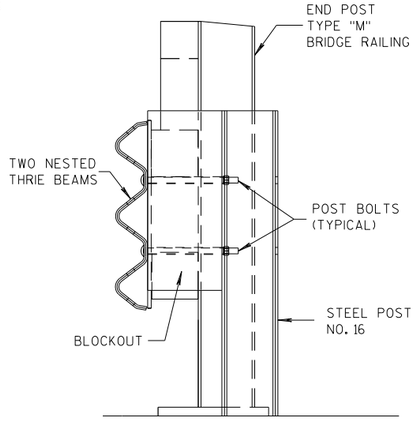
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

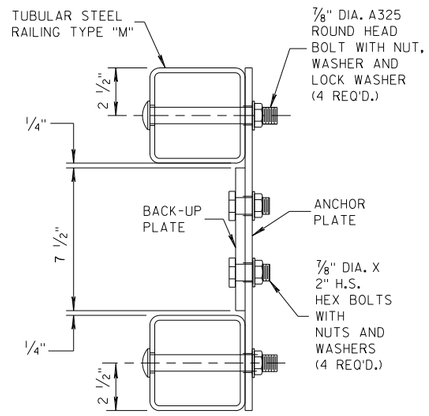


FRONT VIEW

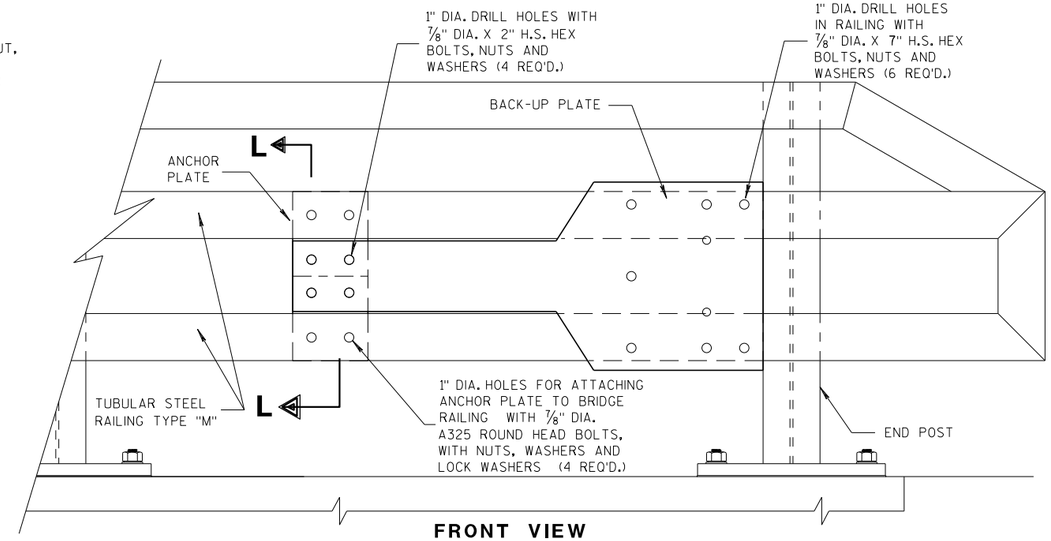
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

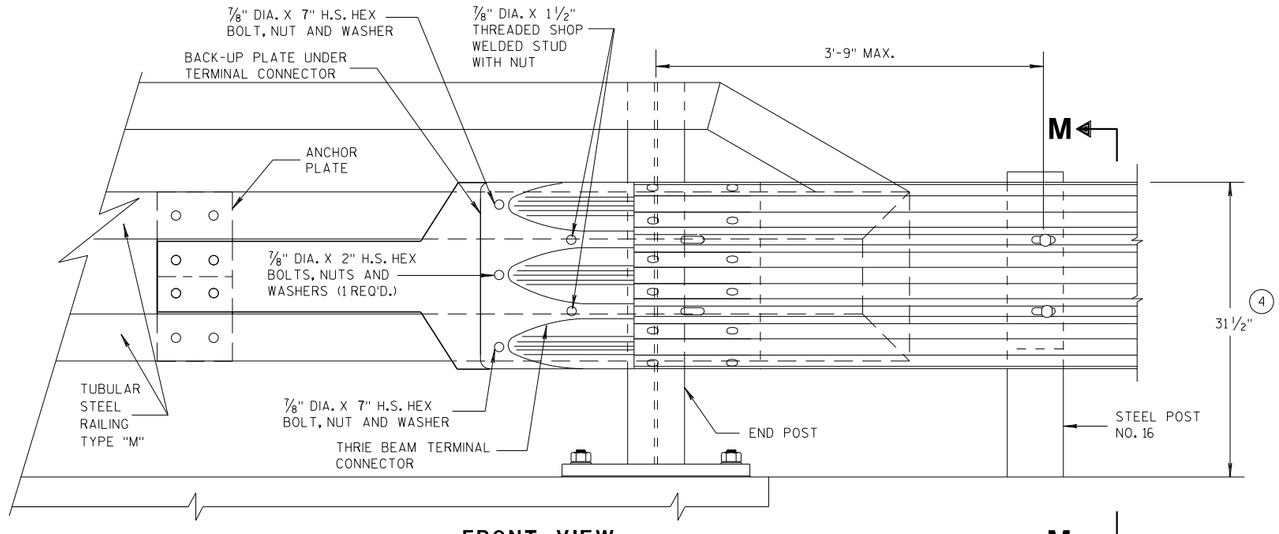


SECTION L-L

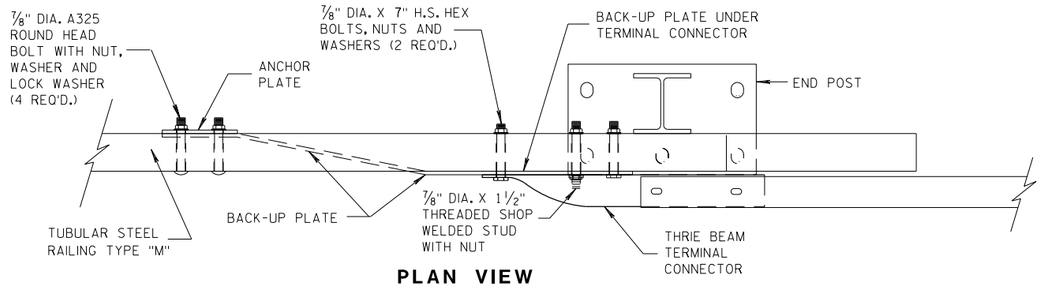


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

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S.D.D. 14 B 45-5h

6

S.D.D. 14 B 45-5h

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.

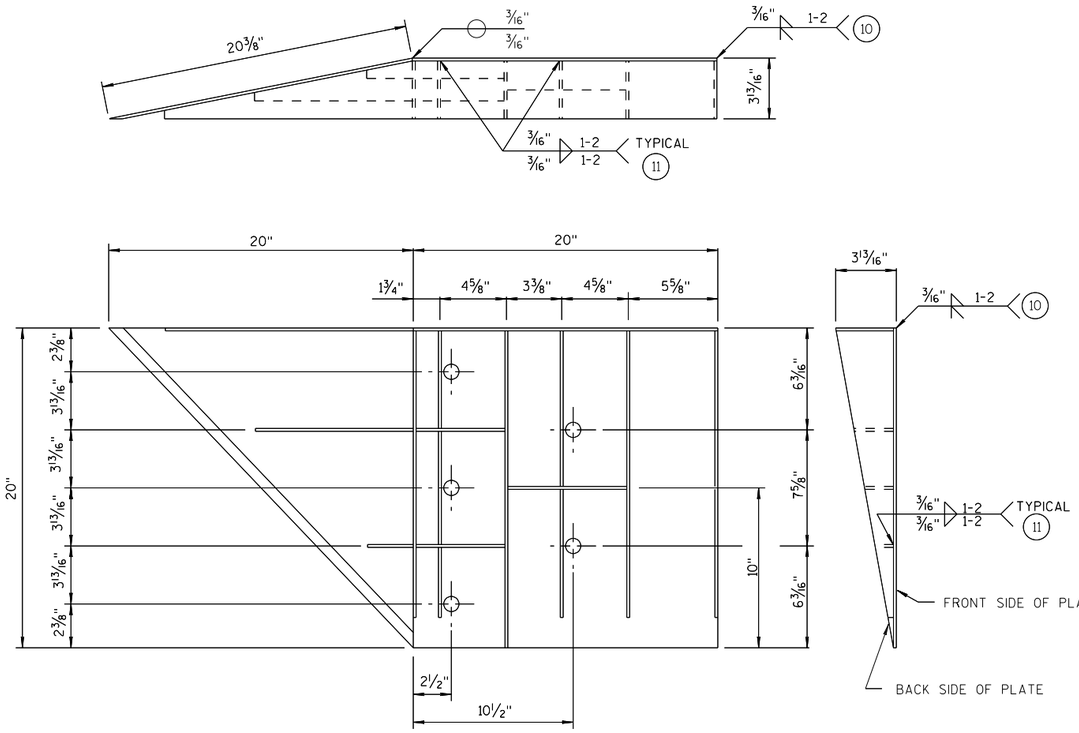
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

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".



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

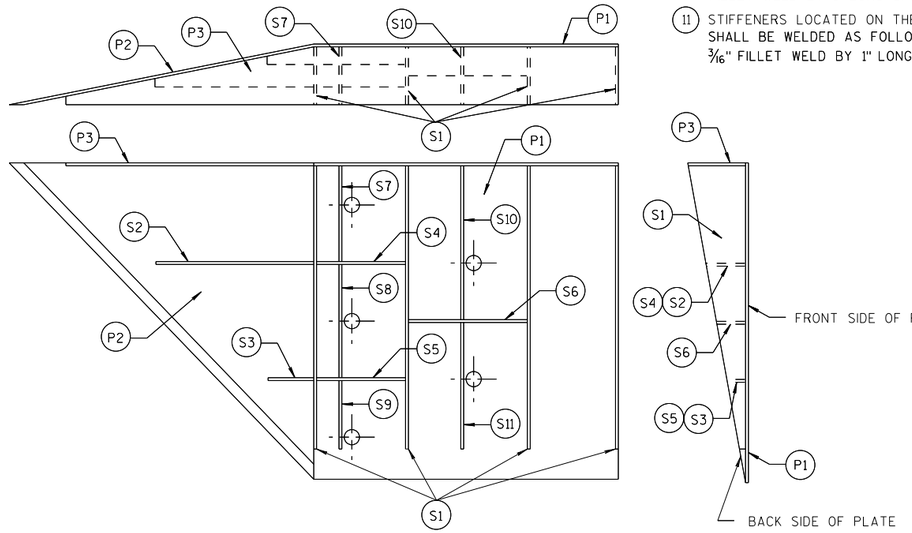


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

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)

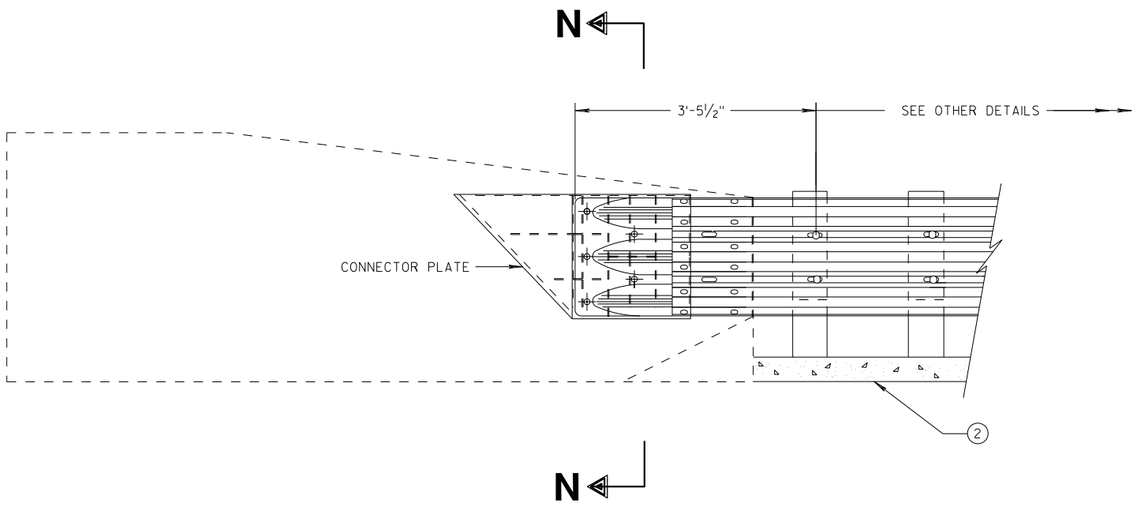
STATE OF WISCONSIN
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7/2018
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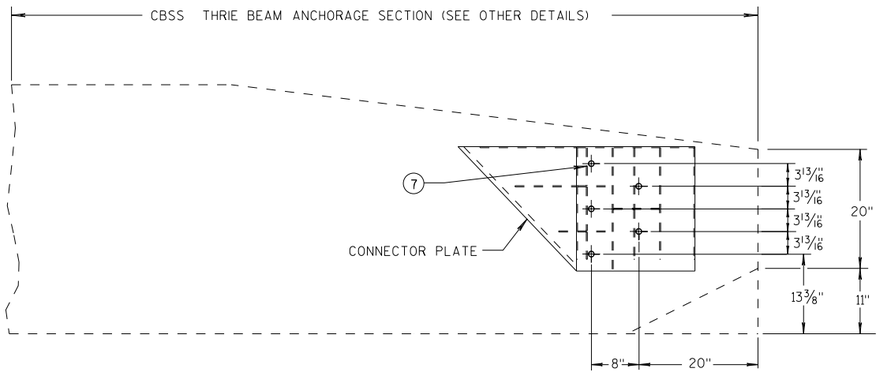
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THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



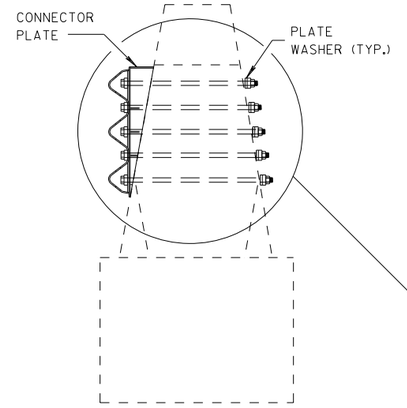
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

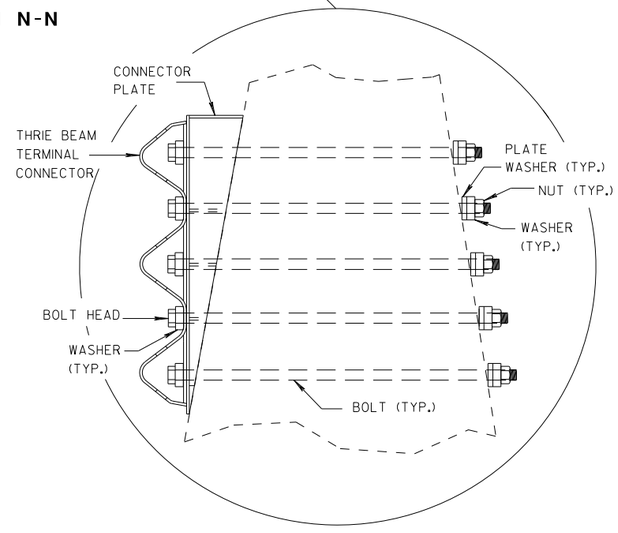
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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

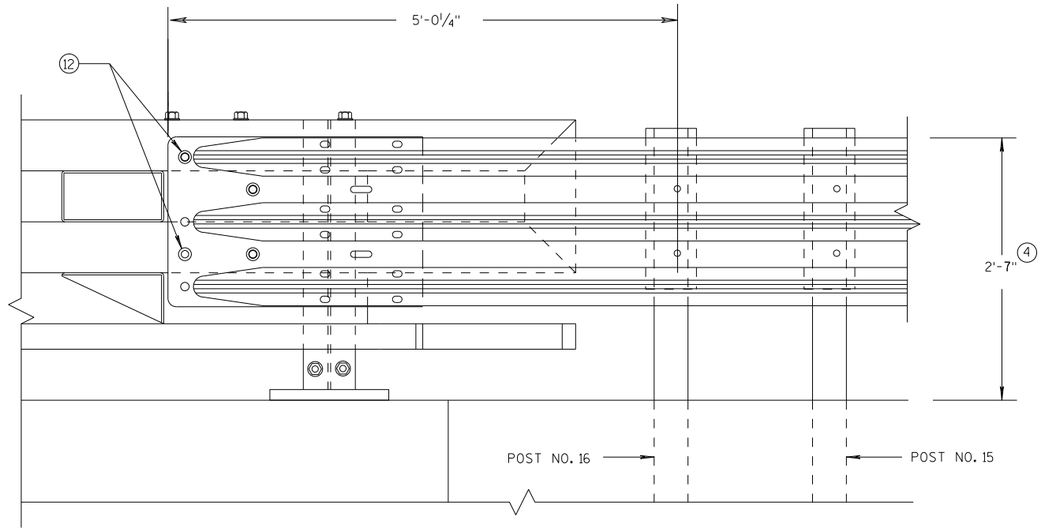
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FHWA

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S.D.D. 14 B 45-5j

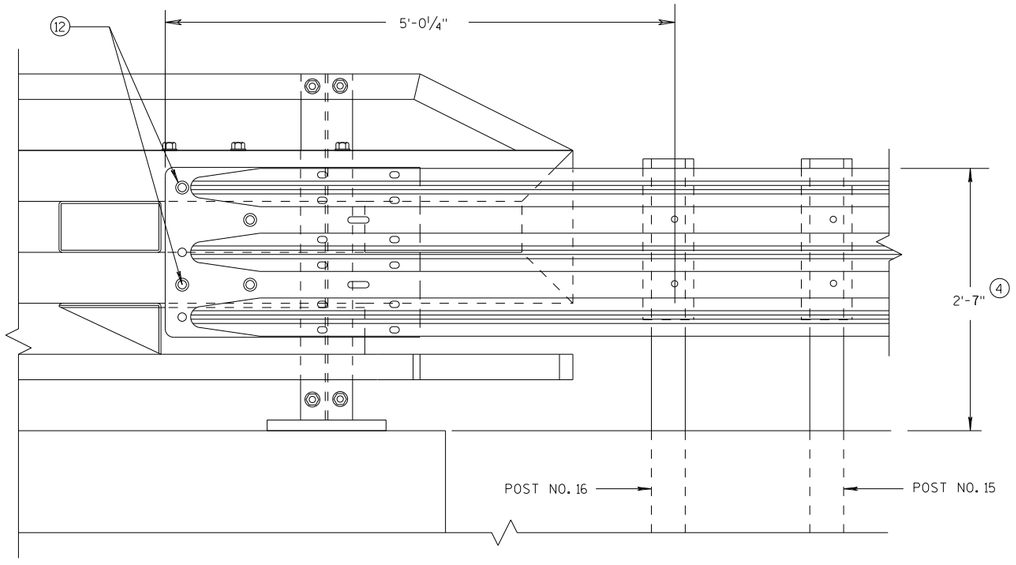
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S.D.D. 14 B 45-5j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) 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. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

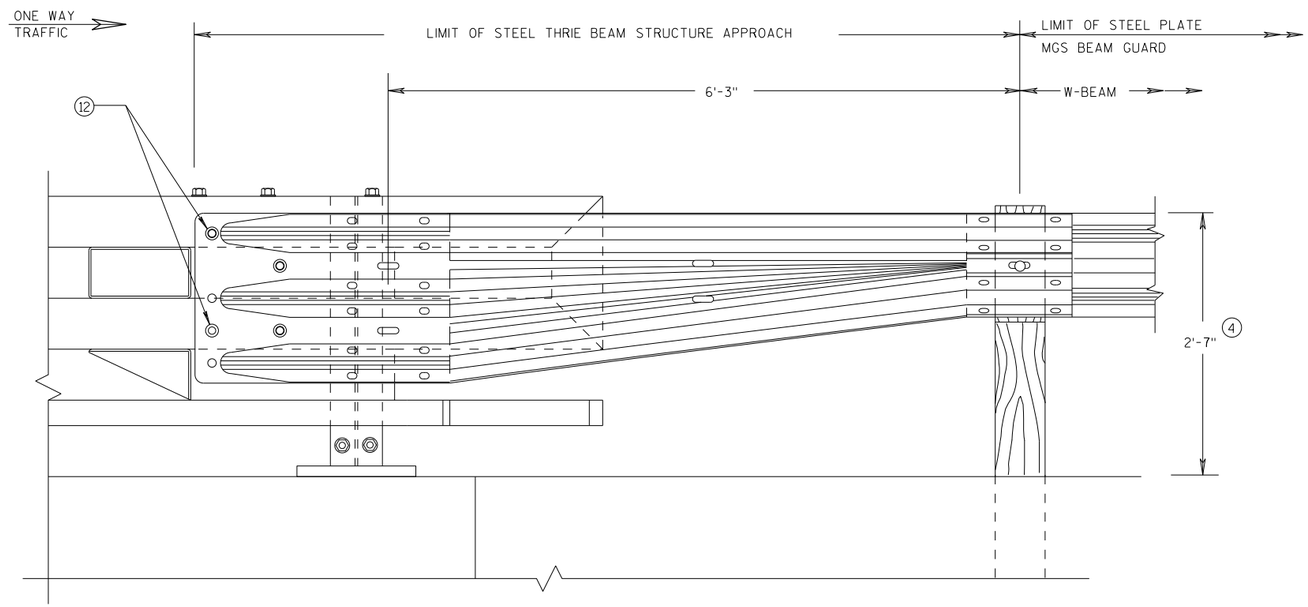
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S.D.D. 14 B 45-5k



FRONT VIEW

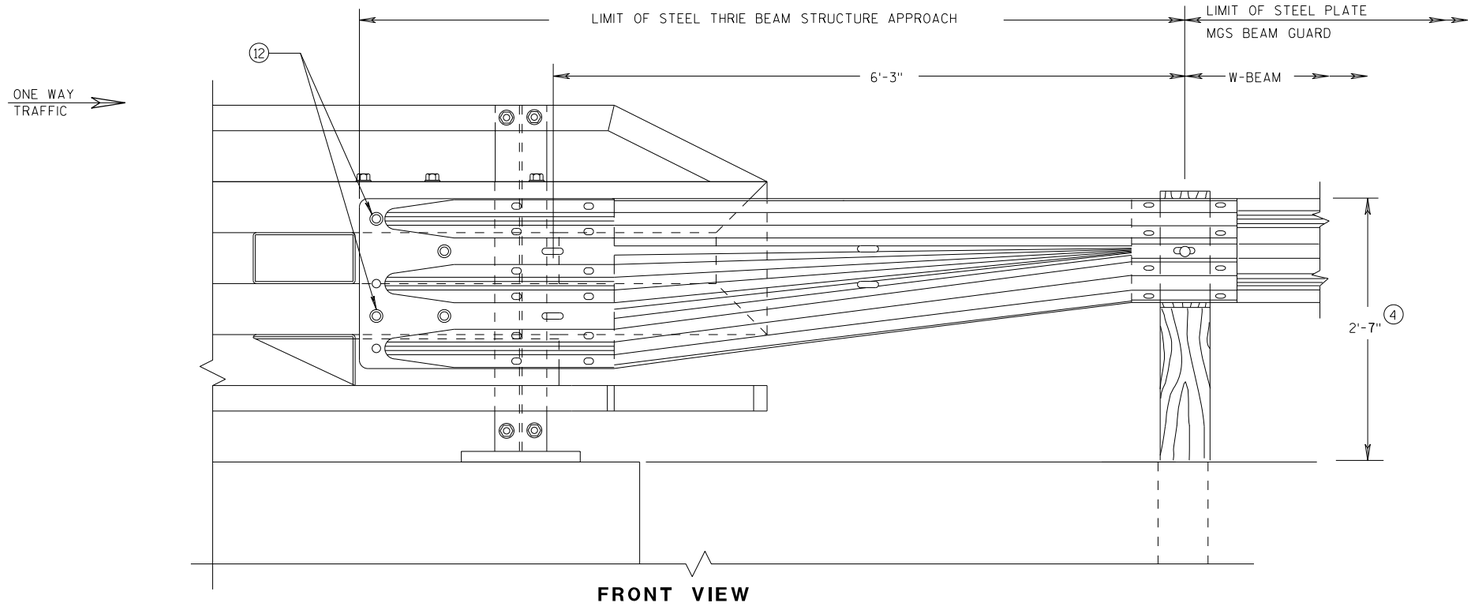
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) 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. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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FHWA

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UNIT SUPERVIS

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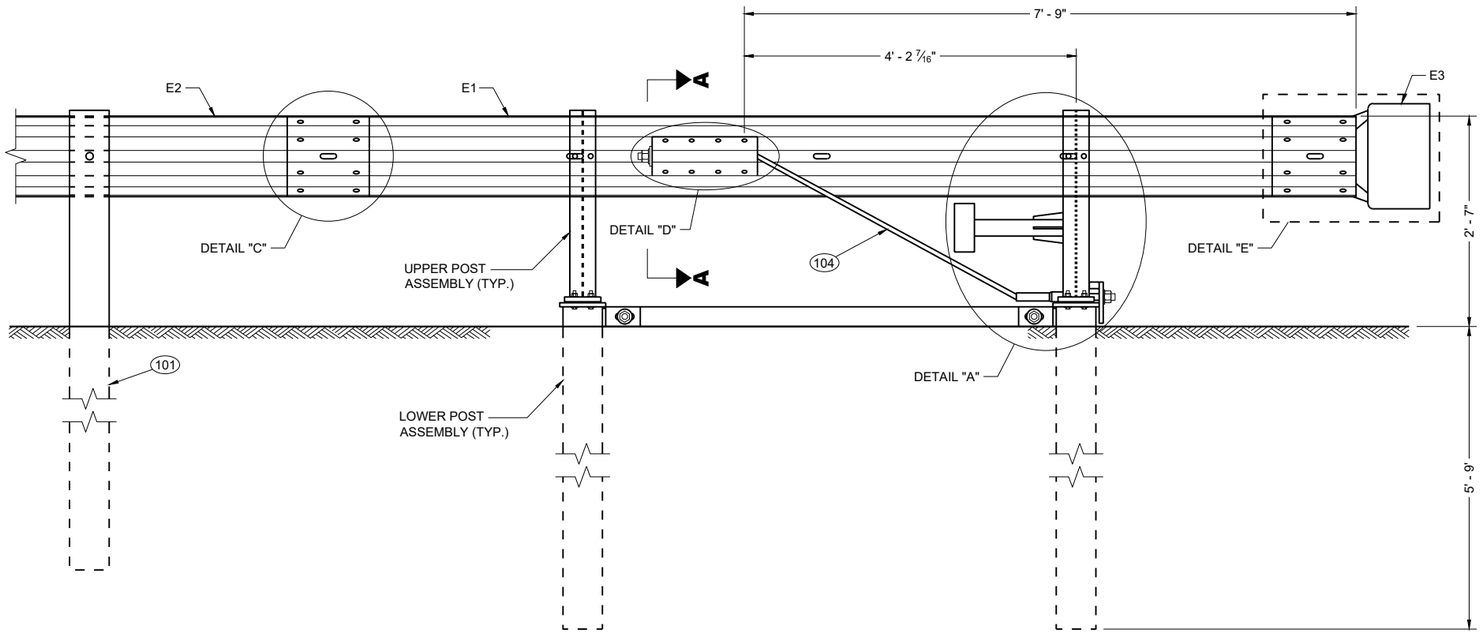
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S.D.D. 14 B 45-5L

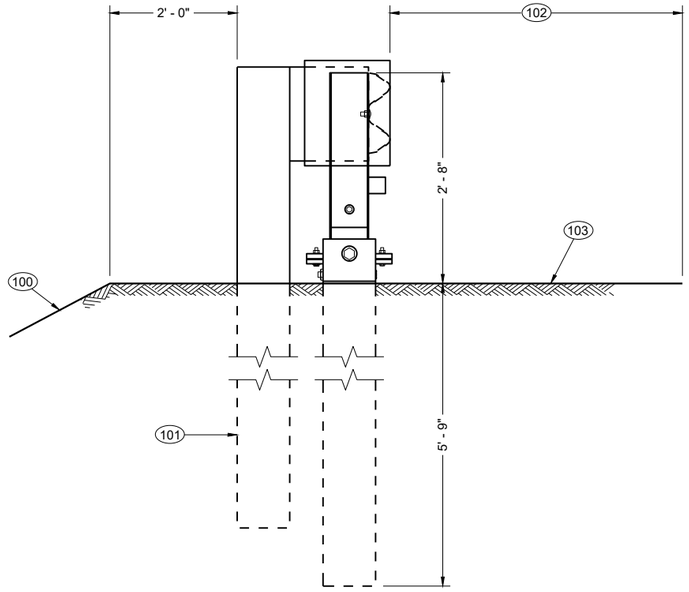
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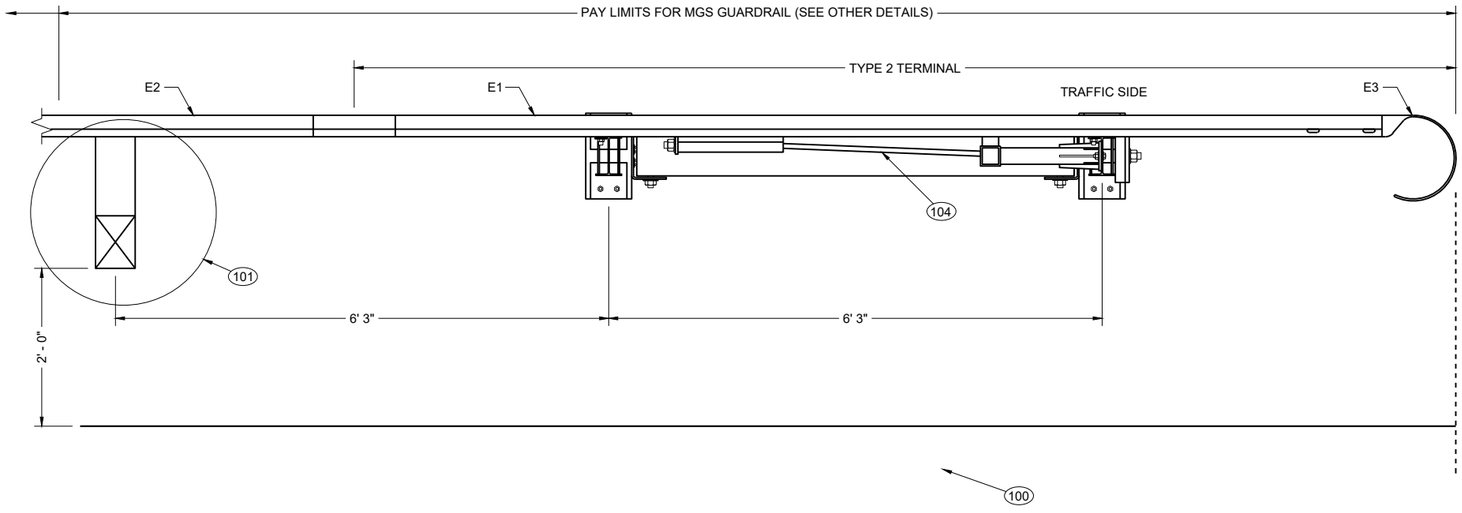
BACK VIEW

TYPE 2 TERMINAL



SIDE VIEW

TYPE 2 TERMINAL



TOP VIEW

TYPE 2 TERMINAL

GENERAL NOTES

SEE SDD 14B42 FOR MORE INFORMATION

(100) MAXIMUM SLOPE IS 2.5:1.

(101) SEE SDD 14B42 FOR MORE INFORMATION.

(102) SHOULDER

(103) MAXIMUM SLOPE IS 10:1.

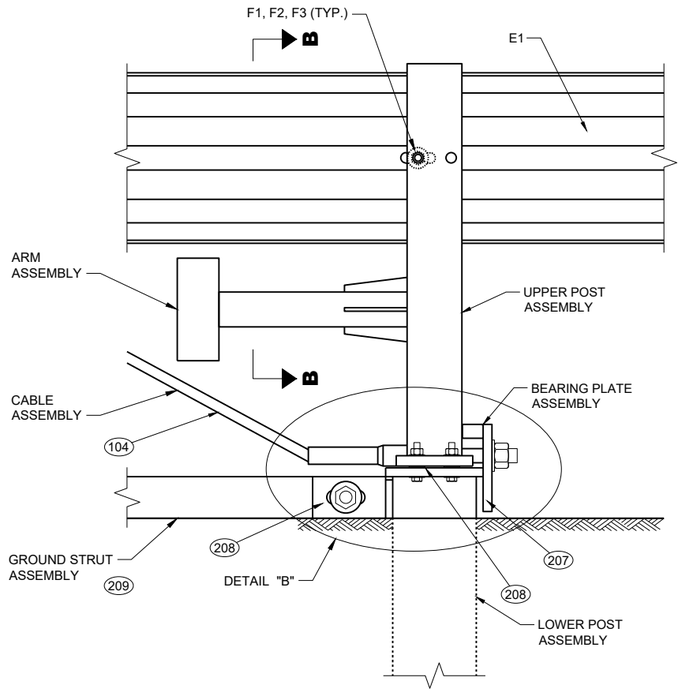
(104) AFTER ASSEMBLY, CABLE IS TO BE TIGHTENED WITHOUT TWISTING THE CABLE.

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

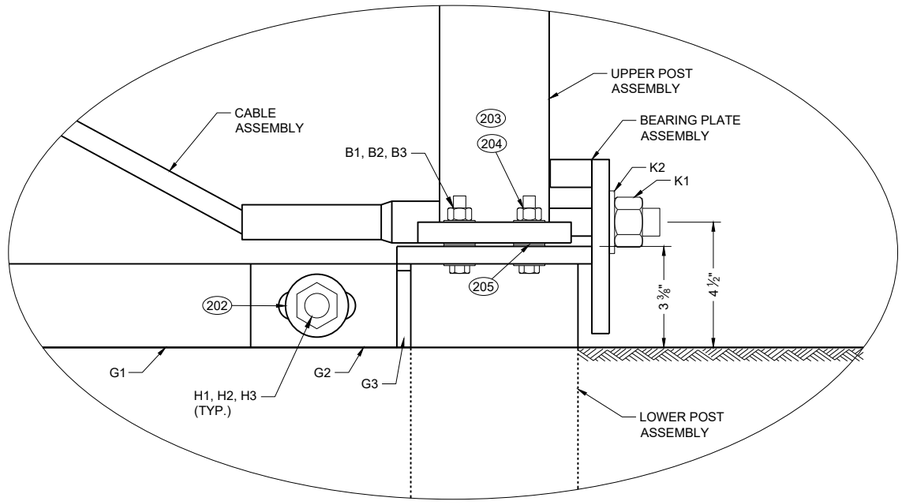
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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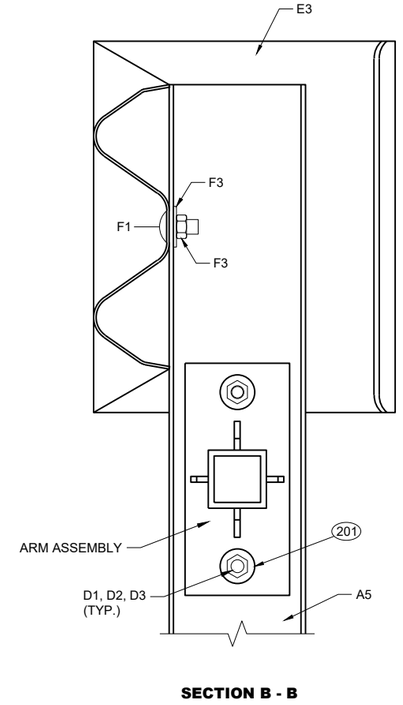
SDD 14B47-07a



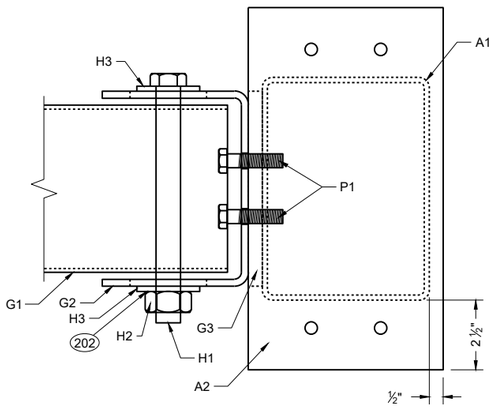
DETAIL "A"



DETAIL "B"

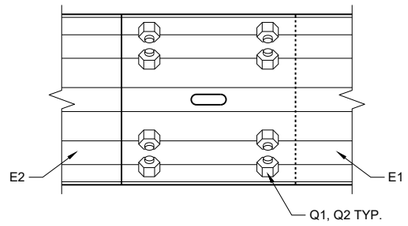


SECTION B - B

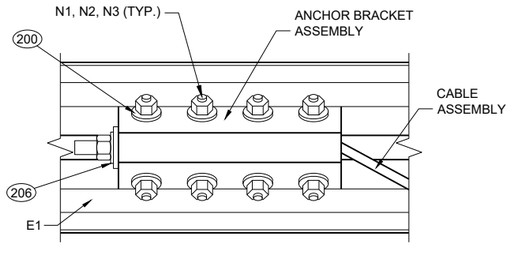


TOP VIEW

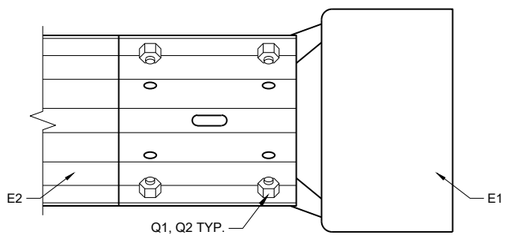
GROUND STRUT CONNECTION DETAIL



DETAIL "C"



DETAIL "D"



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.

207 NO MATERIAL IS TO BE PLACED AGAINST THE VERTICAL FACES OF BEARING PLATE.

208 PREVENT OR REMOVE MATERIALS THAT BLOCK ACCESS TO BOLTS FOR POST ASSEMBLIES AND GROUND STRUT.

209 PREVENT OR REMOVE MATERIALS THAT IMPEDE REMOVAL OF GROUND STRUT.

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

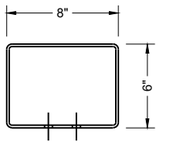
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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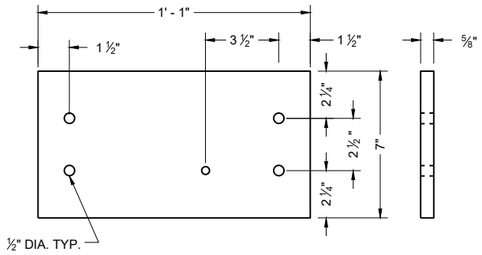
SDD 14B47-07b

GENERAL NOTES

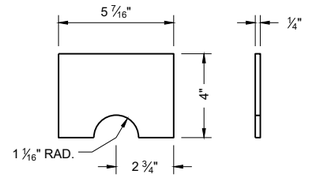
(300) TAP FOR 1/2" AFTER GALVANIZATION



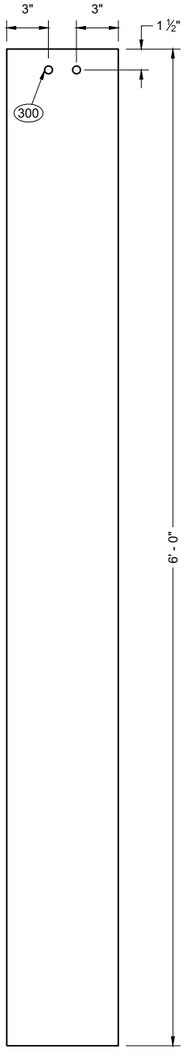
TOP VIEW



LOWER PLATE (A2)

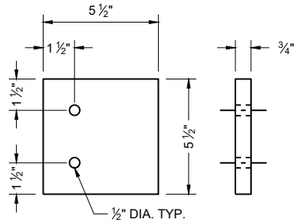


POST GUSSET (A3)

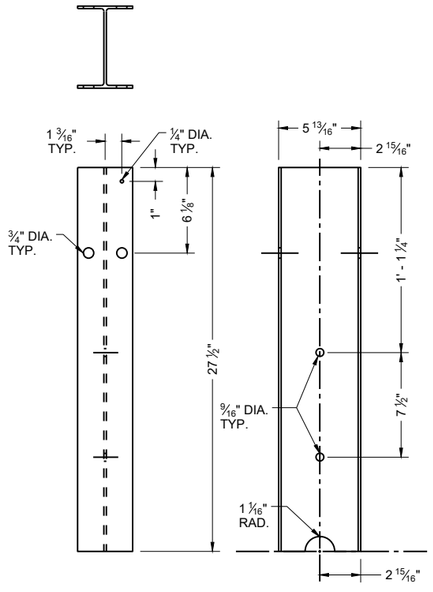


SIDE VIEW

FOUNDATION TUBE (A1)

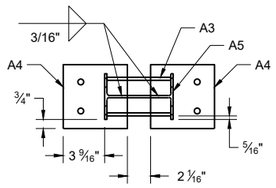


UPPER PLATE (A4)

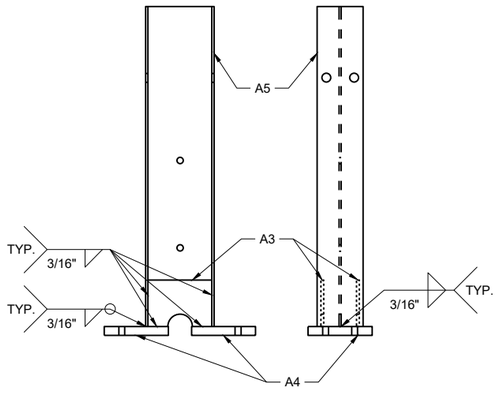


FRONT VIEW SIDE VIEW

TYPE 2 POST (A5)

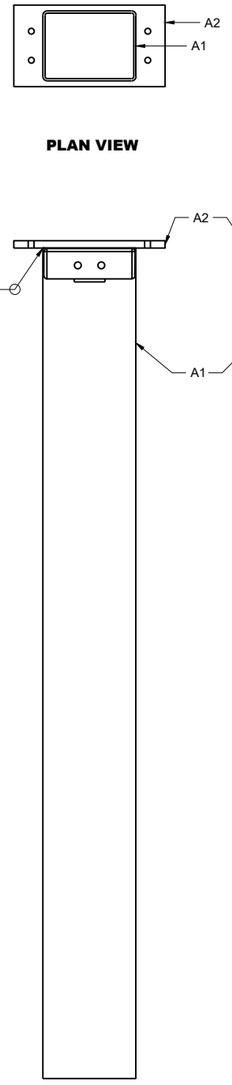


PLAN VIEW



SIDE VIEW FRONT VIEW

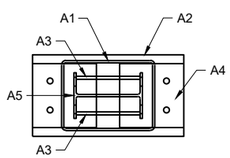
UPPER POST ASSEMBLY

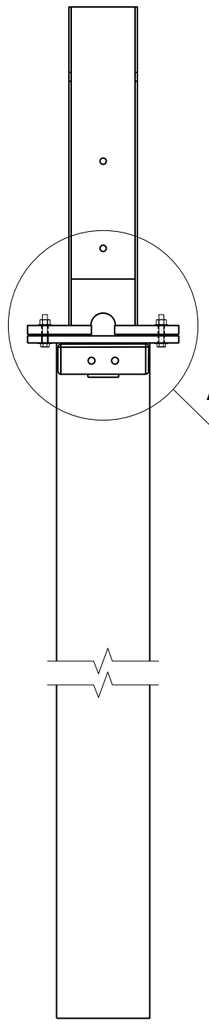


PLAN VIEW

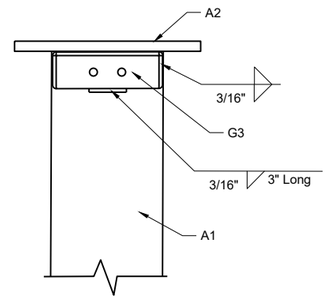
FRONT VIEW SIDE VIEW

LOWER POST ASSEMBLY

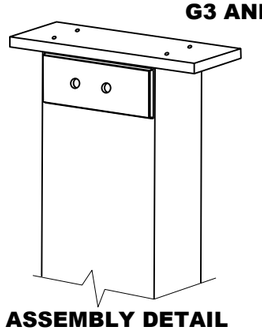




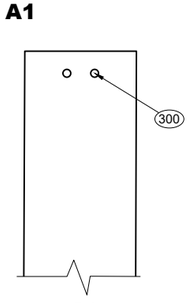
ASSEMBLED POST



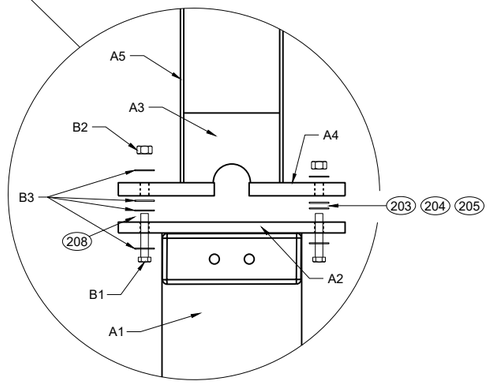
WELDING DETAIL G3 AND A1



ASSEMBLY DETAIL ISOMETRIC



A1



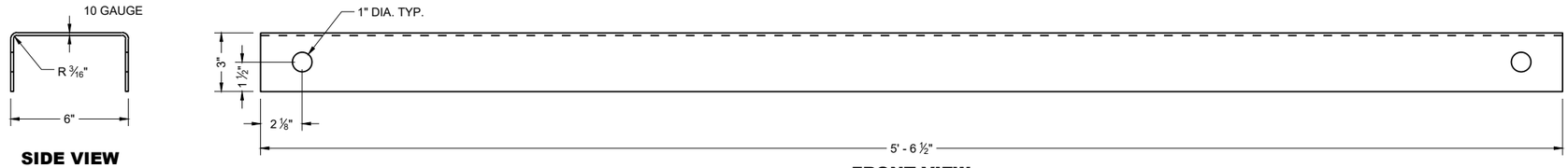
POST CONNECTION DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

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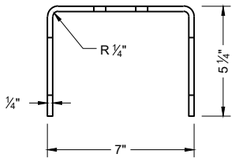
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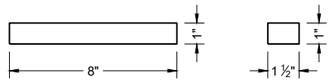
SIDE VIEW

FRONT VIEW

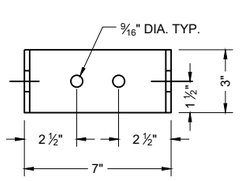
GROUND STRUT CHANNEL (G1)



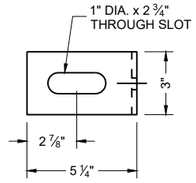
TOP VIEW



BEARING PLATE FLANGE (L2)

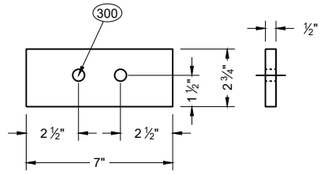


FRONT VIEW

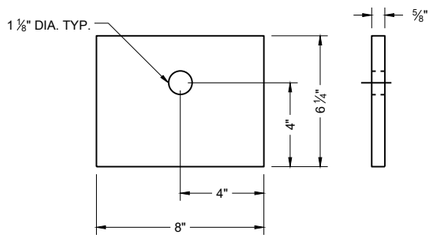


SIDE VIEW

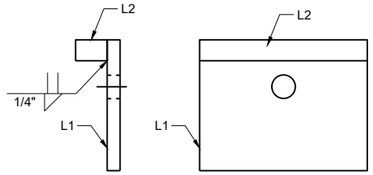
GROUND STRUT CONNECTOR (G2)



GROUND STRUT PLATE (G3)

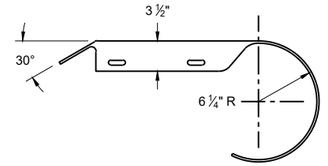


BEARING PLATE (L1)

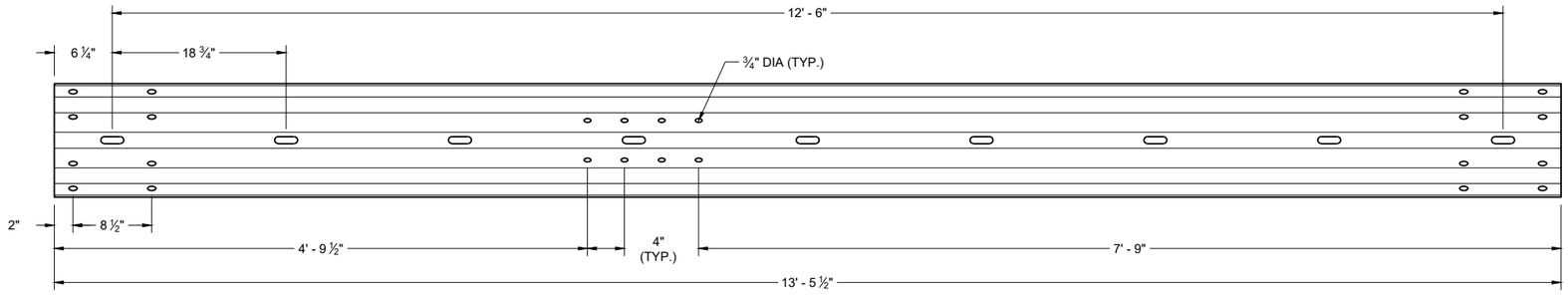


SIDE VIEW FRONT VIEW

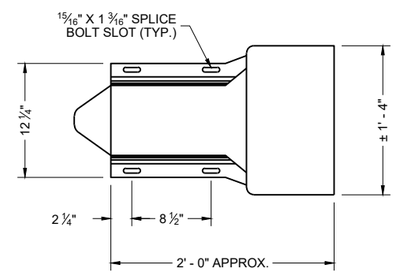
BEARING PLATE ASSEMBLY



PLAN VIEW

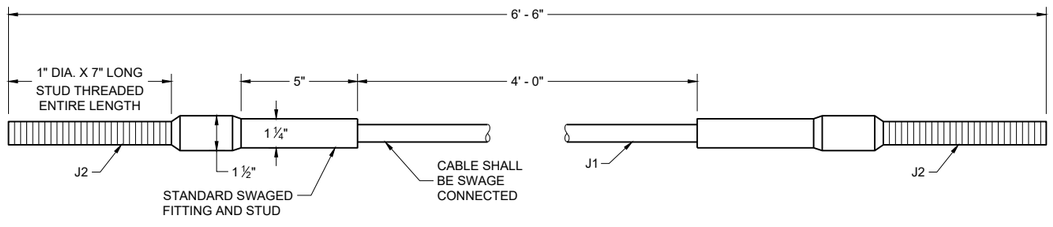


TYPE 2 GUARDRAIL (E1)



ELEVATION VIEW

ROUNDED BUFFER END (E3)



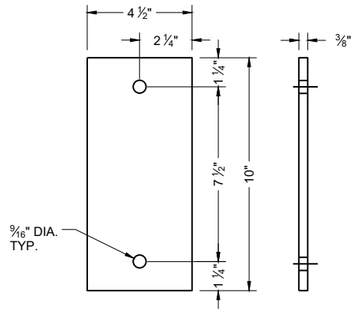
CABLE ASSEMBLY

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

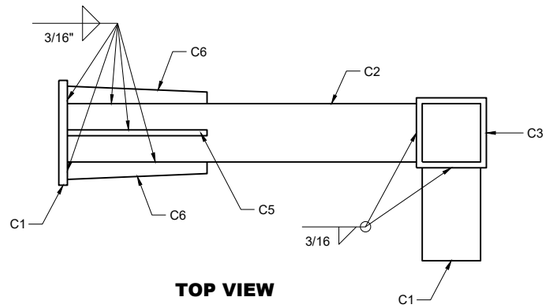
STATE OF WISCONSIN
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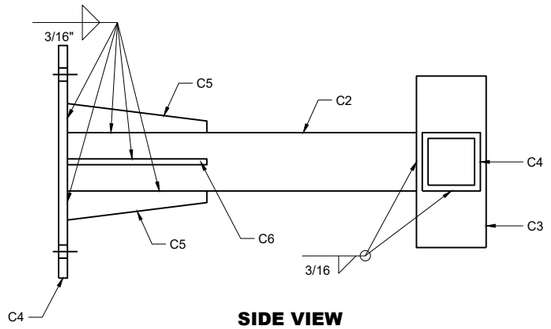
SDD 14B47-07d



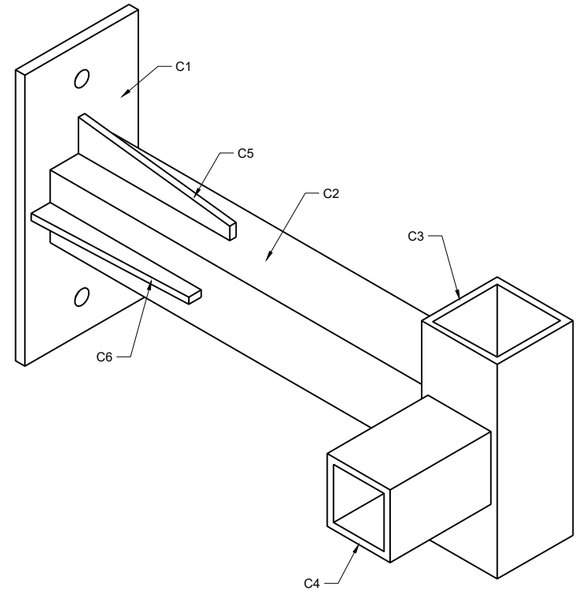
ARM PLATE (C1)



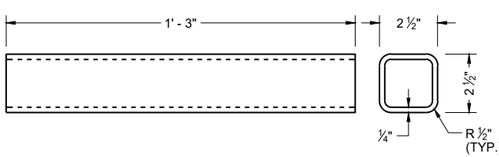
TOP VIEW
ARM ASSEMBLY



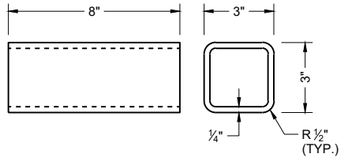
SIDE VIEW
ARM ASSEMBLY



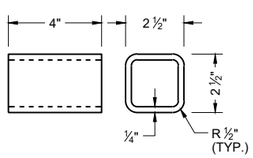
ISOMETRIC VIEW
ARM ASSEMBLY



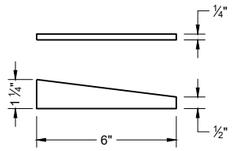
ARM TUBE 1 (C2)



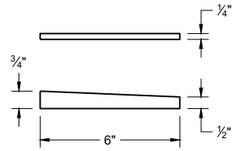
ARM TUBE 2 (C3)



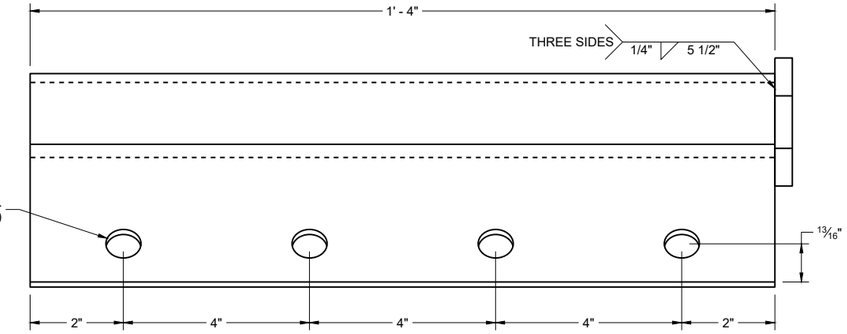
ARM TUBE 3 (C4)

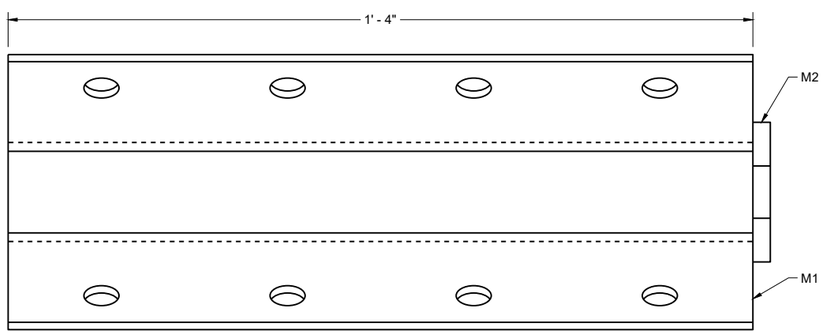


ARM GUSSET PLATE 1 (C5)

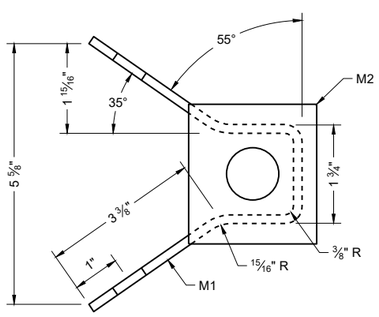


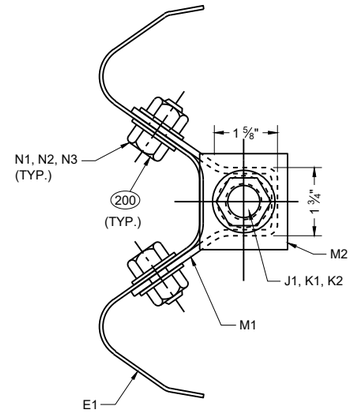
ARM GUSSET PLATE 2 (C6)

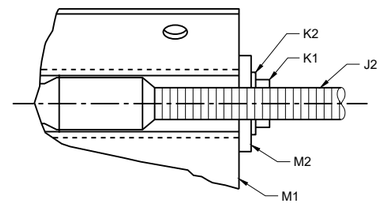




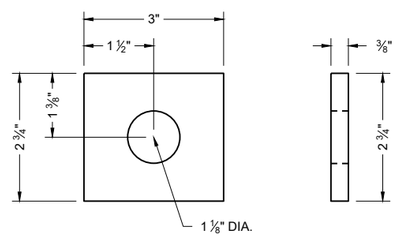
ANCHOR BRACKET (M1, M2)







SECTION A - A



ANCHOR BRACKET BEARING PLATE (M2)

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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, w6x9 or w6x8.5	
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

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

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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.
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.

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

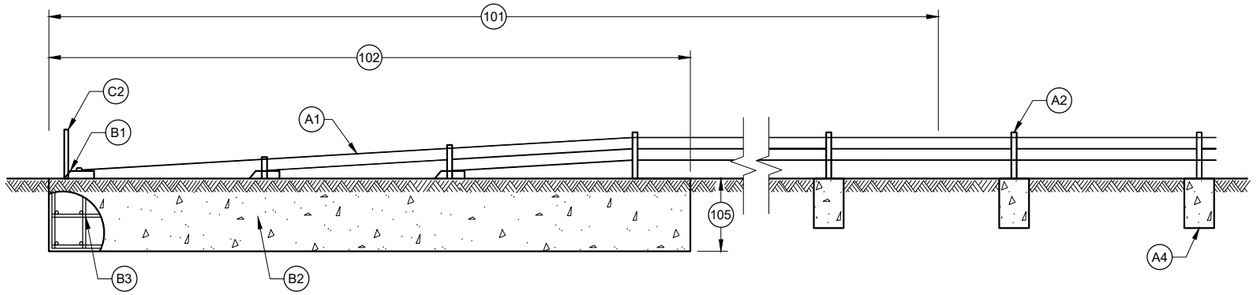
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2025 — DATE
/S/ Rodney Taylor — <position>

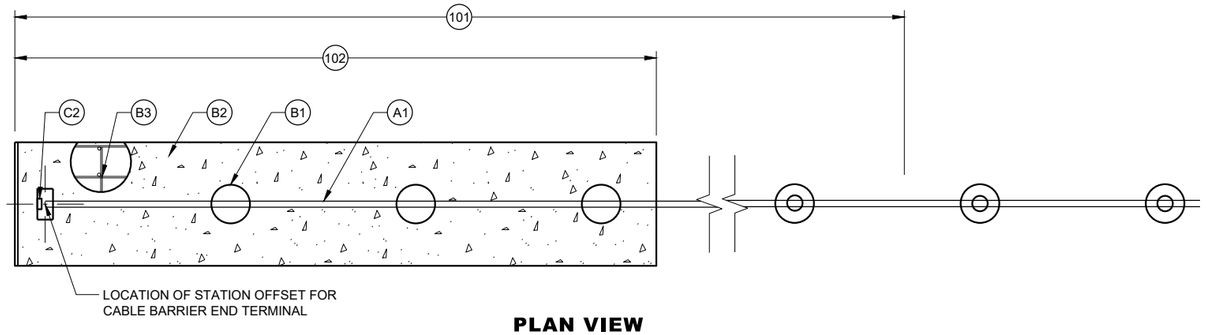
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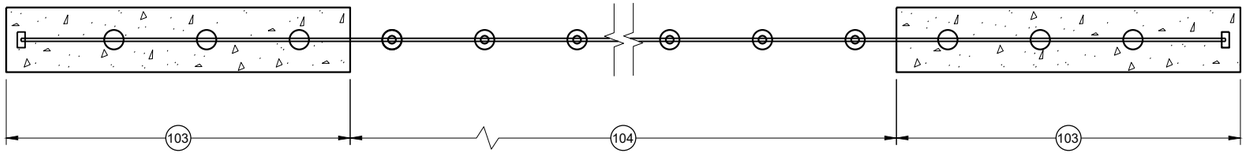


PROFILE VIEW

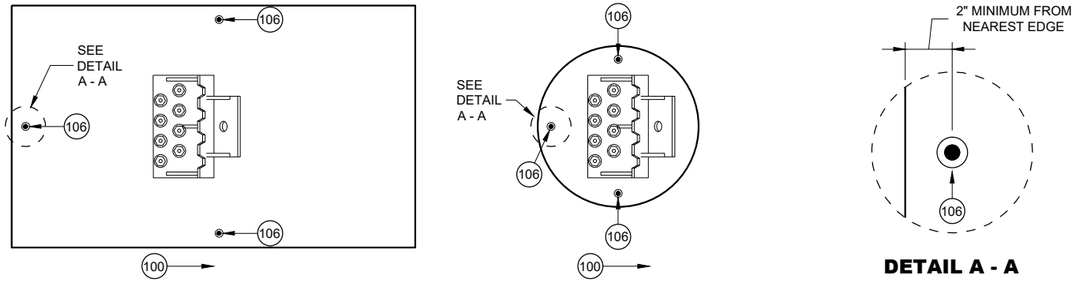


PLAN VIEW

TRANSITION FROM CABLE BARRIER TERMINAL TO CABLE BARRIER LINE POSTS



TYPICAL PLAN VIEW



DETAIL A - A

ANCHOR MONITOR POINTS FOR CABLE BARRIER END TERMINAL ANCHORS

GENERAL NOTES

DRAWINGS ARE GENERAL IN NATURE. SEE MANUFACTURER'S INFORMATION FOR MORE DETAIL.

PROVIDE 2 INCH CLEAR COVER FROM OUTER EDGE OF CONCRETE FOOTINGS TO REINFORCEMENT.

INSTALL LINE POSTS PLUMB. LINE POSTS ARE TO BE EASILY REMOVED BY HAND AND HOLD CABLES AT THE PROPER ELEVATION.

PROVIDE CABLE BARRIER SYSTEM FROM APPROVED PRODUCT LIST.

PROVIDE A SYSTEM TO HAVE THE WORKING WIDTH INDICATED IN PLAN.

PROVIDE DOCUMENTATION HOW POST SPACING, RADIUS OF CURVE AND ANCHOR SPACING INFLUENCES WORKING WIDTH TO CONSTRUCTION STAFF.

CONSTRUCT SHAFTS VERTICALLY. VERTICAL TOLERANCE OF SHAFT IS $\frac{1}{8}$" PER FOOT OF DEPTH. SHAFTS ARE TO MINIMIZE DISTURBANCE TO ADJACENT SOILS.

SECURE STEEL REINFORCEMENT AND STEEL SLEEVE PRIOR TO PLACEMENT OF CONCRETE. MAINTAIN CLEAR DISTANCE BETWEEN SOIL AND REINFORCEMENT CAGE.

PLACE CONCRETE IN ONE CONTINUOUS POUR FOR EACH FOOTING. USE VIBRATION TO CONSOLIDATE CONCRETE.

PROVIDE CASING AS NECESSARY TO PREVENT INTRUSION OF UNCONSOLIDATED MATERIALS OR WATER. USE CASINGS WHEN THERE IS 3 OR MORE INCHES OF WATER IN EXCAVATION.

PROVIDE WISCONSIN PROFESSIONAL ENGINEER SIGNED AND APPROVED FOOTING DESIGN USING A CASING AND CONSTRUCTION SEQUENCE. PROJECT ENGINEER WILL REVIEW AND APPROVED CASING DESIGN AND CONSTRUCTION SEQUENCE. CASING IS TO HAVE INTIMATE CONTACT WITH SHAFT SIDEWALL. CASING IT TO WITHSTAND INSERTION STRESS, REMOVAL STRESS, CONCRETE PRESSURE AND SOIL PRESSURE. REMOVE CASING DURING CONCRETE PLACEMENT OR IMMEDIATELY AFTER CONCRETE PLACEMENT. NO TEMPORARY CASING MAY REMAIN IN-PLACE.

PROVIDE WISCONSIN PROFESSIONAL ENGINEER SIGNED AND APPROVED FOOTING DESIGN AND CONSTRUCTION SEQUENCE WHEN OVER EXCAVATION IS REQUIRED NEAR A FOOTING. PROJECT ENGINEER WILL REVIEW AND APPROVED DESIGN AND CONSTRUCTION SEQUENCE.

FINISH TOP OF FOOTINGS TO THE DIMENSIONS INDICATED IN PLAN. REMOVE EXCESS CONCRETE.

DESIGN POST FOOTINGS SO THAT LINE POST FOOTING MOVE LESS THAN 1 INCH WHEN LINE POST IS IMPACTED BY A NCHRP 350 TL-3 SMALL CAR.

USE MARINE GRADE ANTI-SEIZE LUBRICANT FOR THREADING FITTINGS THAT IS ACCEPTABLE FOR USE ON GALVANIZED STEEL.

(100) DIRECTION THAT THE CABLE PULLS THE END ANCHOR FOOTING

(101) LOCATION OF LENGTH OF NEED POINT FOR CABLE BARRIER END TERMINAL VARIES. (SEE MANUFACTURER'S INFORMATION)

(102) PAY LIMIT FOR CABLE BARRIER END TERMINAL. LENGTH OF CABLE BARRIER END TERMINAL VARIES. (SEE MANUFACTURER'S INFORMATION)

(103) CABLE BARRIER END TERMINAL

(104) CABLE BARRIER AND LINE POSTS

(105) IN SOIL MINIMUM DEPTH OF CABLE BARRIER END TERMINAL FOOTING IS 60 INCHES. DEEPER FOOTINGS PER MANUFACTURER'S RECOMMENDATION ARE ACCEPTABLE.

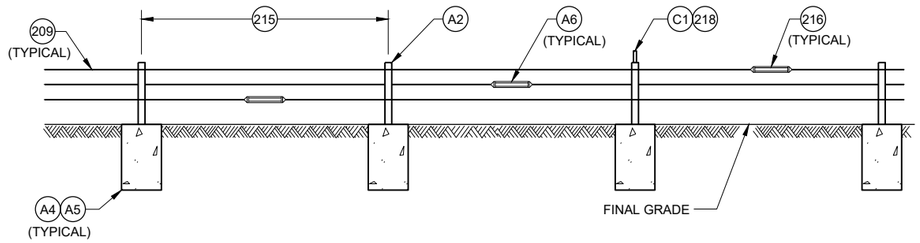
(106) ANCHOR MONITOR POINTS ARE GALVANIZED SURVEY NAIL, OR MASONRY NAIL, PLACED INTO CONCRETE FOOTING BEFORE HARDENING. IF THERE ARE MULTIPLE ANCHOR POINTS WITHIN A PAY LIMIT FOR A CABLE BARRIER END TERMINAL, EACH ANCHOR POINT NEEDS THREE ANCHOR MONITOR POINTS.

CABLE BARRIER TYPE 1 LAYOUT

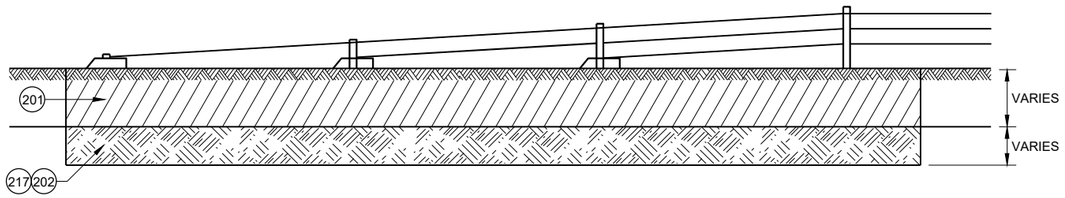
STATE OF WISCONSIN
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SDD14B52 - 03a



PROFILE VIEW
LINE POST INSTALLATION



CABLE BARRIER END TERMINAL
ROCK EXCAVATION DETAIL

GENERAL NOTES

201 SOIL TO BE EXCAVATED FOR CABLE BARRIER END TERMINAL (VARIES)

202 ROCK TO BE EXCAVATED FOR CABLE BARRIER END TERMINAL (VARIES)

203 SOIL TO BE EXCAVATED FOR LINE POST (VARIES)

204 ROCK TO BE EXCAVATED FOR LINE POST (VARIES)

205 EXCAVATE AND GRADE LINE FOR LINE POST FOOTINGS. INSTALL LINE POST FOOTING TO MINIMIZE 4 INCH TALL OBJECT ON 5 FOOT CHORD.

206 2 INCHES OF CLEAR COVER FROM EDGE OF CONCRETE TO REINFORCEMENT.

207 DIAMETER OF LINE POST FOOTING VARIES. SEE MANUFACTURERS' INFORMATION.

208 MINIMUM DEPTH OF LINE POST FOOTING IS 4' - 0" IN SOIL. DEEPER FOOTINGS PER MANUFACTURER'S RECOMMENDATION ARE ACCEPTABLE.

209 NUMBER AND LOCATION OF CABLES VARY. SEE MANUFACTURERS' INFORMATION.

210 LINE POST DIMENSIONS AND CONNECTION HARDWARE VARY. SEE MANUFACTURERS' INFORMATION.

211 LANE OF ROADWAY (VARIES). SEE PLAN FOR MORE INFORMATION.

212 PAVED SHOULDER (VARIES). SEE PLAN FOR MORE INFORMATION.

213 GRAVEL SHOULDER (VARIES). SEE PLAN FOR MORE INFORMATION.

214 CABLE BARRIER OFFSET FROM CENTERLINE OF MEDIAN DITCH (8 FOOT MINIMUM). SEE PLAN FOR MORE INFORMATION.

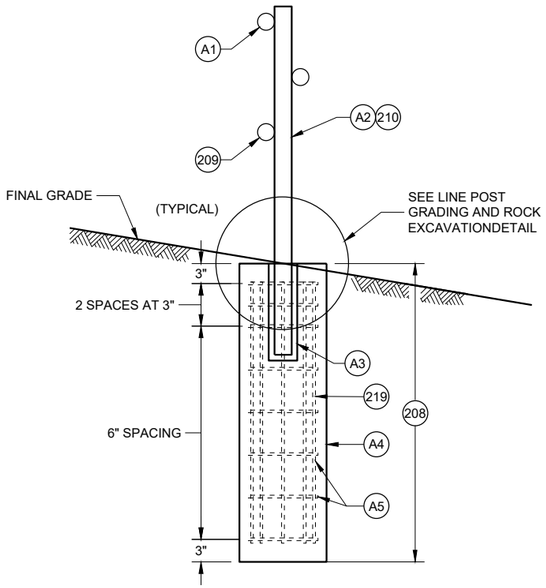
215 MAXIMUM POST SPACING IS 15 FEET.

216 STAGGER TURNBUCKLES (TYPICAL).

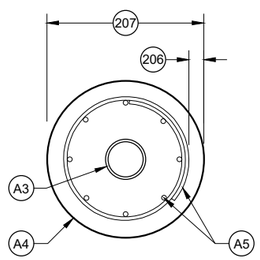
217 SEE MANUFACTURER'S DESIGN WHEN ROCK IS ENCOUNTERED.

218 LINE POST DELINEATOR SPACING IS 100 FEET.

219 MINIMUM LINE POST FOOTING REINFORCEMENT SHOWN. MANUFACTURER IS TO INDICATE REINFORCEMENT IS ADEQUATE FOR THEIR SYSTEM. IF REINFORCEMENT IS NOT ADEQUATE, PROVIDE FOOTING DESIGN WITH A ADEQUATE REINFORCEMENT.

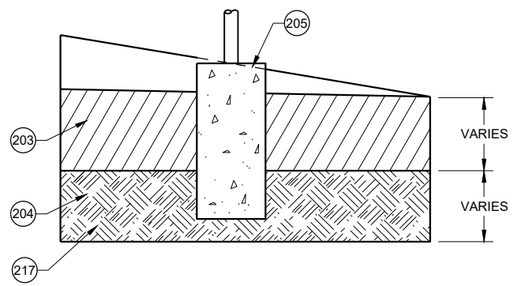


CROSS SECTION

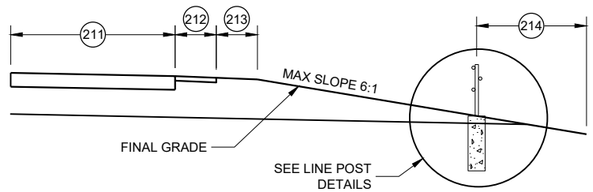


PROFILE VIEW
(LINE POSTS AND CABLES NOT SHOWN)

LINE POST DETAILS



LINE POST GRADING
AND ROCK EXCAVATION DETAIL



CABLE BARRIER OFFSET FROM DITCH LINE

CABLE BARRIER
TYPE 1 LAYOUT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B52 - 03b
SDD 14B52 - 03b

BILL OF MATERIALS

PART NUMBER	QTY.	DESCRIPTION	MATERIALS SPECIFICATIONS
A1	3 OR 4	¾" 3x7 PRESTRECHED GALVANIZED STEEL WIRE ROPE	AASHTO M30 TYPE 1 CLASS A OR ASTM A741 TYPE 1 CLASS A WITH MINIMUM BREAKING STRENGTH = 39 KIPS (173.5 KN)
A2	1 PER LINE POST	GALVANIZED REMOVABLE STEEL LINE POST	SEE MANUFACTURER'S INFORMATION ON DIMENSIONS AND MATERIAL REQUIREMENTS.
			ASTM A123 (GALVANIZATION).
A3	1 PER LINE POST	GALVANIZED STEEL SLEEVE	SEE MANUFACTURER'S INFORMATION ON DIMENSIONS AND MATERIAL REQUIREMENTS.
			ASTM A123 (GALVANIZATION).
A4	VARIES	CONCRETE FOR LINE POST FOOTING	A, A-FA.A-T, OR A-IP OF STANDARD SPECIFICATION 501.2 OR AS MANUFACTURER SPECIFIES.
			STANDARD SPECIFICATION 716 QMP FOR CLASS II ANCILLARY CONCRETE
			SEE MANUFACTURER'S INFORMATION ON DIMENSIONS.
A5	MINIMUM REINFORCEMENT: 8 HORIZONTAL LOOP BARS 8 VERTICAL BARS	EPOXY COATED STEEL REINFORCEMENT	STANDARD SPECIFICATION 505.
			ALL BARS ARE NO. 4 BARS
A6	VARIES	TURNBUCKLES AND OTHER CABLE CONNECTING HARDWARE	SEE MANUFACTURER'S INFORMATION ON DIMENSIONS.
			MINIMUM BREAKING STRENGTH OF TURNBUCKLES AND CONNECTION HARDWARE IS EQUAL TO CABLE.
			TURNBUCKLES AND OTHER CABLE CONNECTION HARDWARE IS FIELD SWAGED PER MANUFACTURER'S RECOMMENDATION AND DETAILS.
			PROVIDE DOCUMENTATION THAT THE FITTINGS ARE STRONGER THAN THE CABLE BARRIER. DOCUMENTATION IS TO INCLUDE: MANUFACTURER NAME, TESTING RESULTS, AND DATE OF TESTING.
B1	VARIES	CABLE CONNECTION TO CABLE BARRIER END TERMINAL	SEE MANUFACTURER'S INFORMATION ON DIMENSIONS AND MATERIAL REQUIREMENTS.
B2	VARIES	CONCRETE FOR CABLE BARRIER END TERMINAL	A, A-FA.A-T, OR A-IP OF STANDARD SPECIFICATION 501.2.
			STANDARD SPECIFICATION 716 QMP FOR CLASS II ANCILLARY CONCRETE
B3	VARIES	EPOXY COATED STEEL REINFORCEMENT	STANDARD SPECIFICATION 505.
C1	VARIES	LINE POST DELINEATOR	REFLECTIVE SHEETING TYPE SH. SEE APPROVED PRODUCT LIST YELLOW.
C2	VARIES	CABLE BARRIER END TERMINAL DELINEATOR	REFLECTIVE SHEETING TYPE SH. SEE APPROVED PRODUCT LIST OBJECT MARKER TYPE 3 PATTERN

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SDD 14B52 - 03c

SDD 14B52 - 03c

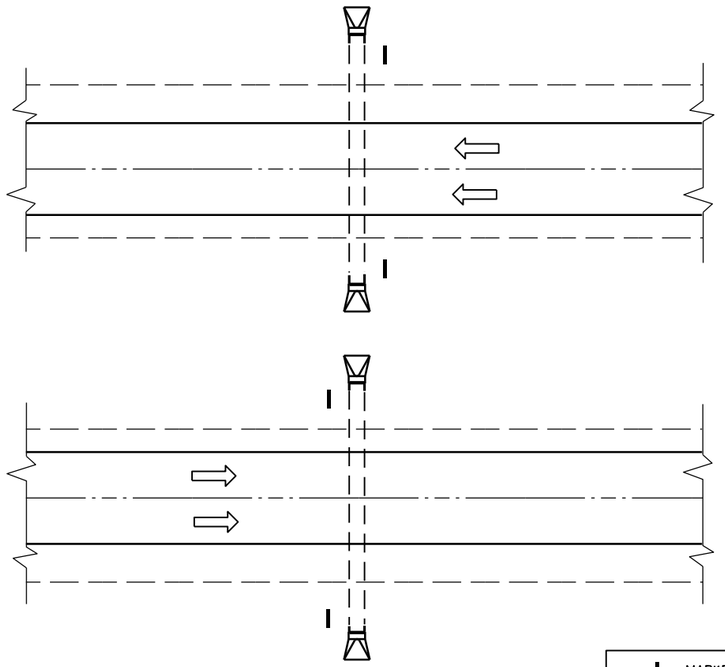
CABLE BARRIER TYPE 1 LAYOUT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

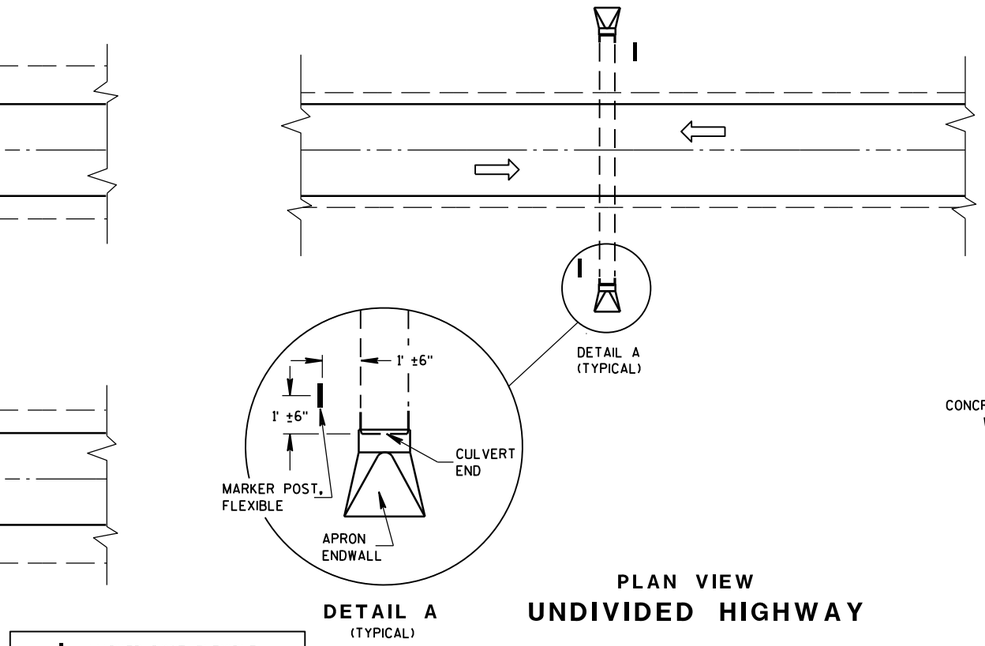
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

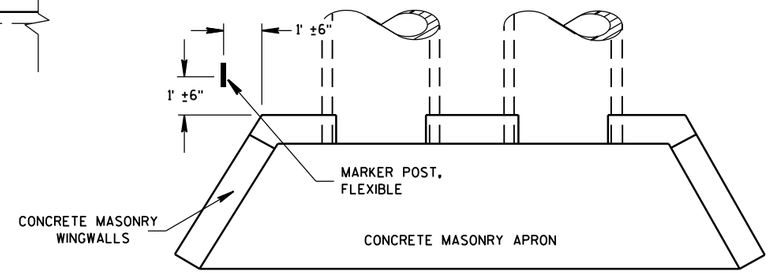
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

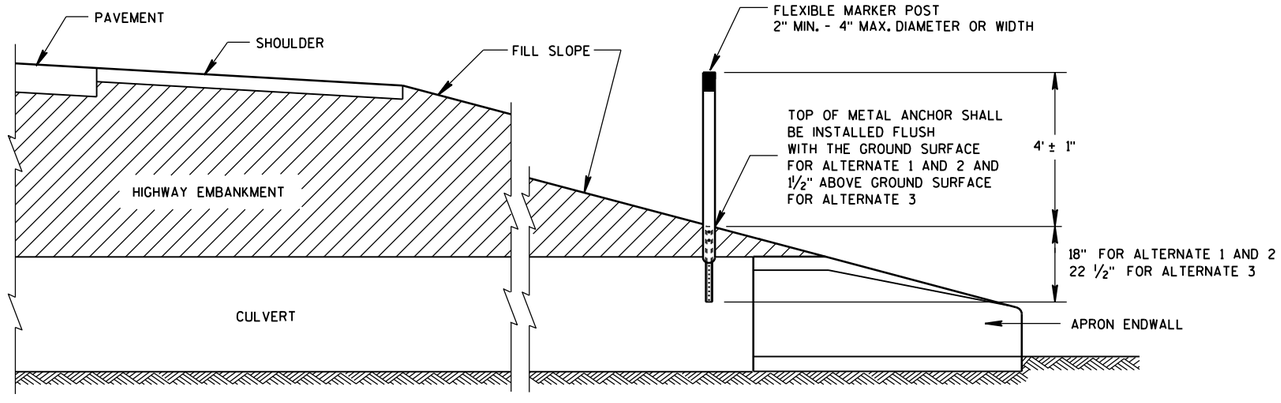
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

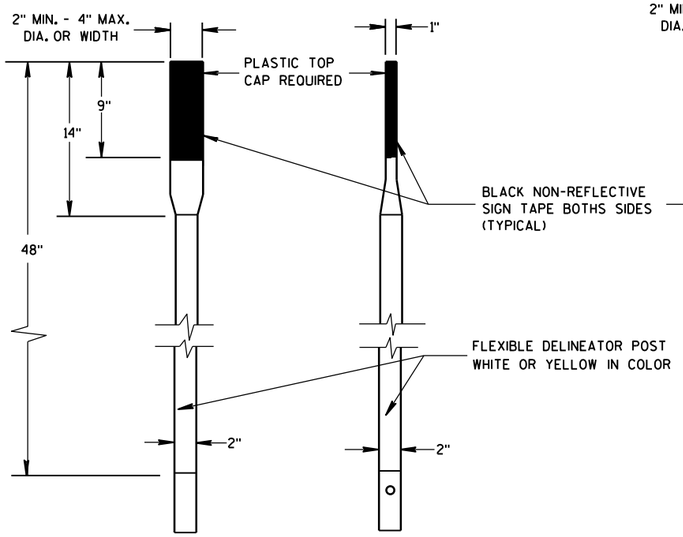
STATE OF WISCONSIN
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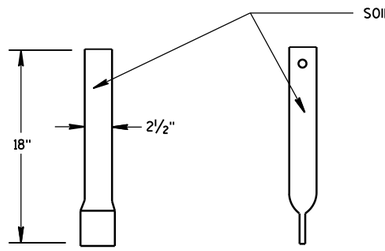
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S.D.D. 15 A 3-2a

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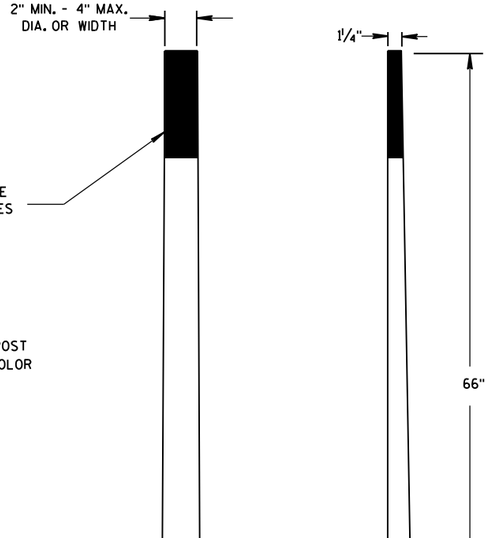
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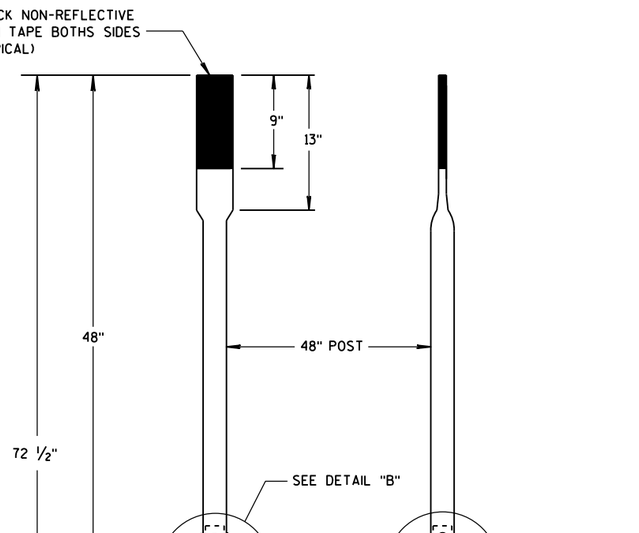
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

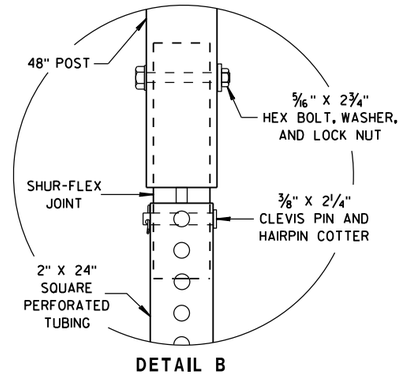
ALTERNATE 2



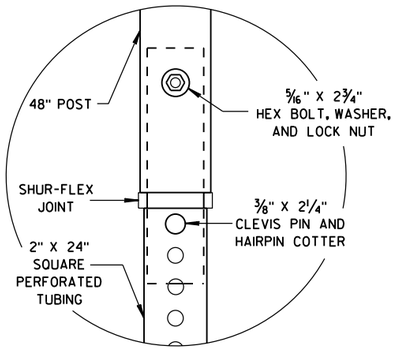
FRONT VIEW SIDE VIEW

ALTERNATE 3

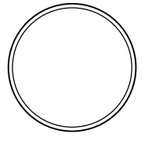
FLEXIBLE MARKER POSTS



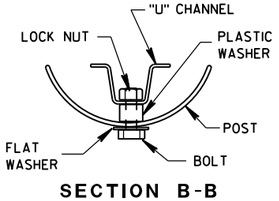
DETAIL B



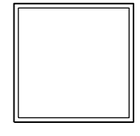
DETAIL C



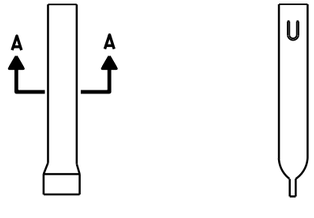
SECTION A-A



SECTION B-B

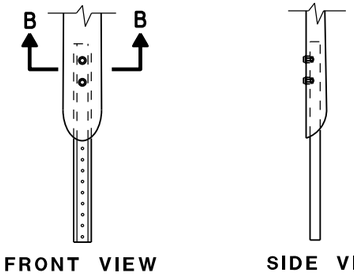


SECTION C-C



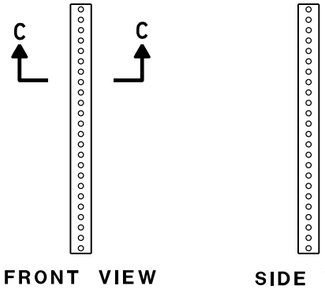
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST
FOR CULVERT END

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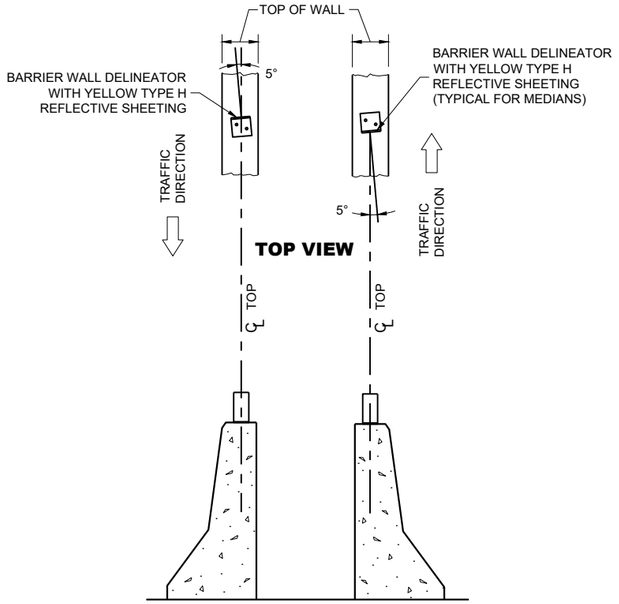
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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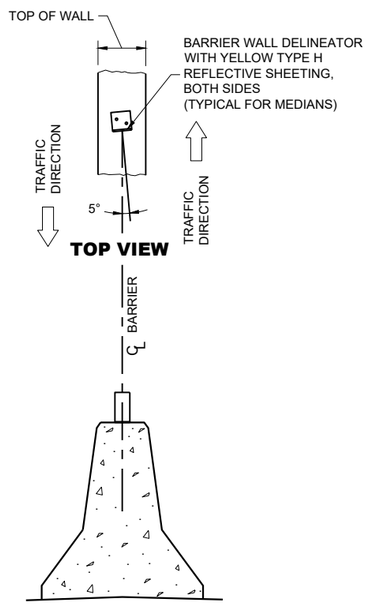
S.D.D. 15 A 3-2b

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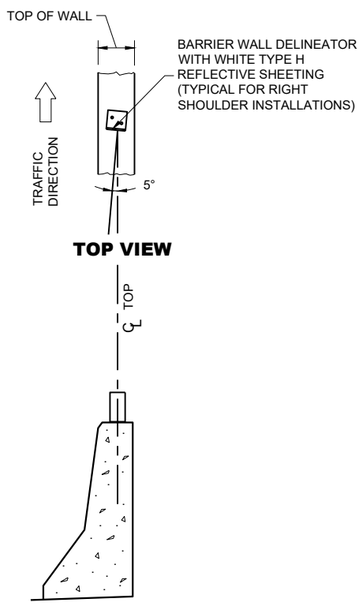
S.D.D. 15 A 3-2b



SIDE VIEW
DOUBLE BARRIERS IN MEDIAN

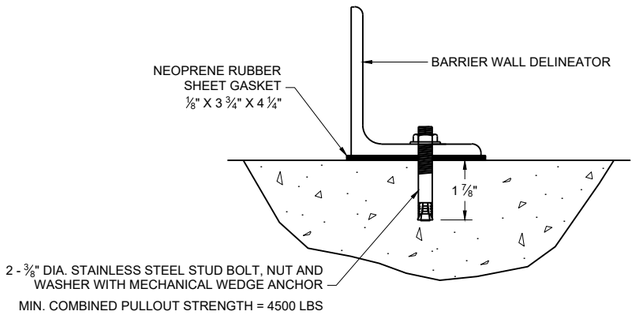


SIDE VIEW
MEDIAN BARRIER

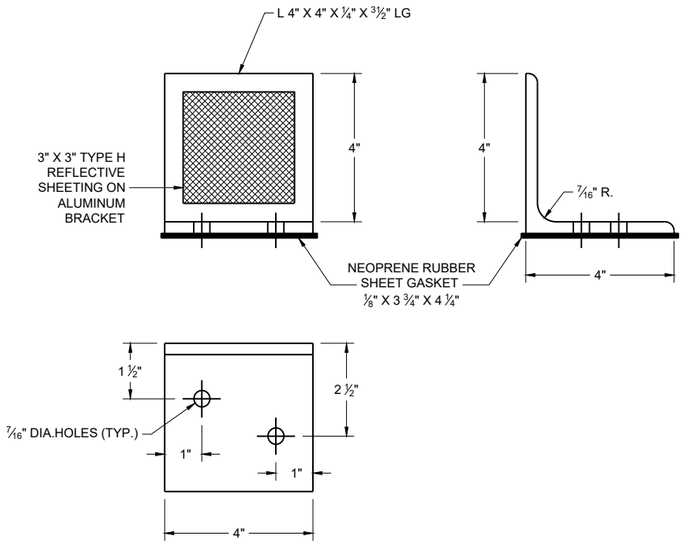


SIDE VIEW
TO RIGHT OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR BARRIER WALL DELINEATOR MOUNTED ON CONCRETE BARRIERS



BARRIER WALL DELINEATOR
MOUNTING DETAIL



BARRIER WALL DELINEATOR

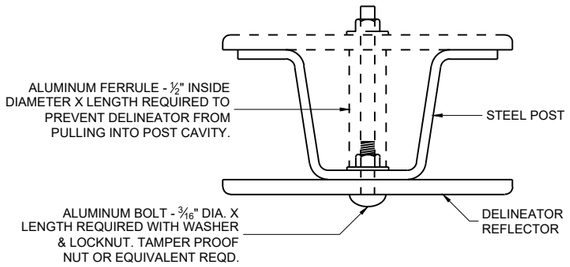
REFLECTOR SPACING TABLE

REFLECTOR SPACING	MINIMUM NUMBER OF REFLECTORS
100' C-C	3

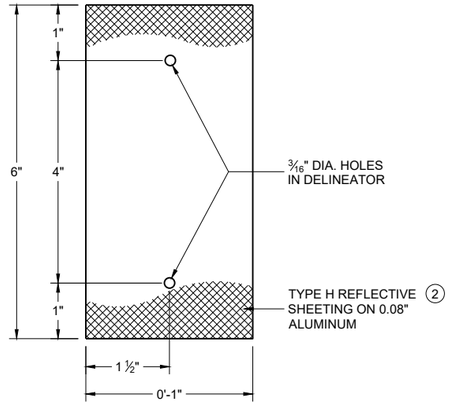
BARRIER WALL DELINEATOR WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

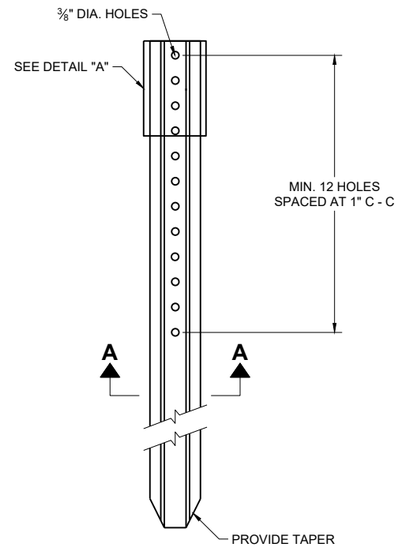
APPROVED
March 2024 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer
FHWA



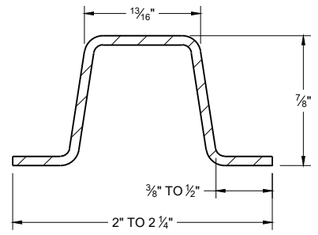
MOUNTING DETAIL FOR DELINEATOR REFLECTOR



DETAIL "A" 3" X 6" DELINEATOR REFLECTOR



DELINEATOR POST



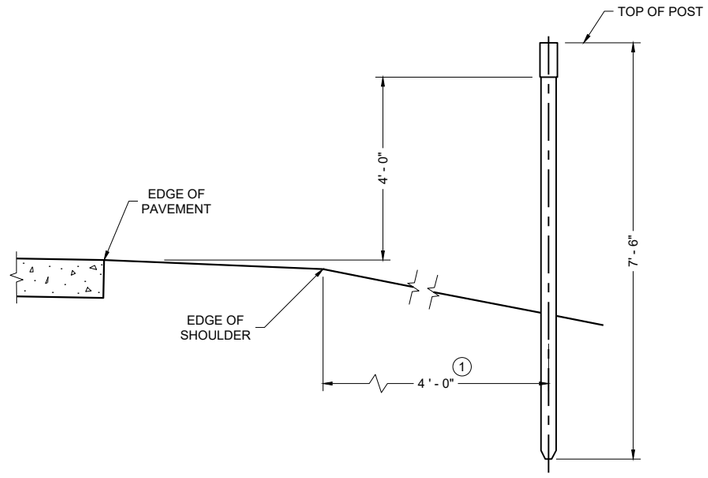
SECTION A - A

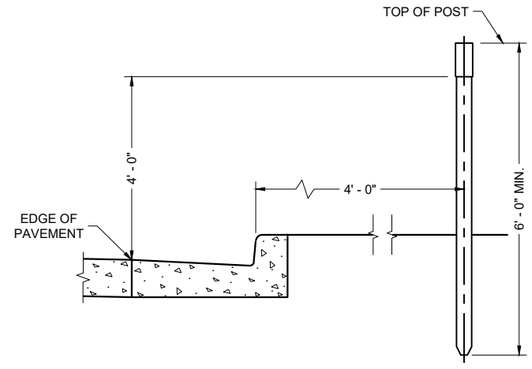
WEIGHT 1.12 LBS PER FT. \ 0.1 LB.

REFLECTOR SPACING TABLE

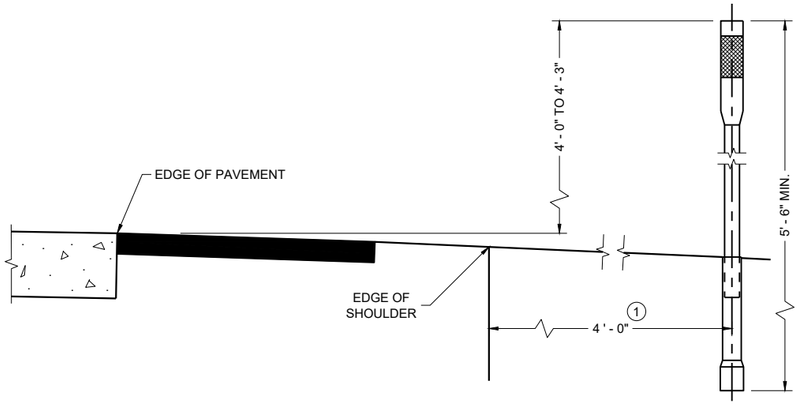
REFLECTOR SPACING	LOCATION
* 100' C-C	RAMPS
400' C-C	MAINLINE

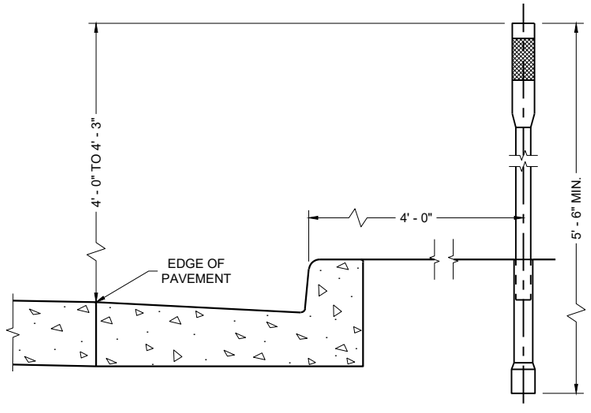
* START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER





TYPICAL INSTALLATIONS OF DELINEATOR POSTS





TYPICAL INSTALLATIONS OF FLEXIBLE DELINEATOR POSTS

GENERAL NOTES

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

(1) DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.

(2) FURNISH TYPE H SHEETING FROM THE APPROVED PRODUCTS LIST.

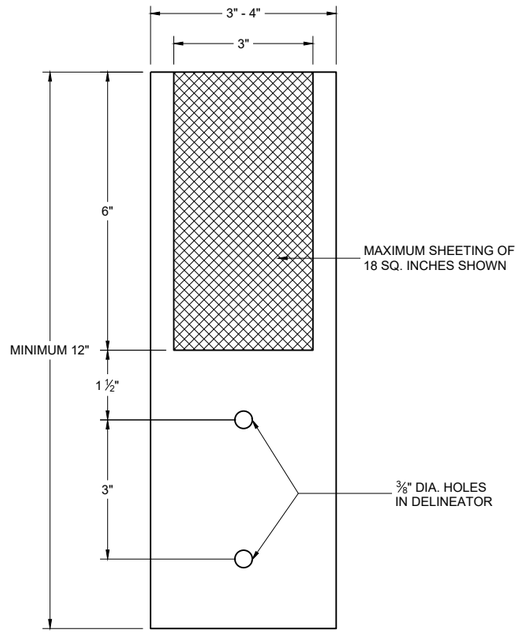
DELINEATOR POST WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6
SDD 15A04-08c



4" x 12" DELINEATOR
WITH REFLECTIVE SHEETING

REFLECTOR SPACING TABLE

REFLECTOR SPACING	MINIMUM NUMBER OF REFLECTORS
100' C-C	3

DELINEATOR POST
WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

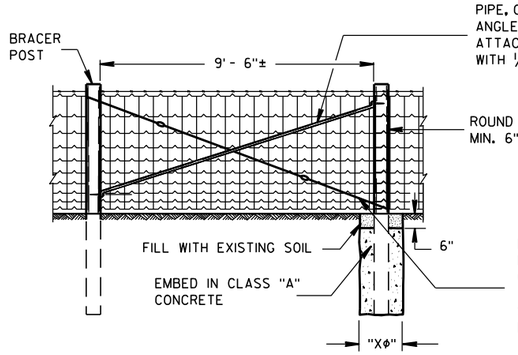
FHWA

6

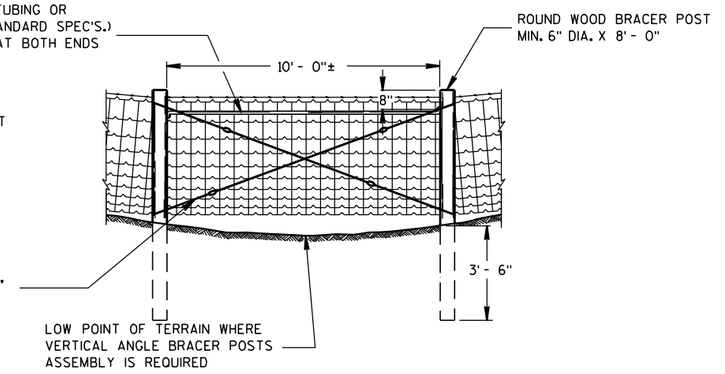
SDD 15A04-08e

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

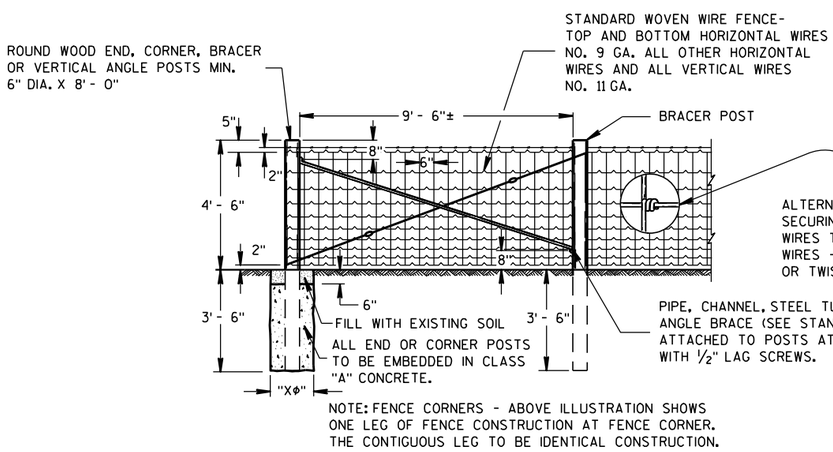
GENERAL NOTES

"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.

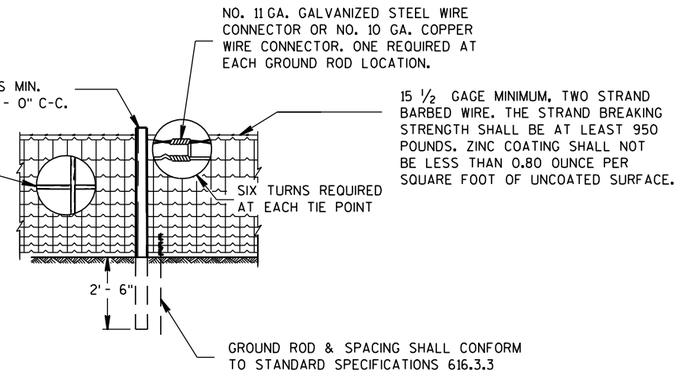
DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED 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.



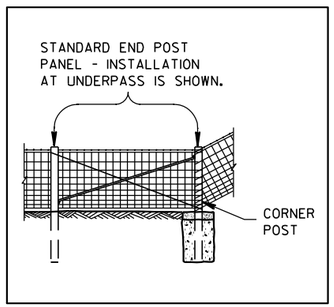
NOTE: FENCE CORNERS - ABOVE ILLUSTRATION SHOWS ONE LEG OF FENCE CONSTRUCTION AT FENCE CORNER. THE CONTIGUOUS LEG TO BE IDENTICAL CONSTRUCTION.

END OR CORNER POSTS ASSEMBLY

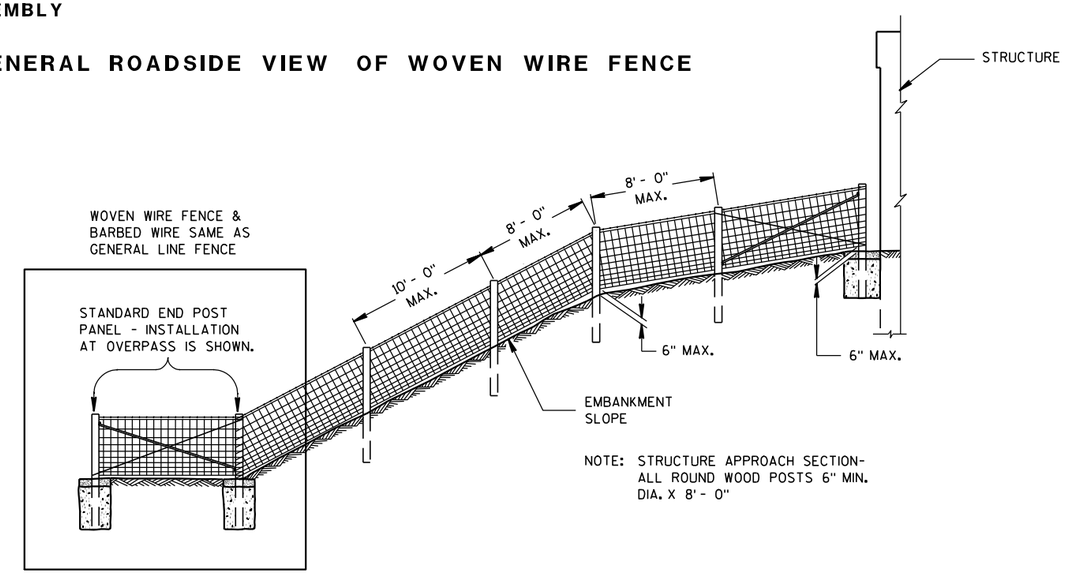


LINE FENCE CONSTRUCTION

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



ALTERNATE FENCE DESIGN AT STRUCTURE



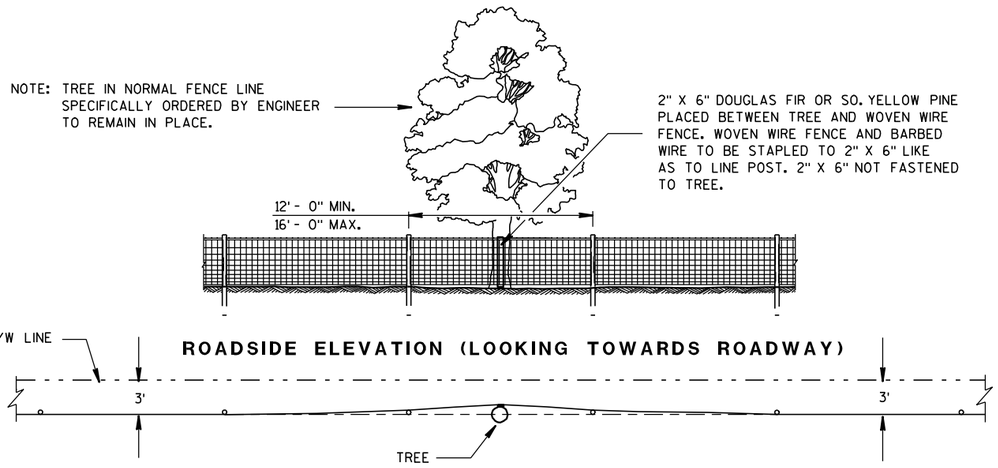
NOTE: STRUCTURE APPROACH SECTION- ALL ROUND WOOD POSTS 6" MIN. DIA. X 8' - 0"

FENCE DESIGN AT STRUCTURE APPROACH

FENCE WOVEN WIRE

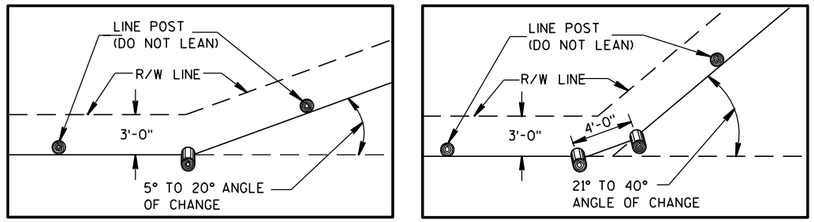
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 15 B 1-8a



PLAN VIEW

FENCE DESIGN AT TREES REMAINING IN NORMAL FENCE LINE



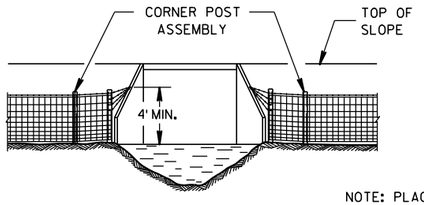
PLAN VIEW
SINGLE POST CORNER

PLAN VIEW
DOUBLE POST CORNER

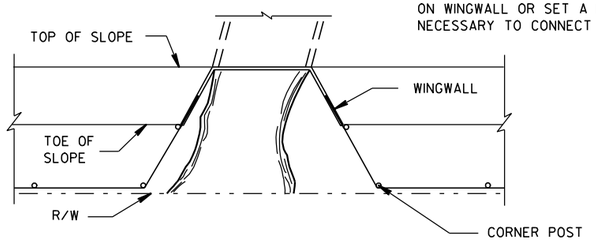
RIGHT OF WAY LINE CHANGE 40° AND LESS

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.

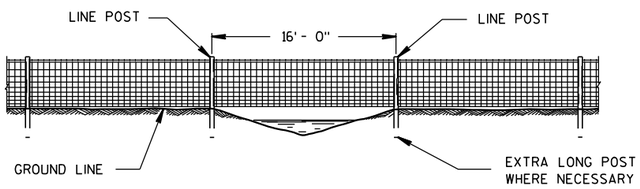
WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



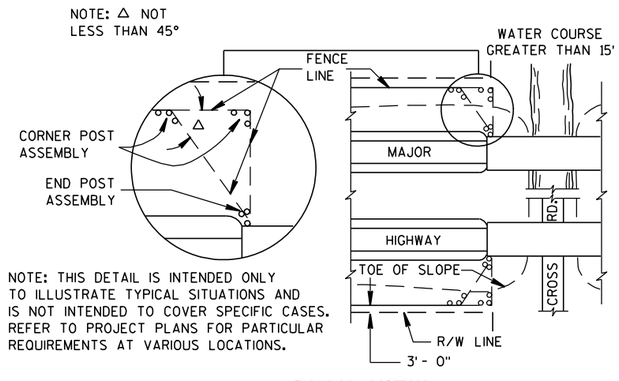
NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.



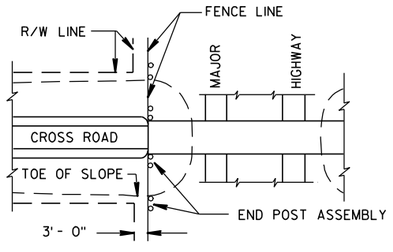
FENCE INSTALLATION TO WINGWALLS



FENCE CONSTRUCTION OVER STREAM COURSES OF 15 FT. OR LESS IN WIDTH



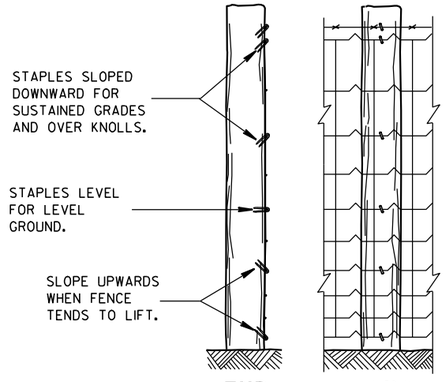
PLAN VIEW
MAJOR HIGHWAY OVERPASS OR STREAM COURSE CROSSING OF GREATER THAN 15 FT. IN WIDTH



PLAN VIEW
MAJOR HIGHWAY UNDERPASS

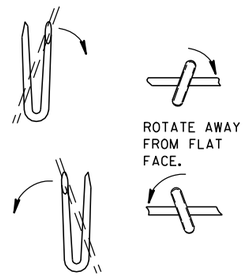
FENCE LOCATION AT STRUCTURES

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.



END ELEVATION **FARM SIDE ELEVATION**

FENCE MOUNTING DETAIL



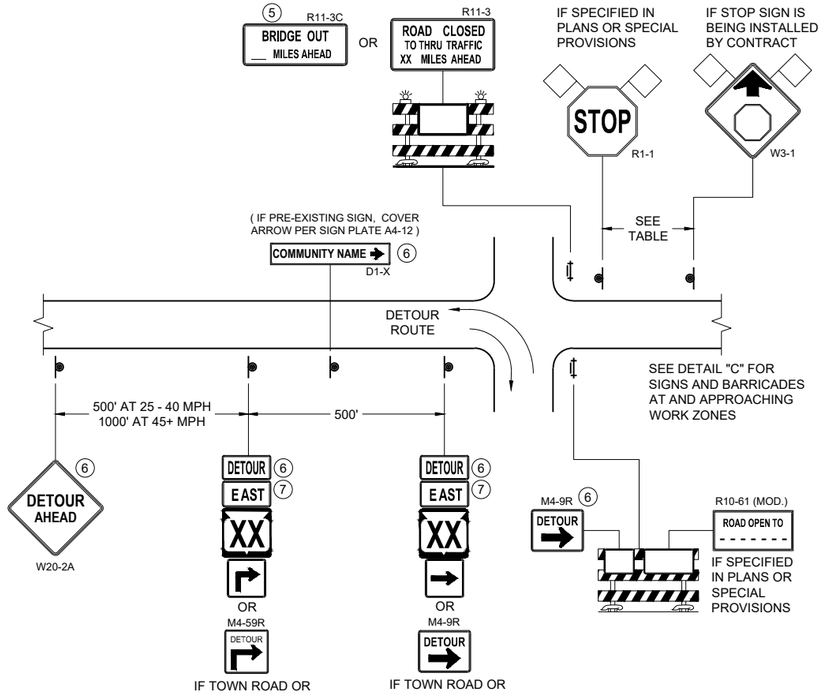
LINE POST

FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/4/2008 — DATE
/S/ Jerry H. Zo— — ROADWAY STANDARDS [252 — ENT
ENGINEER
FHWA

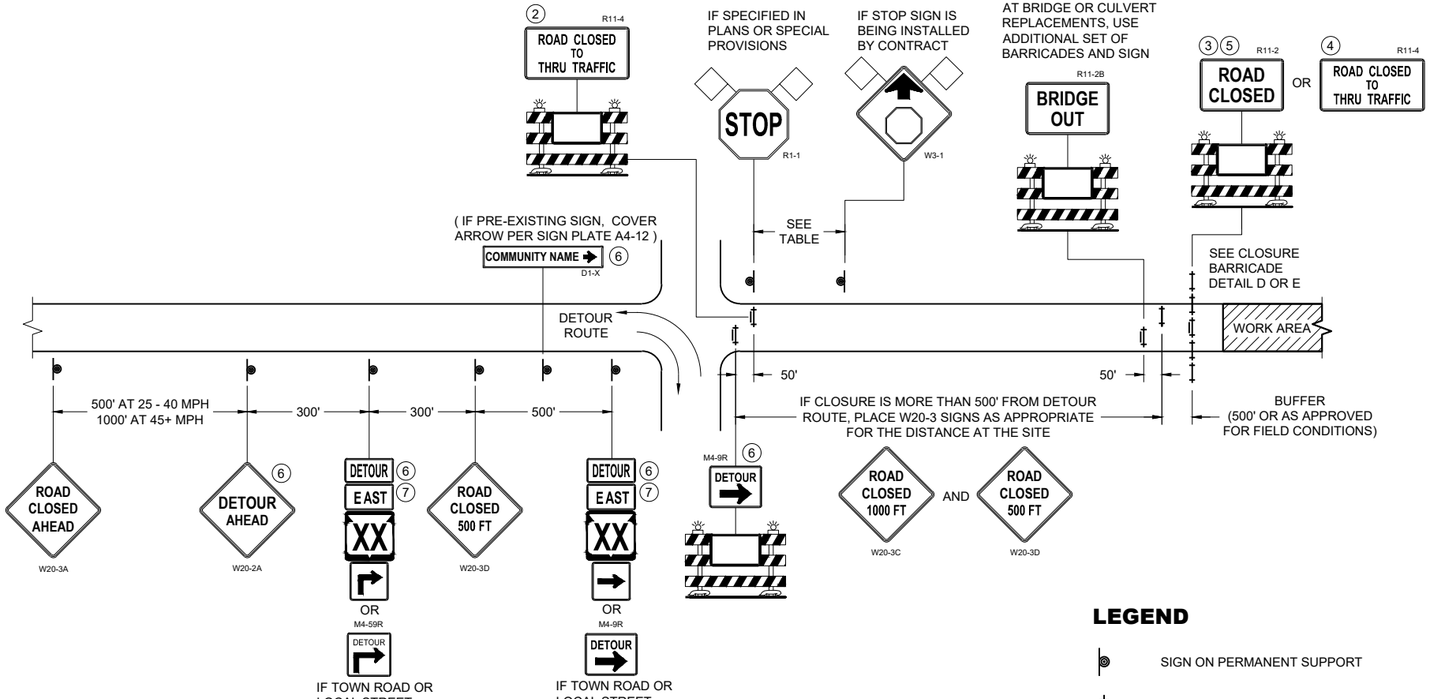
6
S.D.D. 15 B 1-8b



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

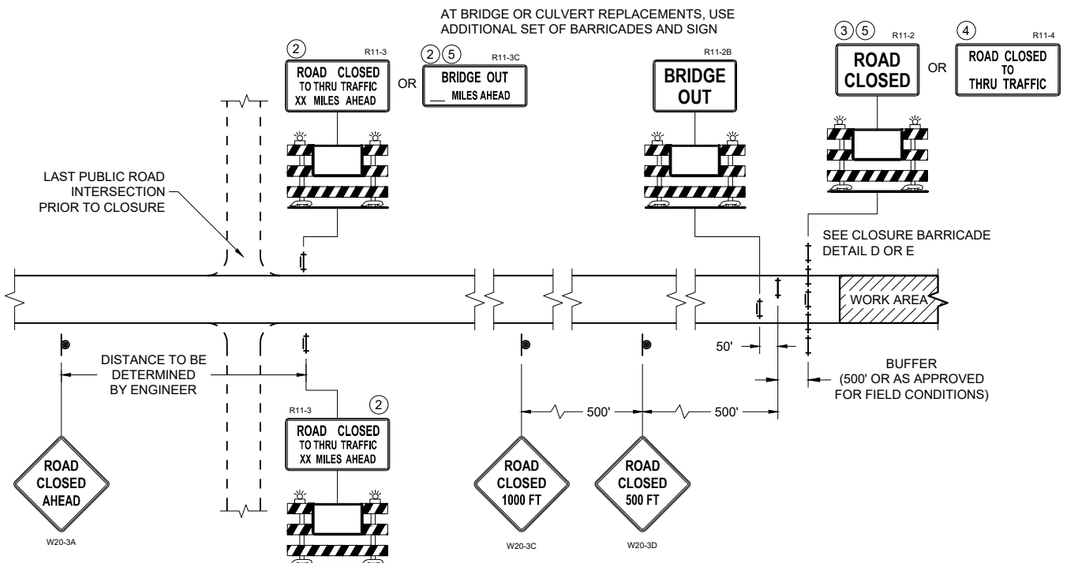
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

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)

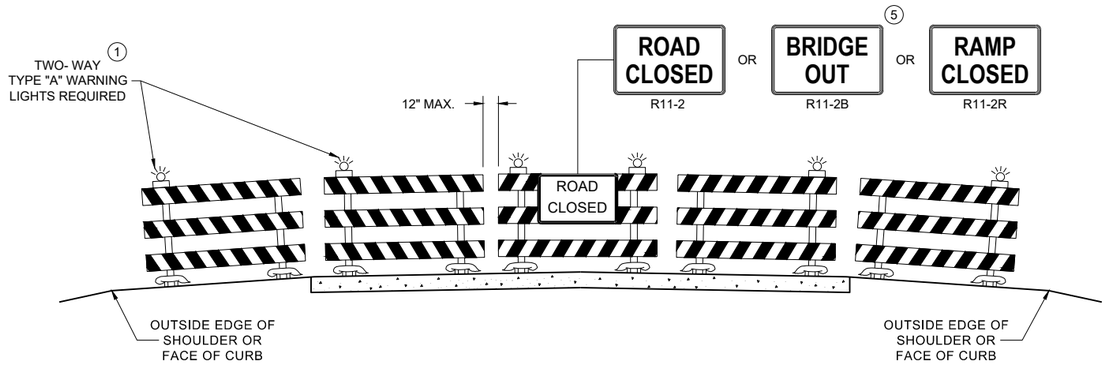
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

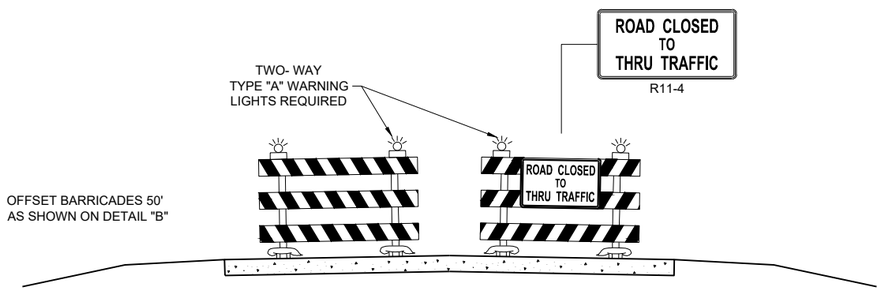
6
SDD 15C02-10a



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.

PARTIAL NUMBERS ON SIGNS SHALL BE DISPLAYED AS A WHOLE NUMBER(AS NEEDED) FOLLOWED BY A FRACTION. SIGNS SHALL NOT DISPLAY NUMBERS IN DECIMAL FORM.

"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"

SIGNS PLACED ON TYPE III BARRICADES THAT ARE SIZES OTHER THAN 48"X30" SHALL HAVE A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE.

(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
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

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SDD 15C02-10b

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.

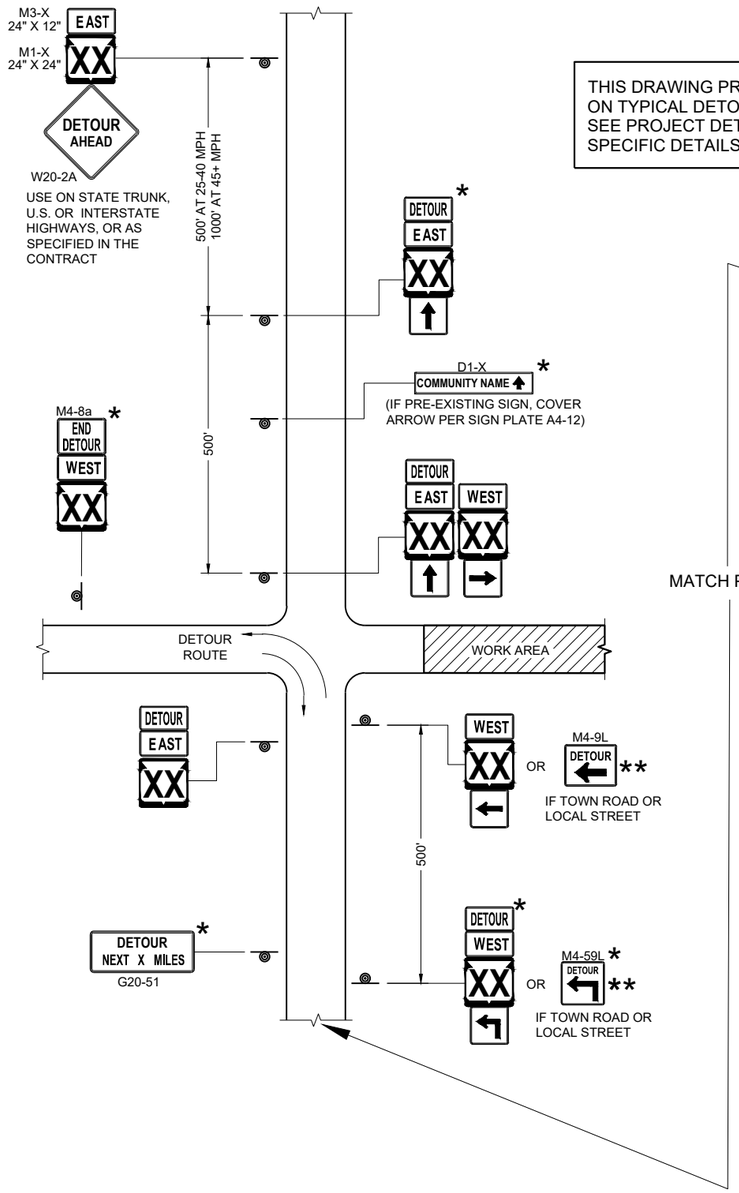
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

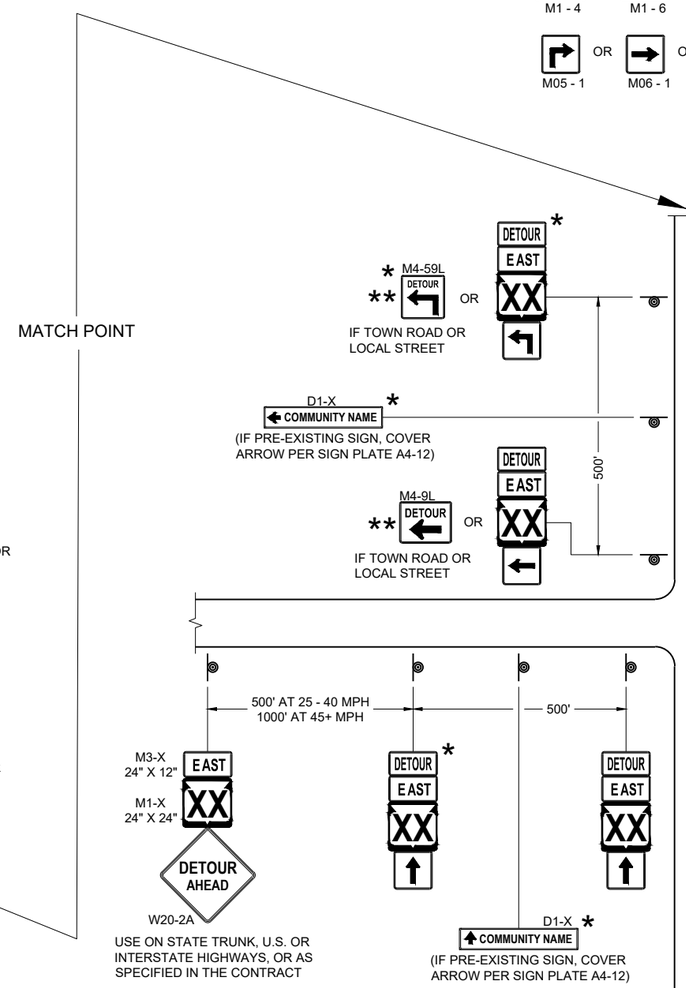
SIGN SIZES SHALL BE AS FOLLOWS:

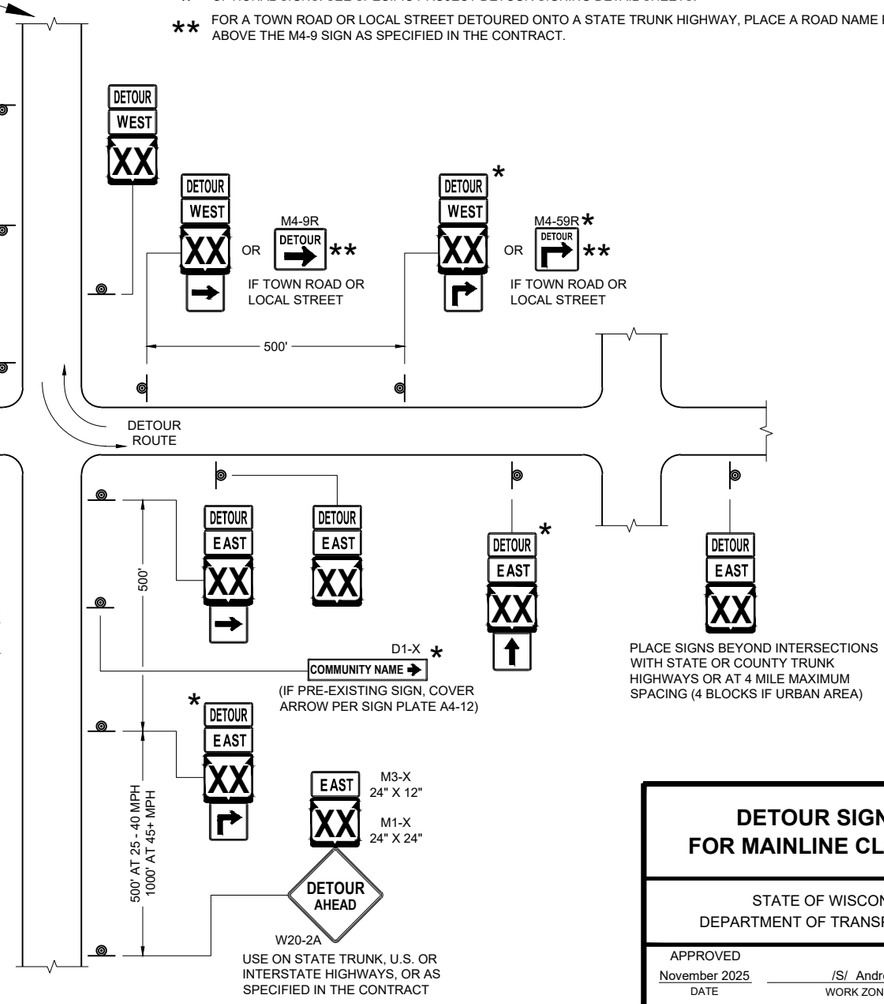
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING 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

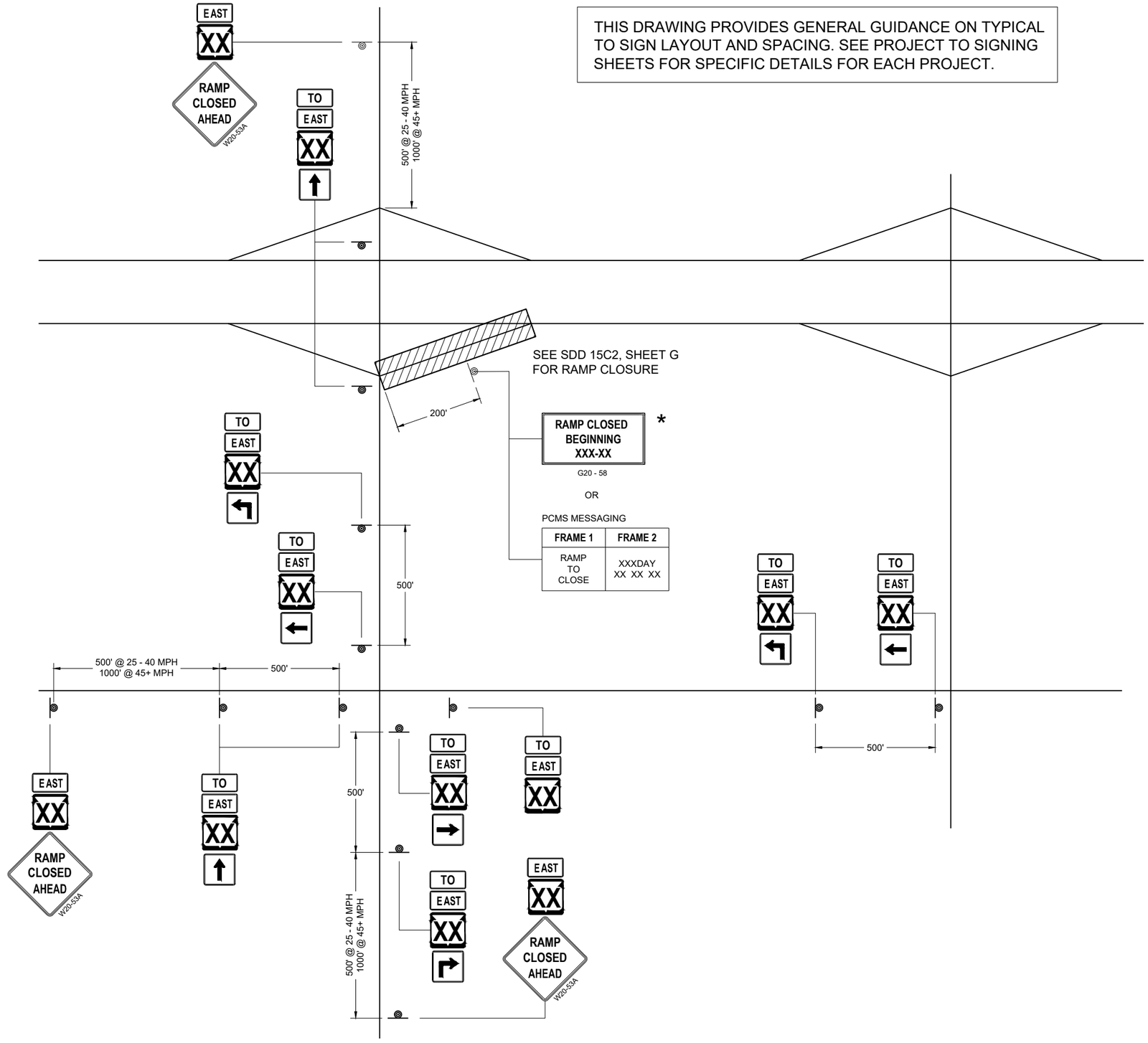
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6

SDD 15C02-10c



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

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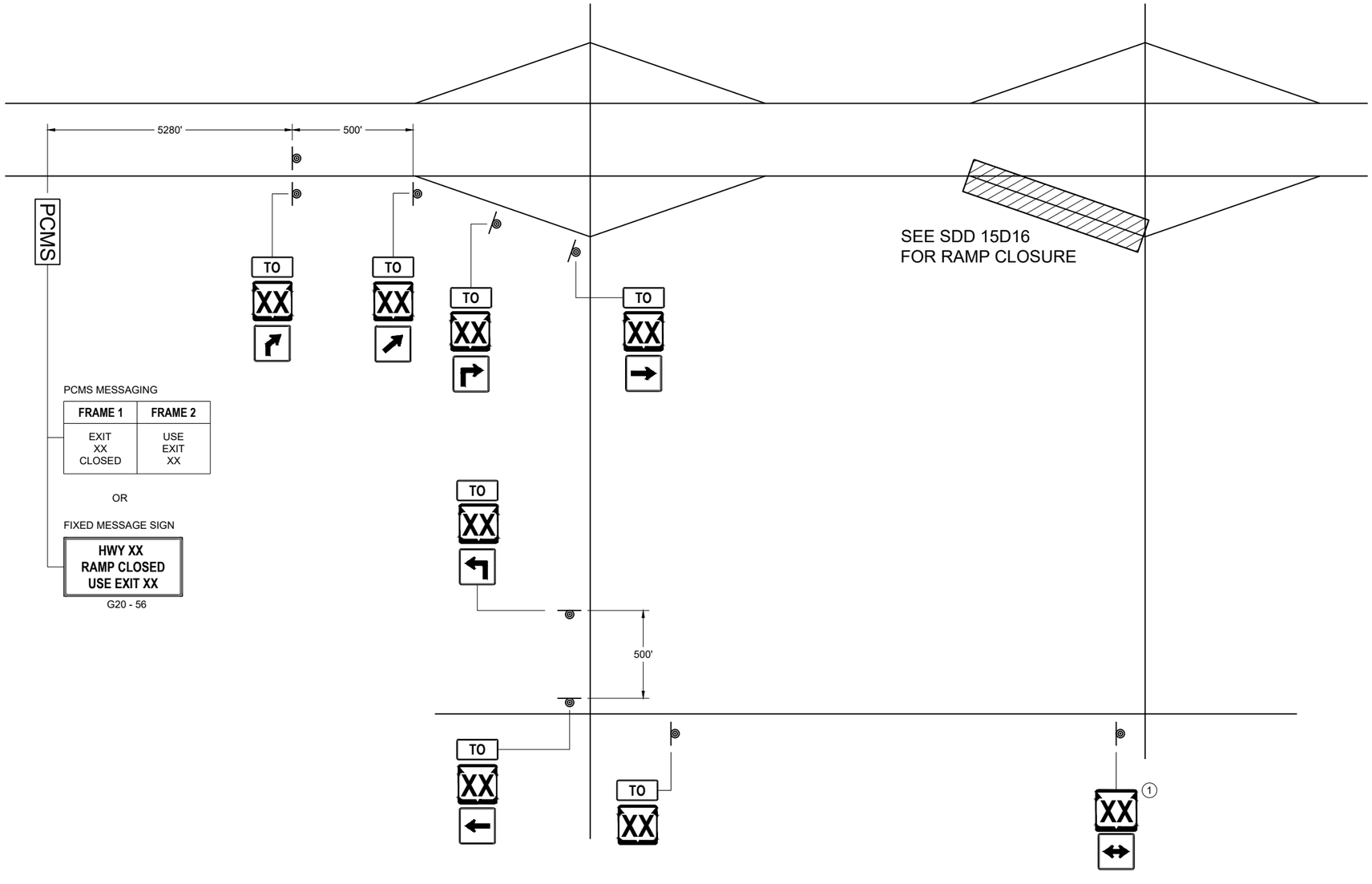
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SDD 15C02-10d

6

SDD 15C02-10d

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

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.

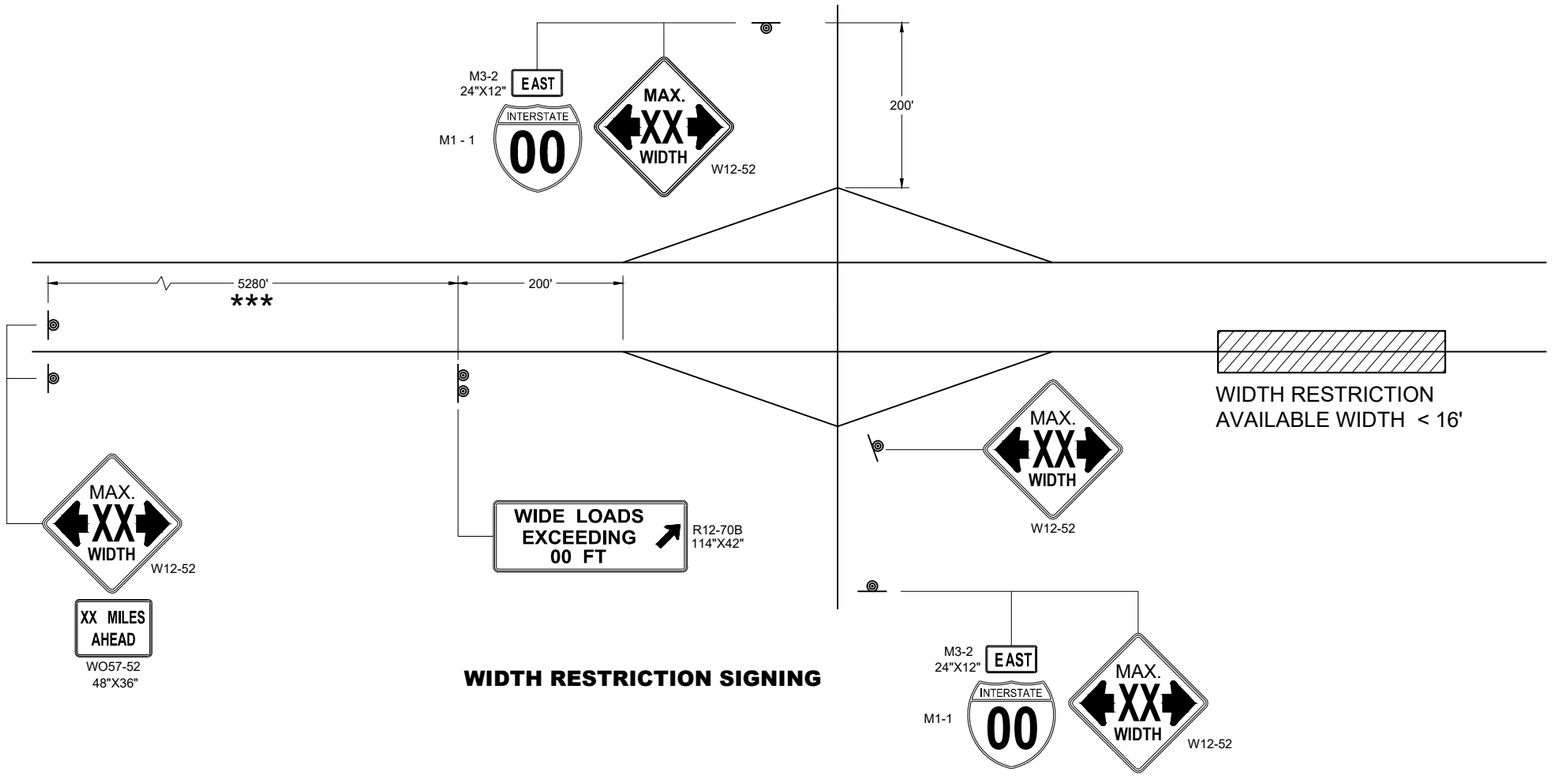
OFF RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6 SDD 15C02-10e



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.

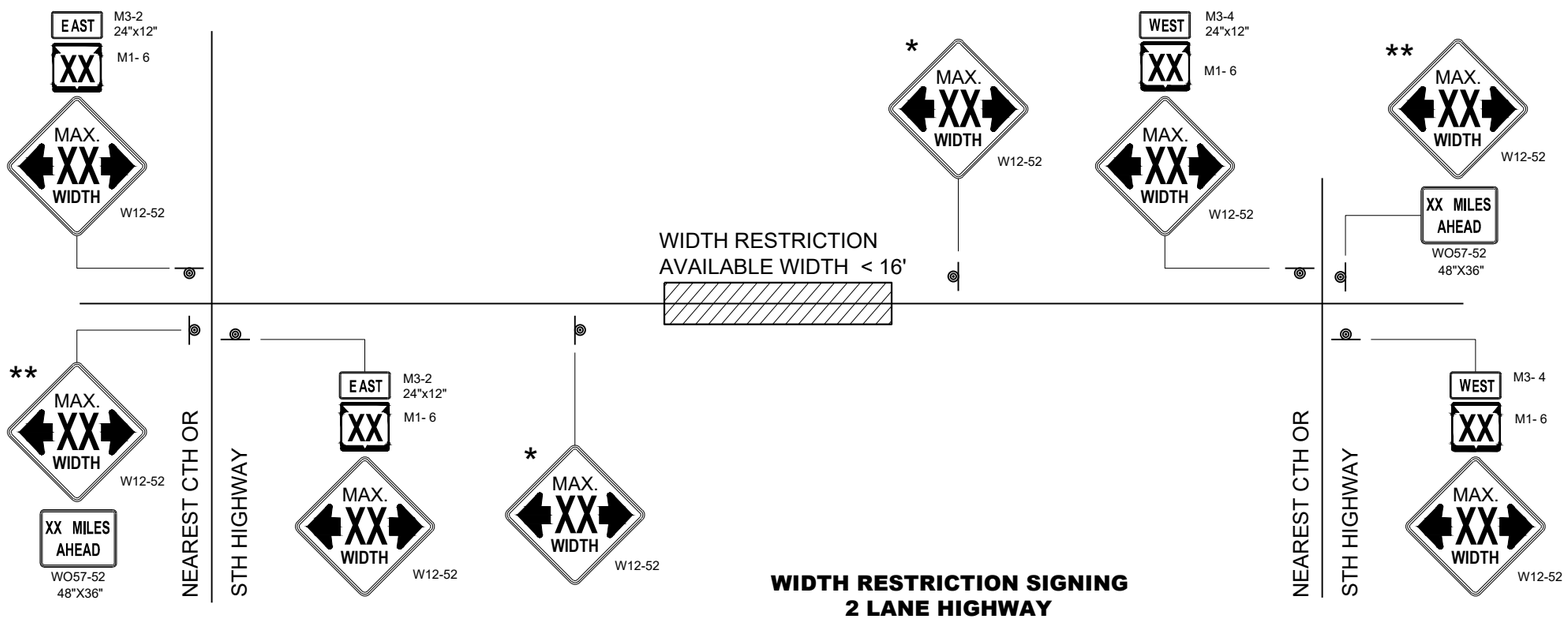
* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** 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

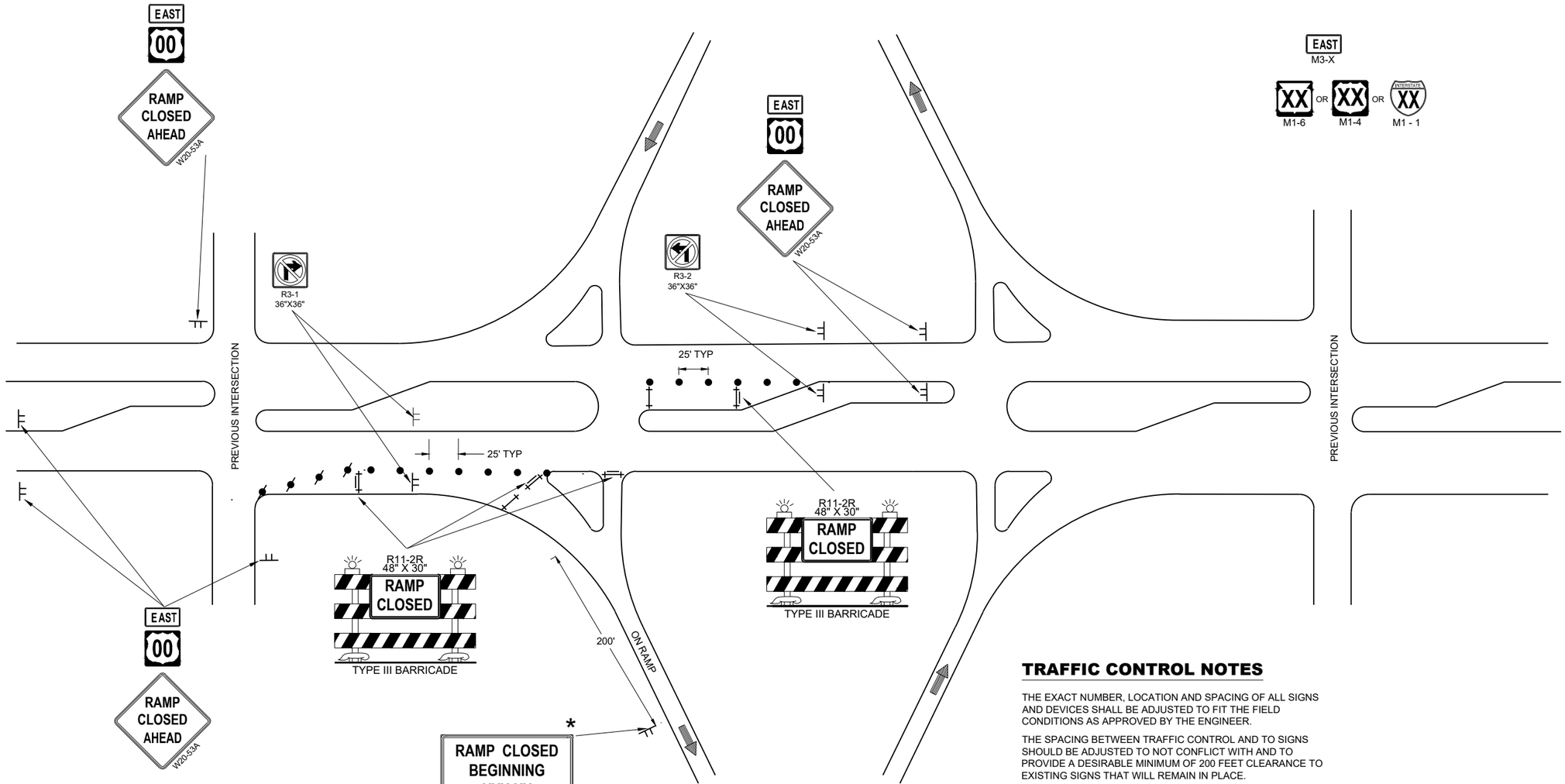
APPROVED
November 2025 — DATE
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SDD 15C02-10f

SDD 15C02-10f



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT THE FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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 THE 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.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24"x24" (36" x18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-1, M1-4, AND M1-6 SHALL BE 24"x24" (36"x36" IF NEEDED TO MATCH EXISTING SIGNS)
- W20-53A SHALL BE 48"X48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025
DATE

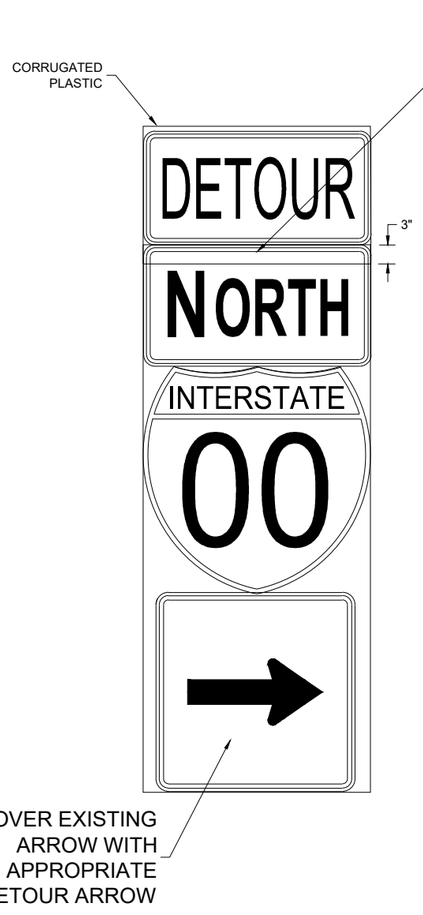
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

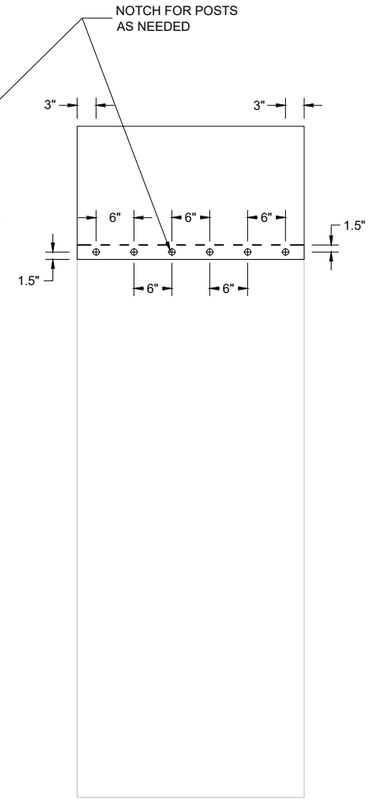
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SDD 15C02-10g

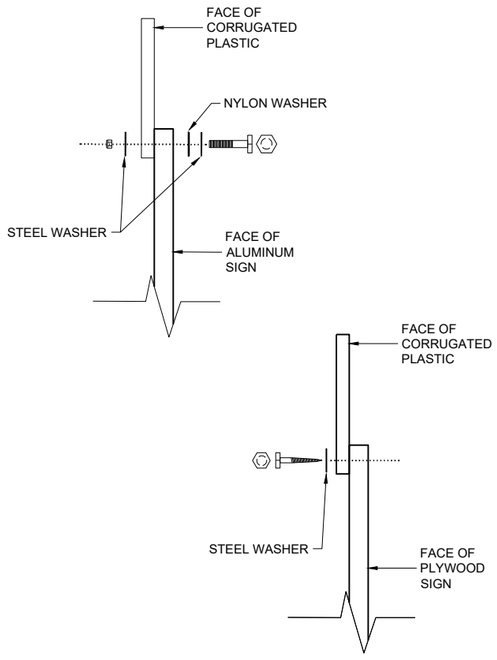
FRONT SIDE



BACK SIDE



SIDE VIEW



GENERAL NOTES

CELLS OF CORRUGATED PLASTIC SHALL BE VERTICALLY ORIENTED.

PROVIDE A 0.4-INCH THICK BASE CORRUGATED PLASTIC WITH A 0.035-INCH WALL THICKNESS AND 0.4-INCH CELL SIZE.

FOR 36" WIDE SIGNS: USE 6 FASTENERS AS SHOWN.

FOR 24" WIDE SIGNS: USE 4 FASTENERS WITH EDGE SPACING AS SHOWN AND 6" SPACING BETWEEN FASTENERS.

METAL WASHERS, NUTS, BOLTS AND LAGS 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, SC3

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.

PLYWOOD SIGNS:
LAG SCREWS - 5/16" x 1"
ALUMINUM SIGNS:
MACHINE BOLTS - 5/16" x 1-1/4" LENGTH W/NUTS
WASHERS:
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

MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

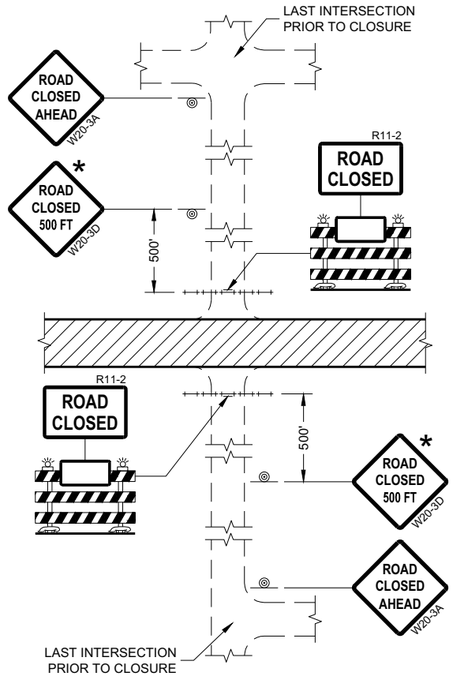
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025
DATE

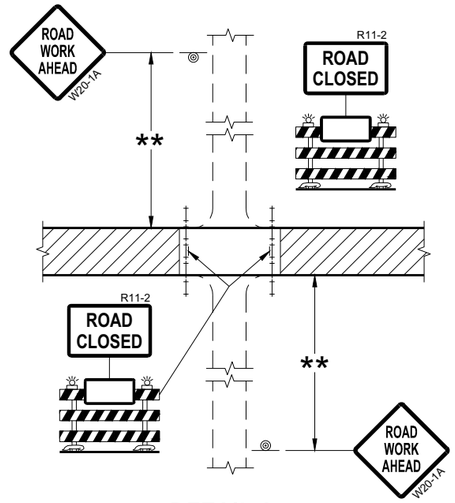
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

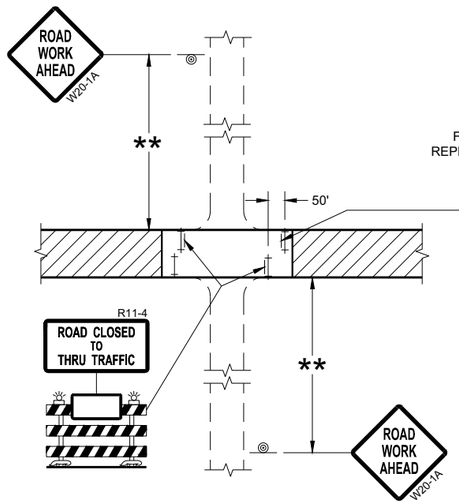
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SDD 15C02-10h



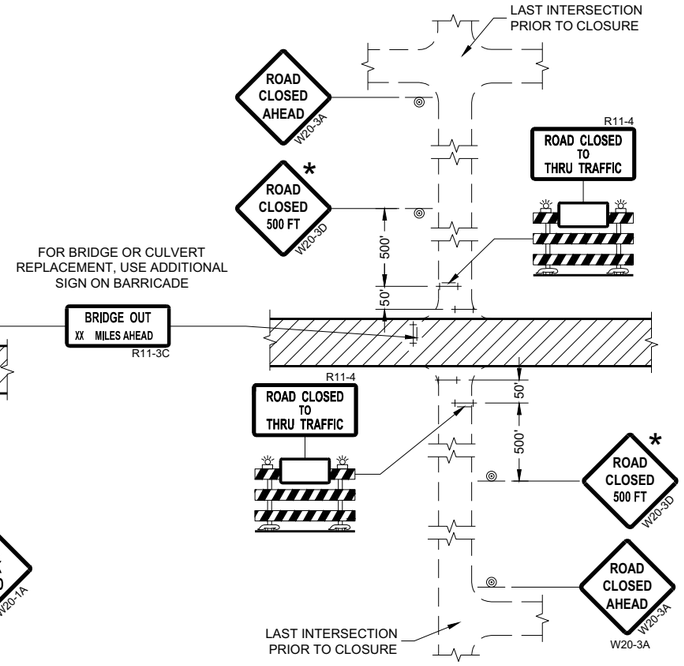
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

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 (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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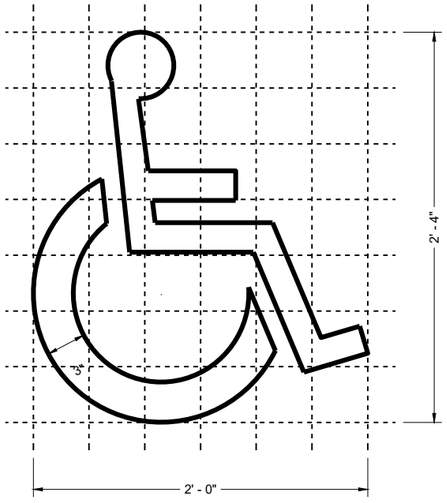
SDD 15C03 - 05

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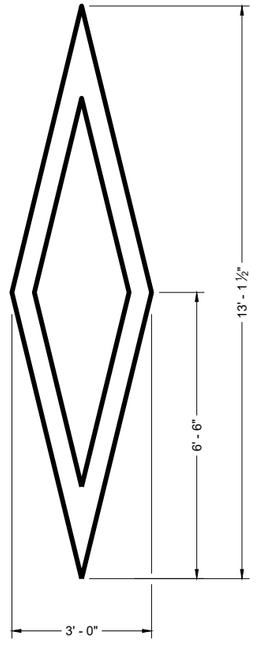
SDD 15C03 - 05

GENERAL NOTES

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



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

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SDD 15C07-16a

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

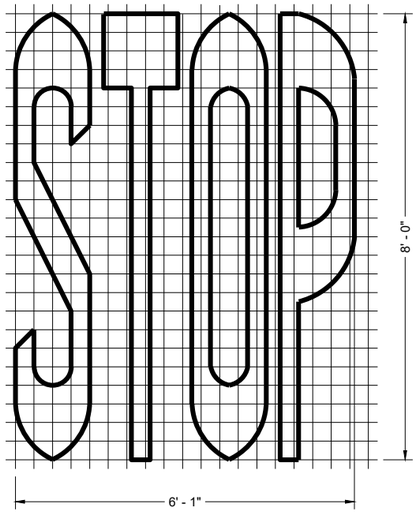
APPROVED
November 2024
DATE

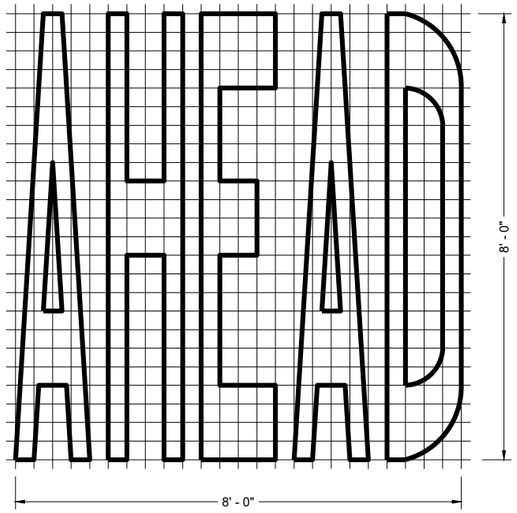
/S/ Jeannie Silver
STATE SIGNING AND MARKING ENGINEER

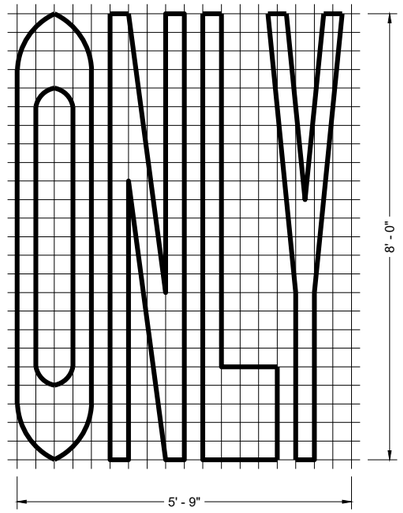
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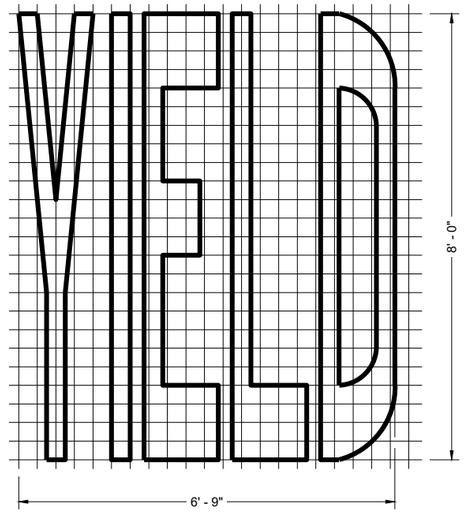
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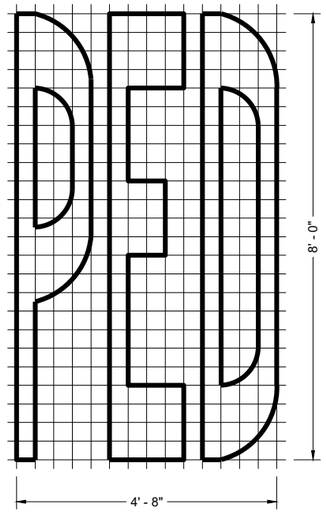
SDD 15C07-16a

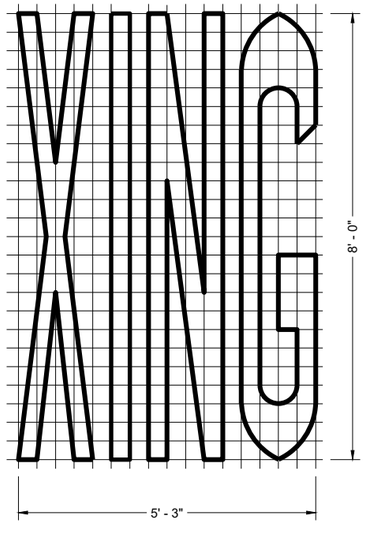


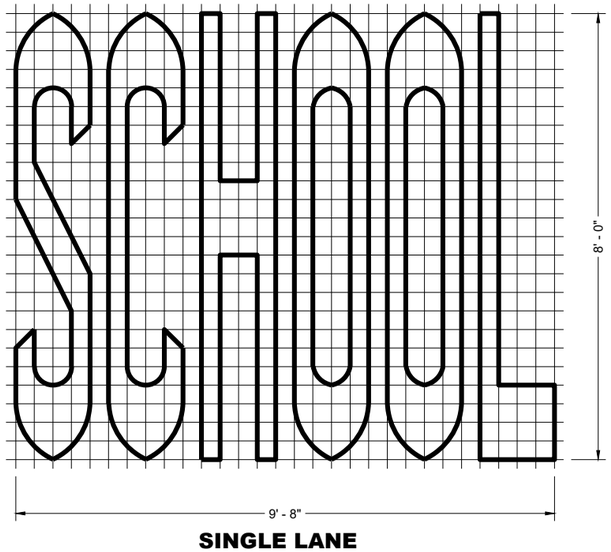




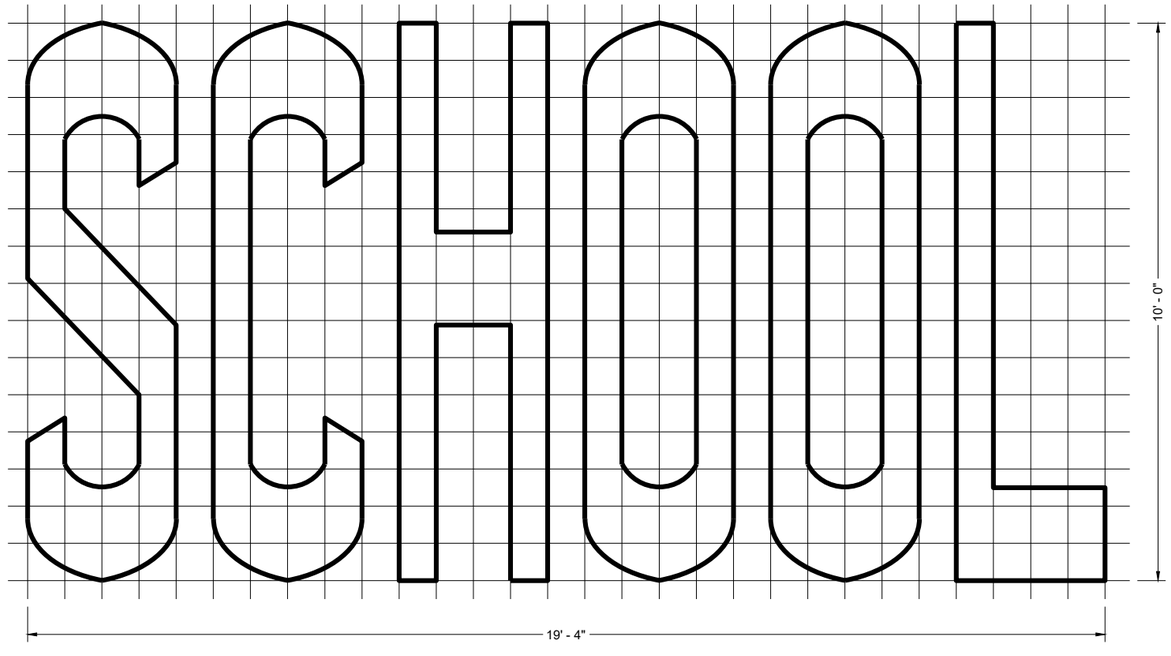








SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MARKING ENGINEER

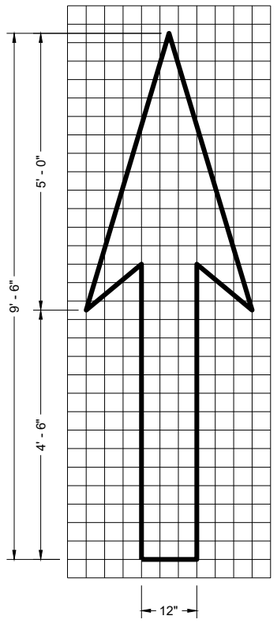
FHWA

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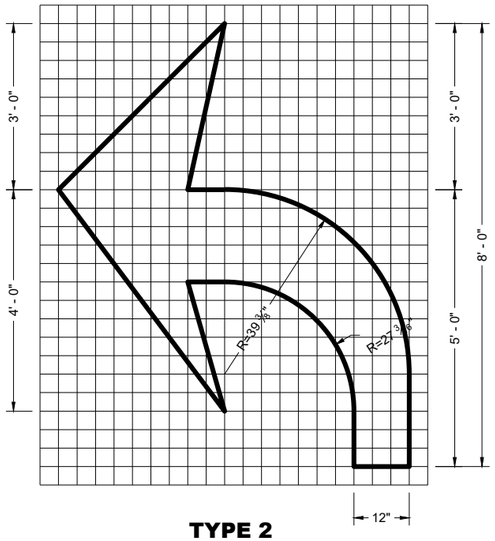
SDD 15C07-16b

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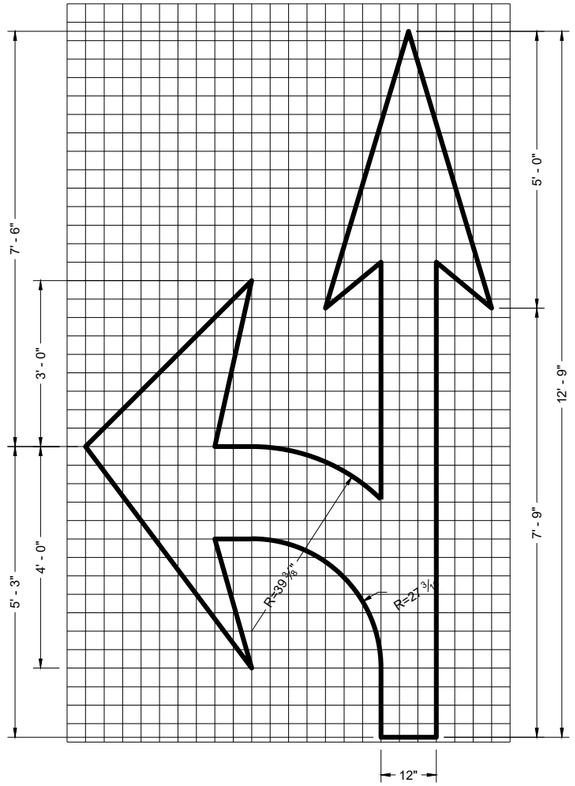
SDD 15C07-16b



TYPE 1



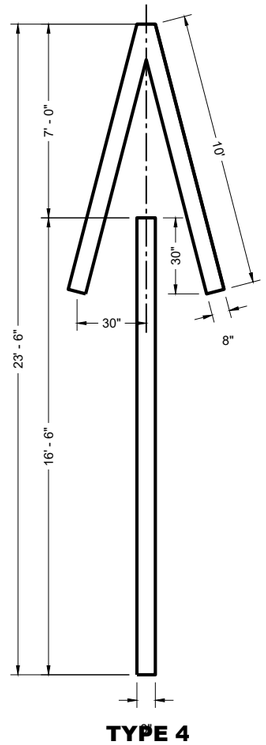
TYPE 2



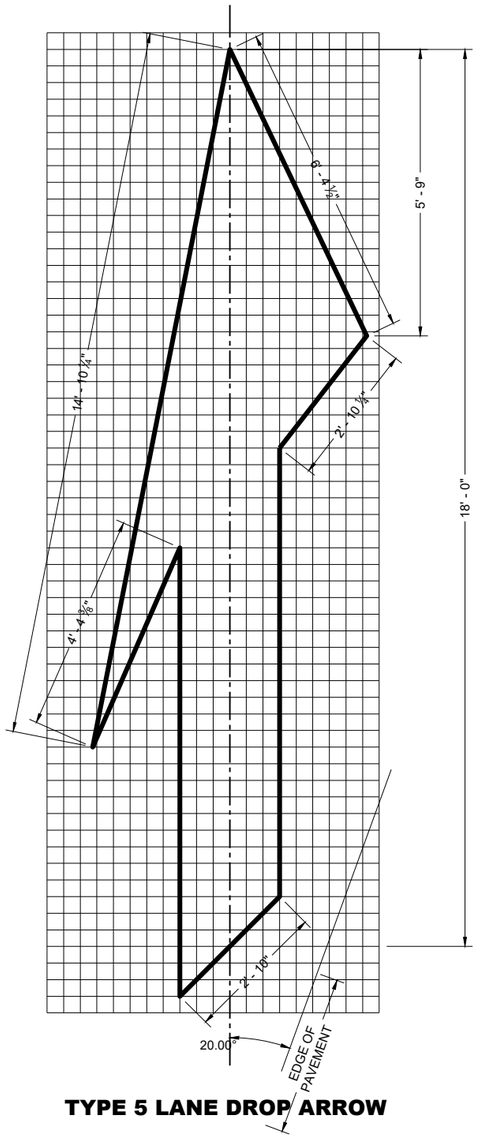
TYPE 3

GENERAL NOTES

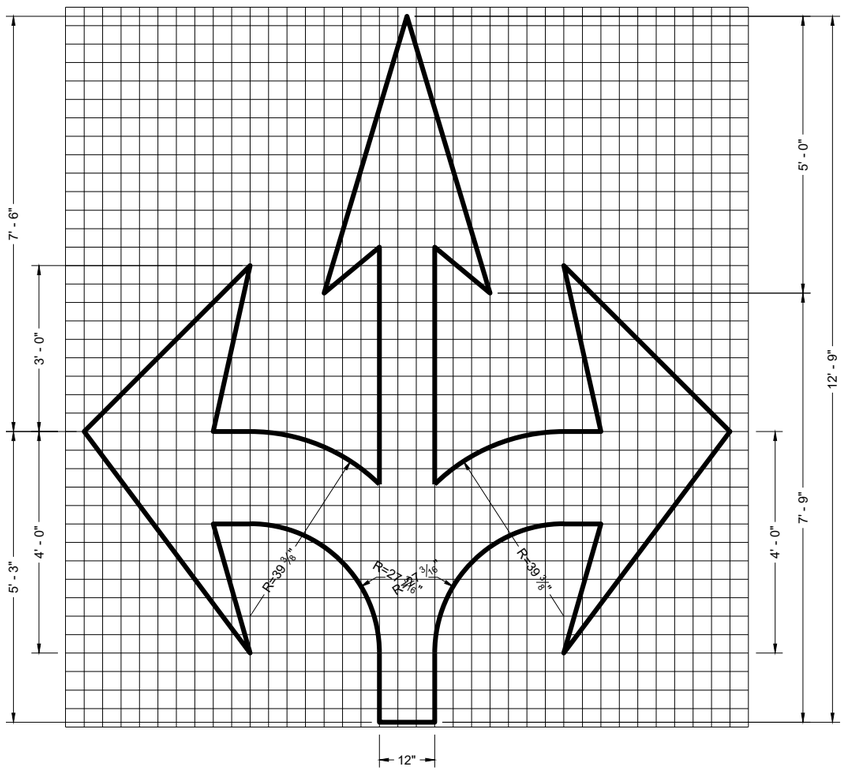
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



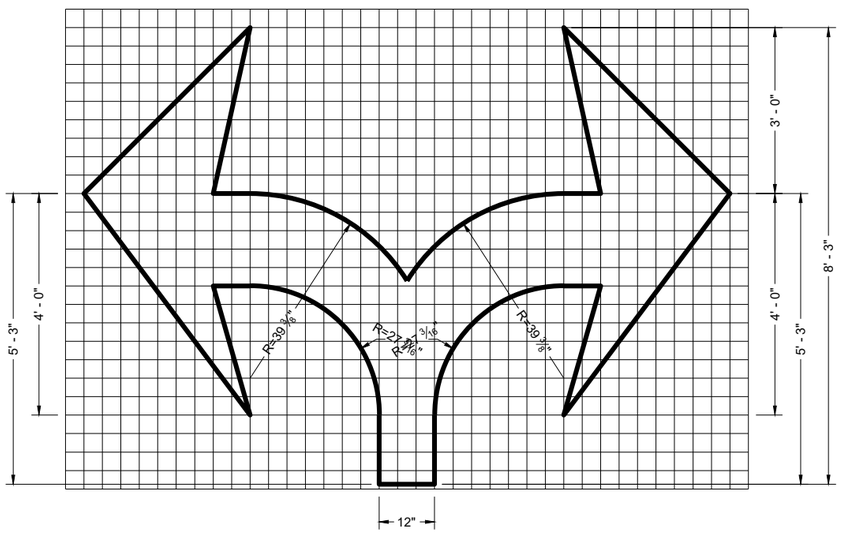
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C07-16c

6

SDD 15C07-16c

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.

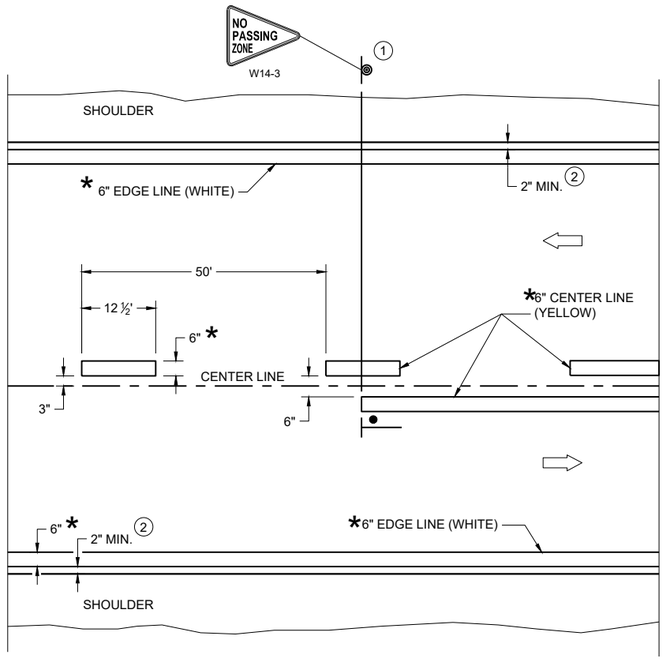
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

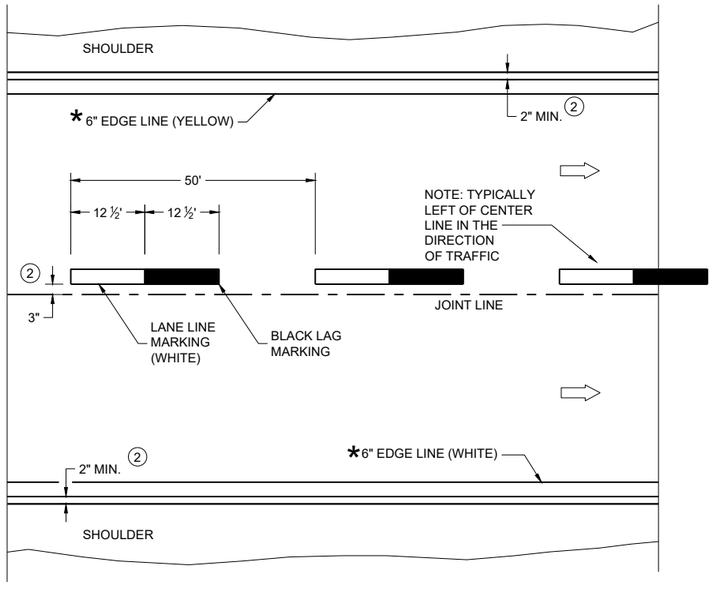
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

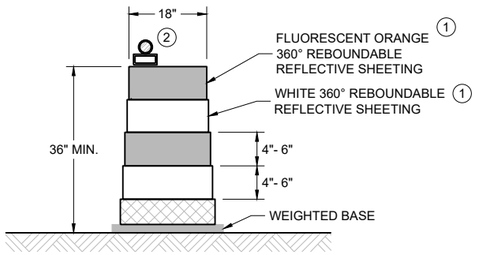
FHWA

SDD 15C08-24a

GENERAL NOTES

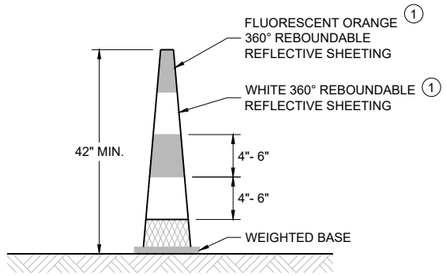
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

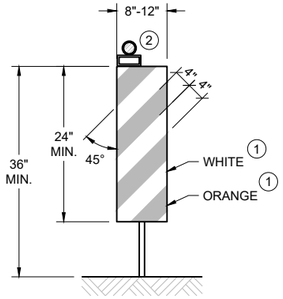
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

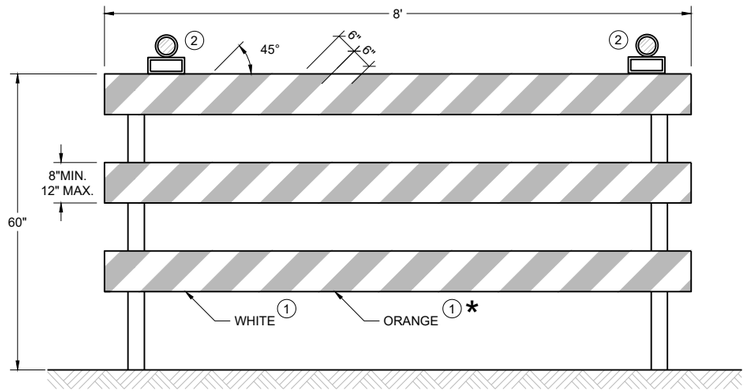
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE 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.

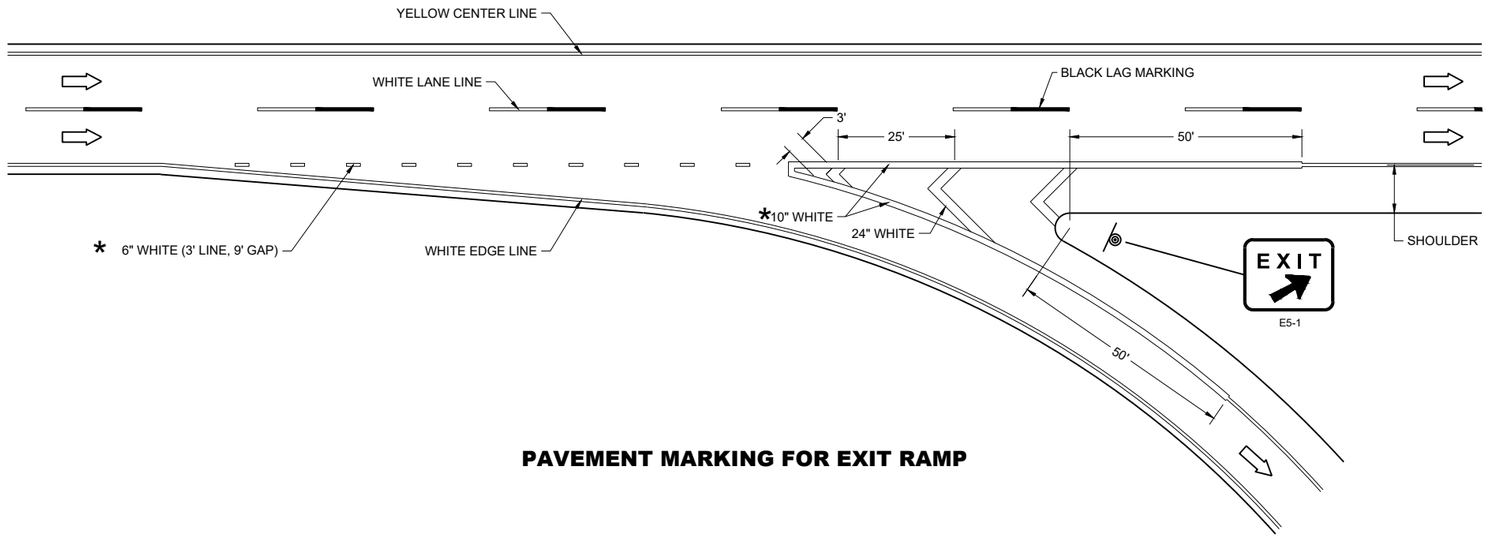
CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

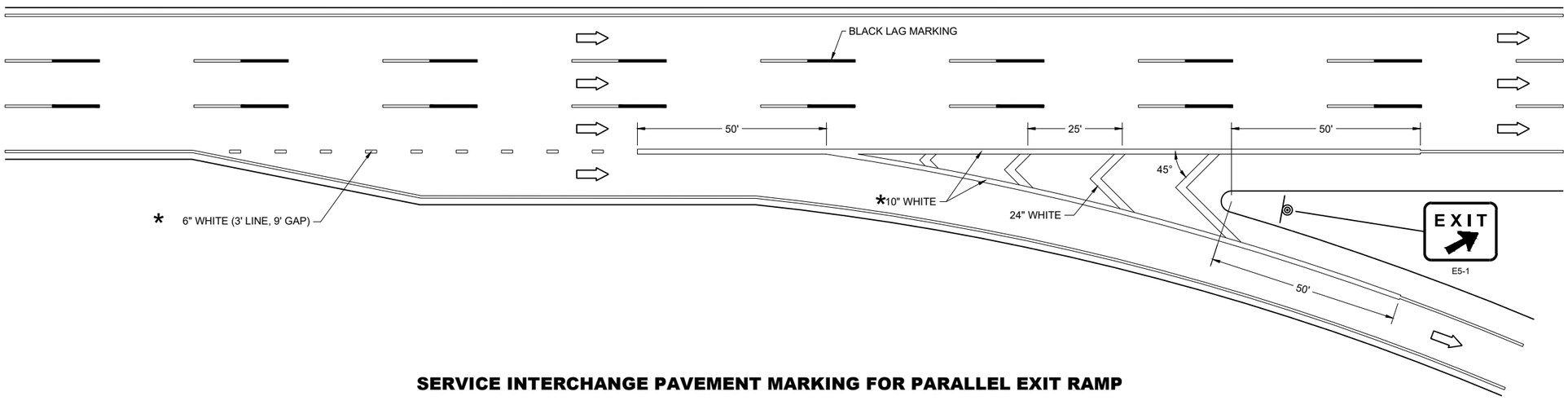
APPROVED
February 2026 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6
SDD 15C11-11b



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

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

6

SDD 15C31-08a

PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C31-08a

GENERAL NOTES

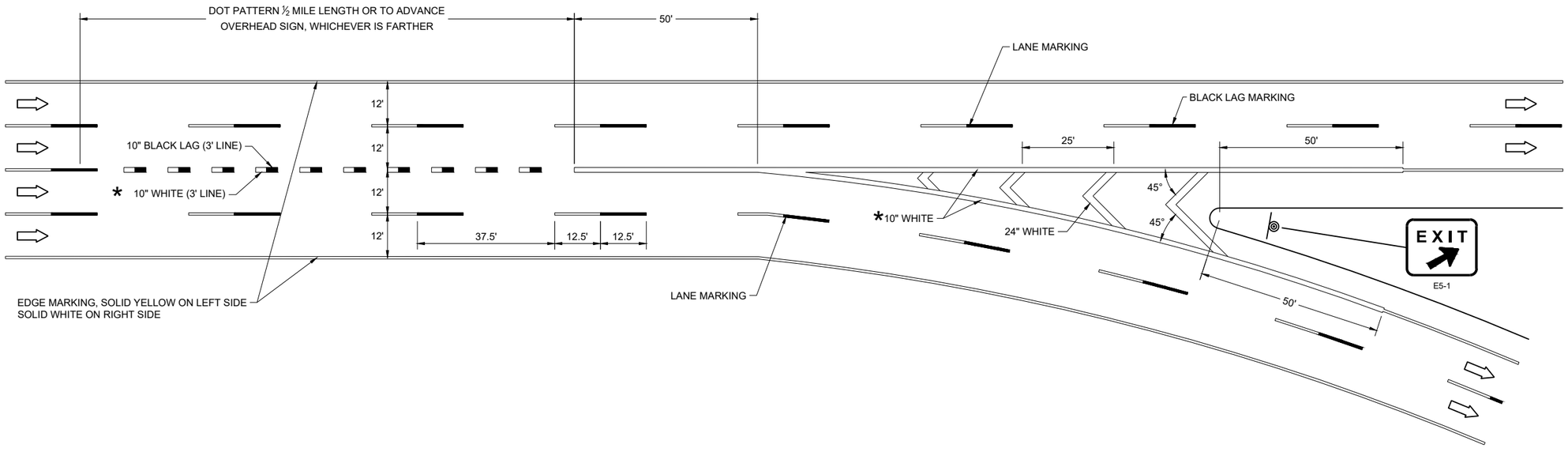
PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



6

SDD 15C31-08b

PAVEMENT MARKING, MAJOR SPLIT FREEWAY TO FREEWAY

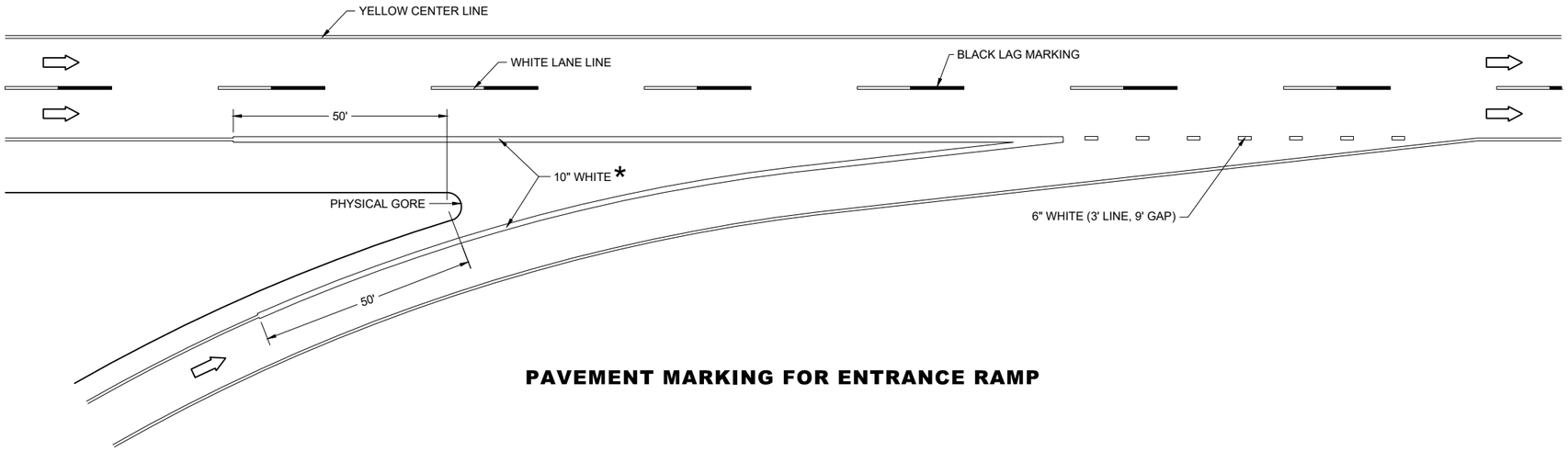
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C31-08b

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

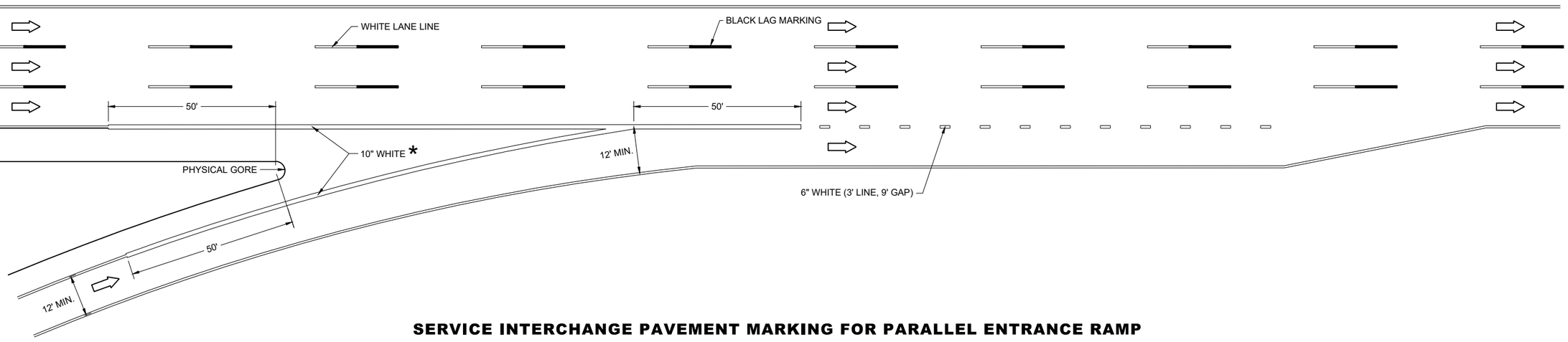


PAVEMENT MARKING FOR ENTRANCE RAMP

LEGEND

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

6

SDD 15C31-08c

PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C31-08c

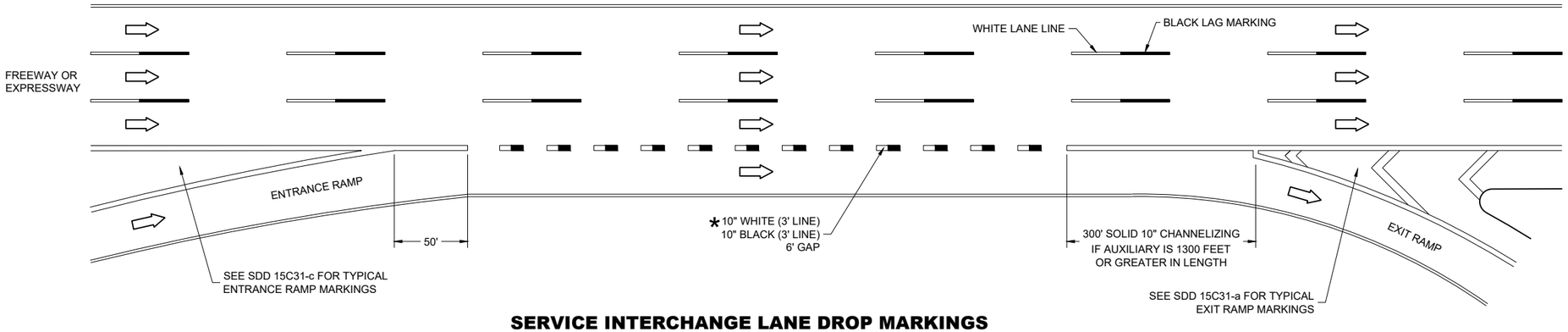
LEGEND

DIRECTION OF TRAVEL

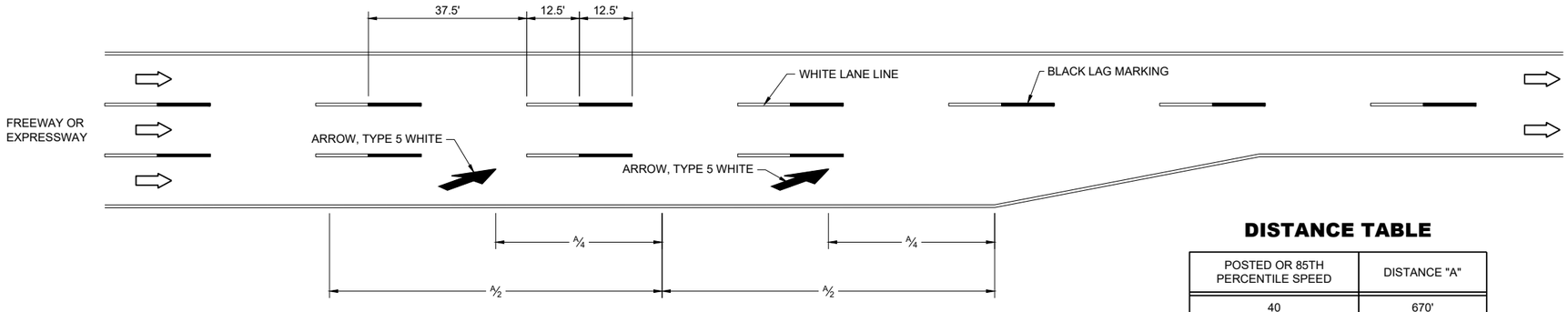
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.



SERVICE INTERCHANGE LANE DROP MARKINGS



LANE REDUCTION MARKINGS

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
40	670'
45	775'
50	885'
55	990'
60	1100'
65	1200'
70	1250'

PAVEMENT MARKING, LANE DROP AND LANE REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

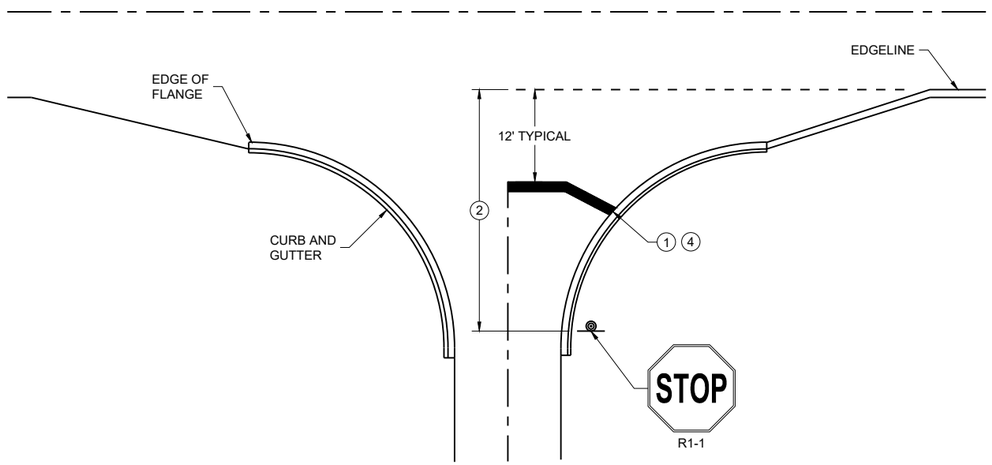
APPROVED
November 2024 — DATE
/S/ Matthew Rauch — WORK ZONE ENGINEER
FHWA

6
SDD 15C31-08d

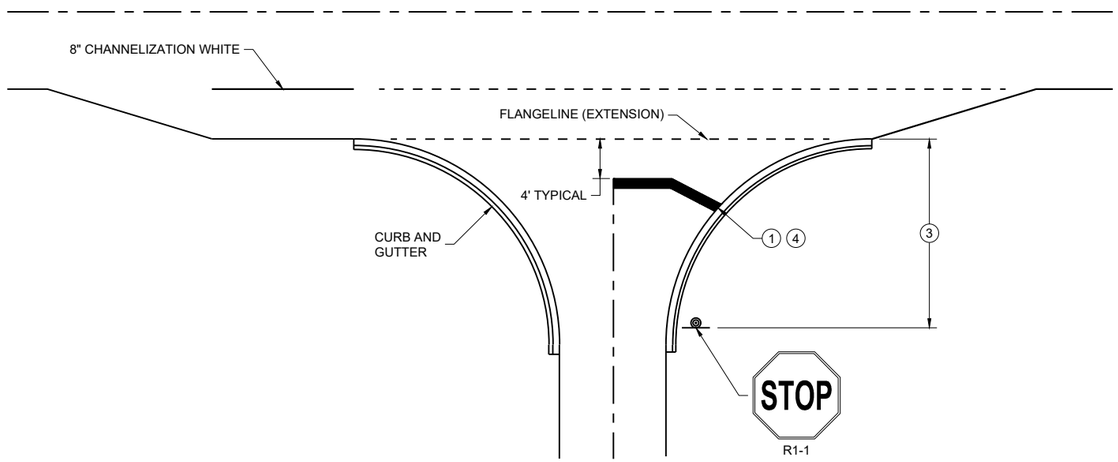
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

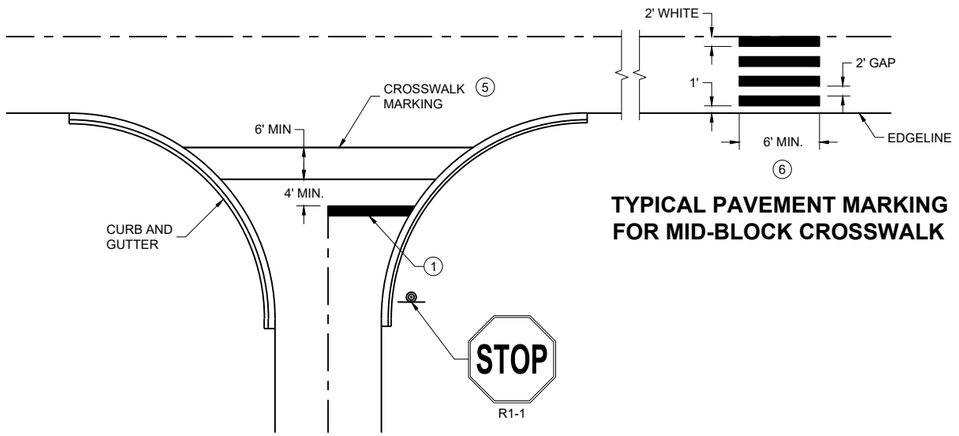
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES.
6. POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

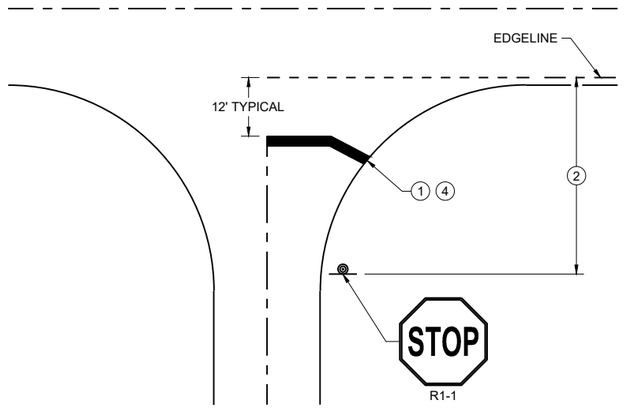


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK (5)

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

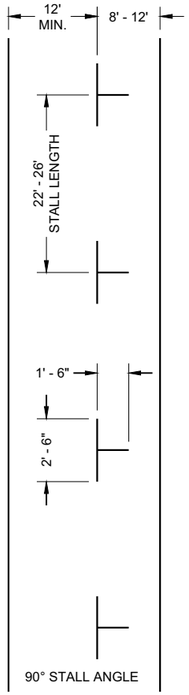
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

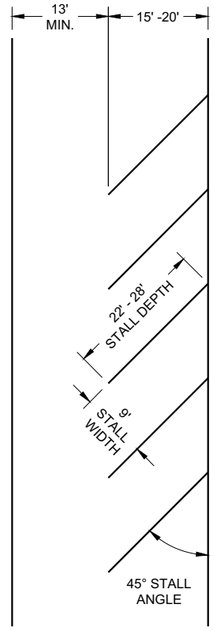
March 2024 — DATE

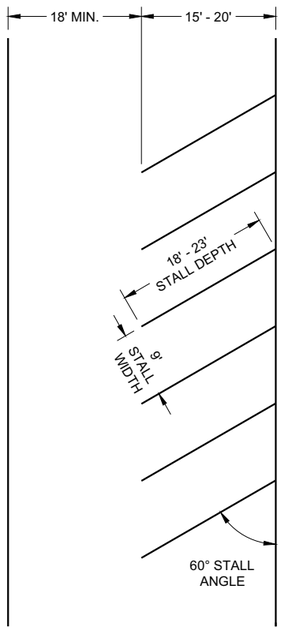
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA



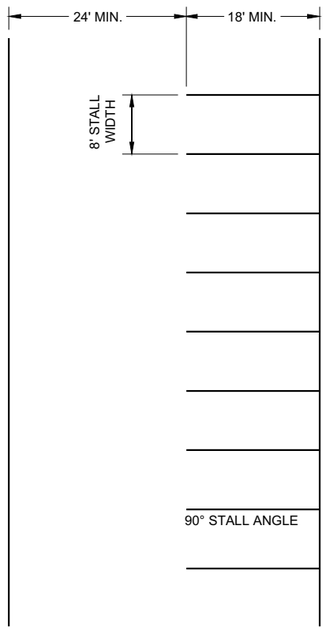
PARALLEL PARKING





ANGLED PARKING

(ANGLED PARKING IS NOT ALLOWED ON STATE HIGHWAYS UNLESS A DESIGN JUSTIFICATION HAS BEEN COMPLETED.)



PARKING LOTS

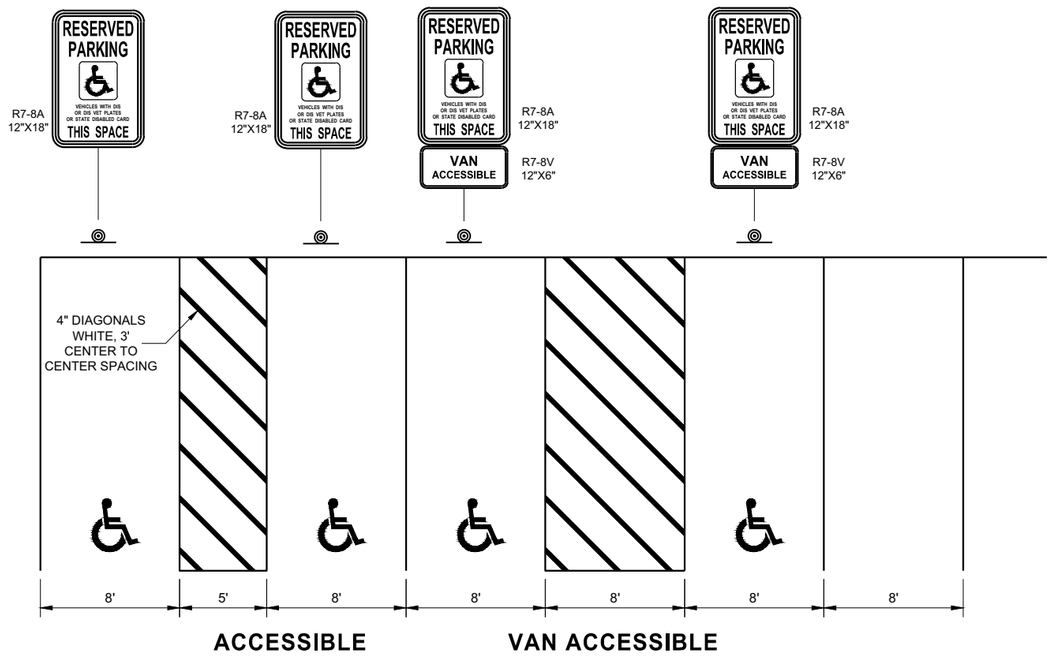
GENERAL NOTES

ALL LINES 4" WHITE (UNLESS OTHERWISE NOTED)

LAST PARKING STALL IS A MINIMUM OF 15' FROM THE CROSSWALK.

LEGEND

SIGN ON PERMANENT SUPPORT



ACCESSIBLE VAN ACCESSIBLE

PARKING STALL MARKING

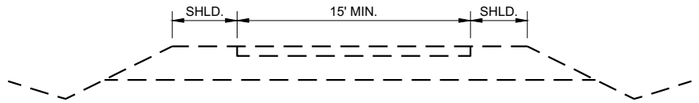
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAR ENGINEER

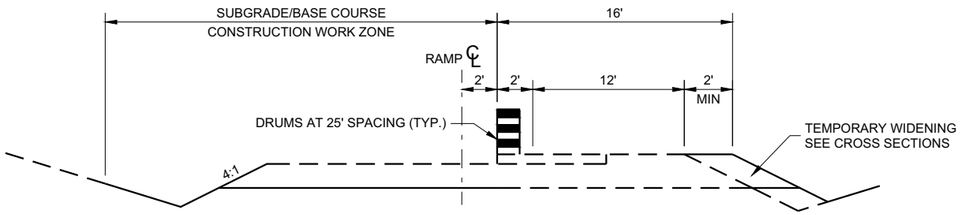
FHWA

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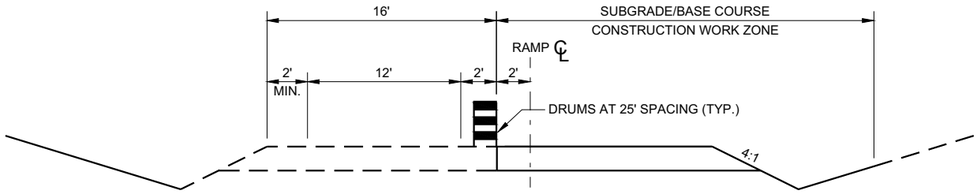
SDD 15C36 - 01



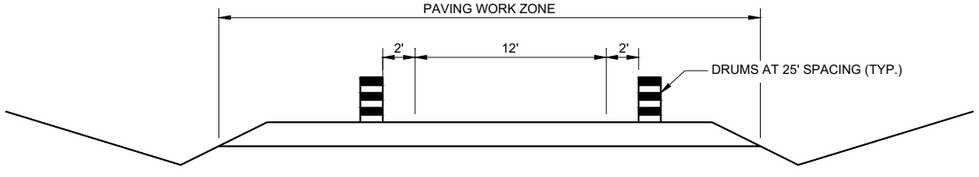
INITIAL RAMP - TYPICAL



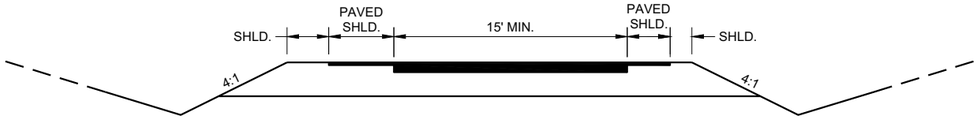
STAGE I - CONSTRUCTION TO SUBGRADE, LEFT



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

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" 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 OR AS APPROVED BY THE ENGINEER.

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 AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

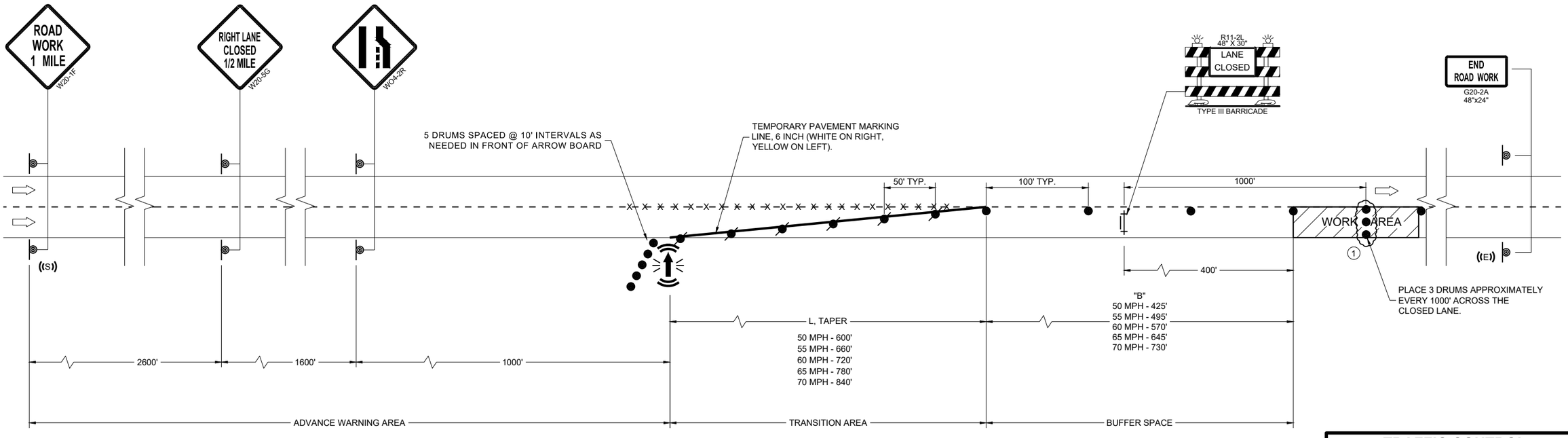
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE 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.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

(1) DRUMS IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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
- CONNECTED ARROW BOARD
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2026 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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SDD 15D12-17a

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.

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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 AND PLACE TEMPORARY PAVEMENT MARKING LINE 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.

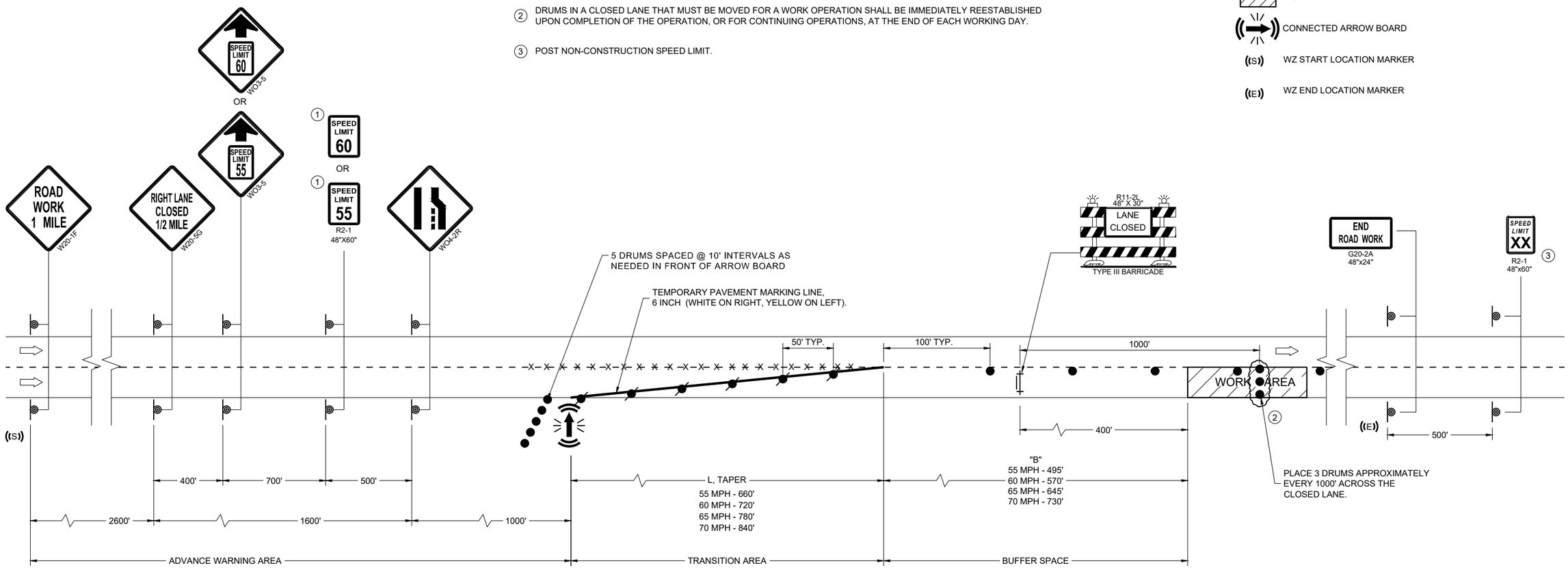
① A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES.

② DRUMS IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

③ POST NON-CONSTRUCTION SPEED LIMIT.

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
- CONNECTED ARROW BOARD
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2026 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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SDD 15D12-17b

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
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER
- CONNECTED ARROW BOARD
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- (S) — PORTABLE TRAFFIC SENSOR (PTS)
- FBS — FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
WO8-76
96" x 48"

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.

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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 AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

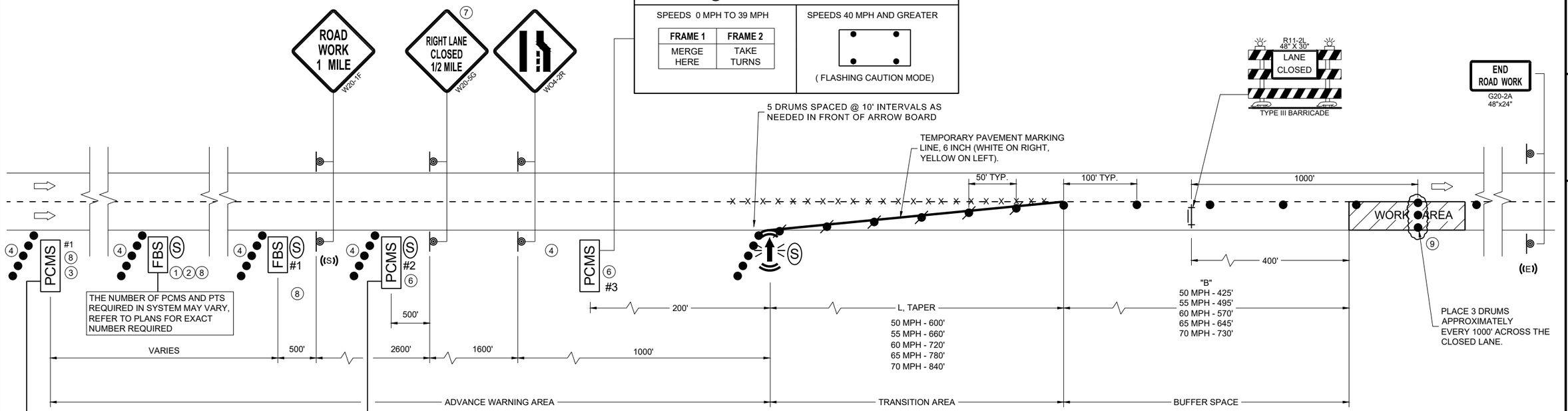
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THIS DETAIL IS FOR RIGHT LANE CLOSURES ONLY. IF LEFT LANE CLOSURE IS NEEDED WITH THE DLMS, TAKE A RIGHT LANE CLOSURE AND SHIFT TRAFFIC TO THE RIGHT LANE.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

PORTABLE TRAFFIC SENSOR (PTS) MAY BE MOUNTED ON PCMS, FBS, ARROW BOARD OR OTHER TRAILER DEVICES.

1. FURTHEST UPSTREAM FBS DOES NOT HAVE A PTS.
2. PLACE FLASHING BEACON SIGNS EVERY ONE MILE BETWEEN PCMS #1 AND FBS #1. THE NUMBER OF FBS MAY BE MORE THAN SHOWN ON THIS DETAIL.
3. FOR THREE LANE CONFIGURATION, CHANGE PCMS #1 FRAME 2 MESSAGE TO "USE ALL LANES".
4. 5 DRUMS SPACED @ 10' INTERVALS AS NEEDED.
5. PCMS SHALL FOLLOW ARROW BOARD STANDARDS WHEN DISPLAYING FLASHING FOUR CORNER CAUTION MODE.
6. TO REMOVE OBSTRUCTION OF THE ARROW BOARD BY THE PCMS, OFFSET THE PCMS AS NEEDED FROM THE EDGE LINE
7. IF THERE IS AN APPROVED TEMPORARY SPEED DECLARATION, ADD WO-3-5 SIGNS 400 FEET AFTER THE W20-5G SIGNS AND ADD R2-1 SIGNS (48"x60") 700 FEET AFTER THE WO3-5 SIGNS. 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 (800 FEET DESIRABLE) BEYOND THE G30-3A "END ROAD WORK" SIGN.
8. IF THERE ARE MORE THAN TWO LANES OR IF SPECIFIED IN THE PLANS, PLACE PCMS AND FBS ON BOTH SIDES OF THE ROADWAY.
9. DRUMS IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.



TRAFFIC CONTROL, DYNAMIC LATE MERGE SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2026 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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SDD 15D12-17c

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
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER
- CONNECTED ARROW BOARD
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- (S) — PORTABLE TRAFFIC SENSOR (PTS)
- FBS — FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
WO8-76
96" x 48"

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS, INCLUDING FBS 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.

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"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. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED SIGNS.

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 AND PLACE TEMPORARY PAVEMENT MARKING LINE 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.

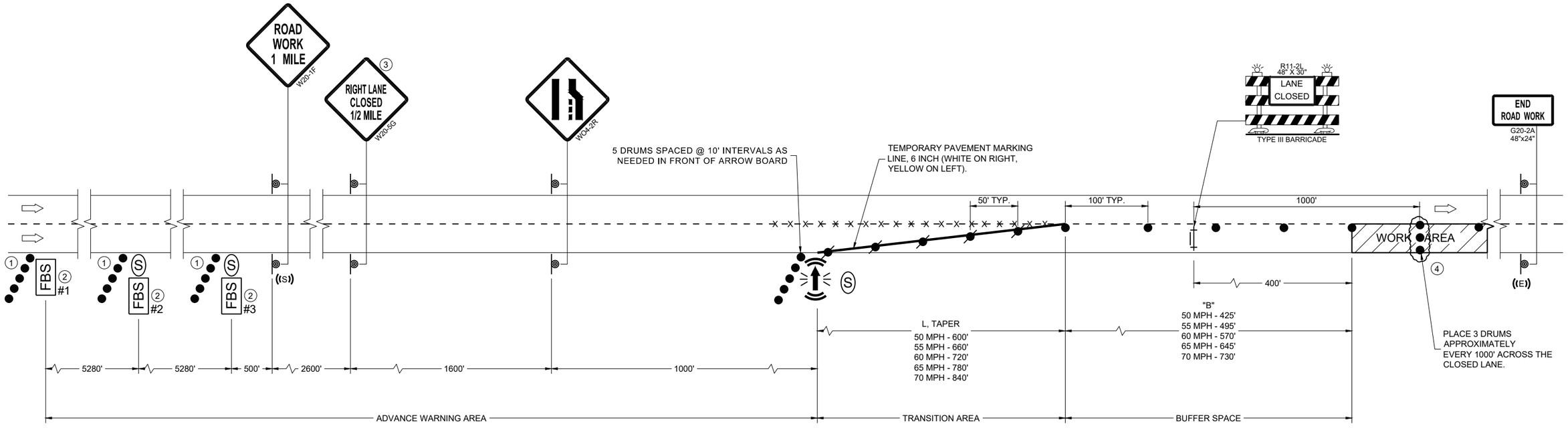
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CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

PORTABLE TRAFFIC SENSOR (PTS) MAY BE MOUNTED ON THE FBS, ARROW BOARD OR OTHER TRAILER DEVICES.

1. 5 DRUMS SPACED AT 10 FOOT INTERVALS AS NEEDED.
2. IF THERE ARE MORE THAN TWO LANES OR IF SPECIFIED IN THE PLANS, PLACE FBS ON BOTH SIDES OF THE ROADWAY.
3. IF THERE IS AN APPROVED TEMPORARY SPEED DECLARATION, ADD WO-3-5 SIGNS 400 FEET AFTER THE W20-5G SIGNS AND ADD R2-1 SIGNS (48"x60") 700 FEET AFTER THE WO3-5 SIGNS. 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 (800 FEET DESIRABLE) BEYOND THE G30-3A "END ROAD WORK" SIGN
4. DRUMS IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.



TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2026 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6 SDD 15D12-17d

6 SDD 15D12-17d

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
- CONNECTED ARROW BOARD
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- (S) — PORTABLE TRAFFIC SENSOR (PTS)
- ((S)) — WZ START LOCATION MARKER
- ((E)) — WZ END LOCATION MARKER

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS, INCLUDING FBS 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.

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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. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED SIGNS.

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 AND PLACE TEMPORARY PAVEMENT MARKING LINE 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.

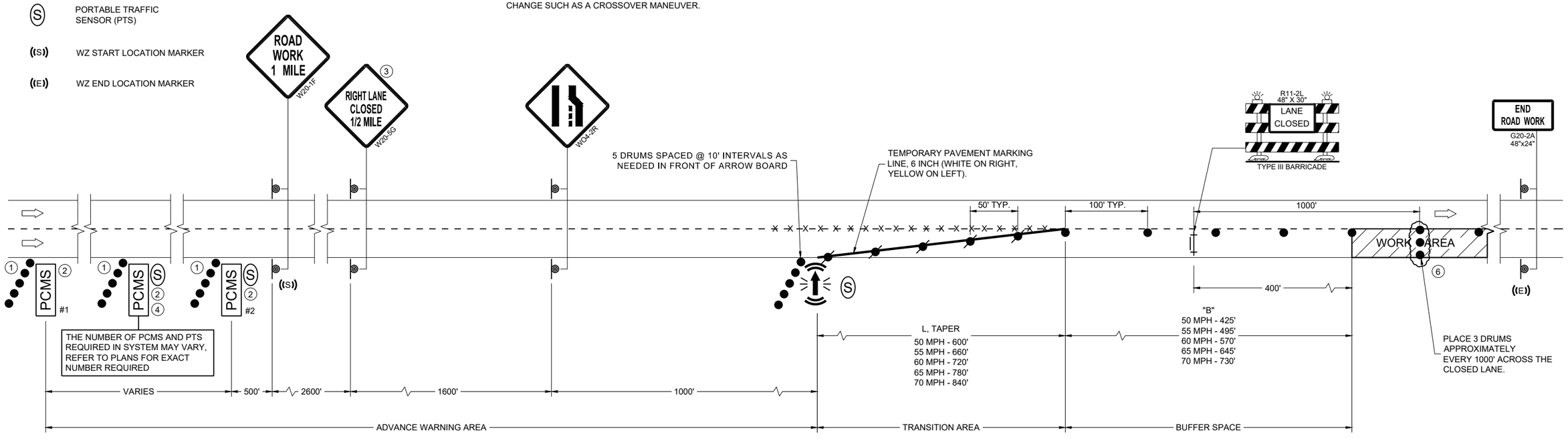
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CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

PORTABLE TRAFFIC SENSOR (PTS) MAY BE MOUNTED ON PCMS, ARROW BOARD OR OTHER TRAILER DEVICES.

1. 5 DRUMS SPACED AT 10 FOOT INTERVALS AS NEEDED.
2. IF THERE ARE MORE THAN TWO LANES OR IF SPECIFIED IN THE PLANS, PLACE PCMS ON BOTH SIDES OF THE ROADWAY.
3. IF THERE IS AN APPROVED TEMPORARY SPEED DECLARATION, ADD WO-3-5 SIGNS 400 FEET AFTER THE W20-5G SIGNS AND ADD R2-1 SIGNS (48"x60") 700 FEET AFTER THE WO3-5 SIGNS. 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 (800 FEET DESIRABLE) BEYOND THE G30-3A "END ROAD WORK" SIGN.
4. PLACE PCMS EVERY ONE MILE BETWEEN PCMS #1 AND PCMS #2, OR AS THE ENGINEER DIRECTS. THE NUMBER OF PCMS MAY BE MORE THAN SHOWN ON THIS DETAIL.
5. PCMS SHALL FOLLOW ARROW BOARD STANDARDS WHEN DISPLAYING FLASHING FOUR CORNER CAUTION MODE OR ARROW MERGE MODE.
6. DRUMS IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.



⑤ PCMS MESSAGING

SPEEDS 0 MPH TO 19 MPH		SPEEDS 20 MPH TO 39 MPH		SPEEDS 40 MPH AND GREATER
FRAME 1	FRAME 2	FRAME 1	FRAME 2	
STOPPED TRAFFIC AHEAD	EXPECT DELAYS	SLOW TRAFFIC AHEAD	PREPARE TO STOP	(FLASHING CAUTION MODE)

TRAFFIC CONTROL, LANE CLOSURE, TRAFFIC QUEUE WARNING SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2026 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

SDD 15D12-17e

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
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER
- TEMPORARY TAPE RUMBLE STRIPS (VARIABLE SPACING)
- PORTABLE TRAFFIC SENSOR (PTS)

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.

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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. NO WARNING LIGHTS

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCE WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

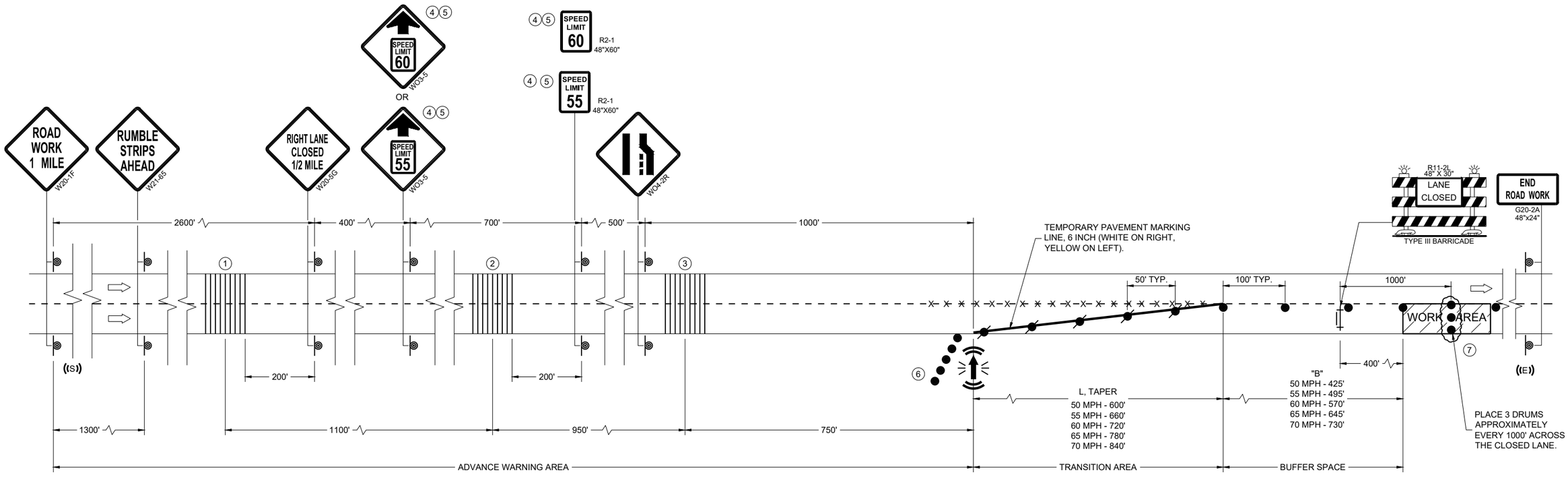
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CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

USE THIS DETAIL FOR PLACEMENT OF TEMPORARY TAPE RUMBLE STRIPS AND W21-65 SIGNS. SEE APPROPRIATE LANE CLOSURE SDD FOR DETAILS OF OTHER TRAFFIC CONTROL DEVICES AND SIGNS.

1. NINE RUMBLE STRIPS WITH 10 FOOT SPACING BETWEEN EACH INDIVIDUAL STRIP.
2. NINE RUMBLE STRIPS WITH 5 FOOT SPACING BETWEEN EACH INDIVIDUAL STRIP.
3. NINE RUMBLE STRIPS WITH 1.5 FOOT SPACING BETWEEN EACH INDIVIDUAL STRIP.
4. COVER OR REMOVE PER APPROVED TEMPORARY SPEED DECLARATION.
5. IF NO APPROVED SPEED DECLARATION, OMIT SIGNS.
6. 5 DRUMS SPACED AT 10 FOOT INTERVALS AS NEEDED.
7. DRUMS IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.



TRAFFIC CONTROL, LANE CLOSURE, WITH TEMPORARY TAPE RUMBLE STRIPS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2026
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6
SDD 15D12-17f

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 AND PLACE TEMPORARY PAVEMENT MARKING LINE 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.

IF THE SPEED LIMIT WILL CHANGE BASED ON THE PRESENCE OF WORKERS, USE THE TAPER LENGTH THAT MATCHES THE HIGHER OF THE TWO SPEEDS FOR A CONTINUOUS LANE CLOSURE.

EXISTING POST MOUNTED SPEED LIMIT SIGNS SHOULD BE COVERED OR REMOVED.

(1) POST NON-CONSTRUCTION SPEED LIMIT.

(2) IF THE LANE CLOSURE MOVES DOWNSTREAM, LEAVE DSLT IN PLACE.

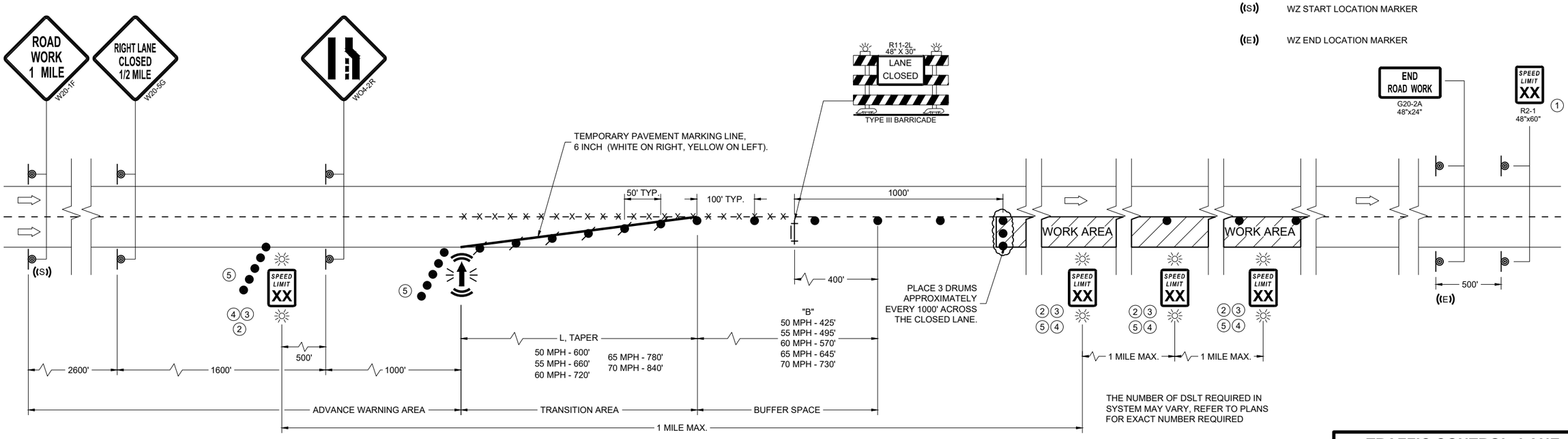
(3) PLACE DSLT AT EXISTING POST MOUNTED SPEED LIMIT SIGN AFTER THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. IF THERE IS NOT AN EXISTING SIGN, PLACE 1,500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP

(4) FOR LEFT LANE CLOSURES, DSLT REMAINS ON RIGHT SHOULDER.

(5) 5 DRUMS SPACED @ 10' INTERVALS AS NEEDED.

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
- CONNECTED ARROW BOARD
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER



TRAFFIC CONTROL, LANE CLOSURE, DIGITAL SPEED REDUCTION SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2026 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6 SDD 15D12-17g

6 SDD 15D12-17g

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

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.

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.

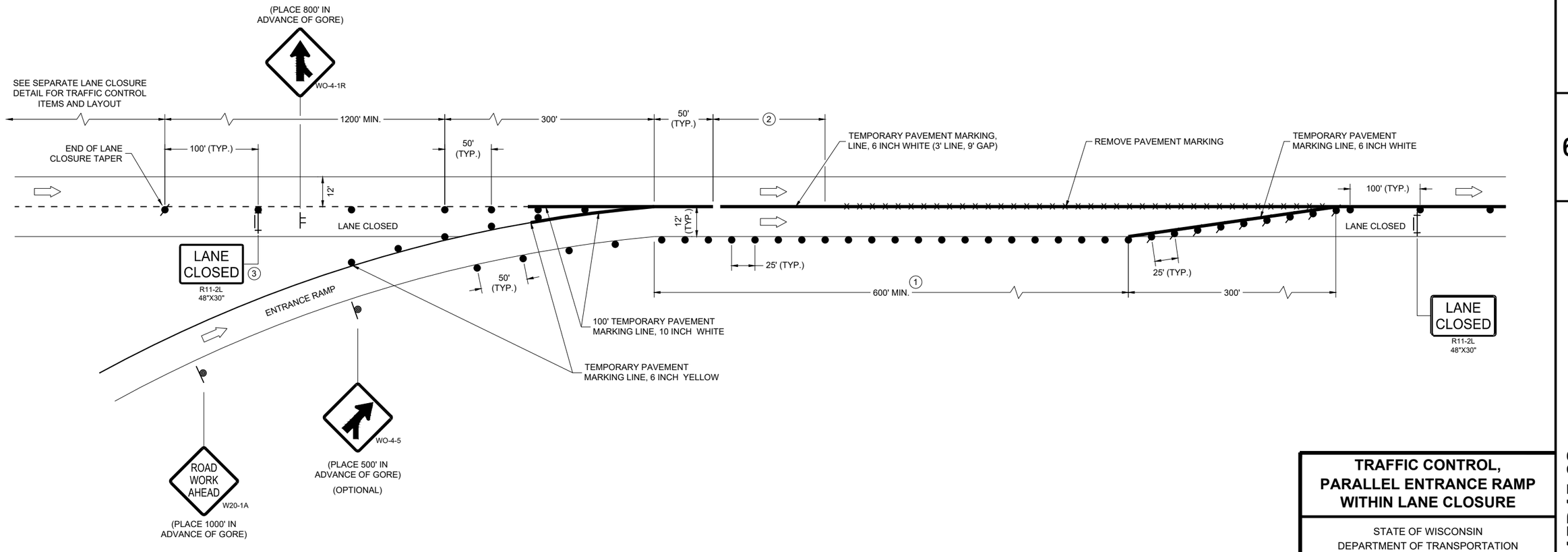
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) EXTEND THE LENGTH OF THE MERGE ARE IF THE ENTERING (DESIGN) SPEED IS LESS THAN 50MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY PAVEMENT MARKING LINE AT 1/2 THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.

(3) IF LOCATED AFTER INITIAL LANE CLOSURE BARRICADE AND "LANE CLOSED" SIGN, USE 3 DRUMS IN PLACE OF BARRICADE AND SIGN.



TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D15-08a

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
- 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.

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.

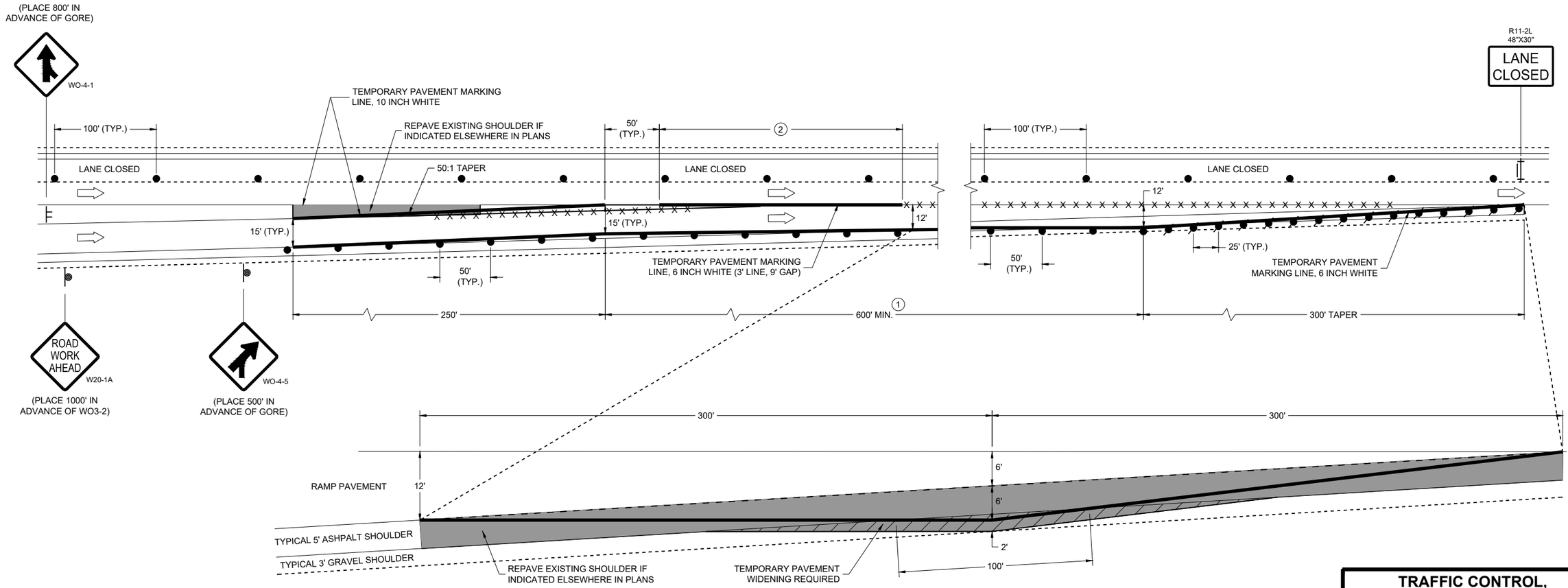
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS /OR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

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 LINES 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) EXTEND THE LENGTH OF THE MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY PAVEMENT MARKING LINE AT 1/2 THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.



TEMPORARY PAVEMENT DETAIL

(EXISTING RAMP DIMENSIONS MAY VARY, ADJUST TEMPORARY PAVEMENT ACCORDINGLY)

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6

SDD 15D15-08b

6

SDD 15D15-08b

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.

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"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.

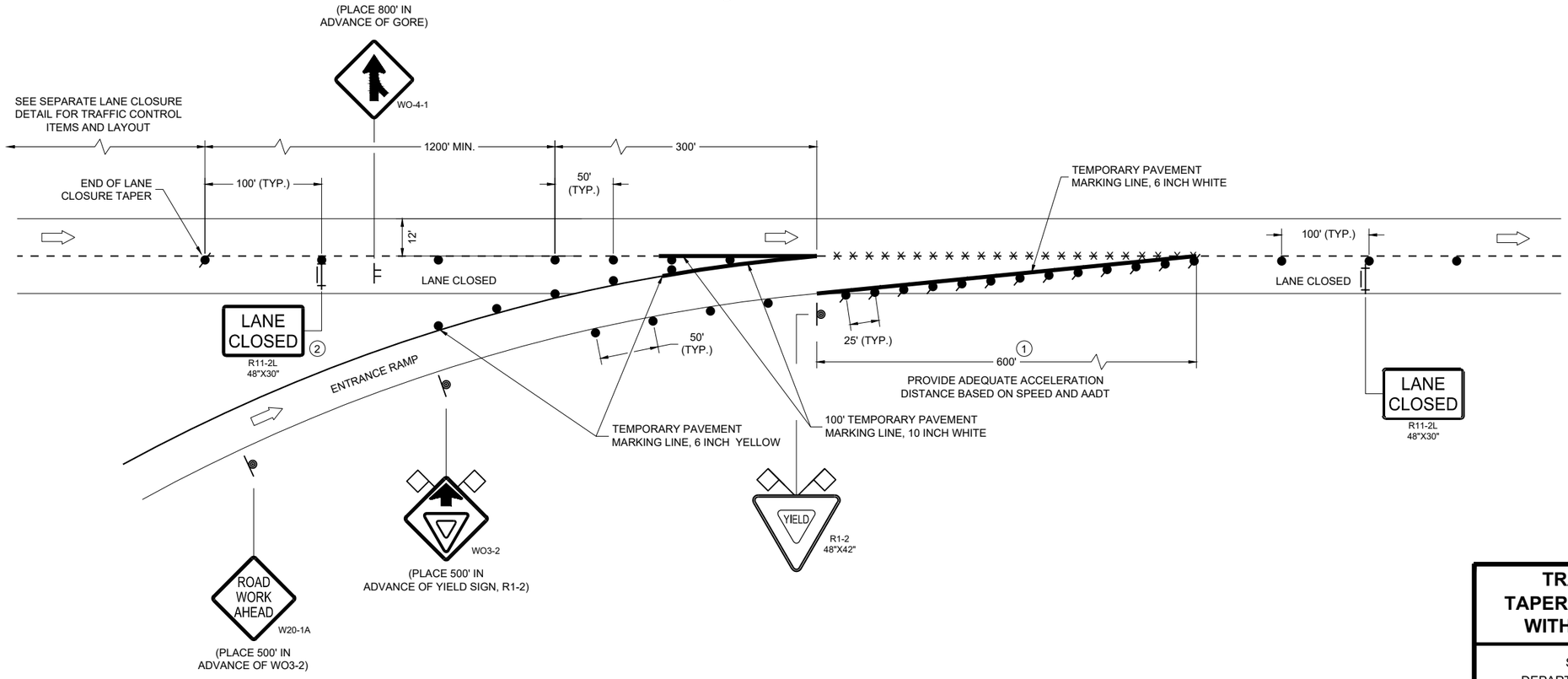
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WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) CONSULT WITH REGIONAL WORK ZONE ENGINEER IF NEED TO REDUCE LENGTH EXISTS.

(2) IF LOCATED AFTER INITIAL LANE CLOSURE BARRICADE AND "LANE CLOSED" SIGN, USE 3 DRUMS IN PLACE OF BARRICADE AND SIGN.



TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Andrew Heidtke — <position>
FHWA

6

SDD 15D15-08c

6

SDD 15D15-08c

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

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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.

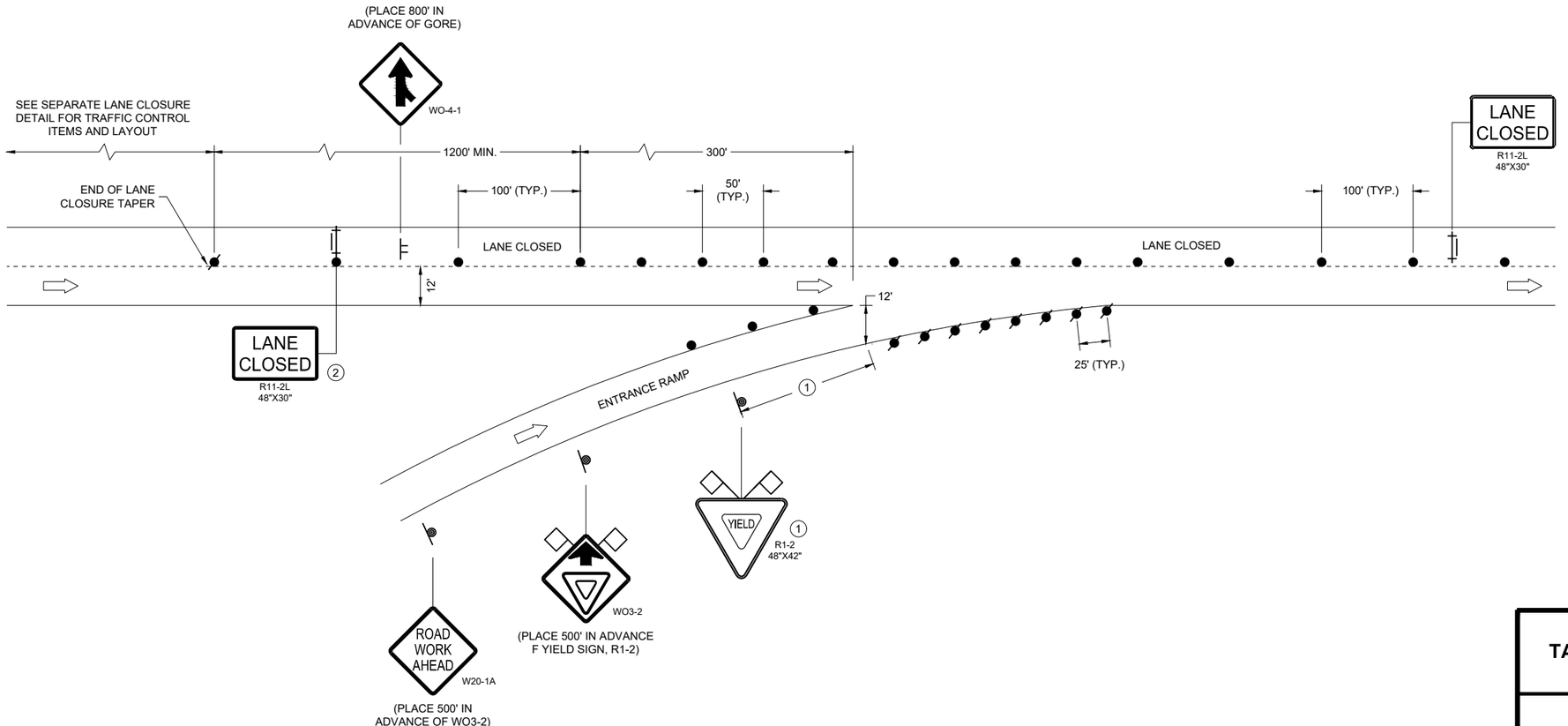
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ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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.

(2) IF LOCATED AFTER INITIAL LANE CLOSURE BARRICADE AND "LANE CLOSED" SIGN, USE 3 DRUMS IN PLACE OF BARRICADE AND SIGN.



TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6

SDD 15D15-08d

6

SDD 15D15-08d

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
- 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.

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SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

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.

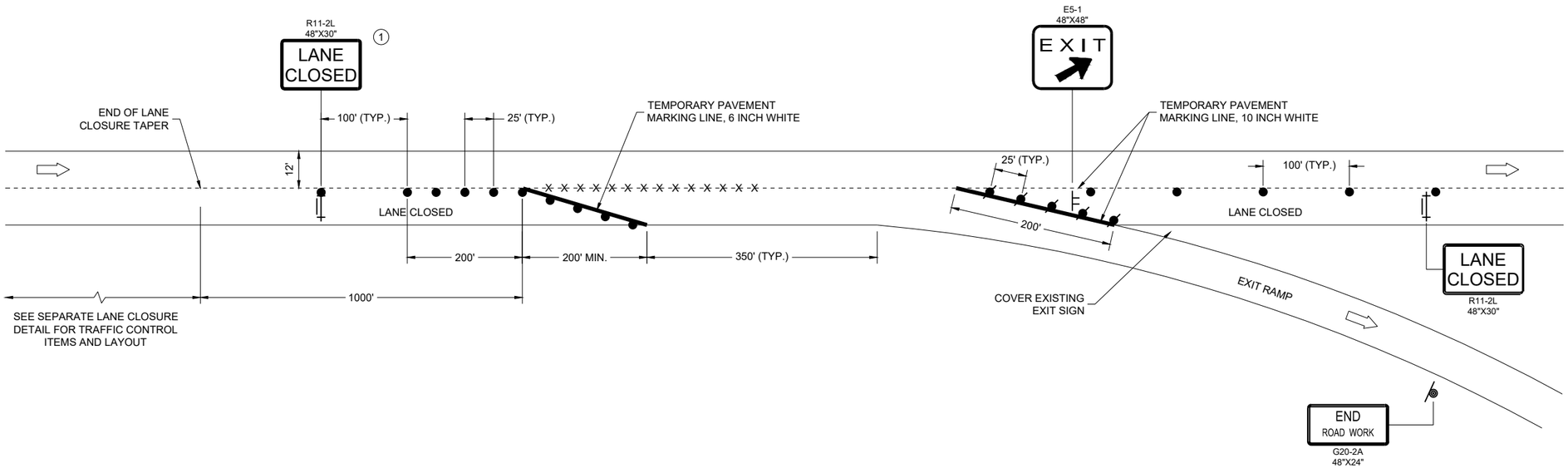
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ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES 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) IF LOCATED AFTER INITIAL LANE CLOSURE BARRICADE AND "LANE CLOSED" SIGN, USE 3 DRUMS IN PLACE OF BARRICADE AND SIGN.



TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2025 — DATE

/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6

SDD 15D15-08e

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.

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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 LINE 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.

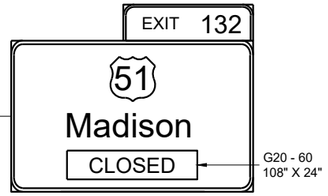
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

(1) 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.

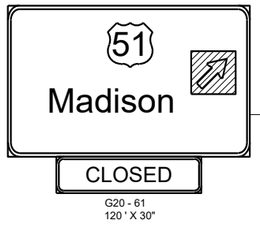
(2) PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



OR



PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN



G20 - 61
120 ' X 30"

COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

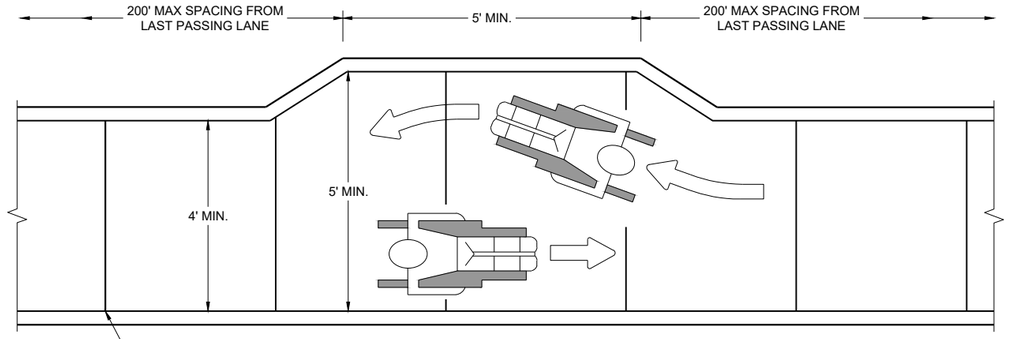
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — <position>

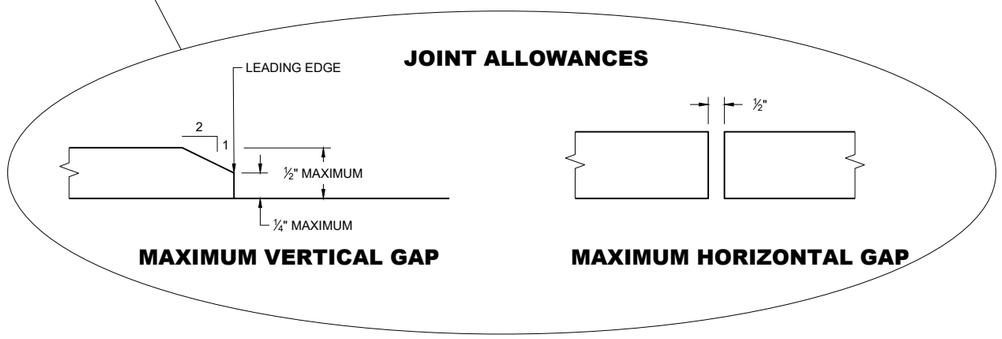
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6 SDD 15D16-07

6 SDD 15D16-07



NARROW SIDEWALK PASSING DETAIL



MAXIMUM VERTICAL GAP

MAXIMUM HORIZONTAL GAP

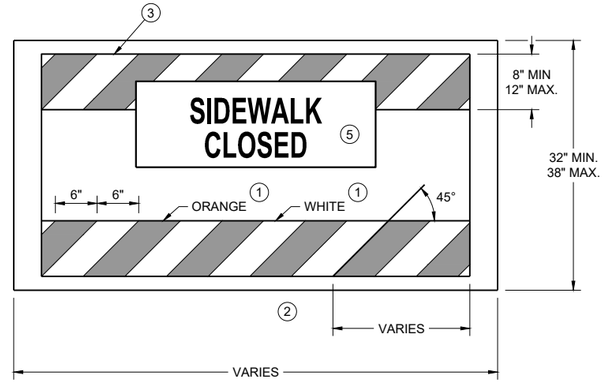
GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

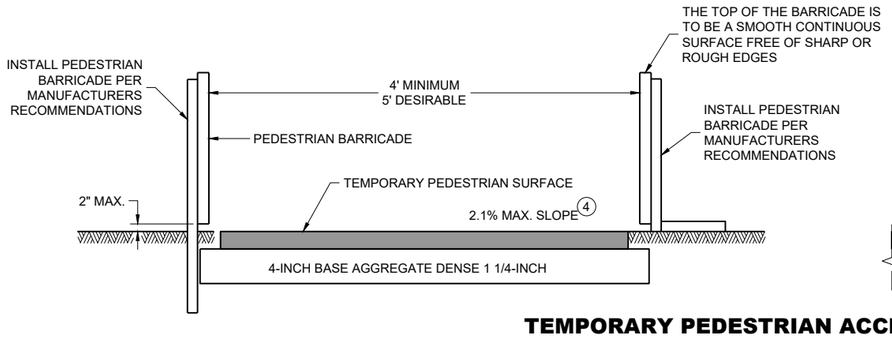
1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
3. PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

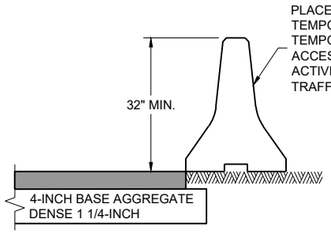
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

4. WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.
5. WHERE SIGNS FOR TEMPORARY PEDESTRIAN ACCOMMODATIONS ARE SHOWN BEING PLACED BEHIND TEMPORARY PEDESTRIAN BARRICADE, THE SIGNS MAY BE MOUNTED ON THE TEMPORARY PEDESTRIAN BARRICADE INSTEAD. A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE SHALL BE USED IF MOUNTED ON THE BARRICADE. THE TOP OF THE SIGN SHALL BE MOUNTED BELOW THE TOP OF THE BARRICADE TO ALLOW A CONTINUOUS HAND-TRAILING EDGE.

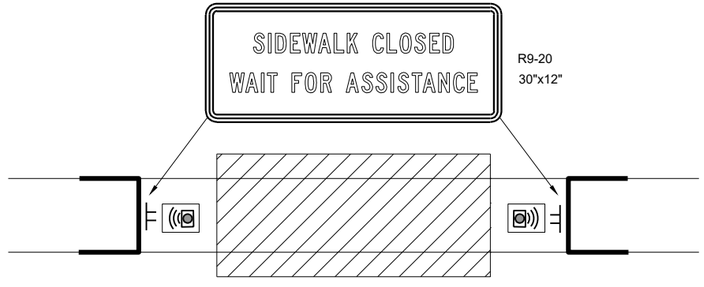


TEMPORARY PEDESTRIAN BARRICADE *





TEMPORARY PEDESTRIAN ACCESS



TEMPORARY AUDIBLE MESSAGE DEVICE (TAMD) MESSAGE: "SIDEWALK CLOSED WAIT FOR ASSISTANCE"

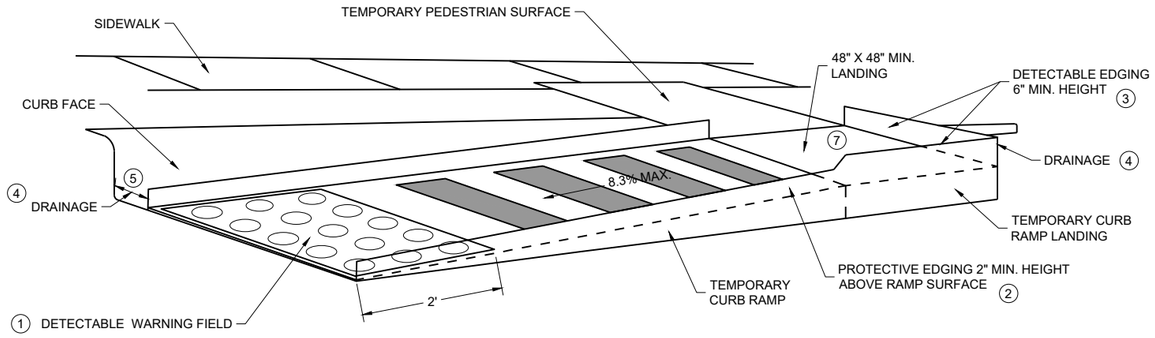
TEMPORARY PEDESTRIAN FLAGGING

LEGEND

- TEMPORARY PEDESTRIAN BARRICADE
- AUDIBLE MESSAGE DEVICE
- TEMPORARY SIGN SUPPORT
- WORK AREA

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PERSPECTIVE VIEW

GENERAL NOTES

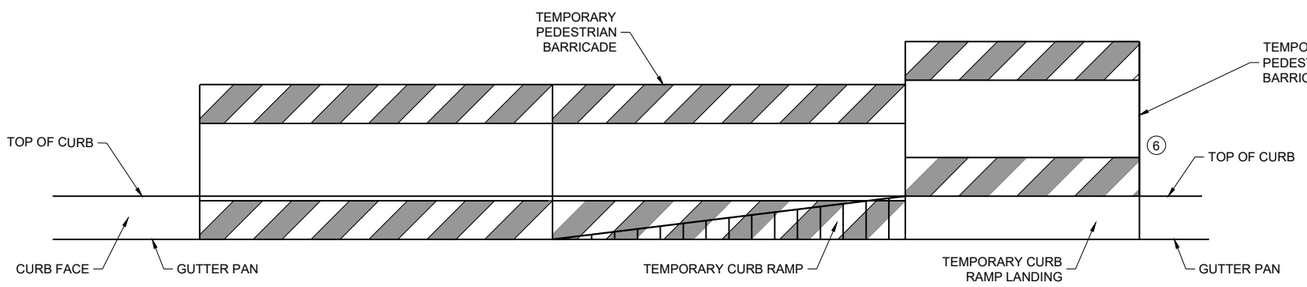
CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

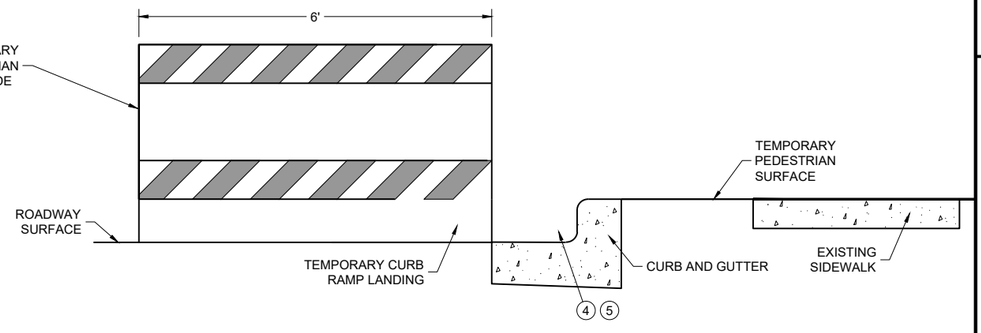
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

1. INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
5. ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.
6. IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.
7. LANDING TO BE SLOPED A MAXIMUM OF 2.1% IN ALL DIRECTIONS OF PEDESTRIAN TRAVEL.



FRONT VIEW



SIDE VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB

6

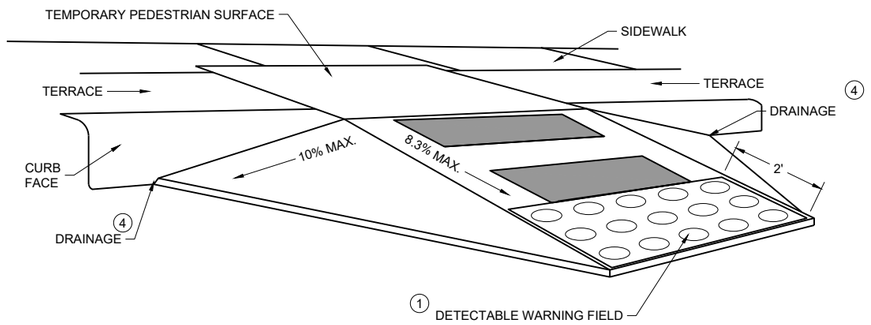
SDD 15D30-12b

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

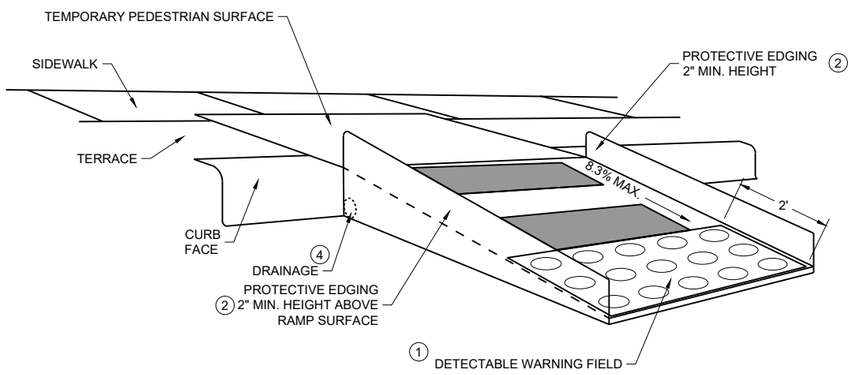
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-12b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

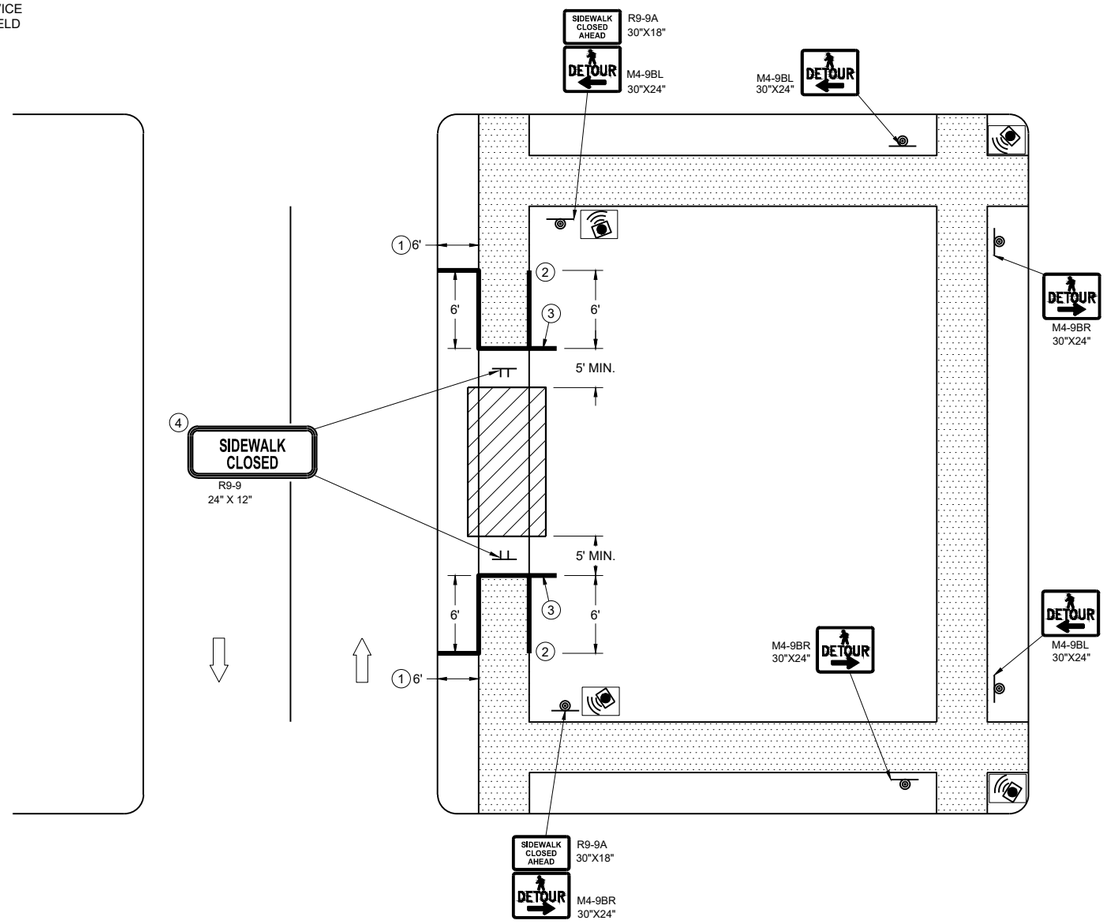
(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

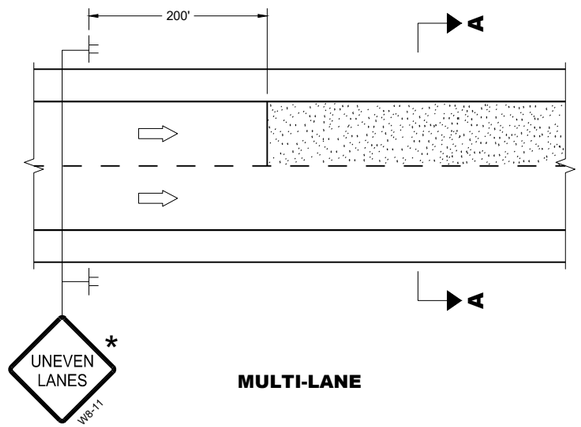
1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

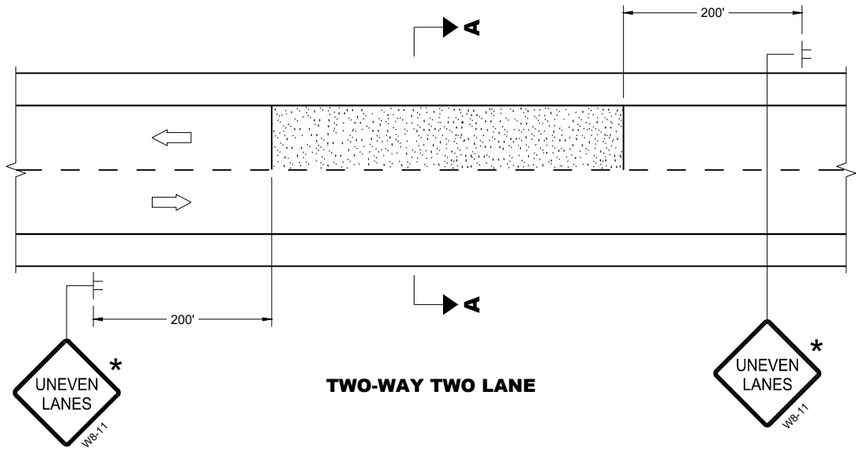
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

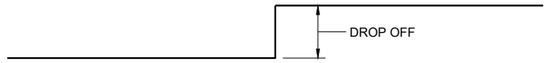
SDD 15D30-12f



MULTI-LANE

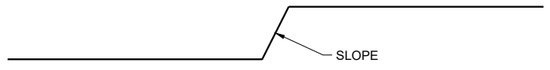


TWO-WAY TWO LANE

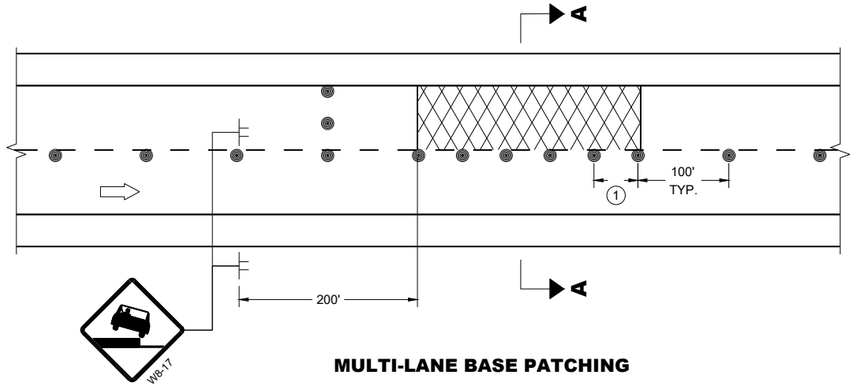


SECTION A - A

OR



SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

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.

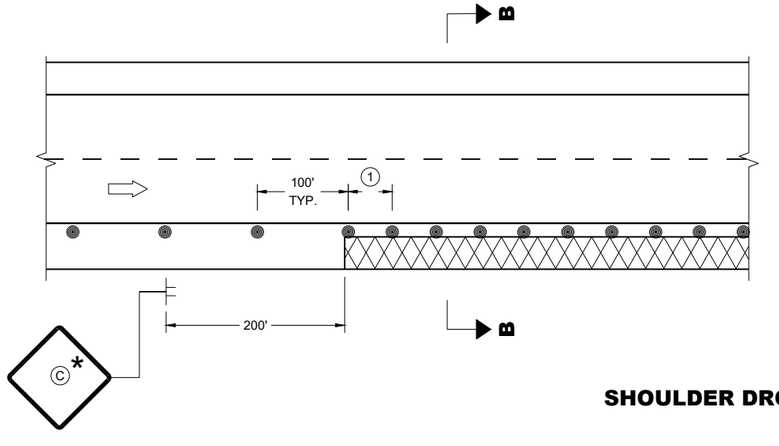
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

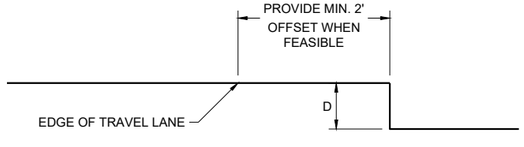
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

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



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER W08-9
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
February 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6

SDD 15D39-03

6

SDD 15D39-03

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

GENERAL NOTES

RIGHT CLOSURE SHOWN (LEFT LANE CLOSURE SIMILAR)

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS PART OF A DAYTIME ONLY OPERATION.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROL SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND / OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

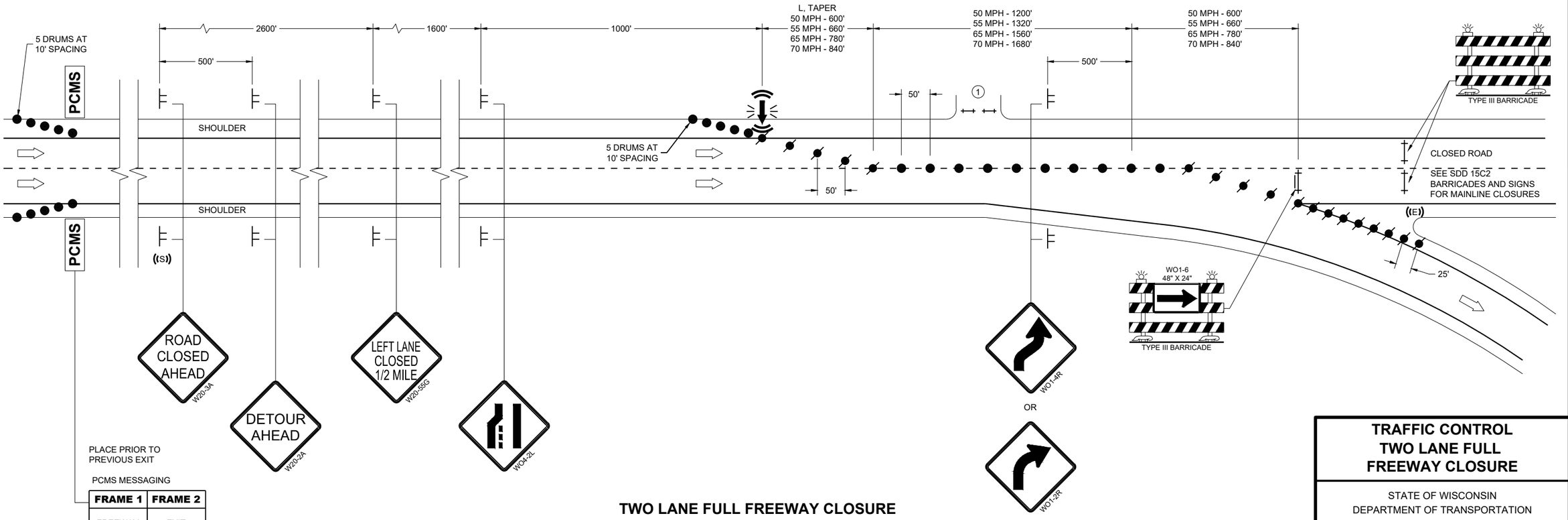
PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1000' ACROSS EACH CLOSED LANE TO HELP REINFORCE THE DRUM LINE.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

REFER TO DETOUR ROUTES FOR TRAFFIC GUIDANCE SIGNING.

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. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

① PLACE TYPE III BARRICADES ACROSS MEDIAN MAINTENANCE TURNAROUNDS WITHIN THE CLOSED ROADWAY SEGMENT AND ANTICIPATED QUEUE AREA WITHIN THE ADVANCE WARNING AREA.



PLACE PRIOR TO PREVIOUS EXIT

PCMS MESSAGING

FRAME 1	FRAME 2
FREEWAY CLOSED	EXIT AHEAD

TWO LANE FULL FREEWAY CLOSURE

TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2026 — DATE
/S/ Andrew Heidtke

FHWA

6

SDD 15D42-05

6

SDD 15D42-05

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- DELINEATOR, FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- CONSTRUCTION TRAFFIC
- WORK AREA
- CC — CRASH CUSHION TEMPORARY
- EXISTING CONCRETE BARRIER TEMPORARY PRECAST

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.

WORK ZONE INGRESS/EGRESS LOCATIONS SHALL BE APPROVED BY THE ENGINEER. LOCATIONS FOR WORK ZONE ACCESS TO/FROM THE FREEWAY SHALL NOT BE USED FOR INGRESS AND EGRESS AT THE SAME TIME.

THIS ACCESS DETAIL IS TYPICAL FOR LEFT LANE ACCESS, FOR RIGHT LANE ACCESS, REVERSE THE TRAFFIC CONTROL

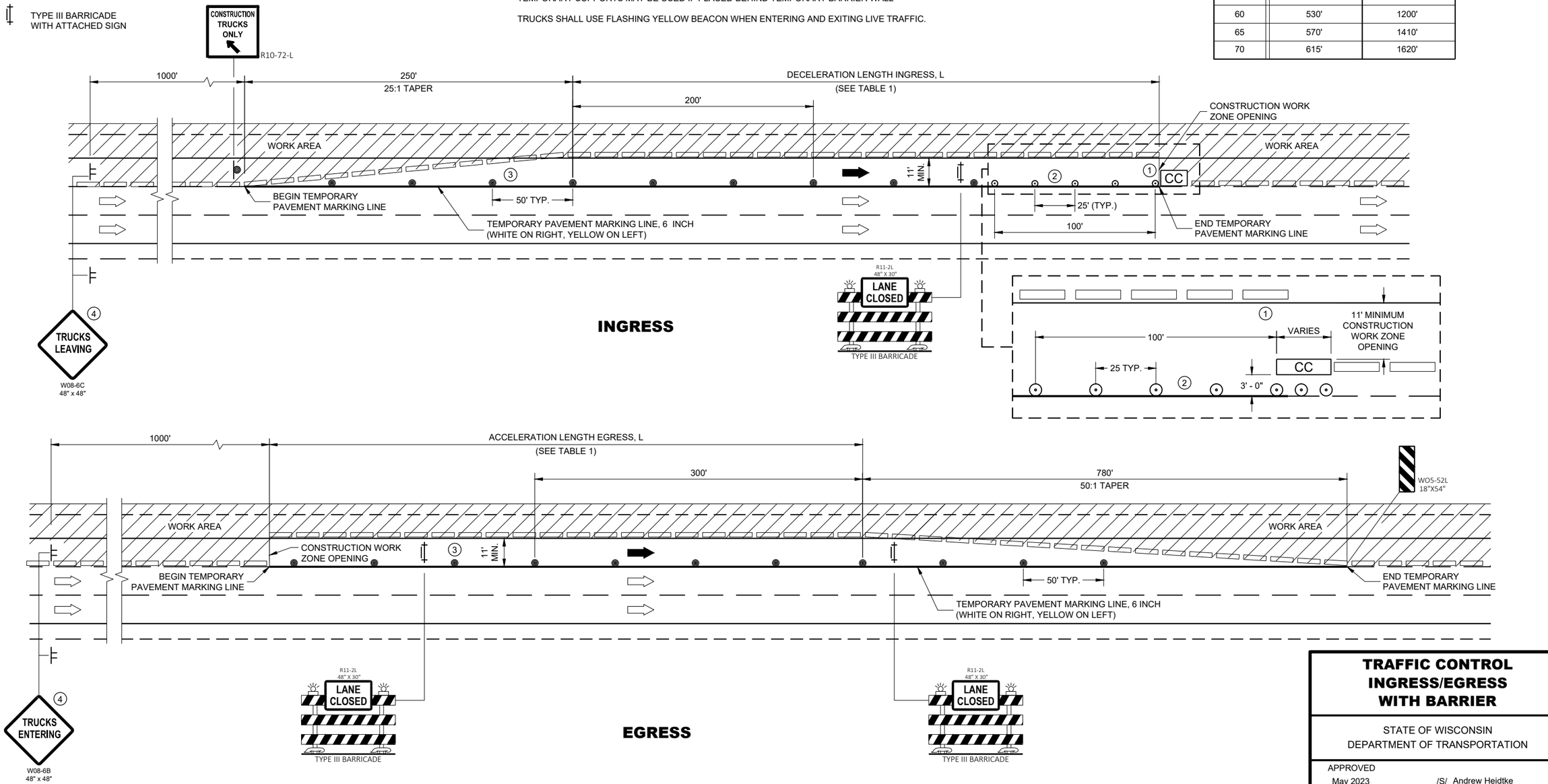
TEMPORARY SUPPORTS MAY BE USED IF PLACED BEHIND TEMPORARY BARRIER WALL

TRUCKS SHALL USE FLASHING YELLOW BEACON WHEN ENTERING AND EXITING LIVE TRAFFIC.

1. WIDEN BARRIER AS NECESSARY TO ACCOMMODATE CRASH CUSHION WIDTH.
2. USE TUBULAR MARKERS TO HELP DELINEATE TEMPORARY CRASH CUSHION.
3. REMOVE DRUMS / BARRICADES WHEN INGRESS / EGRESS ARE IN USE.
4. REMOVE OR COVER WHEN ACCESS IS NOT NEEDED.

TABLE 1

S (MPH)	INGRESS, L	EGRESS, L
50	435'	720'
55	480'	960'
60	530'	1200'
65	570'	1410'
70	615'	1620'



TRAFFIC CONTROL INGRESS/EGRESS WITH BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

293

FHWA

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SDD 15D47-03a

6

SDD 15D47-03a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- CONSTRUCTION TRAFFIC
- WORK AREA

TABLE 1

S (MPH)	INGRESS, L	EGRESS, L
50	435'	720'
55	480'	960'
60	530'	1200'
65	570'	1410'
70	615'	1620'

LEGEND

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.

WORK ZONE INGRESS/EGRESS LOCATIONS SHALL BE APPROVED BY THE ENGINEER. LOCATIONS FOR WORK ZONE ACCESS TO/FROM THE FREEWAY SHALL NOT BE USED FOR INGRESS AND EGRESS AT THE SAME TIME.

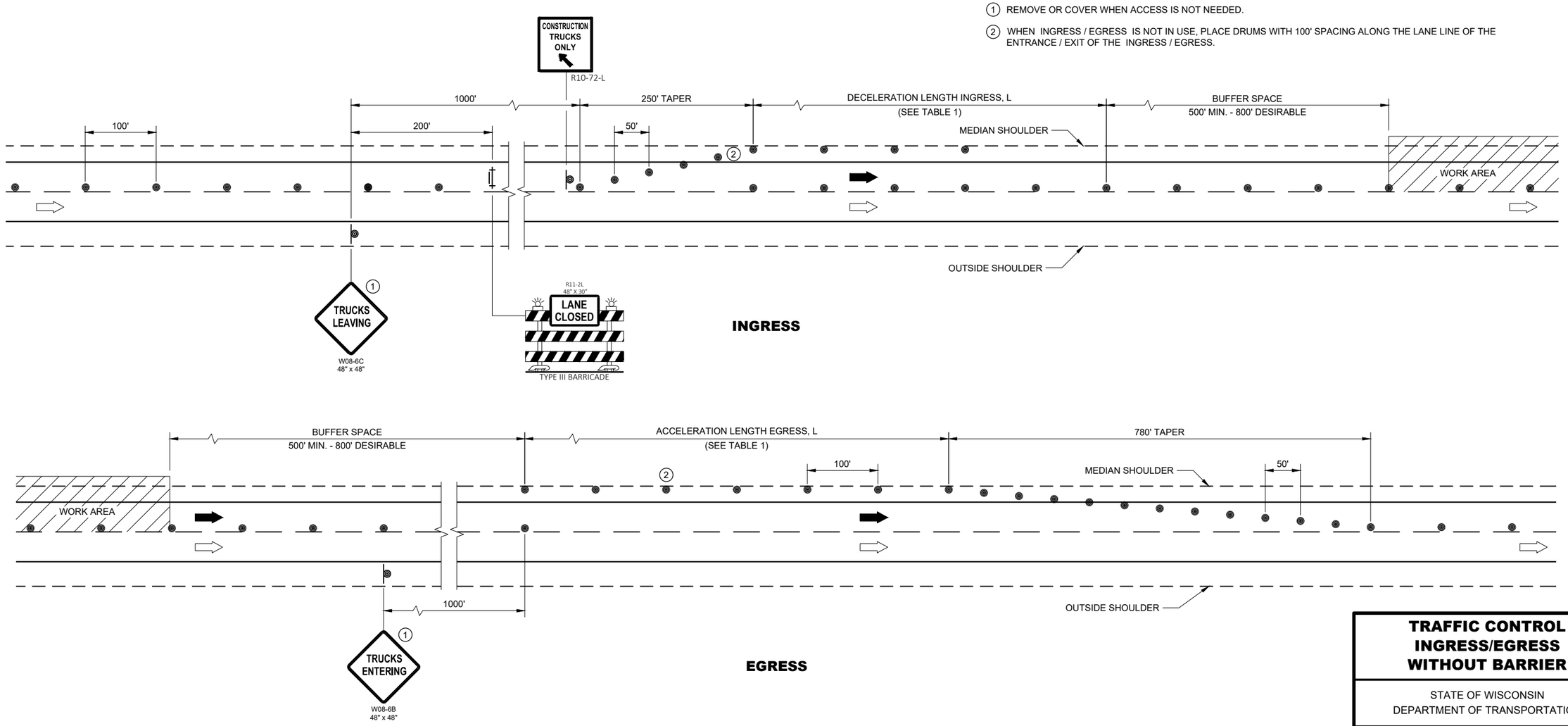
THIS ACCESS DETAIL IS TYPICAL FOR LEFT LANE ACCESS, FOR RIGHT LANE ACCESS, REVERSE THE TRAFFIC CONTROL

TEMPORARY SUPPORTS MAY BE USED IF PLACED BEHIND TEMPORARY BARRIER WALL

TRUCKS SHALL USE FLASHING YELLOW BEACON WHEN ENTERING AND EXITING LIVE TRAFFIC.

(1) REMOVE OR COVER WHEN ACCESS IS NOT NEEDED.

(2) WHEN INGRESS / EGRESS IS NOT IN USE, PLACE DRUMS WITH 100' SPACING ALONG THE LANE LINE OF THE ENTRANCE / EXIT OF THE INGRESS / EGRESS.



TRAFFIC CONTROL INGRESS/EGRESS WITHOUT BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

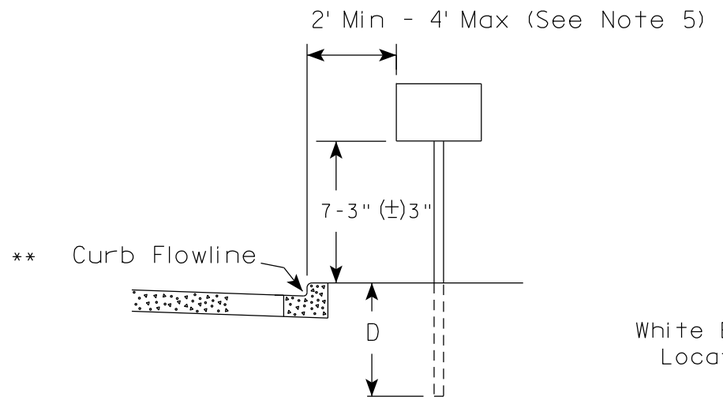
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SDD 15D47-03b

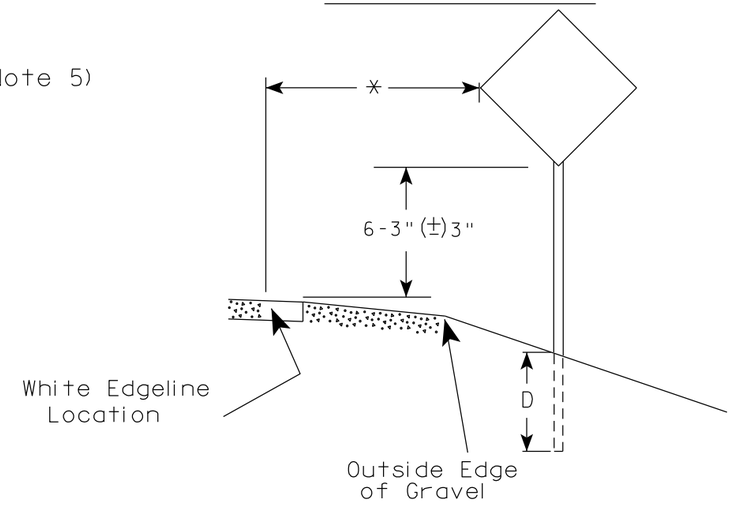
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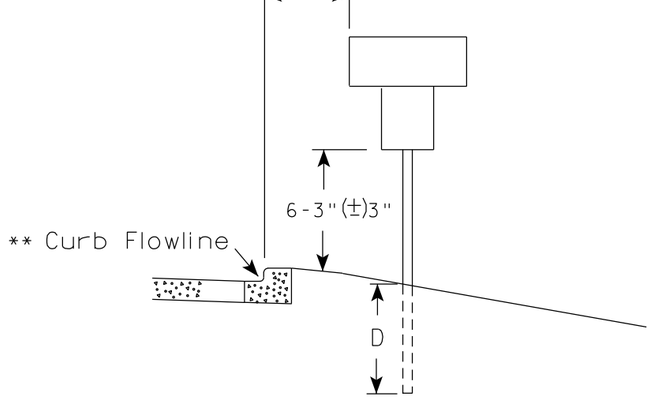
SDD 15D47-03b

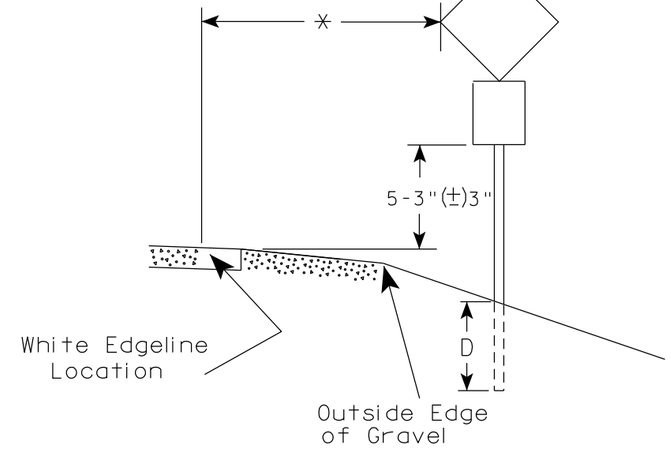
URBAN AREA



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" (±) 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".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

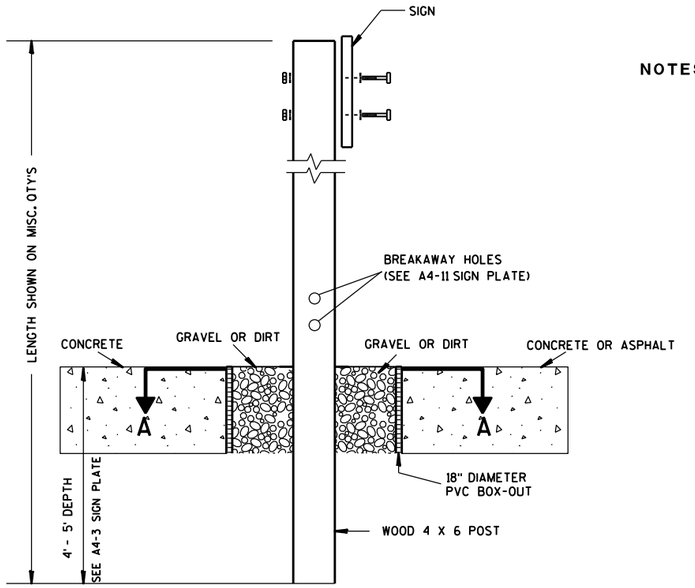
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

7

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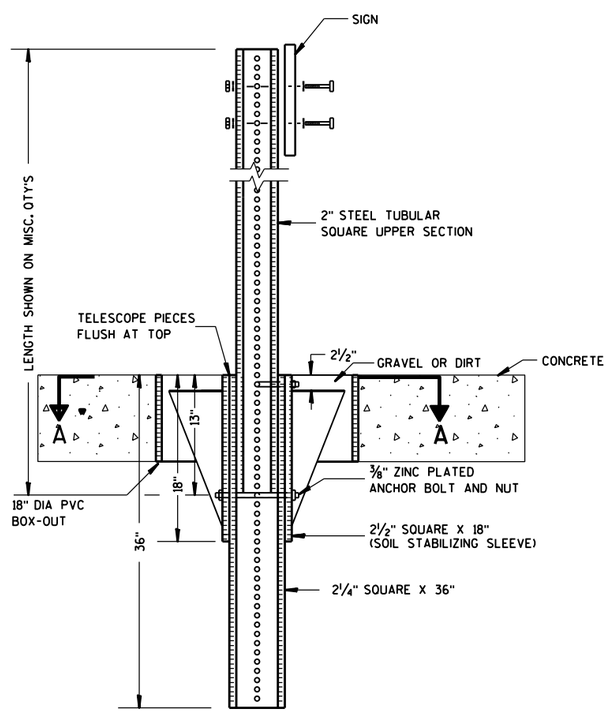
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 295 E



ELEVATION VIEW

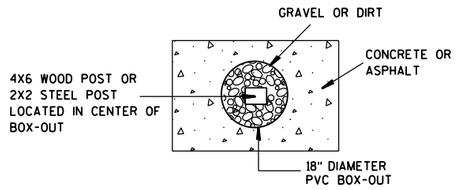
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

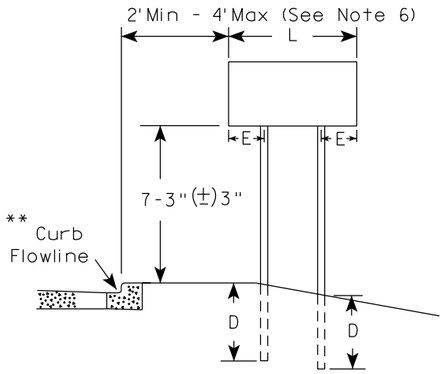
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

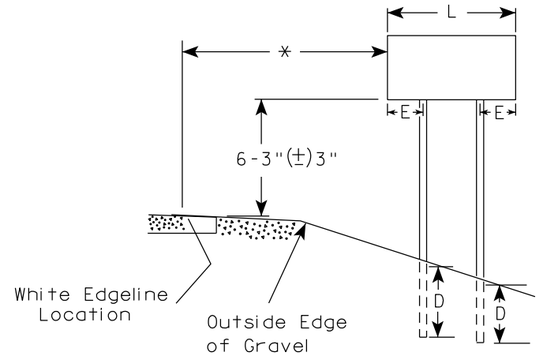
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

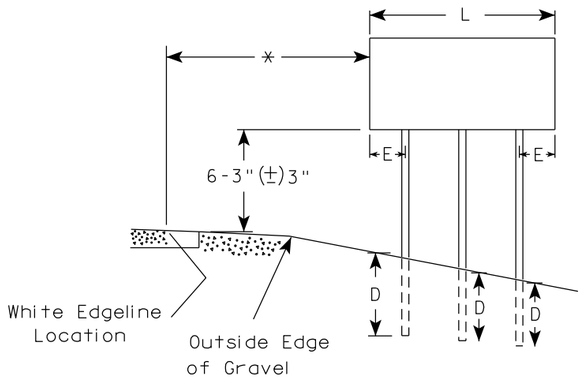
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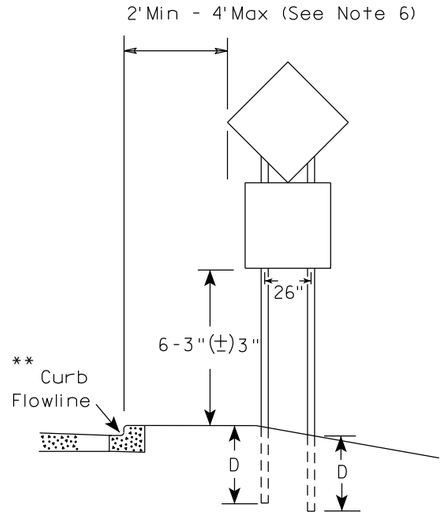
URBAN AREA



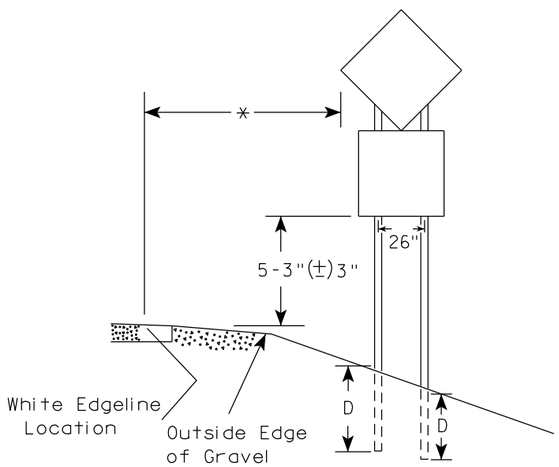
RURAL AREA (See Note 3)







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" (±) 3" or 6'-3" (±) 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" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 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" (±) 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'

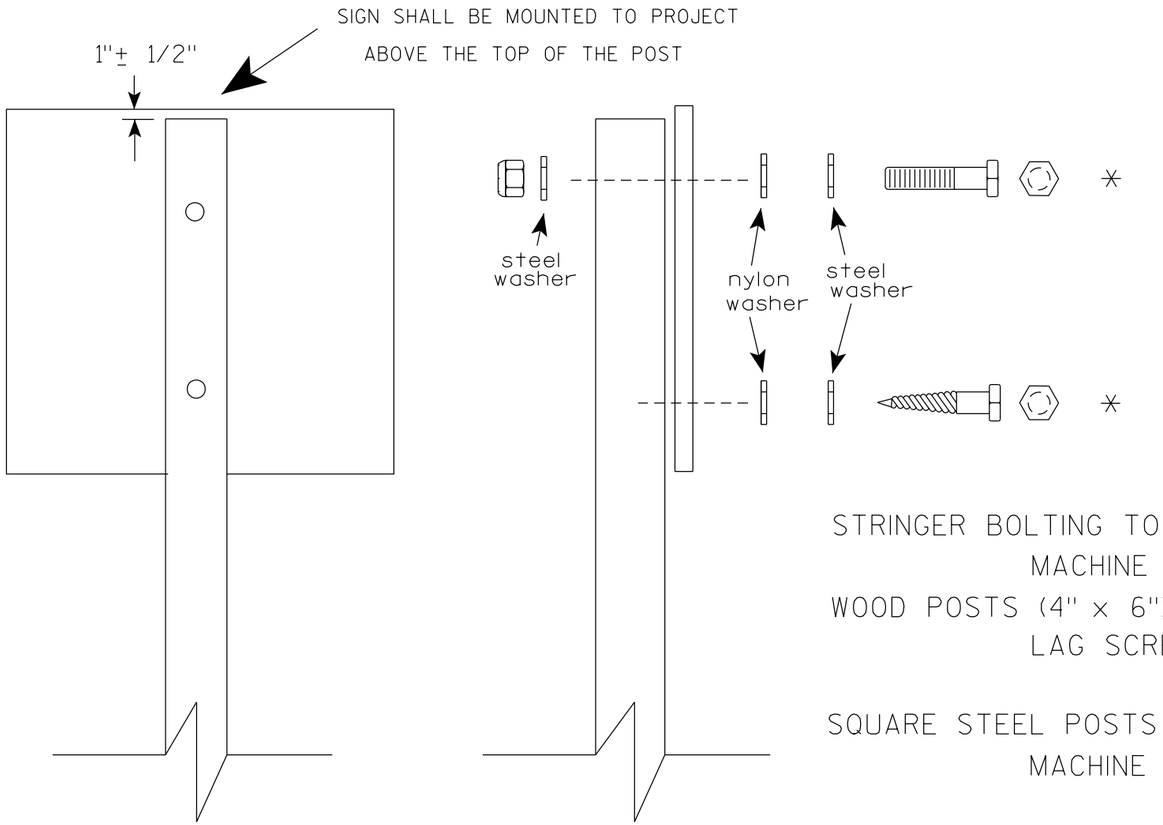
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 297	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

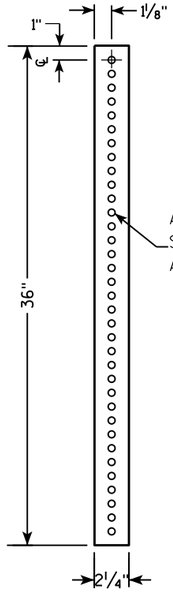
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

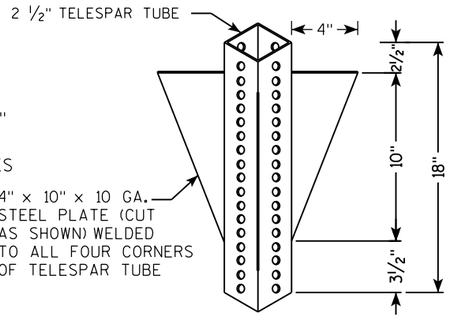
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

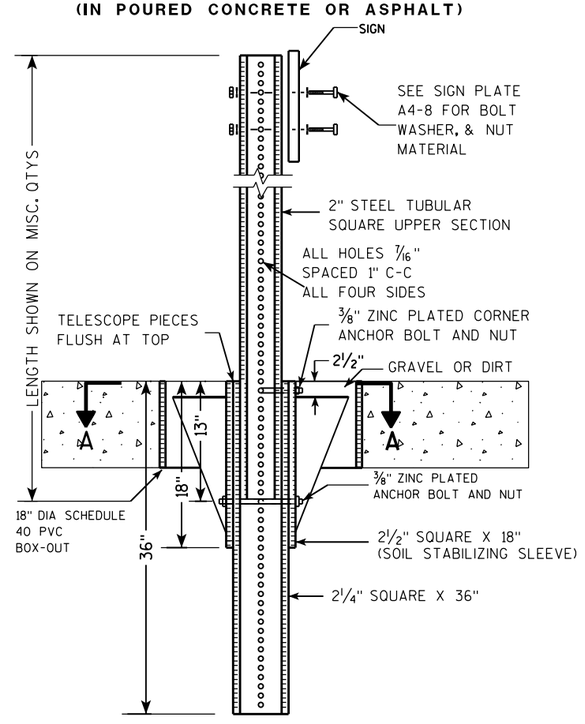
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



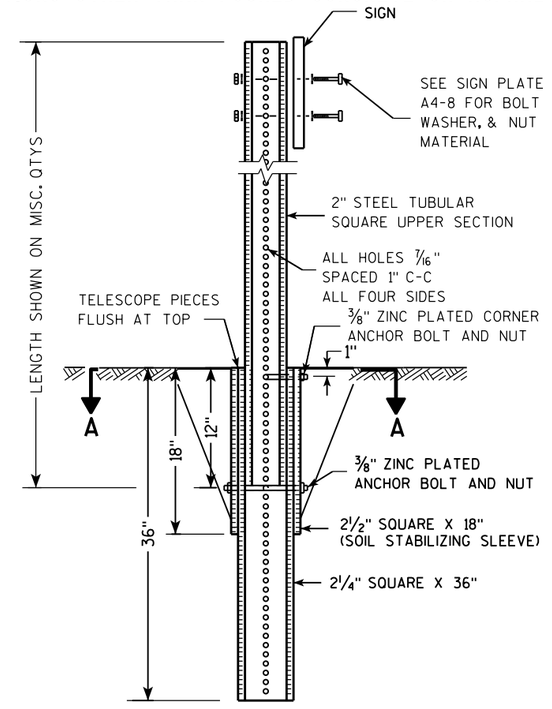
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

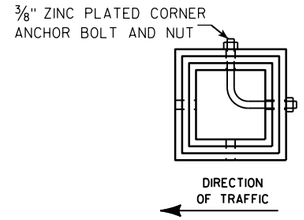


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

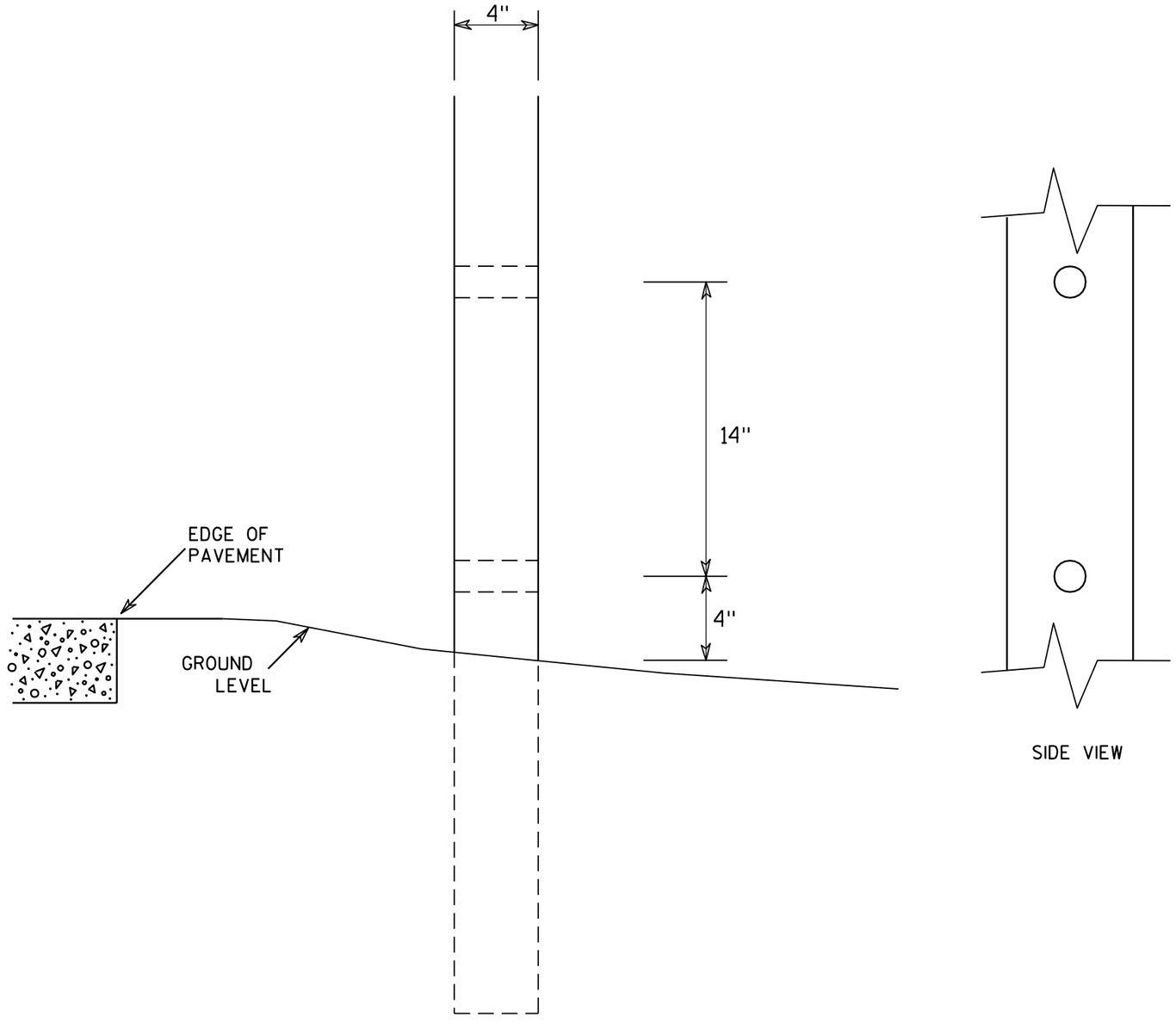
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 299 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

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4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

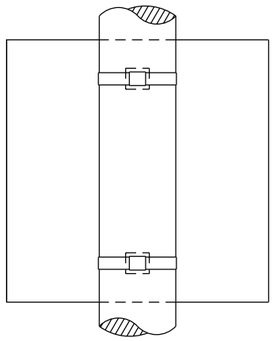
APPROVED Chester J Spang
for State Traffic Engineer

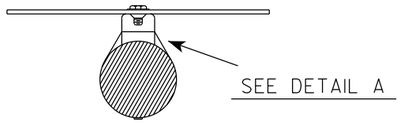
DATE 3/27/97 PLATE NO. A4-11.2

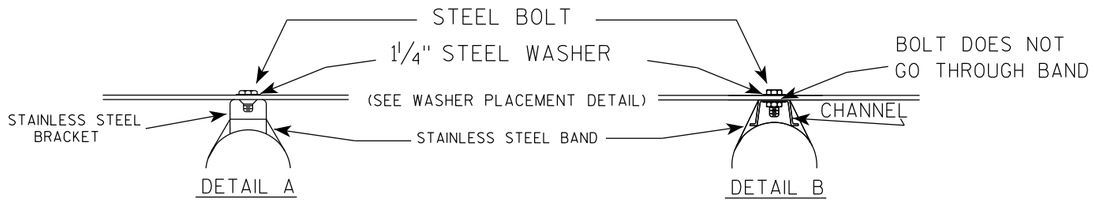
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 300	E

BANDING

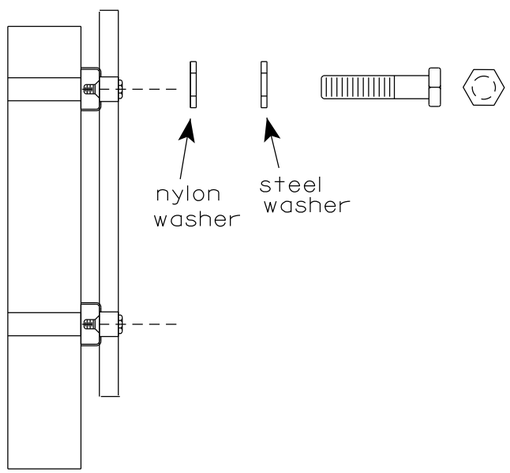
SINGLE SIGN







WASHER PLACEMENT

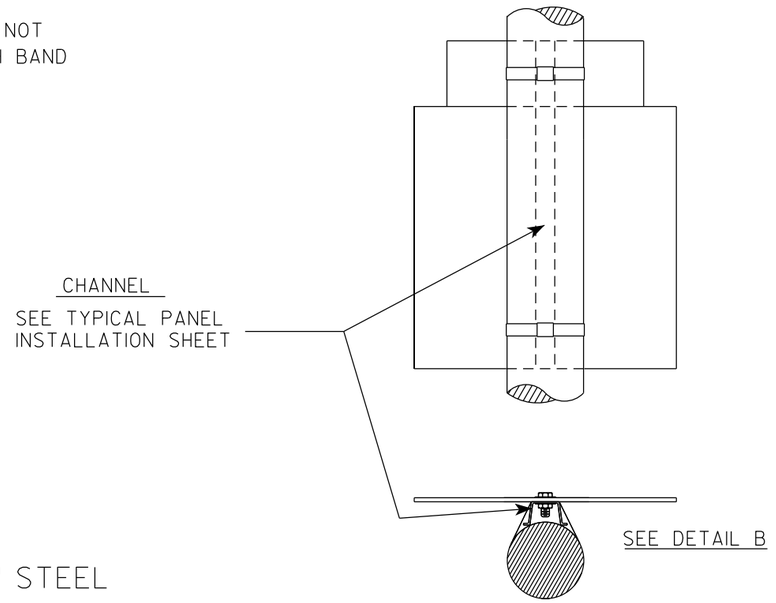


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

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

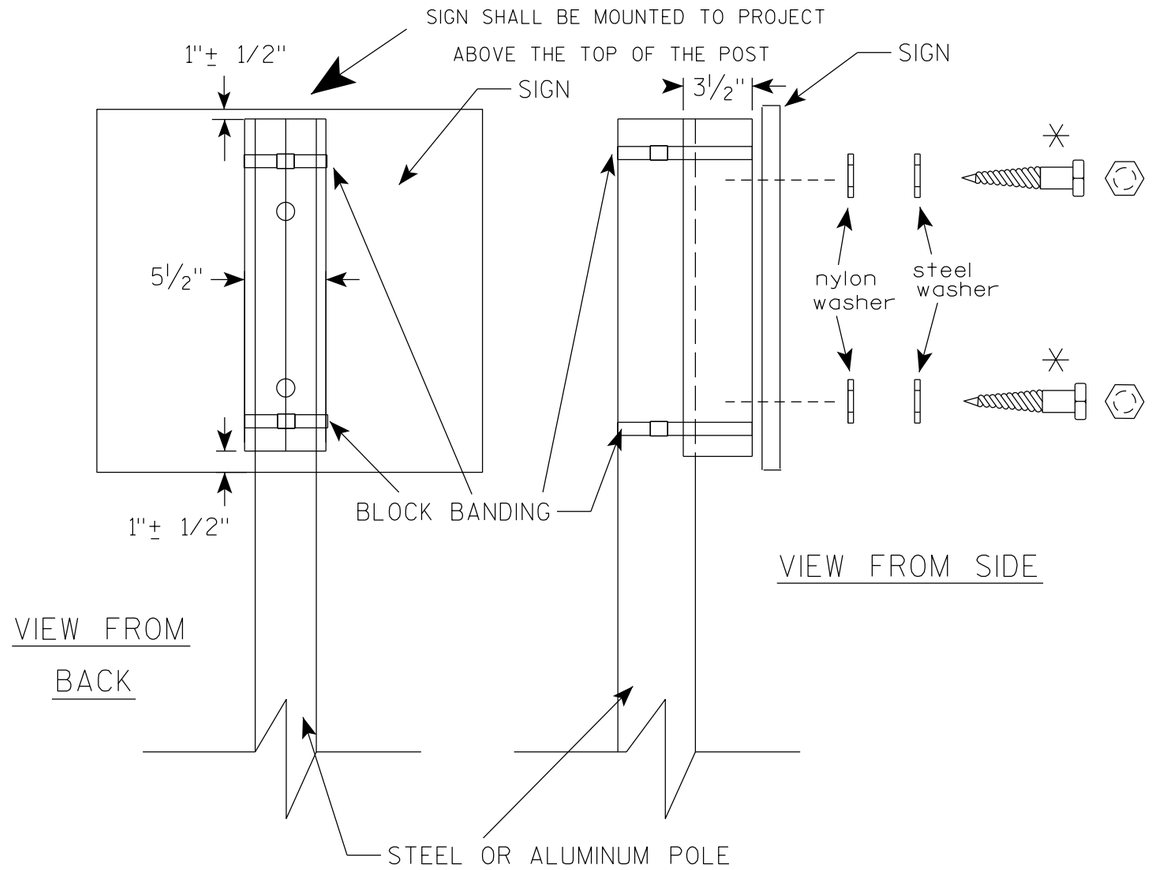
DATE 6/10/19 PLATE NO. A5-9.4

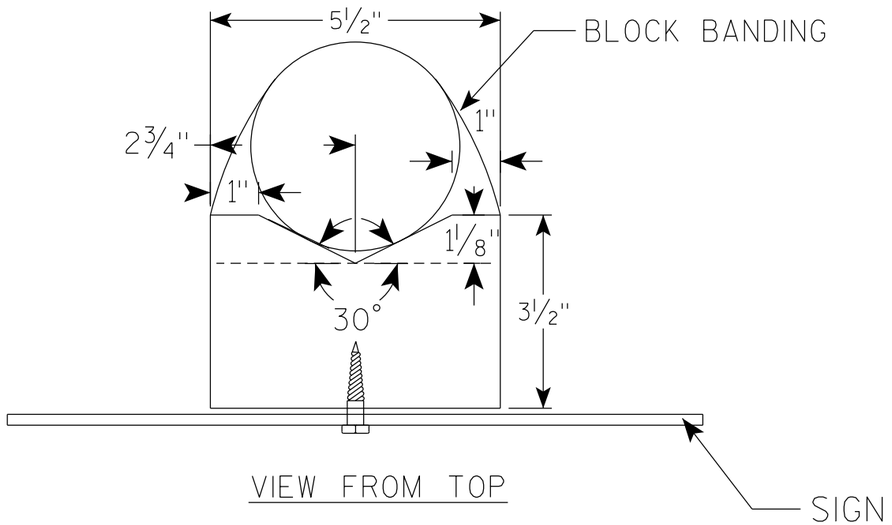
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 301	E

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7

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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)

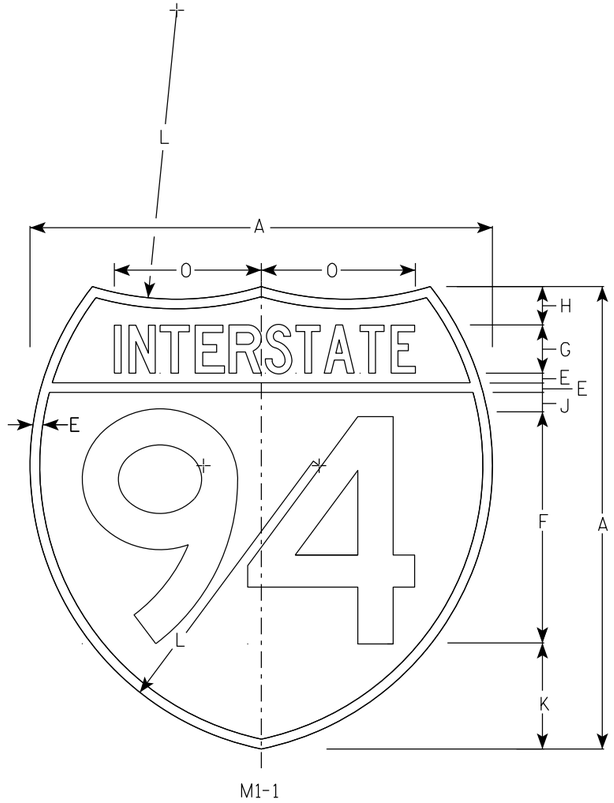
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

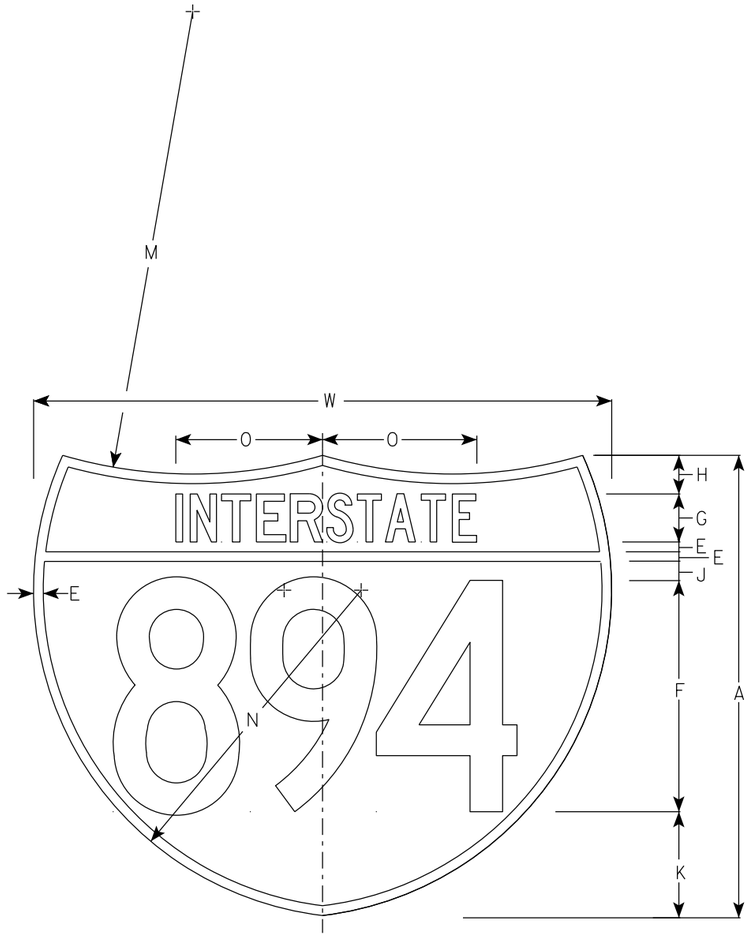
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 302 E



M1-1



M1-1A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Top Red - Bottom Blue
   Message - White
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

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.
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
2M	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91
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
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
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

INTERSTATE ROUTE MARKER M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 11/7/2022 PLATE NO. M1-1.9

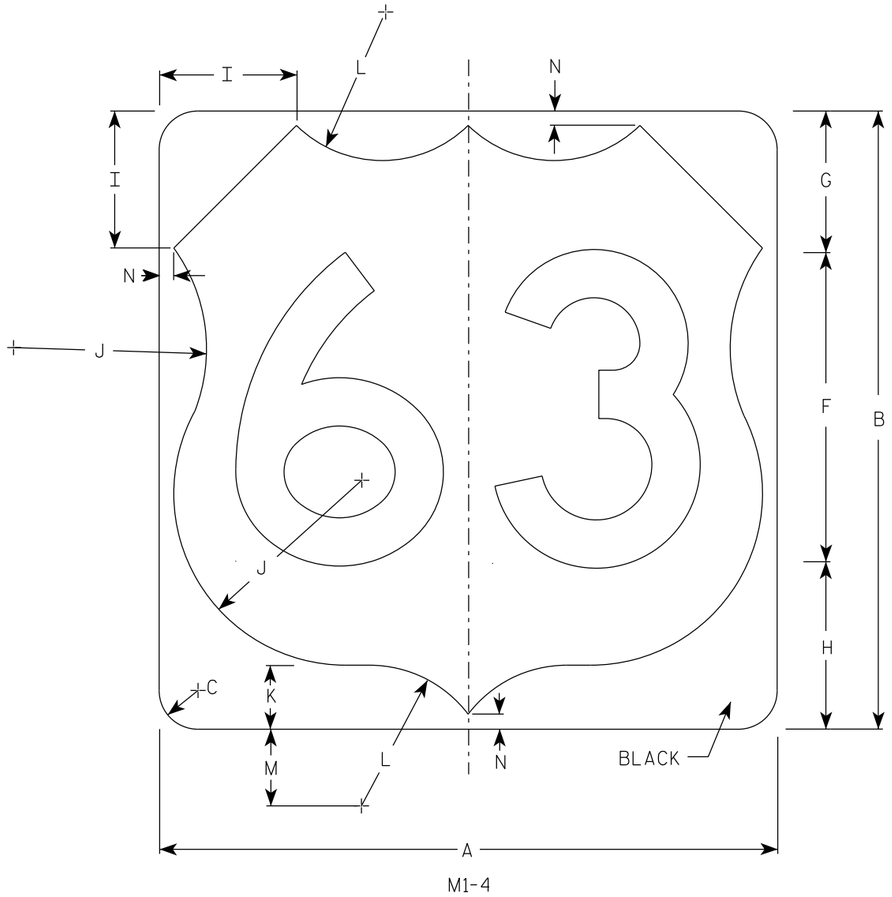
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 303 E

7

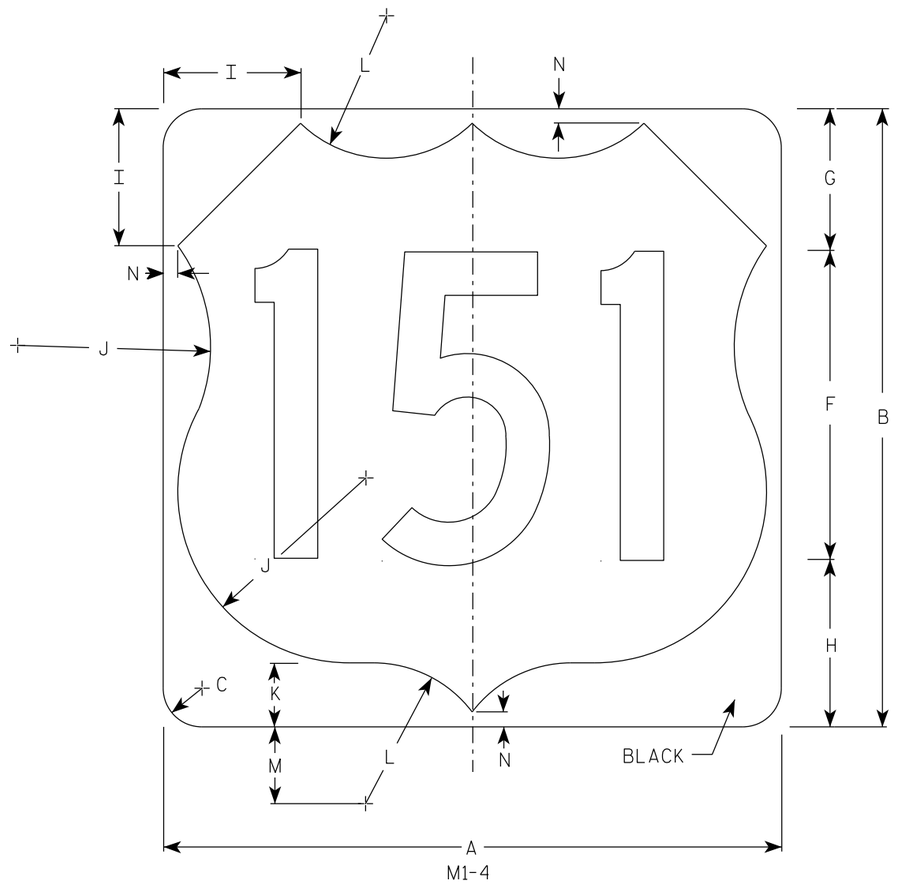
7

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



M1-4



M1-4

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	24	1 ½			12	5 ½	6 ½	5	7 ½	2 ½	5 ½	3	½													4.0
2M	24	24	1 ½			12	5 ½	6 ½	5	7 ½	2 ½	5 ½	3	½													4.0
3	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0
4	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0
5	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0

USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

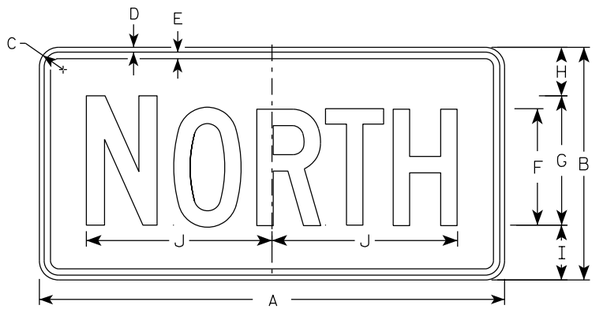
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/22 PLATE NO. M1-4.11

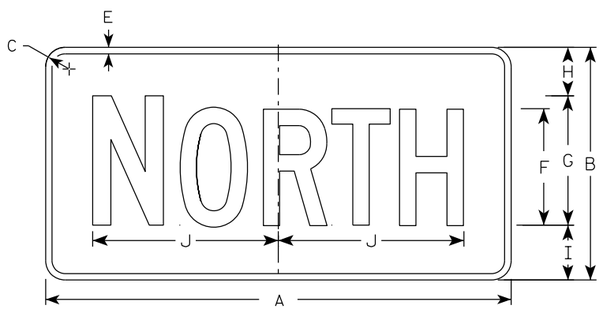
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 304 E

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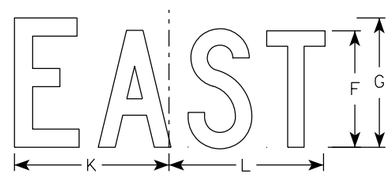
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M3-1
MM3-1
MP3-1



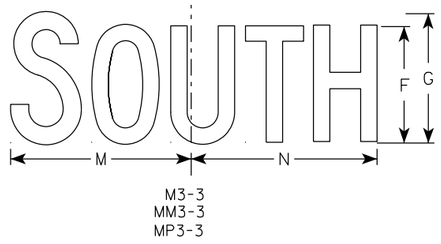
MB3-1
MK3-1
MN3-1



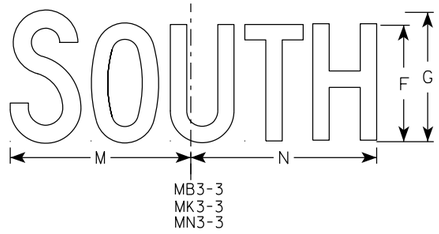
M3-2
MM3-2
MP3-2



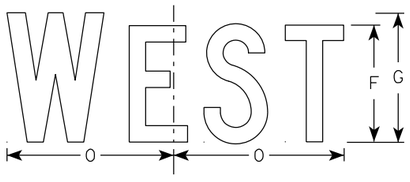
MB3-2
MK3-2
MN3-2



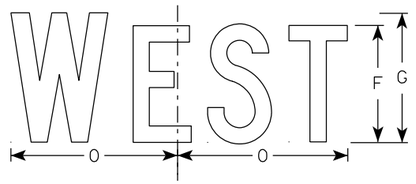
M3-3
MM3-3
MP3-3



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 Reflective
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																											
2S	24	12	1 1/2	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												2.00
2M	24	12	1 1/2	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												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

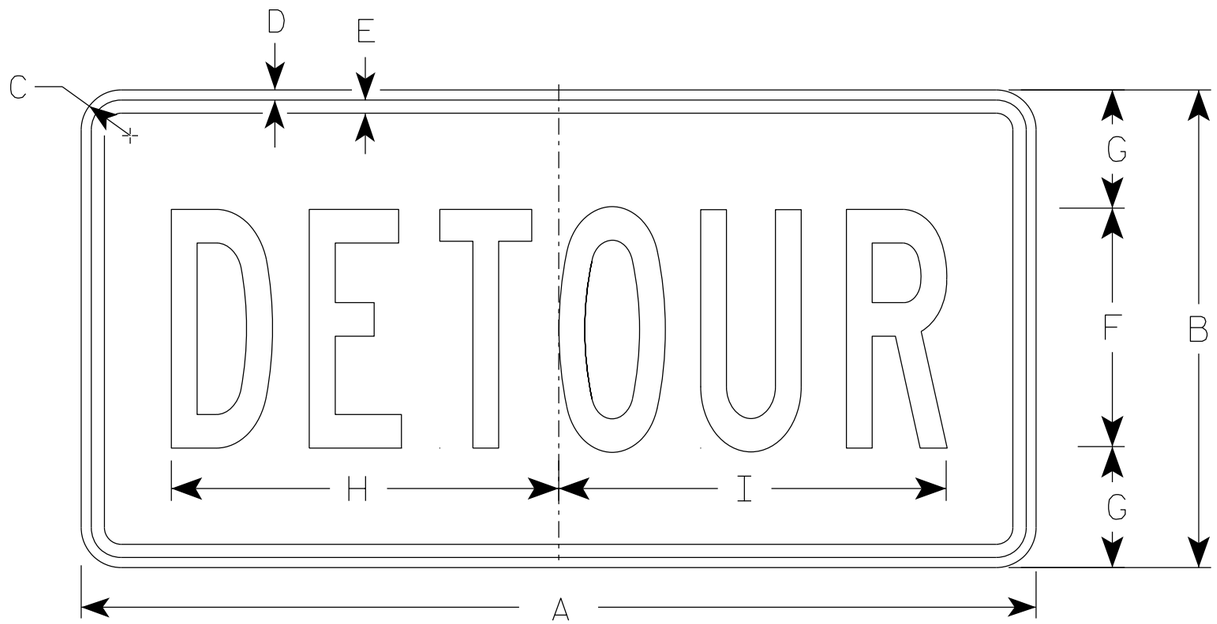
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 305 | E



M4-8

NOTES

1. Sign is Type II - Type F Reflective
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 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
2M	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5

STANDARD SIGN
M4-8

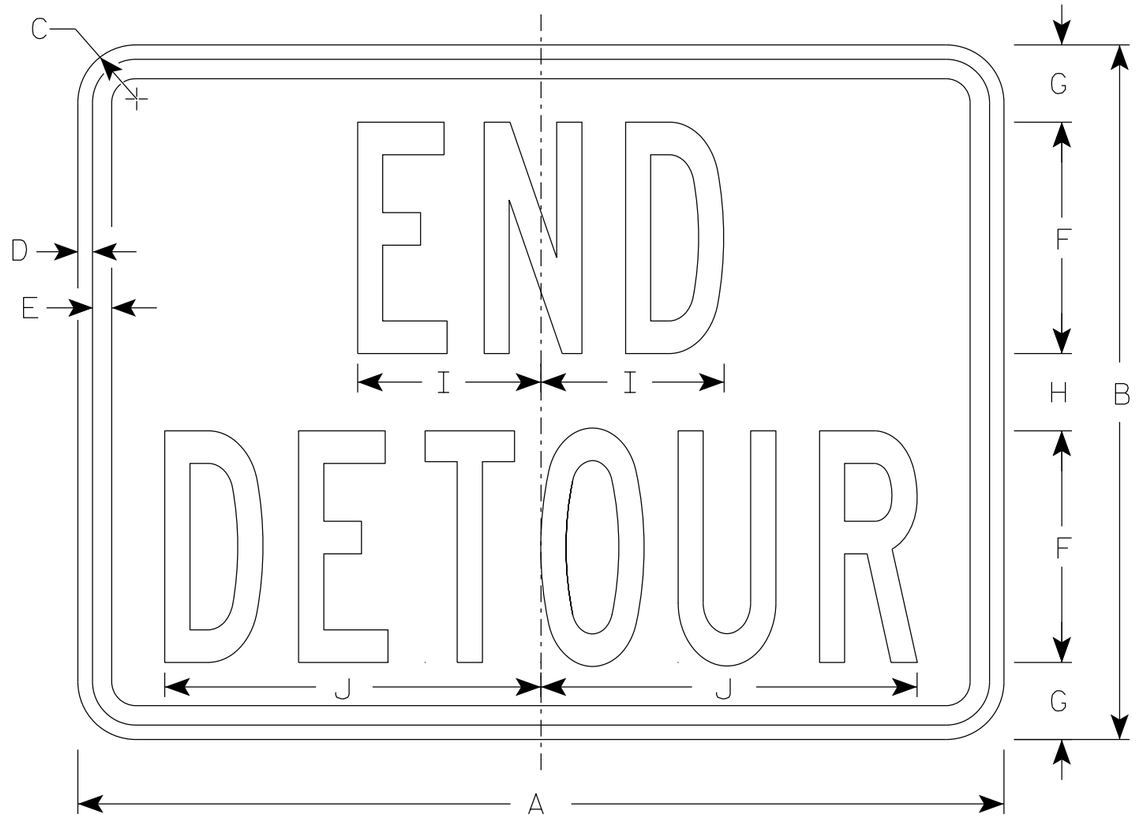
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M48.dgn PLOT DATE : 9-FEB 2023 7:38 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



M4-8A

NOTES

1. Sign is Type II - Type F Reflective
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 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
2M	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
3	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
4	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
5	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0

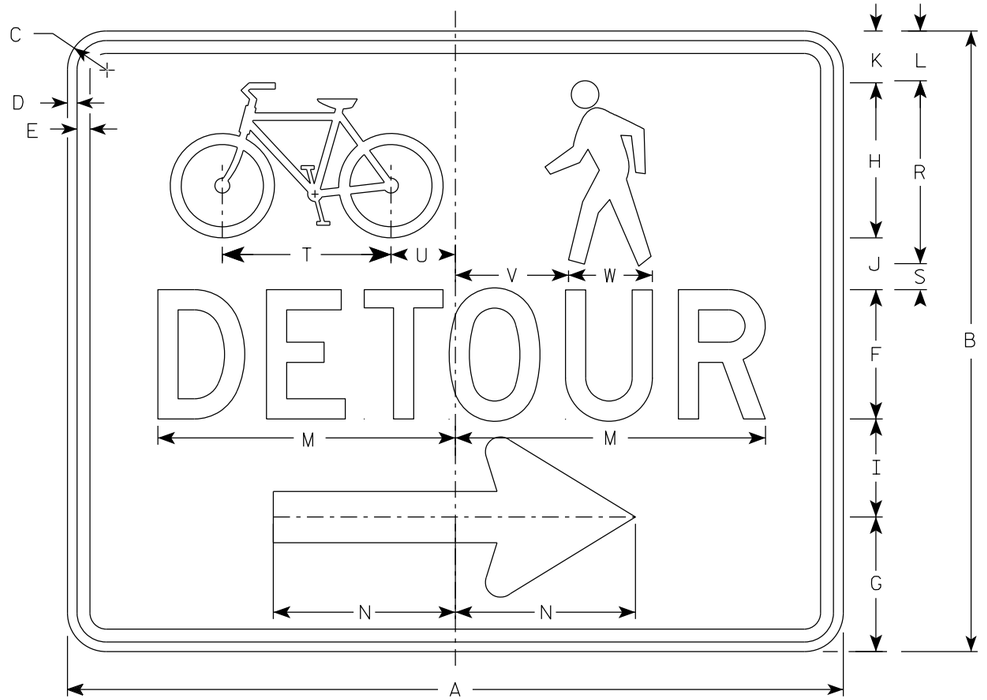
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

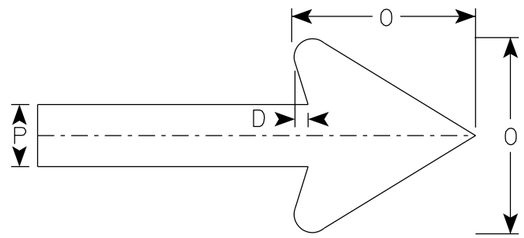
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 307 | E



M4-9AR

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. M4-9AL is the same as M4-9AR except the arrow is reversed.



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	30	24	1 1/2	3/8	1/2	5	5 1/4	6	3 3/4	2	2	1 7/8	11 3/4	7	6	2		7 1/8	1	6 1/2	2 1/2	4 3/8	3 1/4				5.00
2M	30	24	1 1/2	3/8	1/2	5	5 1/4	6	3 3/4	2	2	1 7/8	11 3/4	7	6	2		7 1/8	1	6 1/2	2 1/2	4 3/8	3 1/4				5.00
3																											
4																											
5																											

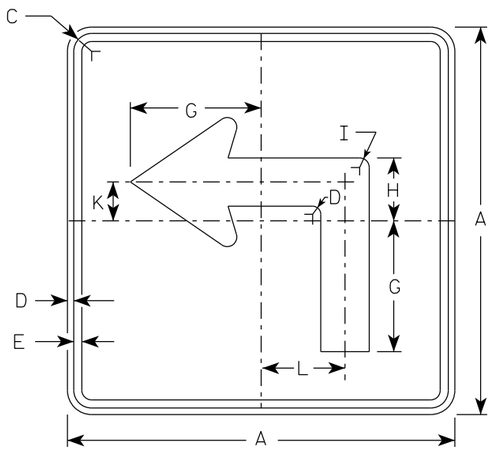
STANDARD SIGN
M4-9A L&R

WISCONSIN DEPT OF TRANSPORTATION

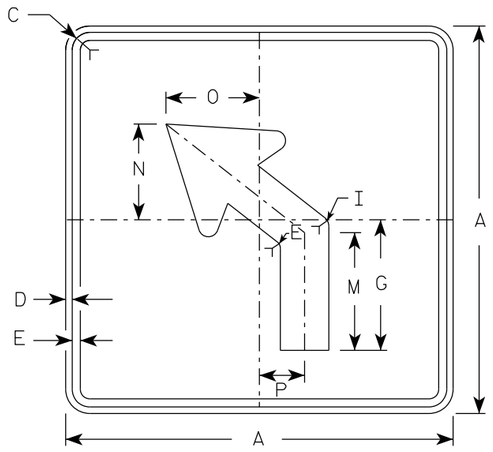
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9A.3

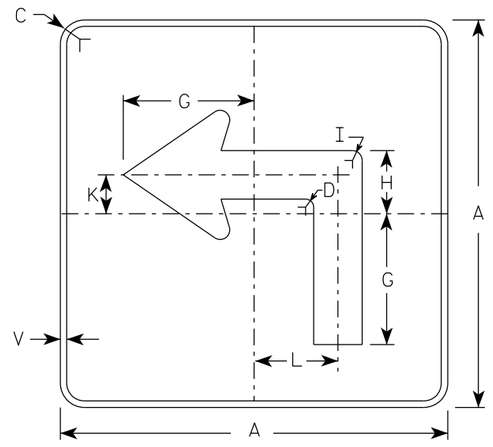
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 308 | E



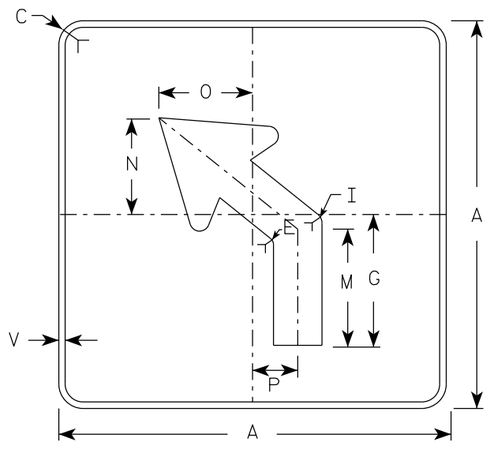
M5-1L
MM5-1L
MO5-1L
MP5-1L



M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L

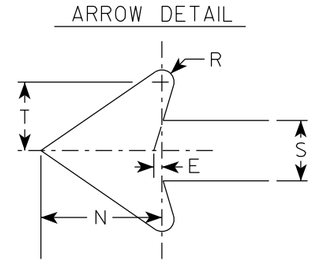


MB5-2L
MK5-2L
MN5-2L
MR5-2L

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
   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.

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	21		1 1/2	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		1/2					3.06
2M	21		1 1/2	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		1/2					3.06
3	30		1 7/8	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		1/2					6.25
4	30		1 7/8	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		1/2					6.25
5	30		1 7/8	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		1/2					6.25

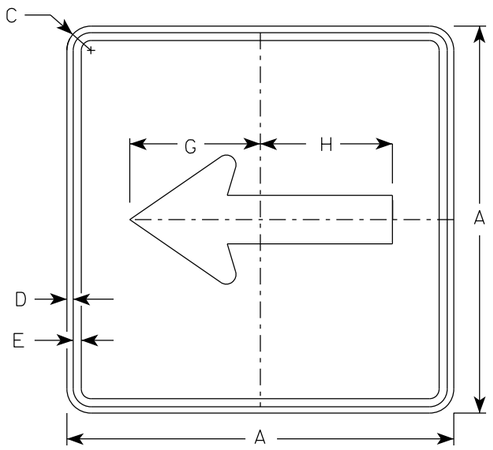
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

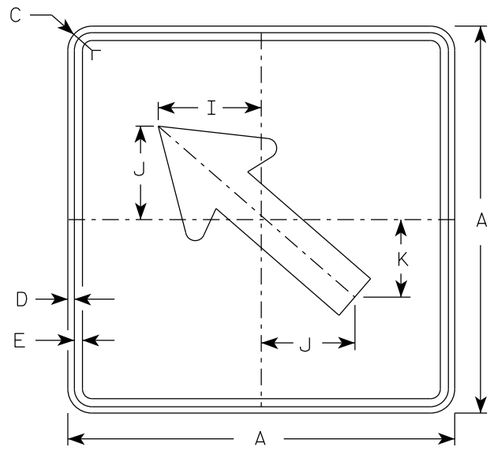
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

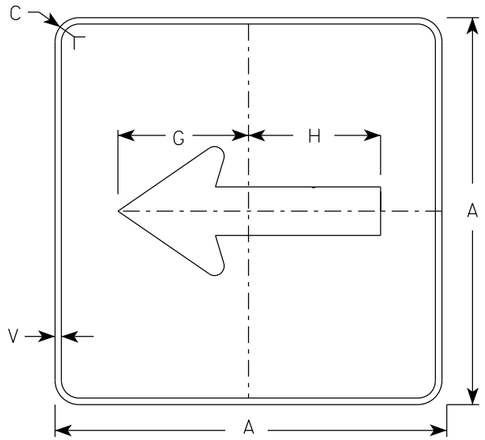
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 309 | E



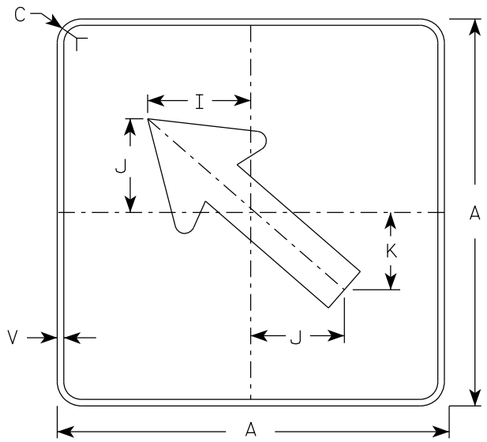
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

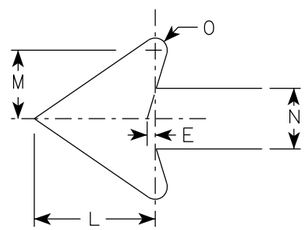


MB6-2
MK6-2
MN6-2
MR6-2

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. 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

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	21		1 1/2	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							1/2					3.06
2M	21		1 1/2	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							1/2					3.06
3	30		1 7/8	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							1/2					6.25
4	30		1 7/8	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							1/2					6.25
5	30		1 7/8	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							1/2					6.25

STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

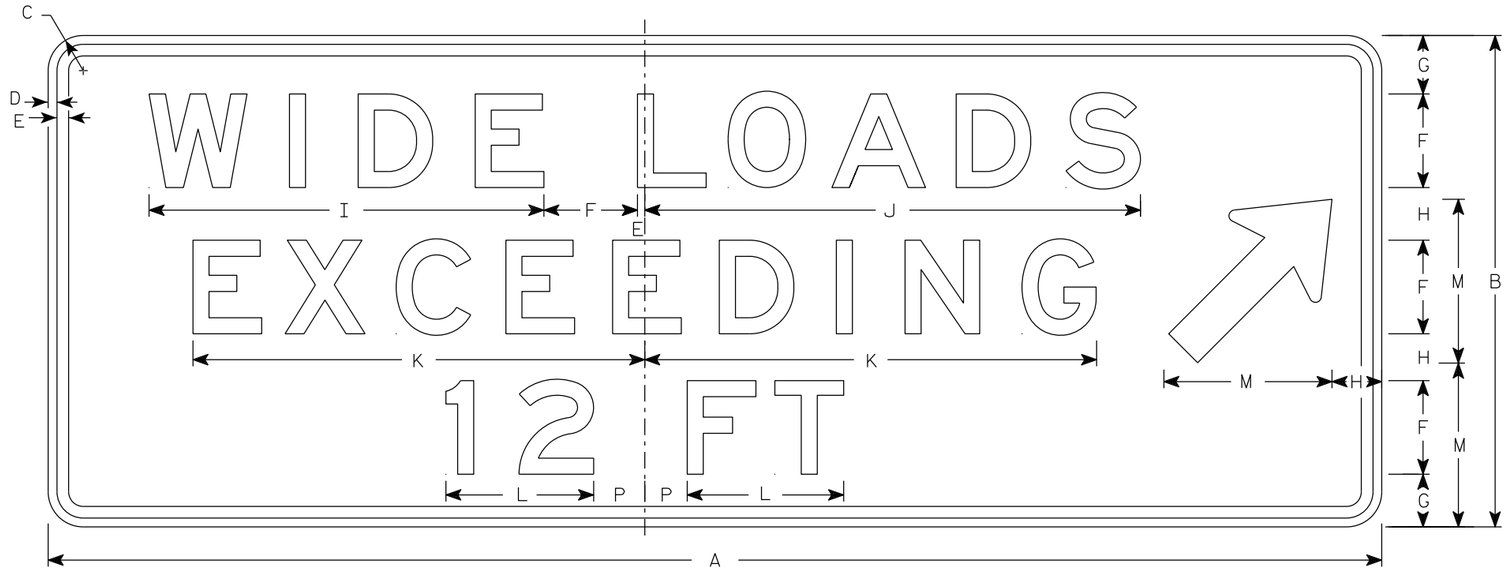
DATE 2/13/2023 PLATE NO. M6-1.16

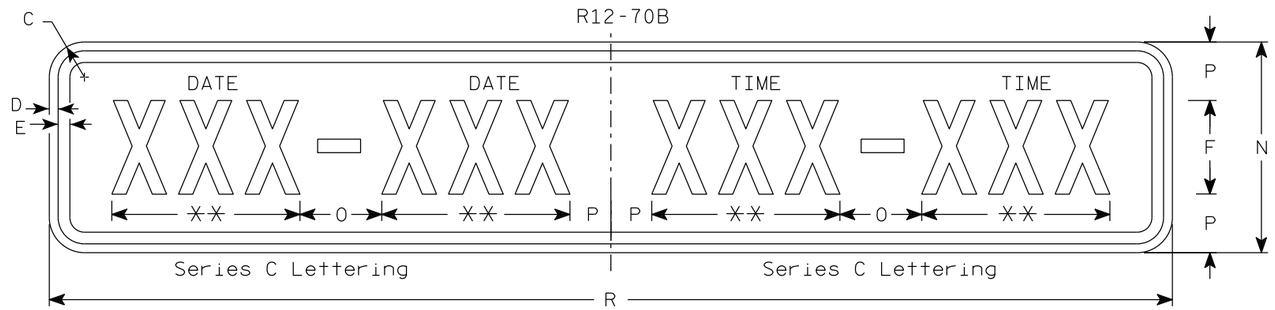
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 310 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E except as noted
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.

** Substitute appropriate message, optically center message





R12-70C

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	R12-70 Area sq. ft.	R12-70C Area sq. ft.
1																												
2S	90	36	3	1/2	5/8	6	4	5	20 7/8	28 3/8	24 5/8	8 1/8	12	12	6	3		66									22.5	5.5
2M	90	36	3	1/2	5/8	6	4	5	20 7/8	28 3/8	24 5/8	8 1/8	12	12	6	3		66									22.5	5.5
3	90	36	3	1/2	5/8	6	4	5	20 7/8	28 3/8	24 5/8	8 1/8	12	12	6	3		66									22.5	5.5
4	114	42	3	3/4	1	8	5	4	34	42	39	13	14	18	7	3 1/2		96									36.75	12.0
5	114	42	3	3/4	1	8	5	4	34	42	39	13	14	18	7	3 1/2		96									36.75	12.0

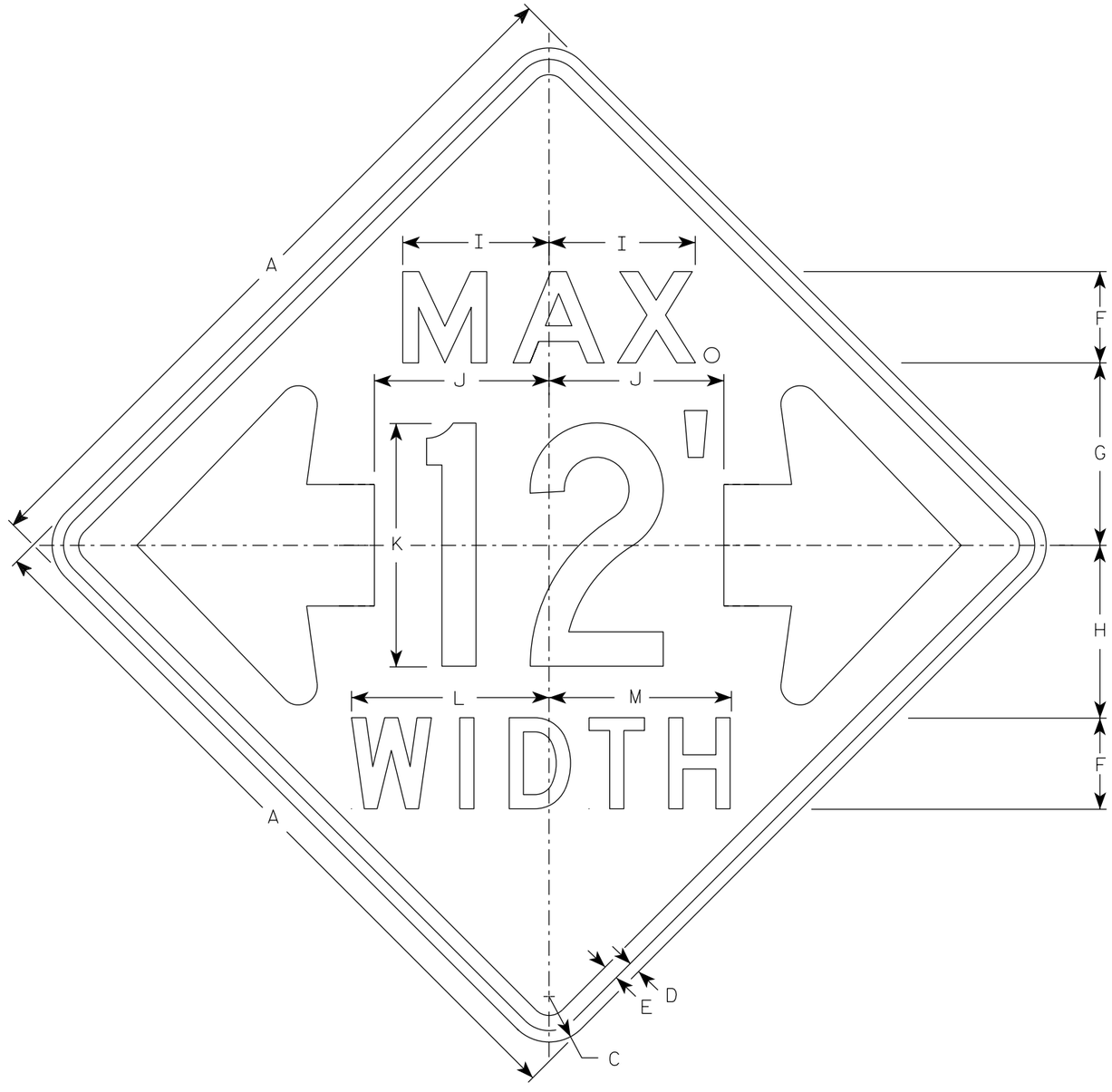
TYPICAL SIGN
R12-70B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/24 PLATE NO. R12-70B.4

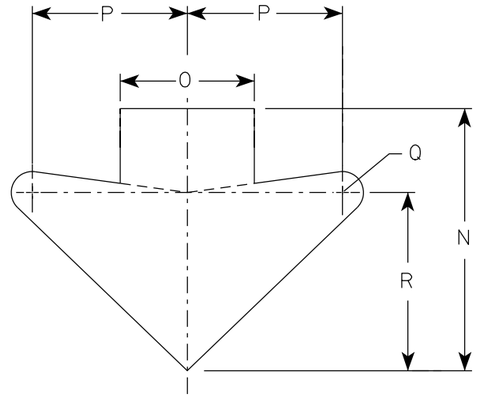
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 311 | E



W12-52

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. The top line is series E, the numerals are series C, and the bottom line is series D.
5. 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		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
2M	48		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
3																											
4																											
5																											

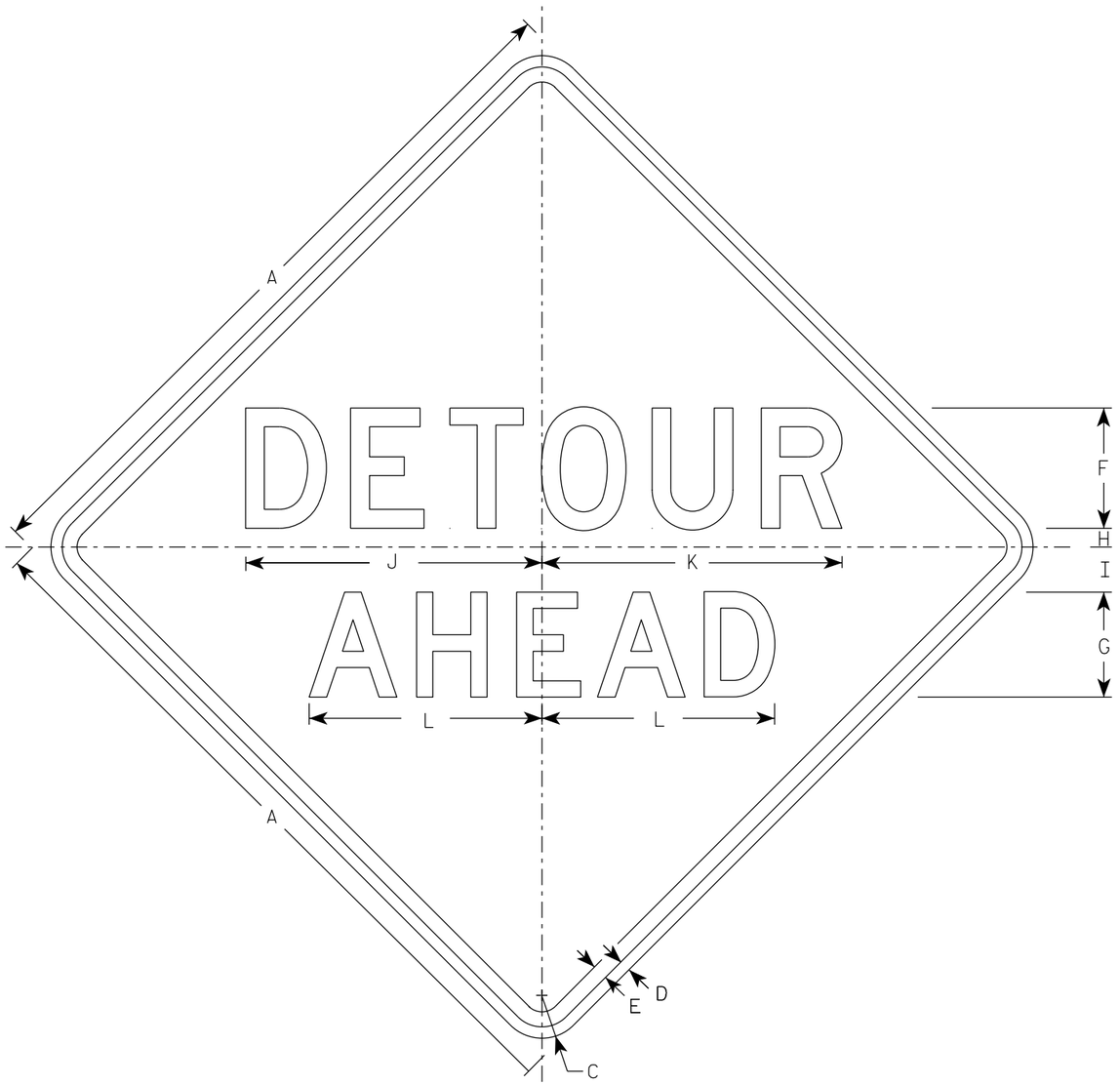
STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

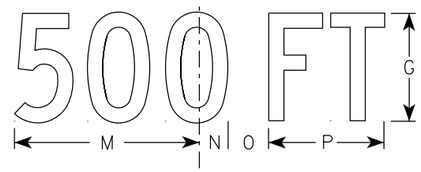
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/2024 PLATE NO. W12-52.8

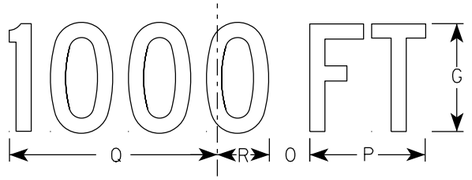
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 312 | E



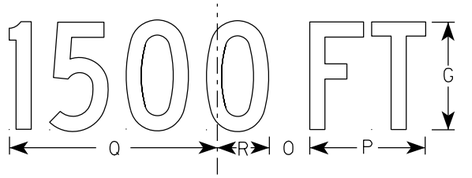
W20-2A



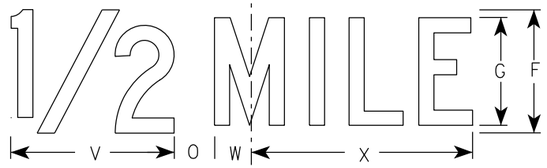
W20-2D



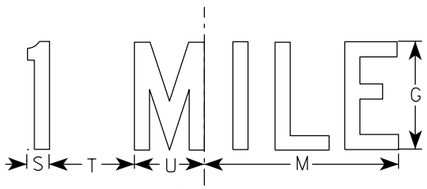
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective
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	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	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		3	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		3	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		3	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		3	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		3	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

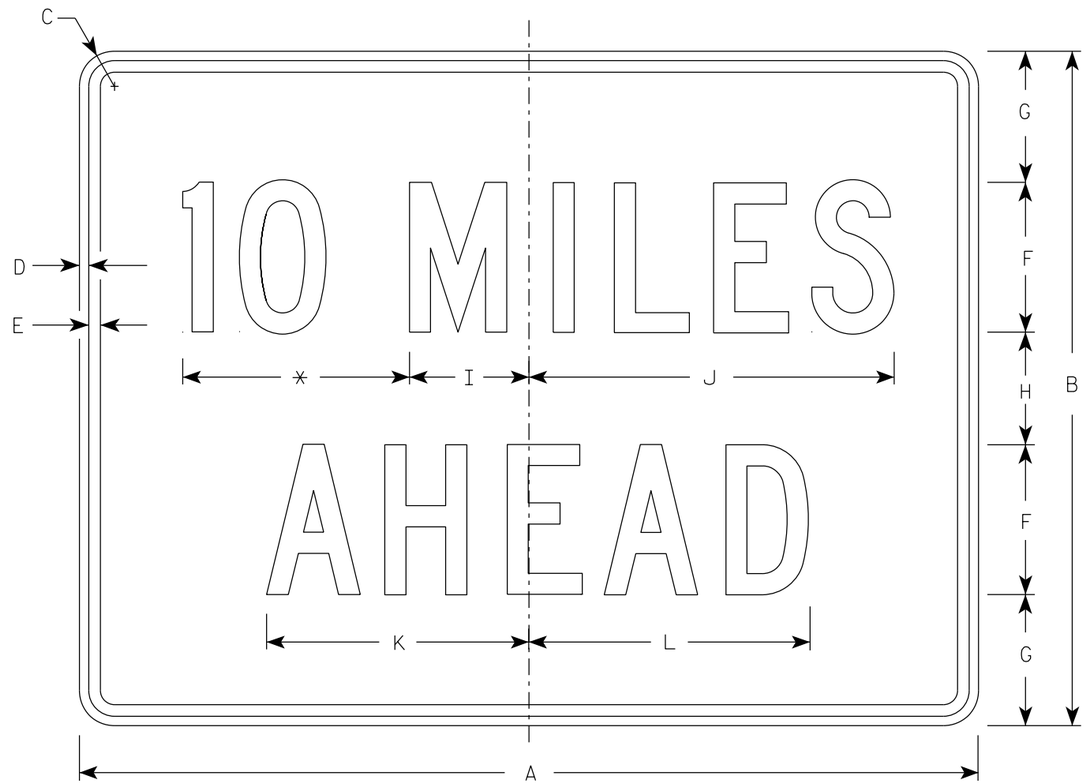
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

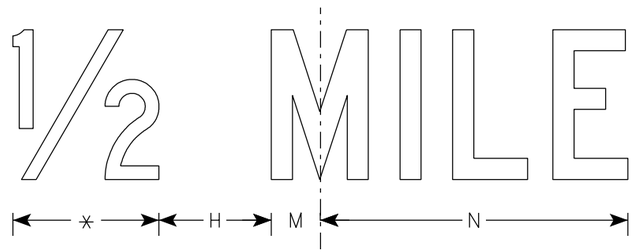
DATE 1/10/2024 PLATE NO. W20-2.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



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 1/2	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	2 1/4	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	2 1/4	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	2 1/4	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	2 1/4	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	2 1/4	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 2/1/2024 PLATE NO. W057-52.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 314 E

STATE PROJECT NUMBER

1100-56-70

TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEMS	UNIT	B-20-69	B-20-70	B-20-71	TOTALS
502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	243	134	134	511
509.0301	PREPARATION DECKS TYPE 1	SY	---	1	---	1
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	---	10	---	10
509.1500	CONCRETE SURFACE REPAIR	SF	10	---	---	10
509.2100.S	CONCRETE MASONRY DECK REPAIR	CY	---	1	---	1

LIST OF DRAWINGS:

1 BRIDGE REPAIR SUMMARY
2 B-20-69/70/71 REPAIRS

SUMMARY OF CATEGORY NUMBERS

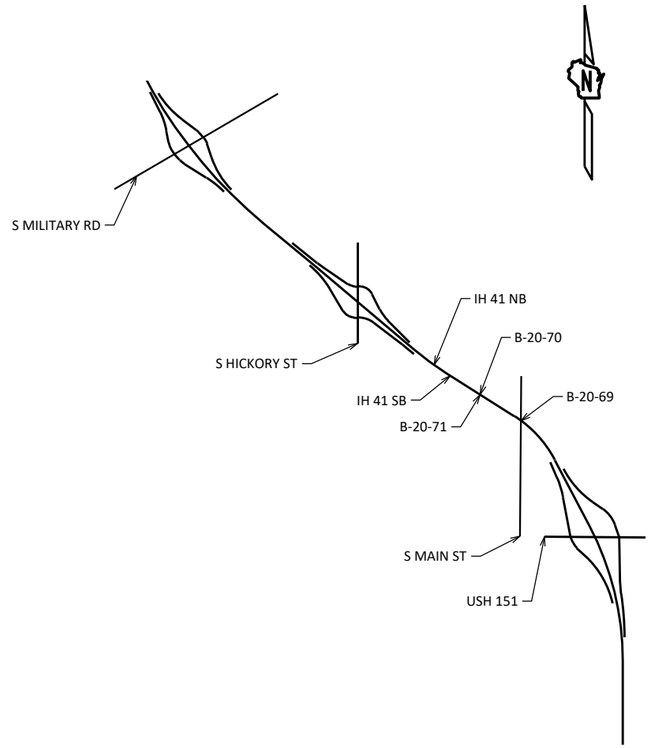
STRUCTURE ID	CATEGORY NUMBER
B-20-69	0040
B-20-70	0050
B-20-71	0060

SUMMARY OF LOCATIONS

STRUCTURE ID	COUNTY	MUNICIPALITY	LOCATION
B-20-69	FOND DU LAC	TOWN OF FOND DU LAC	S MAIN ST OVER IH 41
B-20-70	FOND DU LAC	TOWN OF FOND DU LAC	IH 41 NB OVER E BRANCH FOND DU LAC RIVER
B-20-71	FOND DU LAC	TOWN OF FOND DU LAC	IH 41 SB OVER E BRANCH FOND DU LAC RIVER

GENERAL NOTES

"CONCRETE SURFACE REAPIR" AND "PREPARATION DECKS TYPE 1" AREAS SHOWN IN THE REPAIR SUMMARY TABLES ARE APPROXIMATE. EXPECTED REPAIR LOCATIONS ARE AS NOTED ON THE REPAIR SUMMARY TABLES. EXACT AREAS OF REPAIR SHALL BE DETERMINED IN THE FIELD BY THE PROJECT ENGINEER.



LOCATION MAP

SCOPE OF WORK

- RESEAL PARAPETS WITH PIGMENTED SURFACE SEALER
- CONCRETE SURFACE REPAIR
- DECK REPAIR

STRUCTURE DESIGN CONTACTS:

BRIDGE OFFICE
AARON BONK (608) 261-0261
CONSULTANT
HEATHER ANDERS (414) 410-6899

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

HNTB
250 E WISCONSIN AVE #2000
MILWAUKEE, WI 53202
(414) 359-2300

STATE OF WISCONSIN DEPARTMENT OF TRANSPORATION

ACCEPTED JLR 08/11/26
CHIEF STRUCTURES DESIGN ENGINEER DATE

WISCONSIN
HEATHER D. ANDERS
E-33441
CEDARBURG, WI
7/15/2026
PROFESSIONAL ENGINEER

STRUCTURE B-20-VARIOUS

IH-41 FOND DU LAC TO OSHKOSH BRIDGE REPAIRS

COUNTY	TOWN
FOND DU LAC	FOND DU LAC

DESIGN SPEC.
N/A - REHABILITATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
FEG	HDA	FEG	HDA

BRIDGE REPAIR SUMMARY

SHEET 1 OF 2
315

SCALE = NOT TO SCALE

I.D.

DATE:

8

8

FILE NAME : I:\89429\11005600\MINORBRIDGEREHABS\080101_GP.DWG
LAYOUT NAME - HNTB General Plan

PLOT DATE : 7/14/2026 7:35 AM

STATE PROJECT NUMBER
1100-56-70

B-20-69 REPAIR SUMMARY

S MAIN ST OVER I-41

BID ITEM NO.	BID ITEM DESCRIPTION	UNIT	QUANTITY	COMMENTS
502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	243	APPLY TO ROADSIDE AND TOP FACES FOR FULL LENGTH OF BOTH PARAPETS INCLUDING PARAPETS ON WINGS. SURFACE PREPARATION IS INCLUDED.
509.1500	CONCRETE SURFACE REPAIR	SF	10	REPAIRS AT SOUTH ABUTMENT AND AS DETERMINED BY ENGINEER.

NOTE: JOINT SEALING AT ENDS OF DECK AND AT ALL APPROACH PAVEMENT JOINTS INCLUDED IN ROADWAY PLANS (NOT A BRIDGE ITEM).

B-20-70 REPAIR SUMMARY

I-41 NB OVER E BRANCH FDL RIVER

BID ITEM NO.	BID ITEM DESCRIPTION	UNIT	QUANTITY	COMMENTS
502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	134	APPLY TO ROADSIDE AND TOP FACES FOR FULL LENGTH OF BOTH PARAPETS INCLUDING PARAPETS ON WINGS. SURFACE PREPARATION IS INCLUDED.
509.0301	PREPARATION DECKS TYPE 1	SY	1	REPAIR DECK SPALL AT NORTH END AND AS DETERMINED BY ENGINEER. REPAIR AREAS SHALL BE FILLED WITH "CONCRETE MASONRY DECK REPAIR".
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	10	REPAIRS ON DECK SURFACE
509.2100.S	CONCRETE MASONRY DECK REPAIR	CY	1	REPAIRS ON DECK SURFACE

NOTE: JOINT SEALING AT ENDS OF DECK AND AT ALL APPROACH PAVEMENT JOINTS INCLUDED IN ROADWAY PLANS (NOT A BRIDGE ITEM).

B-20-71 REPAIR SUMMARY

I-41 SB OVER E BRANCH FDL RIVER

BID ITEM NO.	BID ITEM DESCRIPTION	UNIT	QUANTITY	COMMENTS
502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	134	APPLY TO ROADSIDE AND TOP FACES FOR FULL LENGTH OF PARAPET INCLUDING PARAPETS ON WINGS. SURFACE PREPARATION IS INCLUDED.

NOTE: JOINT SEALING AT ENDS OF DECK AND AT ALL APPROACH PAVEMENT JOINTS INCLUDED IN ROADWAY PLANS (NOT A BRIDGE ITEM).

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-20-VARIOUS

DRAWN BY FEG | PLANS CK'D HDA

B-20-69/70/71 REPAIRS

SHEET 2
316

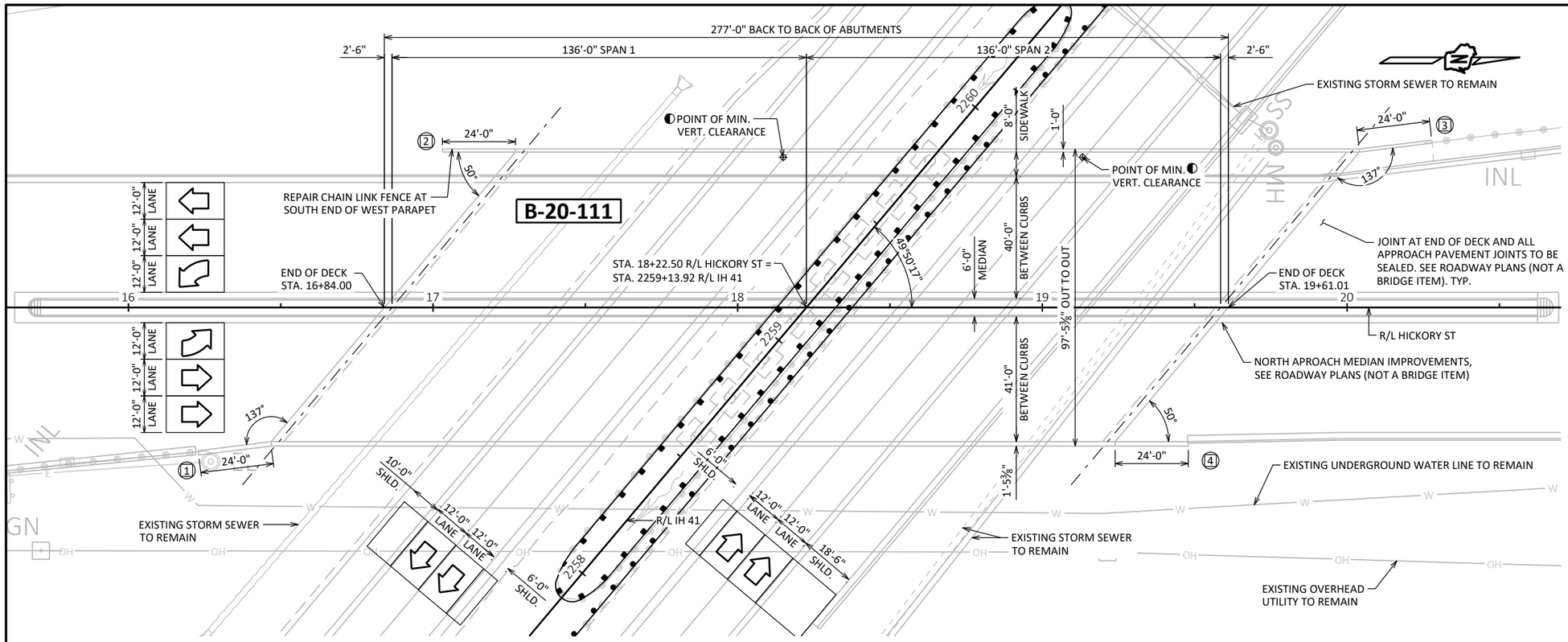
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LAYOUT NAME - QTY

PLOT DATE : 7/14/2026 7:38 AM

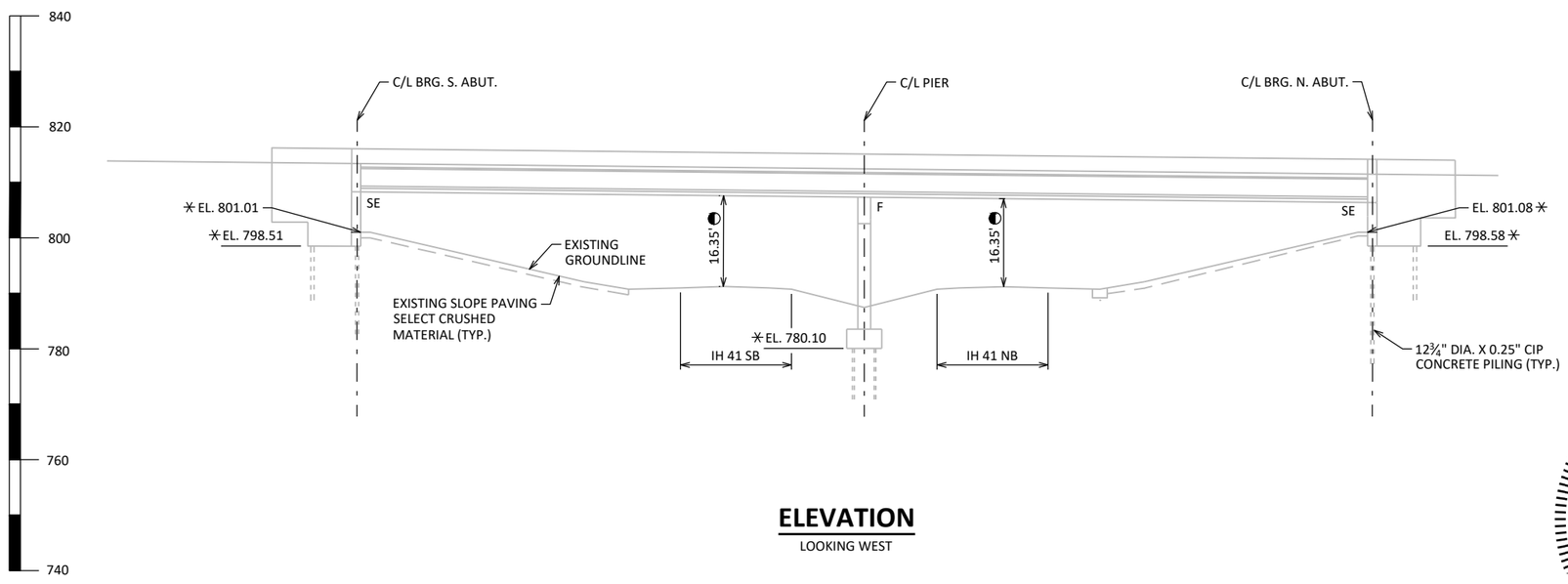
STATE PROJECT NUMBER

1100-56-70



GENERAL PLAN

2 SPAN-54W" PRESTRESSED GIRDERS



ELEVATION

LOOKING WEST

DESIGN DATA

LIVE LOAD:
TAKEN FROM HSI, 04/21/2025
INVENTORY RATING: HS31
OPERATING RATING: HS49
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

MATERIAL PROPERTIES
CONCRETE MASONRY
SUPERSTRUCTURE .....f'c = 4,000 psi
ALL OTHER .....f'c = 3,500 psi
BAR STEEL REINFORCEMENT.....fy = 60,000 psi

TRAFFIC DATA

HICKORY STREET
A.D.T. = 13,400 (2025)
R.D.S. = 40 MPH

IH 41
A.A.D.T. = 46,230 (2027)
A.A.D.T. = 54,020 (2047)
R.D.S. = 70 MPH

LEGEND

- DIRECTION OF TRAFFIC
- (X) INDICATES WING NUMBER
- LOCATION PER EXISTING PLANS. MINIMUM VERTICAL CLEARANCE PER HSI SYSTEM. DIMENSIONS MEASURED 6/13/2017.
- ✳ ELEVATIONS TAKEN FROM EXISTING 2009 PLANS

SCOPE OF WORK

- REPLACE PORTION OF DAMAGED CHAIN LINK FENCE
- RESEAL PARAPETS WITH PIGMENTED SURFACE SEALER

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. TYPICAL SECTION & QUANTITIES
3. CHAIN LINK FENCE DETAILS

STRUCTURES DESIGN CONTACTS
BRIDGE OFFICE:
AARON BONK (608) 261-0261
CONSULTANT:
HEATHER ANDERS (414) 410-6899

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
HNTB
250 E WISCONSIN AVE #2000
MILWAUKEE, WI 53202
(414) 359-2300

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/11/26
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-20-111

S. HICKORY ST. OVER IH 41

COUNTY	TOWN/CITY/VILLAGE
FOND DU LAC	FOND DU LAC

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGN CK'D	DRAWN BY	PLANS CK'D
EJJ	HDA	EJJ	HDA

WISCONSIN PROFESSIONAL ENGINEER
HEATHER D. ANDERS, P.E.
E-33441-006
CEDARBURG, WI
5/29/2026

GENERAL PLAN & ELEVATION

SHEET 1 OF 3
317

I.D. DATE:

FILE NAME : I:\89429\11005600\B-20-111\CDS\B-20-111_GP.DWG
LAYOUT NAME - SHT1C
PLOT DATE : 2/13/2026 11:59 AM

STATE PROJECT NUMBER
1100-56-70

GENERAL NOTES

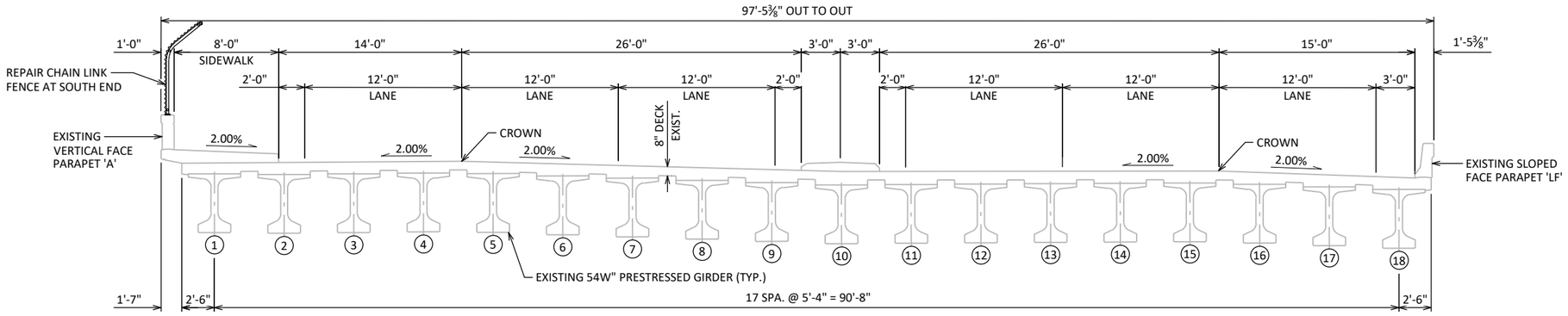
DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE EXISTING STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATIONS AND ELEVATIONS ARE IN FEET.

APPLY "PIGMENTED SURFACE SEALER RESEAL" TO THE TOP AND INSIDE FACES OF EXISTING PARAPETS ON BRIDGE DECK AND WINGWALLS.

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.



TYPICAL SECTION

LOOKING NORTH

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEM	UNIT	TOTAL
502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	261
SPV.0060	REPAIR CHAIN LINK FENCE B-20-111	EACH	1

ALL ITEMS ARE CATEGORY 0070

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-20-111

DRAWN BY EJJ | PLANS CK'D HDA

TYPICAL SECTION & QUANTITIES

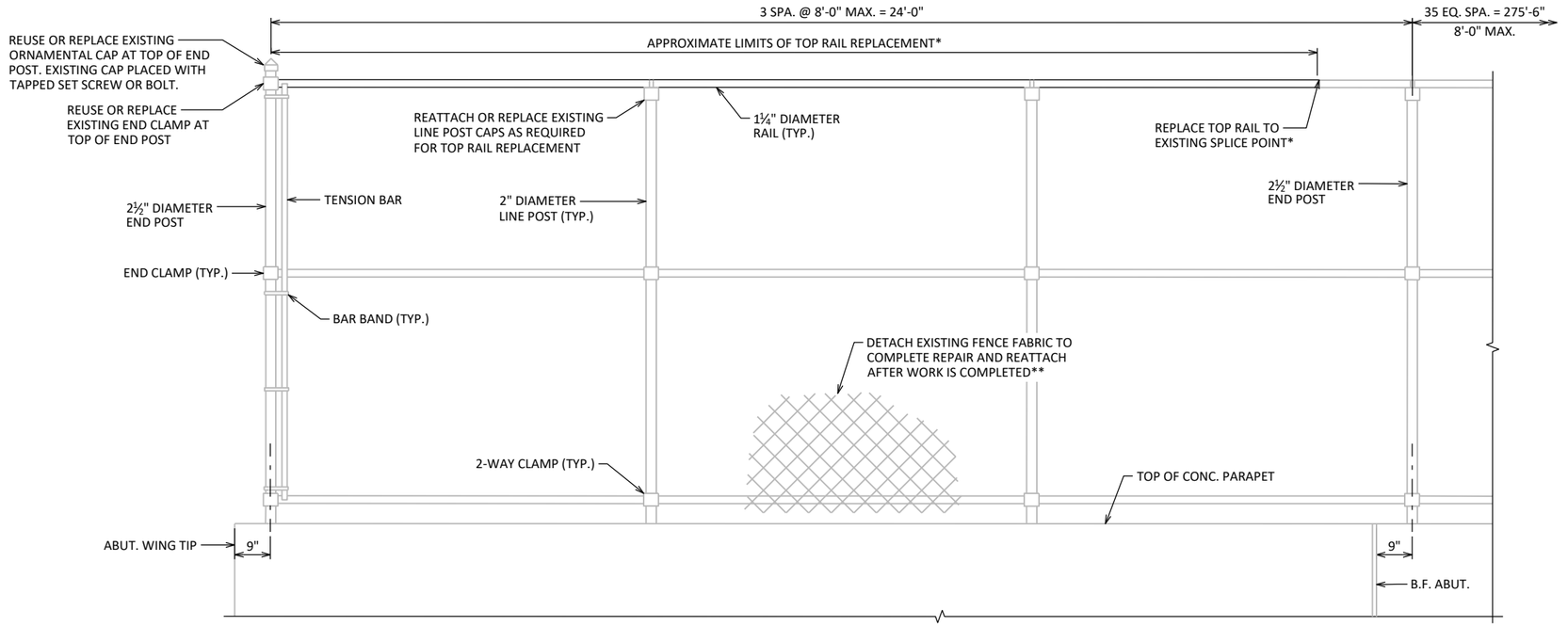
SHEET 2
318

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LAYOUT NAME - SHT2C

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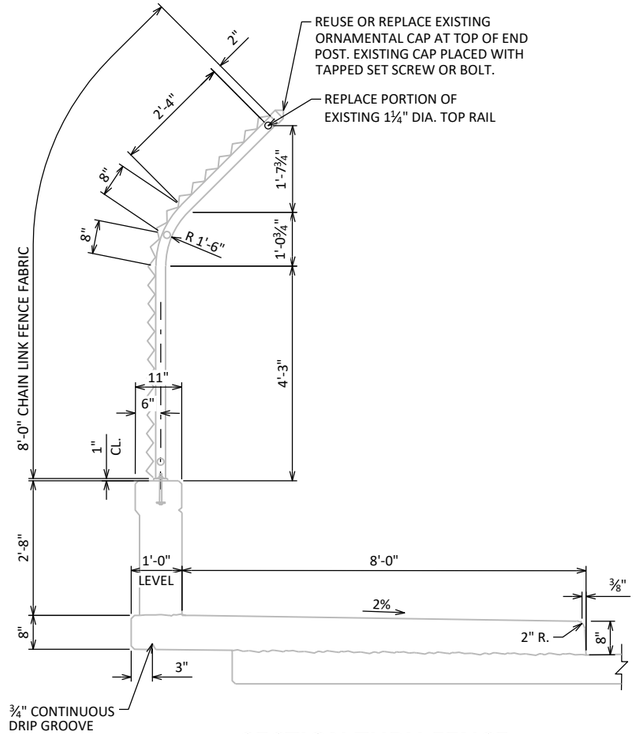
STATE PROJECT NUMBER

1100-56-70



FENCE PART ELEVATION

INSIDE ELEVATION



SECTION THRU FENCE

NOTES

FENCE DETAILS BASED ON EXISTING PLANS.

INTENT OF REPAIR IS TO REMOVE AND REPLACE DAMAGED PORTION OF EXISTING TOP RAIL OF CHAIN LINK FENCE.

THE BID ITEM SHALL BE "REPAIR CHAIN LINK FENCE B-20-111" AND INCLUDES ALL COMPONENTS NECESSARY TO COMPLETE THE WORK.

EXISTING POSTS AND FENCE FABRIC TO BE REUSED AND ATTACHED TO THE REPLACED TOP RAIL. IF EXISTING FENCE COMPONENTS TO REMAIN ARE DAMAGED DURING CONSTRUCTION, THEY SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST.

REPLACE HARDWARE AS NEEDED TO PERFORM FENCE REPAIRS.

ALL FENCING COMPONENTS SHALL BE GALVANIZED STEEL.

ALL RAILS, POSTS, AND SLEEVES ARE STANDARD WEIGHT PIPE, SCHEDULE 40.

PLACE ALL NUTS ON OUTSIDE OF FENCE.

* PER EXISTING PLANS, TOP RAIL IS CONTINUOUS OVER INTERIOR POSTS WITH A MINIMUM LENGTH OF 20'-0" BETWEEN SPLICE POINTS. SPLICE POINTS ON TOP RAIL ARE PLACED NEAR ¼ POINTS OF POST SPACING.

** ATTACH FABRIC TO RAILS AND POSTS WITHOUT TENSION BARS WITH TIE WIRES (ROUND 9-GAGE) SPACED AT 9".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-20-111

DRAWN BY VSB | PLANS CK'D HDA

CHAIN LINK FENCE DETAILS

SHEET 3

8

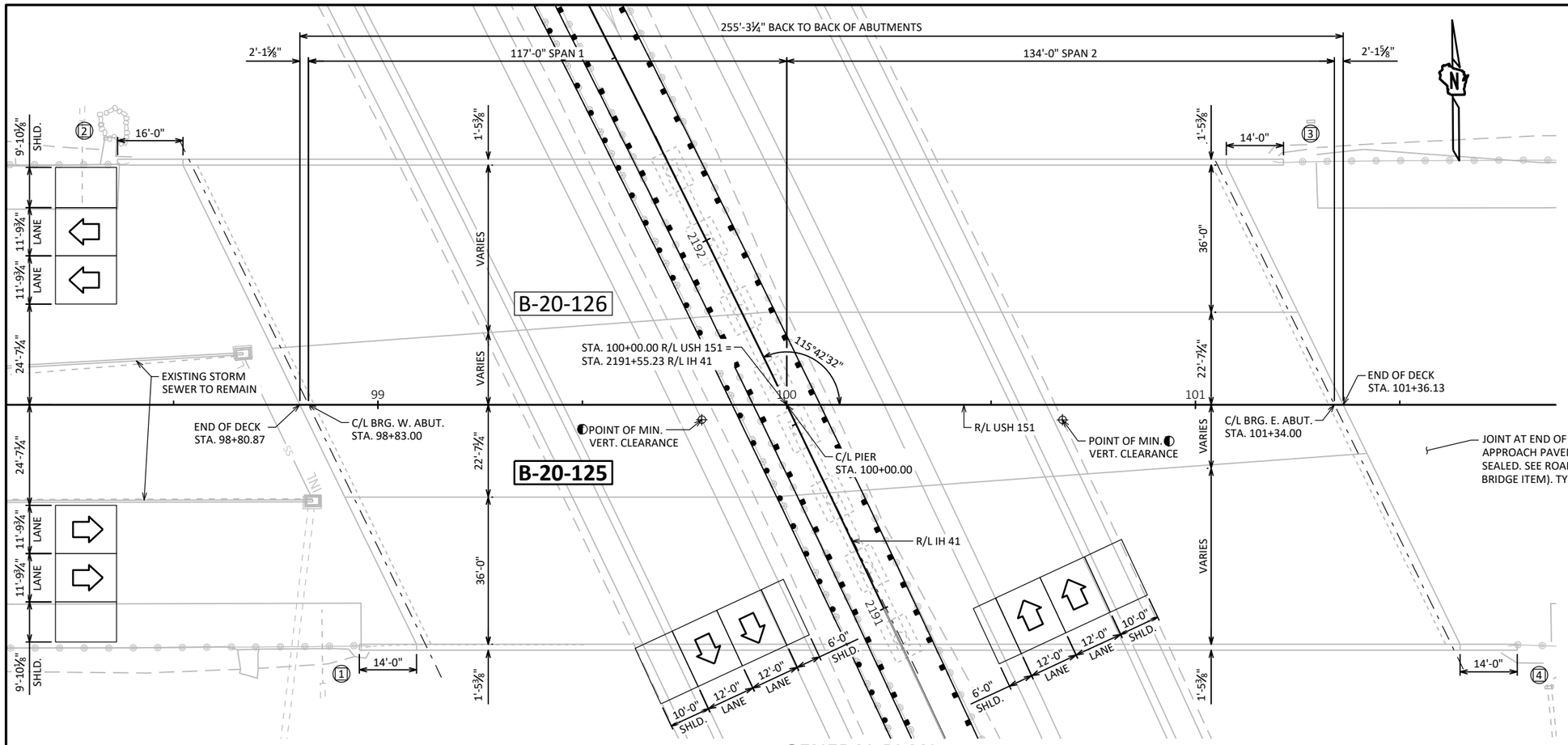
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LAYOUT NAME - Fence

PLOT DATE : 2/13/2026 11:58 AM

STATE PROJECT NUMBER

1100-56-70



JOINT AT END OF DECK AND ALL APPROACH PAVEMENT JOINTS TO BE SEALED. SEE ROADWAY PLANS (NOT A BRIDGE ITEM). TYP.

GENERAL PLAN

2 SPAN-54W" PRESTRESSED GIRDERS

DESIGN DATA

LIVE LOAD:
TAKEN FROM HSI, 04/21/2025
INVENTORY RATING: HS26
OPERATING RATING: HS44
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

MATERIAL PROPERTIES
CONCRETE MASONRY
SUPERSTRUCTURE .....f'c = 4,000 psi
ALL OTHER .....f'c = 3,500 psi
BAR STEEL REINFORCEMENT.....fy = 60,000 psi

TRAFFIC DATA

USH 151 NB
A.D.T. = 6,050 (2025)
R.D.S. = 60 MPH

IH 41
A.A.D.T. = 46,230 (2027)
A.A.D.T. = 54,020 (2047)
R.D.S. = 70 MPH

LEGEND

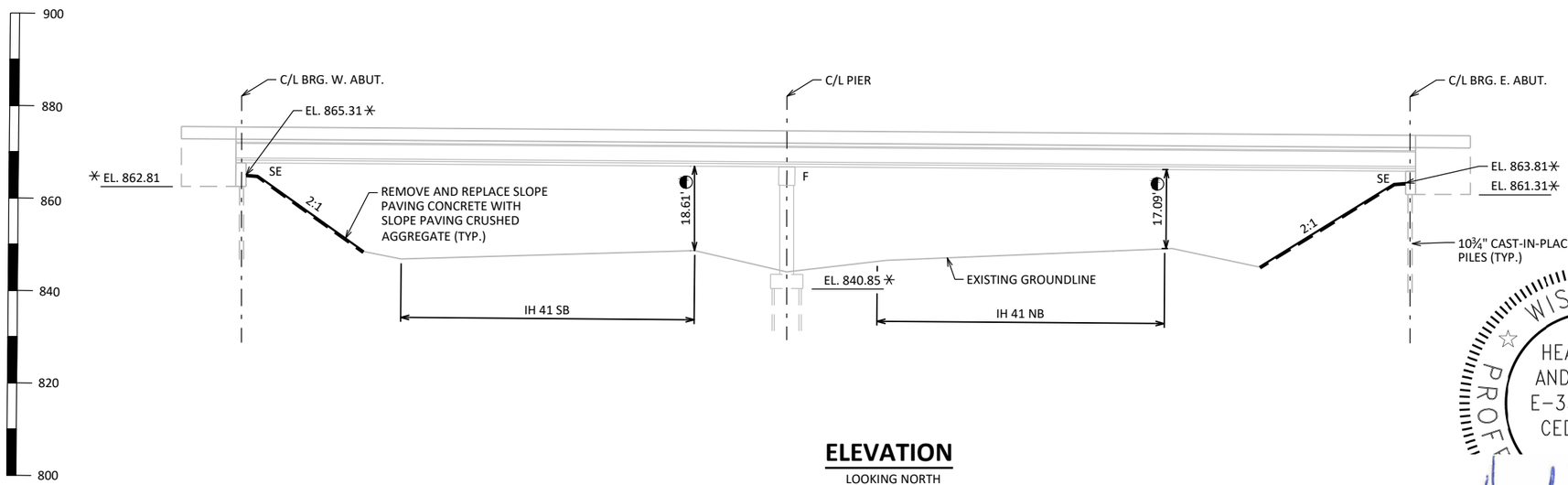
- DIRECTION OF TRAFFIC
- (X) INDICATES WING NUMBER
- ◐ LOCATION PER EXISTING PLANS. MINIMUM VERTICAL CLEARANCE PER HSI SYSTEM. DIMENSIONS MEASURED 6/13/2017.
- ✳ ELEVATIONS TAKEN FROM EXISTING 2005 PLANS

SCOPE OF WORK

- REPLACE EXISTING SLOPE PAVING CONCRETE WITH SLOPE PAVING CRUSHED AGGREGATE
- RESEAL PARAPETS WITH PIGMENTED SURFACE SEALER

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. TYPICAL SECTION & QUANTITIES
3. SLOPE PAVING CRUSHED AGGREGATE



ELEVATION

LOOKING NORTH

STRUCTURES DESIGN CONTACTS
BRIDGE OFFICE:
AARON BONK (608) 261-0261
CONSULTANT:
HEATHER ANDERS (414) 410-6899

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
HNTB
250 E WISCONSIN AVE #2000
MILWAUKEE, WI 53202
(414) 359-2300

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/11/26
CHIEF STRUCTURES DESIGN ENGINEER DATE

WISCONSIN PROFESSIONAL ENGINEER
HEATHER D. ANDERS, P.E.
E-33441-006
CEDARBURG, WI
Heather D. Anders
5/29/2026

STRUCTURE B-20-125

USH 151 NB OVER IH 41

COUNTY	TOWN/~~CITY/VILLAGE~~
FOND DU LAC	FOND DU LAC

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	EJJ	DESIGN CK'D	HDA	DRAWN BY	EJJ	PLANS CK'D	HDA

GENERAL PLAN & ELEVATION

SHEET 1 OF 3
320

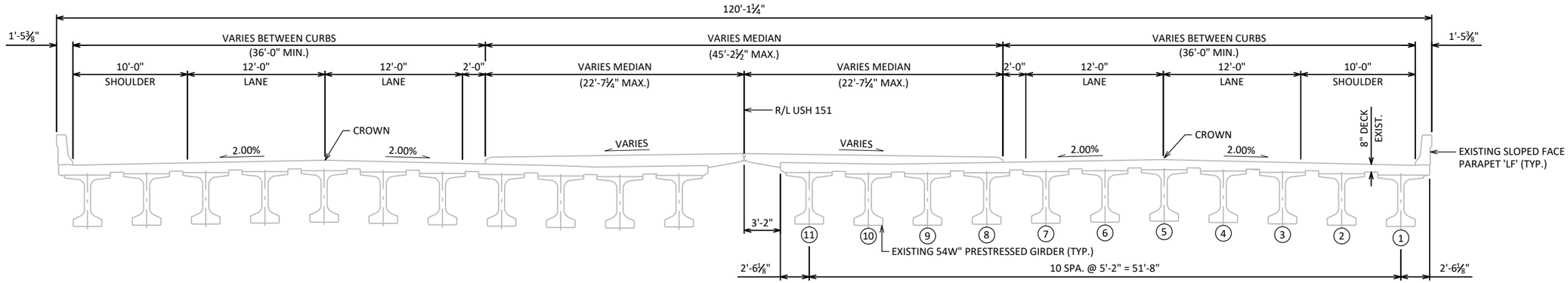
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LAYOUT NAME - SHT1C

PLOT DATE : 5/19/2026 10:17 AM

I.D. DATE:

STATE PROJECT NUMBER
1100-56-70



SOUTHBOUND USH 151 B-20-126 **NORTHBOUND USH 151 B-20-125**

TYPICAL SECTION

LOOKING EAST

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEM	UNIT	TOTAL
204.0175	REMOVING CONCRETE SLOPE PAVING	SY	462
502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	114
604.0500	SLOPE PAVING CRUSHED AGGREGATE	SY	462

ALL ITEMS ARE CATEGORY 0030

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE EXISTING STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATIONS AND ELEVATIONS ARE IN FEET.

APPLY "PIGMENTED SURFACE SEALER RESEAL" TO THE TOP AND INSIDE FACES OF EXISTING PARAPETS.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-20-125

DRAWN BY EJJ | PLANS CK'D HDA

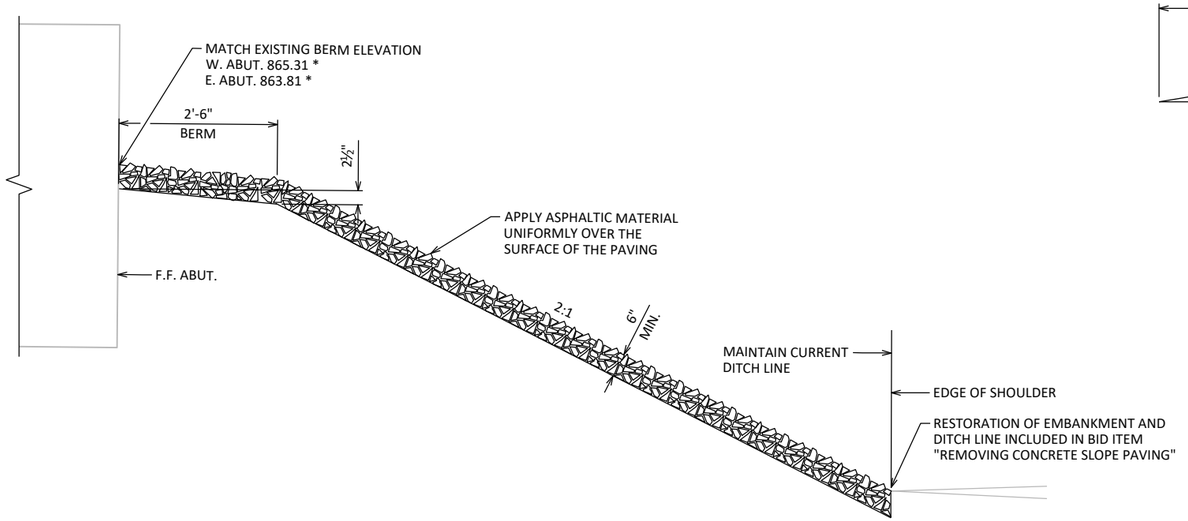
TYPICAL SECTION & QUANTITIES

SHEET 2
321

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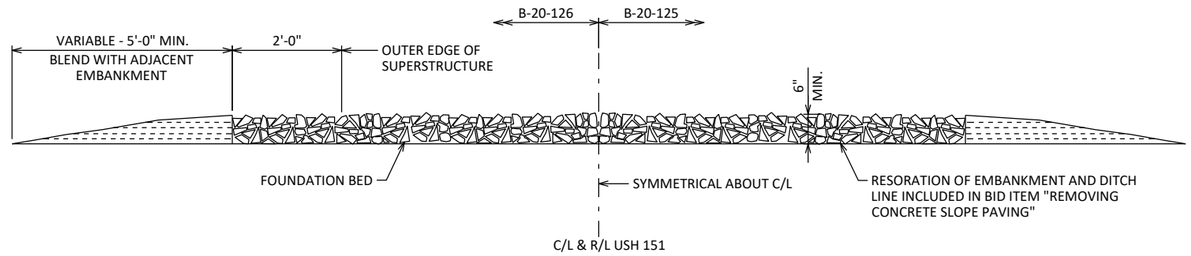
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STATE PROJECT NUMBER
1100-56-70

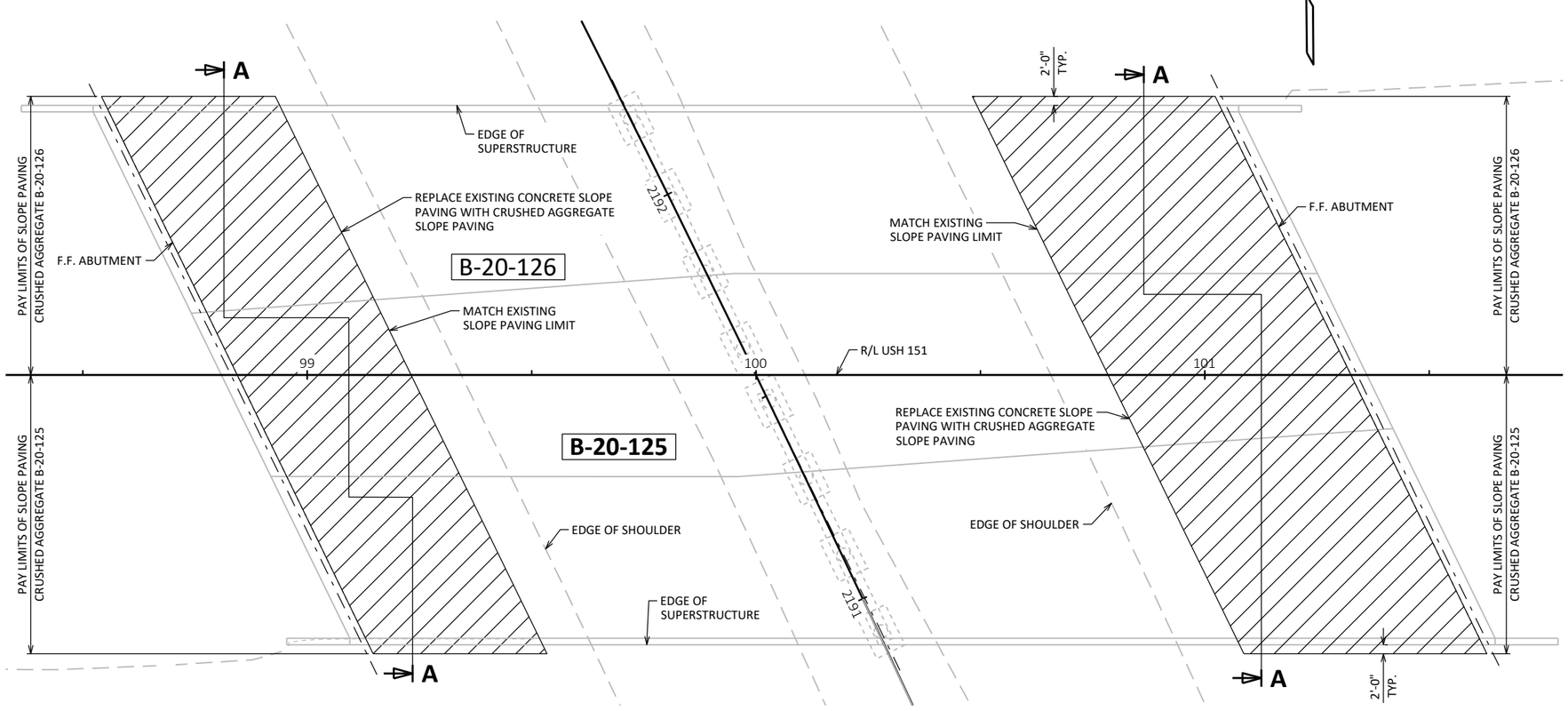


TYPICAL SECTION

ROUND STONE WILL NOT BE ACCEPTED



SECTION A-A



PLAN

LEGEND

SLOPE PAVING REPLACEMENT AREA

* ELEVATIONS TAKEN FROM EXISTING 2005 PLANS

NOTES

BID ITEM SHALL BE "SLOPE PAVING CRUSHED AGGREGATE".

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-20-125

DRAWN BY	VSB	PLANS CK'D	HDA

SLOPE PAVING CRUSHED AGGREGATE

SHEET 3
322

8

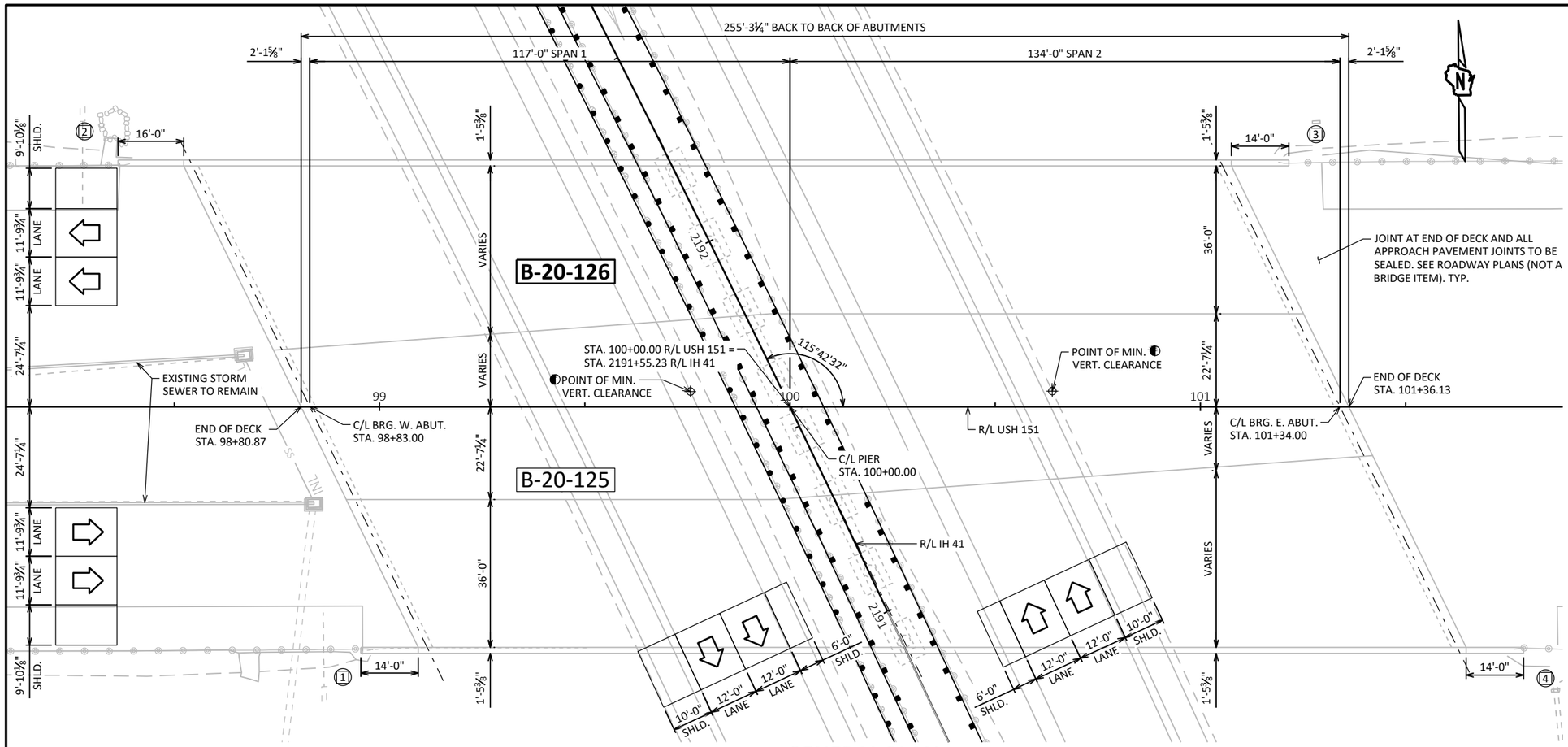
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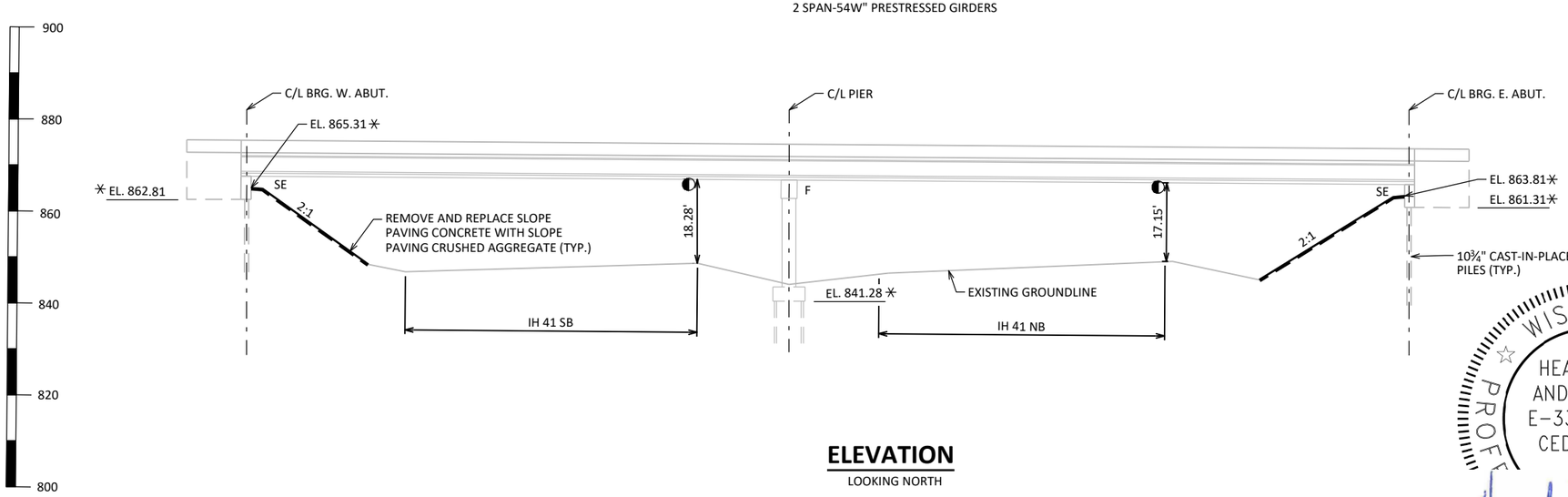
STATE PROJECT NUMBER

1100-56-70



GENERAL PLAN

2 SPAN-54W" PRESTRESSED GIRDERS



ELEVATION

LOOKING NORTH

DESIGN DATA

LIVE LOAD:
TAKEN FROM HSI, 04/21/2025
INVENTORY RATING: HS26
OPERATING RATING: HS44
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

MATERIAL PROPERTIES
CONCRETE MASONRY
SUPERSTRUCTURE .....f'c = 4,000 psi
ALL OTHER .....f'c = 3,500 psi
BAR STEEL REINFORCEMENT.....fy = 60,000 psi

TRAFFIC DATA

USH 151 SB
A.D.T. = 6,050 (2025)
R.D.S. = 60 MPH

IH 41
A.A.D.T. = 46,230 (2027)
A.A.D.T. = 54,020 (2047)
R.D.S. = 70 MPH

LEGEND

- DIRECTION OF TRAFFIC
- (X) INDICATES WING NUMBER
- LOCATION PER EXISTING PLANS. MINIMUM VERTICAL CLEARANCE PER HSI SYSTEM. DIMENSIONS MEASURED 6/13/2017.
- ✳ ELEVATIONS TAKEN FROM EXISTING 2004 PLANS

SCOPE OF WORK

- REPLACE EXISTING SLOPE PAVING CONCRETE WITH SLOPE PAVING CRUSHED AGGREGATE
- RESEAL PARAPETS WITH PIGMENTED SURFACE SEALER

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. TYPICAL SECTION & QUANTITIES
3. SLOPE PAVING CRUSHED AGGREGATE

STRUCTURES DESIGN CONTACTS
BRIDGE OFFICE:
AARON BONK (608) 261-0261
CONSULTANT:
HEATHER ANDERS (414) 410-6899

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
HNTB
250 E WISCONSIN AVE #2000
MILWAUKEE, WI 53202
(414) 359-2300

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/11/26
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-20-126

USH 151 SB OVER IH 41

COUNTY	TOWN/~~CITY/VILLAGE~~
FOND DU LAC	FOND DU LAC

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	EJJ	DESIGN CK'D	HDA	DRAWN BY	EJJ	PLANS CK'D	HDA

WISCONSIN PROFESSIONAL ENGINEER
HEATHER D. ANDERS, P.E.
E-33441-006
CEDARBURG, WI
Heather D. Anders
5/29/2026

GENERAL PLAN & ELEVATION

SHEET 1 OF 3
323

I.D. DATE:

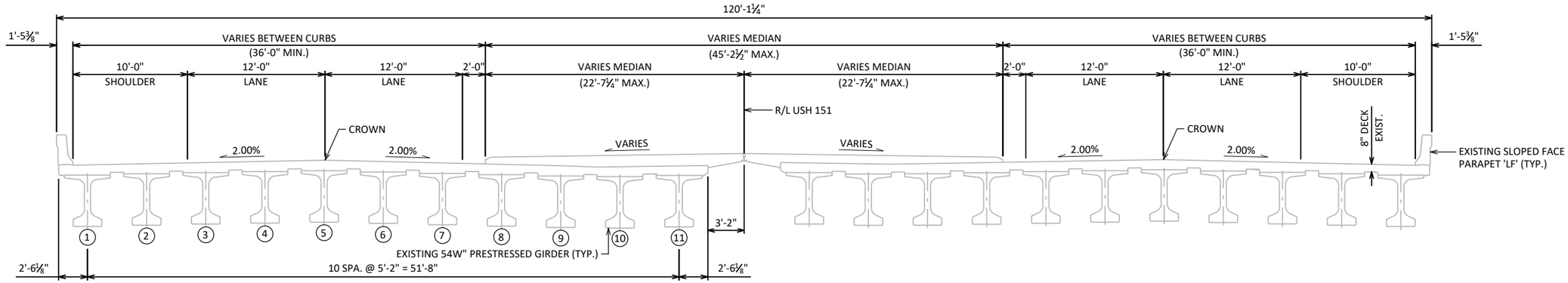
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PLOT DATE : 5/19/2026 8:55 AM

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STATE PROJECT NUMBER
1100-56-70



SOUTHBOUND USH 151 B-20-126 **NORTHBOUND USH 151 B-20-125**

TYPICAL SECTION

LOOKING EAST

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEM	UNIT	TOTAL
204.0175	REMOVING CONCRETE SLOPE PAVING	SY	462
502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	114
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ALL ITEMS ARE CATEGORY 0020

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APPLY "PIGMENTED SURFACE SEALER RESEAL" TO THE TOP AND INSIDE FACES OF EXISTING PARAPETS.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-20-126

DRAWN BY EJJ | PLANS CK'D HDA

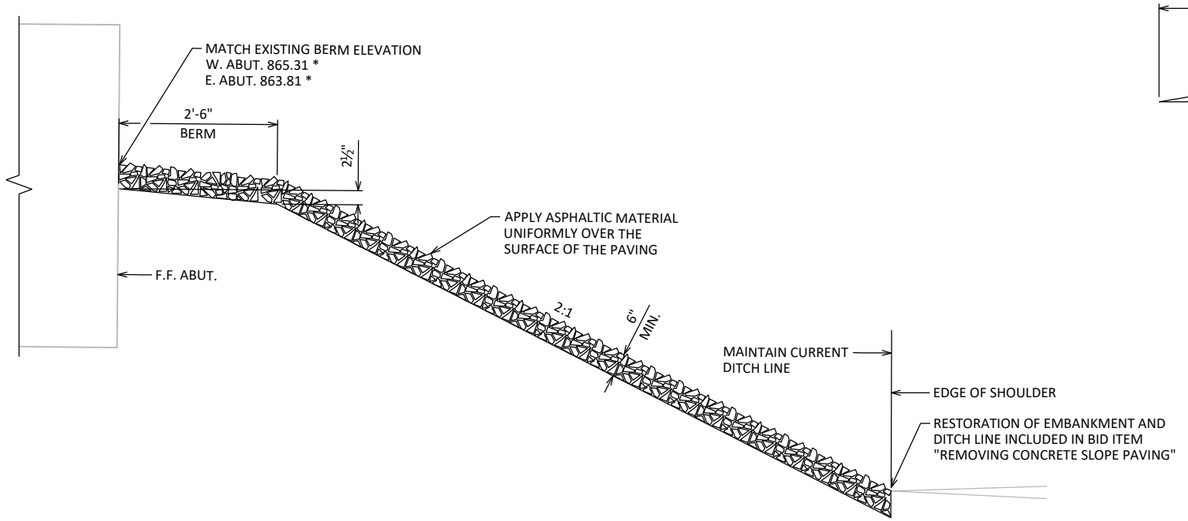
TYPICAL SECTION & QUANTITIES

SHEET 2
324

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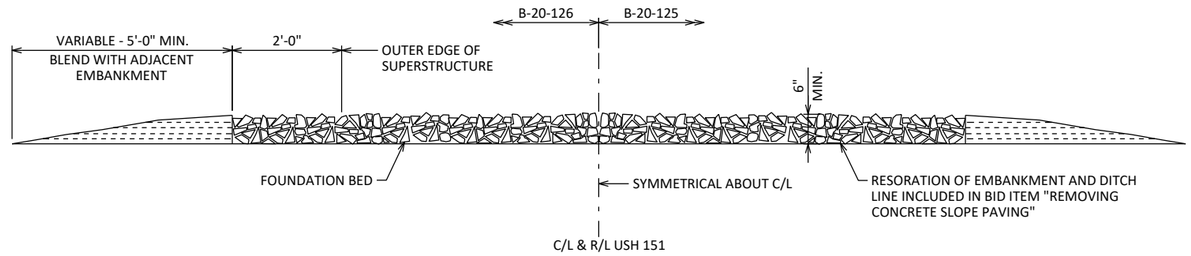
PLOT DATE : 2/13/2026 3:24 PM

STATE PROJECT NUMBER
1100-56-70



TYPICAL SECTION

ROUND STONE WILL NOT BE ACCEPTED



SECTION A-A

PLAN

LEGEND

SLOPE PAVING REPLACEMENT AREA

* ELEVATIONS TAKEN FROM EXISTING 2004 PLANS

NOTES

BID ITEM SHALL BE "SLOPE PAVING CRUSHED AGGREGATE".

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-20-126

DRAWN BY	VSB	PLANS CK'D	HDA

SLOPE PAVING CRUSHED AGGREGATE

SHEET 3
325

8

8

FILE NAME : I:\89429\11005600\B-20-126\CDS\B-20-126_DET.DWG
LAYOUT NAME - Slope

PLOT DATE : 2/13/2026 2:16 PM

IH 41 BULLNOSE

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
2190+24.03	219024.0	0.0	6.0	5.4	0	0	0	0	0
2190+36.13	219036.1	12.1	5.3	14.9	3	5	3	6	-3
2190+54.88	219054.9	18.8	5.3	11.5	4	9	7	18	-11
2191+00.00	219100.0	45.1	5.9	8.3	9	17	16	39	-23
2192+00.00	219200.0	100.0	6.5	8.0	23	30	39	76	-37
2192+54.88	219254.9	54.9	5.7	10.8	12	19	51	100	-49
2192+73.63	219273.6	18.8	5.6	12.8	4	8	55	110	-55
2192+85.74	219285.7	12.1	5.5	14.6	2	6	57	118	-61
COLUMN TOTALS					57	94			

IH 41 BULLNOSE

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
2218+00.00	221800.0	0.0	3.5	14.7	0	0	0	0	0
2218+02.82	221802.8	2.8	3.4	14.6	0	2	0	3	-3
2218+14.93	221814.9	12.1	3.3	15.1	1	7	1	11	-10
2218+33.67	221833.7	18.7	3.2	15.6	2	11	3	25	-22
2219+00.00	221900.0	66.3	2.9	18.0	8	41	11	76	-65
2219+83.63	221983.6	83.6	3.7	17.8	10	55	21	145	-124
2220+00.00	222000.0	16.4	3.6	19.6	2	11	23	159	-136
2220+02.37	222002.4	2.4	3.7	20.3	0	2	23	161	-138
2220+14.48	222014.5	12.1	3.4	23.6	2	10	25	174	-149
COLUMN TOTALS					25	139			

IH 41 BULLNOSE

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
2251+88.70	225188.7	0.0	1.0	30.4	0	0	0	0	0
2252+00.00	225200.0	11.3	1.5	24.3	1	11	1	14	-13
2252+00.81	225200.8	0.8	1.5	24.4	0	1	1	15	-14
2252+19.56	225219.6	18.8	1.9	19.0	1	15	2	34	-32
2253+00.00	225300.0	80.4	4.4	9.3	9	42	11	86	-75
2253+19.56	225319.6	19.6	3.0	12.4	3	8	14	96	-82
2253+38.31	225338.3	18.8	2.1	16.7	2	10	16	109	-93
2253+50.44	225350.4	12.1	1.8	22.1	1	9	17	120	-103
COLUMN TOTALS					17	96			

IH 41 BEAMGUARD

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
2255+98.28	225598.3	0.0	0.6	0.4	0	0	0	0	0
2256+00.00	225600.0	1.7	0.6	0.5	0	0	0	0	0
2256+23.26	225623.3	23.3	0.6	2.2	0	1	0	1	-1
2256+48.24	225648.2	25.0	0.6	5.3	1	3	1	5	-4
2257+00.00	225700.0	51.8	0.9	2.3	1	7	2	14	-12
COLUMN TOTALS					2	11			

IH 41 BULLNOSE

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
2257+93.15	225793.2	0.0	1.8	20.3	0	0	0	0	0
2258+00.00	225800.0	6.9	1.9	18.3	0	5	0	6	-6
2258+05.24	225805.2	5.2	2.0	17.3	0	3	0	10	-10
2258+23.99	225824.0	18.8	2.1	16.4	1	12	1	25	-24
2259+00.00	225900.0	76.0	1.3	30.2	5	66	6	108	-102
2260+00.00	226000.0	100.0	1.3	19.1	5	91	11	221	-210
2260+11.49	226011.5	11.5	1.7	12.9	1	7	12	230	-218
2260+30.24	226030.2	18.8	2.2	13.0	1	9	13	241	-228
2260+42.37	226042.4	12.1	2.5	14.5	1	6	14	249	-235
COLUMN TOTALS					14	199			

IH 41 BEAMGUARD

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
2267+00.00	226700.0	0.0	8.7	2.4	0	0	0	0	0
2267+08.24	226708.2	8.2	8.6	2.4	3	1	3	1	2
2267+33.22	226733.2	25.0	0.8	1.8	4	2	7	4	3
2267+58.21	226758.2	25.0	1.2	1.4	1	1	8	5	3
COLUMN TOTALS					8	4			

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME
3 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH CUT OR BORROW: [(CUT + MARSH EXC + EBS) - ((FILL - REDUCED MARSH IN FILL) - (REDUCED EBS IN FILL) - EXPANDED ROCK) * FILL FACTOR)]

IH 41 BULLNOSE

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
2271+65.46	227165.5	0.0	1.7	28.5	0	0	0	0	0
2271+77.55	227177.6	12.1	1.7	29.2	1	13	1	16	-15
2271+96.30	227196.3	18.8	1.6	24.0	1	18	2	39	-37
2272+00.00	227200.0	3.7	1.6	22.9	0	3	2	43	-41
2272+83.80	227283.8	83.8	1.8	27.9	5	79	7	141	-134
2273+00.00	227300.0	16.2	1.7	28.3	1	17	8	163	-155
2273+02.55	227302.6	2.5	1.7	28.3	0	3	8	166	-158
2273+14.66	227314.7	12.1	2.2	27.9	1	13	9	183	-174
COLUMN TOTALS					9	146			

IH 41 BEAMGUARD

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
2276+00.00	227600.0	0.0	1.5	4.3	0	0	0	0	0
2276+01.93	227601.9	1.9	1.7	4.1	0	0	0	0	0
2276+26.94	227626.9	25.0	1.8	5.3	2	4	2	5	-3
2276+51.93	227651.9	25.0	3.4	0.0	2	2	4	8	-4
2277+00.00	227700.0	48.1	2.7	0.0	5	0	9	8	2
2278+00.00	227800.0	100.0	0.0	0.0	5	0	14	8	7
COLUMN TOTALS					14	6			

IH 41 BEAMGUARD

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
2283+00.00	228300.0	0.0	1.4	1.0	0	0	0	0	0
2283+44.28	228344.3	44.3	1.5	0.1	2	1	2	1	1
2283+69.07	228369.1	24.8	1.9	0.6	2	0	4	1	3
2283+93.88	228393.9	24.8	1.9	9.7	2	5	6	8	-2
2284+00.00	228400.0	6.1	1.9	7.6	0	2	6	10	-4
2285+00.00	228500.0	100.0	2.3	0.0	8	14	14	28	-14
COLUMN TOTALS					14	22			

IH 41 BEAMGUARD

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
2287+00.00	228700.0	0.0	3.0	0.0	0	0	0	0	0
2287+75.60	228775.6	75.6	2.9	0.0	8	0	8	0	8
2288+00.00	228800.0	24.4	2.8	0.0	3	0	11	0	11
2288+00.41	228800.4	0.4	2.8	0.0	0	0	11	0	11
2288+25.20	228825.2	24.8	3.3	0.0	3	0	14	0	14
COLUMN TOTALS					14	0			

IH 41 BULLNOSE

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
2303+77.34	230377.3	0.0	11.2	0.8	0	0	0	0	0
2303+89.41	230389.4	12.1	12.4	0.0	5	0	5	0	5
2304+00.00	230400.0	10.6	11.5	0.0	5	0	10	0	10
2304+08.20	230408.2	8.2	11.3	0.0	3	0	13	0	13
2305+00.00	230500.0	91.8	7.3	1.8	32	3	45	4	41
2305+58.16	230558.2	58.2	14.1	0.0	23	2	68	6	62
2305+76.91	230576.9	18.8	12.8	0.0	9	0	77	6	71
2305+88.96	230589.0	12.0	10.6	0.2	5	0	82	6	76
2306+00.00	230600.0	11.0	8.5	0.4	4	0	86	6	80
COLUMN TOTALS					86	5			

IH 41 FDL RIVER EAST

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
2226+00.00	222600.0	0.0	0.4	0.5	0	0	0	0	0
2227+00.00	222700.0	100.0	3.2	7.8	7	15	7	19	-12
2227+44.16	222744.2	44.2	8.5	18.2	10	21	17	45	-28
2227+69.14	222769.1	25.0	10.6	0.1	9	8	26	55	-29
2227+94.12	222794.1	25.0	14.2	0.0	11	0	37	55	-18
2228+00.00	222800.0	5.9	13.4	0.3	3	0	40	55	-15
2228+31.37	222831.4	31.4	8.2	0.0	13	0	53	55	-2
2228+56.35	222856.4	25.0	6.1	0.0	7	0	60	55	5
2228+81.34	222881.3	25.0	8.7	0.0	7	0	67	55	12
2229+00.00	222900.0	18.7	8.7	0.0	6	0	73	55	18
2229+96.50	222996.5	96.5	3.9	6.8	23	12	96	70	26
COLUMN TOTALS					96	56			

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME
3 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH CUT OR BORROW: [(CUT + MARSH EXC + EBS) - ((FILL - REDUCED MARSH IN FILL) - (REDUCED EBS IN FILL) - EXPANDED ROCK) * FILL FACTOR)]

IH 41 FDL RIVER WEST

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
2231+63.05	223163.1	0.0	8.2	40.7	0	0	0	0	0
2232+00.00	223200.0	37.0	11.2	7.9	13	33	13	41	-28
2232+77.11	223277.1	77.1	5.2	0.2	23	12	36	56	-20
2233+00.00	223300.0	22.9	1.9	0.5	3	0	39	56	-17
2233+02.03	223302.0	2.0	1.9	0.7	0	0	39	56	-17
2233+27.07	223327.1	25.0	1.8	1.8	2	1	41	58	-17
2233+64.73	223364.7	37.7	5.0	0.5	5	2	46	60	-14
2233+89.71	223389.7	25.0	2.1	3.6	3	2	49	63	-14
2234+00.00	223400.0	10.3	1.5	5.6	1	2	50	65	-15
2234+14.69	223414.7	14.7	1.9	21.9	1	7	51	74	-23
2235+00.00	223500.0	85.3	1.0	8.4	5	48	56	134	-78
COLUMN TOTALS					56	107			

RAMP I

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
2292+59.93	229259.9	0.0	0.5	12.5	0	0	0	0	0
2292+85.03	229285.0	25.1	0.6	2.3	1	7	1	9	-8
2293+00.00	229300.0	15.0	0.7	0.2	0	1	1	10	-9
2293+10.23	229310.2	10.2	0.6	0.1	0	0	1	10	-9
2294+00.00	229400.0	89.8	0.7	0.5	2	1	3	11	-8
2295+00.00	229500.0	100.0	1.2	1.6	4	4	7	16	-9
COLUMN TOTALS					7	13			

RAMP E

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
1251+99.48	125199.5	0.0	1.4	4.3	0	0	0	0	0
1252+00.00	125200.0	0.5	1.4	4.3	0	0	0	0	0
1252+24.46	125224.5	24.5	1.4	4.2	1	4	1	5	-4
1252+49.44	125249.4	25.0	1.5	3.7	1	4	2	10	-8
1252+50.00	125250.0	0.6	1.4	3.7	0	0	2	10	-8
1253+00.00	125300.0	50.0	1.5	2.9	3	6	5	18	-13
COLUMN TOTALS					5	14			

USH 151

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
91+97.14	9197.1	0.0	5.9	0.0	0	0	0	0	0
92+00.00	9200.0	2.9	6.4	0.0	1	0	1	0	1
92+25.00	9225.0	25.0	10.3	0.0	8	0	9	0	9
92+50.00	9250.0	25.0	15.2	0.0	12	0	21	0	21
92+75.00	9275.0	25.0	18.8	0.0	16	0	37	0	37
93+00.00	9300.0	25.0	20.6	0.0	18	0	55	0	55
93+25.00	9325.0	25.0	19.8	0.0	19	0	74	0	74
93+50.00	9350.0	25.0	19.3	0.0	18	0	92	0	92
93+75.00	9375.0	25.0	17.5	0.0	17	0	109	0	109
94+00.00	9400.0	25.0	17.9	0.0	16	0	125	0	125
94+25.00	9425.0	25.0	17.4	3.5	16	2	141	3	139
94+50.00	9450.0	25.0	19.8	0.5	17	2	158	5	153
94+75.00	9475.0	25.0	3.5	0.0	11	0	169	5	164
94+75.04	9475.0	0.0	3.3	0.0	0	0	169	5	164
COLUMN TOTALS					169	4			

RAMP H

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
1254+00.00	125400.0	0.0	1.3	0.7	0	0	0	0	0
1254+04.77	125404.8	4.8	1.4	0.6	0	0	0	0	0
1254+29.75	125429.8	25.0	1.7	0.2	1	0	1	0	1
1254+50.00	125450.0	20.3	1.5	4.0	1	2	2	3	-1
1254+54.73	125454.7	4.7	1.4	4.7	0	1	2	4	-2
1255+00.00	125500.0	45.3	0.6	1.2	2	5	4	10	-6
COLUMN TOTALS					4	8			

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME
3 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH CUT OR BORROW: [(CUT + MARSH EXC + EBS) - ((FILL - REDUCED MARSH IN FILL) - (REDUCED EBS IN FILL) - EXPANDED ROCK) * FILL FACTOR)]

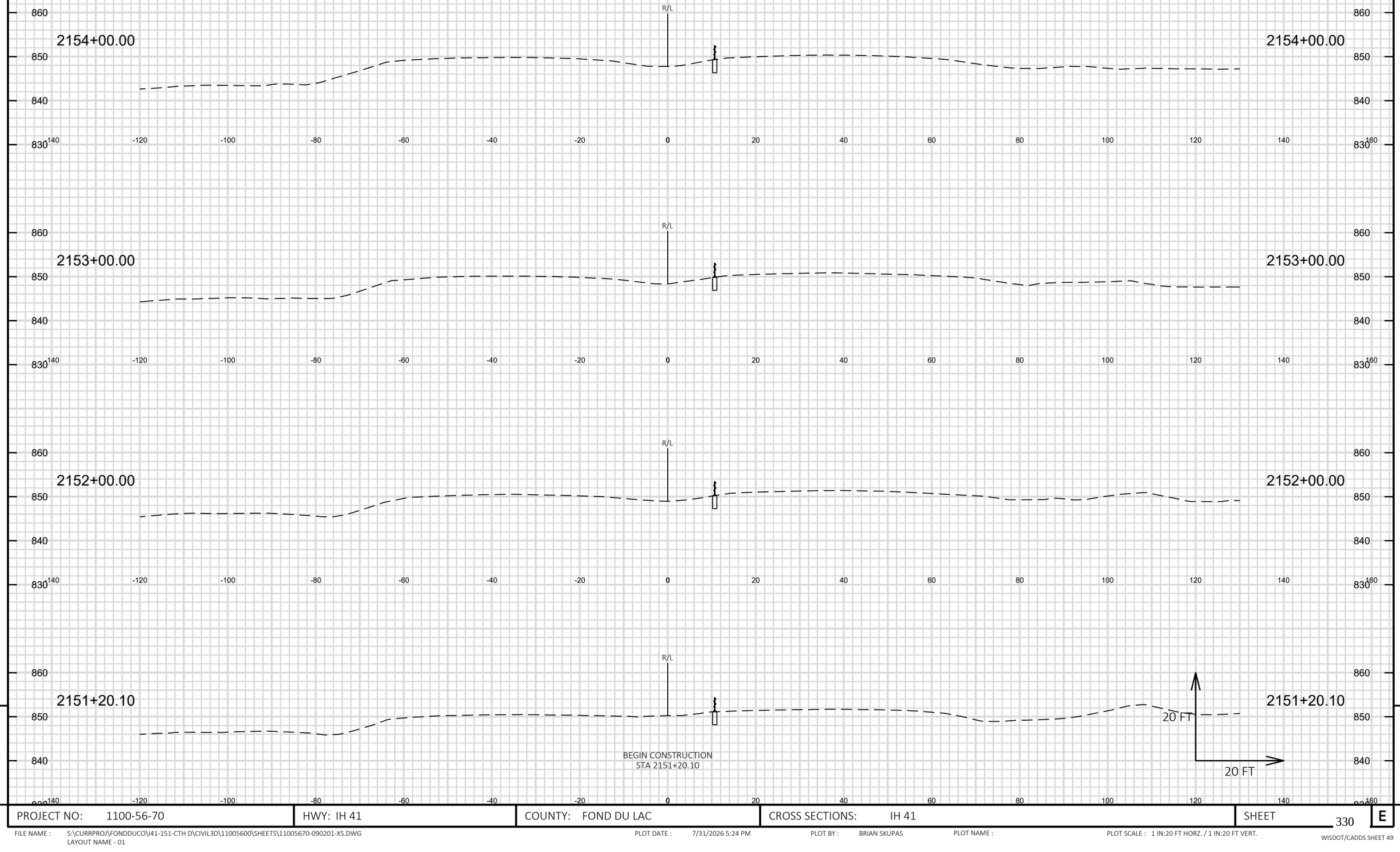
RAMP 'E' GORE

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		MASS ORDINATE NOTE 3
			CUT	FILL	CUT NOTE 1	FILL NOTE 2	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	
2253+75.02	225375.0	0.0	3.0	0.0	0	0	0	0	0
2254+00.00	225400.0	25.0	0.3	11.4	2	5	2	6	-4
2254+50.00	225450.0	50.0	0.4	19.3	1	28	3	41	-38
2255+00.00	225500.0	50.0	65.0	4.4	61	22	64	69	-5
2255+50.00	225550.0	50.0	88.7	3.6	142	7	206	78	129
2256+00.00	225600.0	50.0	141.5	6.7	213	10	419	90	329
2256+50.00	225650.0	50.0	179.0	8.7	297	14	716	108	609
2257+00.00	225700.0	50.0	235.5	9.8	384	17	1100	129	971
2257+50.00	225750.0	50.0	125.1	7.0	334	16	1434	149	1,285
2258+00.00	225800.0	50.0	81.6	1.6	191	8	1625	159	1,466
2258+27.65	225827.7	27.6	22.9	0.0	53	1	1678	160	1,518
COLUMN TOTALS					**1,678**	**128**			

RAMP 'F' OUTSIDE DITCH

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		MASS ORDINATE NOTE 3
			CUT	FILL	CUT NOTE 1	FILL NOTE 2	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	
2265+00.02	226500.02	0.00	0.29	0.00	0	0	0	0	0
2265+50.00	226550.00	49.98	4.74	0.00	5	0	5	0	5
2266+00.00	226600.00	50	29.50	0.43	32	0	37	0	37
2266+50.00	226650.00	50	32.10	0.00	57	0	94	0	94
2267+00.00	226700.00	50	42.26	0.00	69	0	163	0	163
2267+50.00	226750.00	50	43.22	0.00	79	0	242	0	242
2268+00.00	226800.00	50	39.49	0.00	77	0	319	0	319
2268+50.00	226850.00	50	44.93	0.00	78	0	397	0	397
2269+00.00	226900.00	50	69.64	0.00	106	0	503	0	503
2269+50.00	226950.00	50	72.97	0.00	132	0	635	0	635
2270+00.00	227000.00	50	101.59	0.00	162	0	797	0	797
2270+50.00	227050.00	50	116.68	0.00	202	0	999	0	999
2271+00.00	227100.00	50	129.54	0.00	228	0	1227	0	1227
2271+50.00	227150.00	50	126.41	0.00	237	0	1464	0	1464
2272+00.00	227200.00	50	13.38	0.00	129	0	1593	0	1593
2272+07.39	227207.39	7.39	0.87	0.00	2	0	1595	0	1595
COLUMN TOTALS					**1,595**	**0**			

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME
3 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH CUT OR BORROW: [(CUT + MARSH EXC + EBS) - ((FILL - REDUCED MARSH IN FILL) - (REDUCED EBS IN FILL) - EXPANDED ROCK) * FILL FACTOR)]



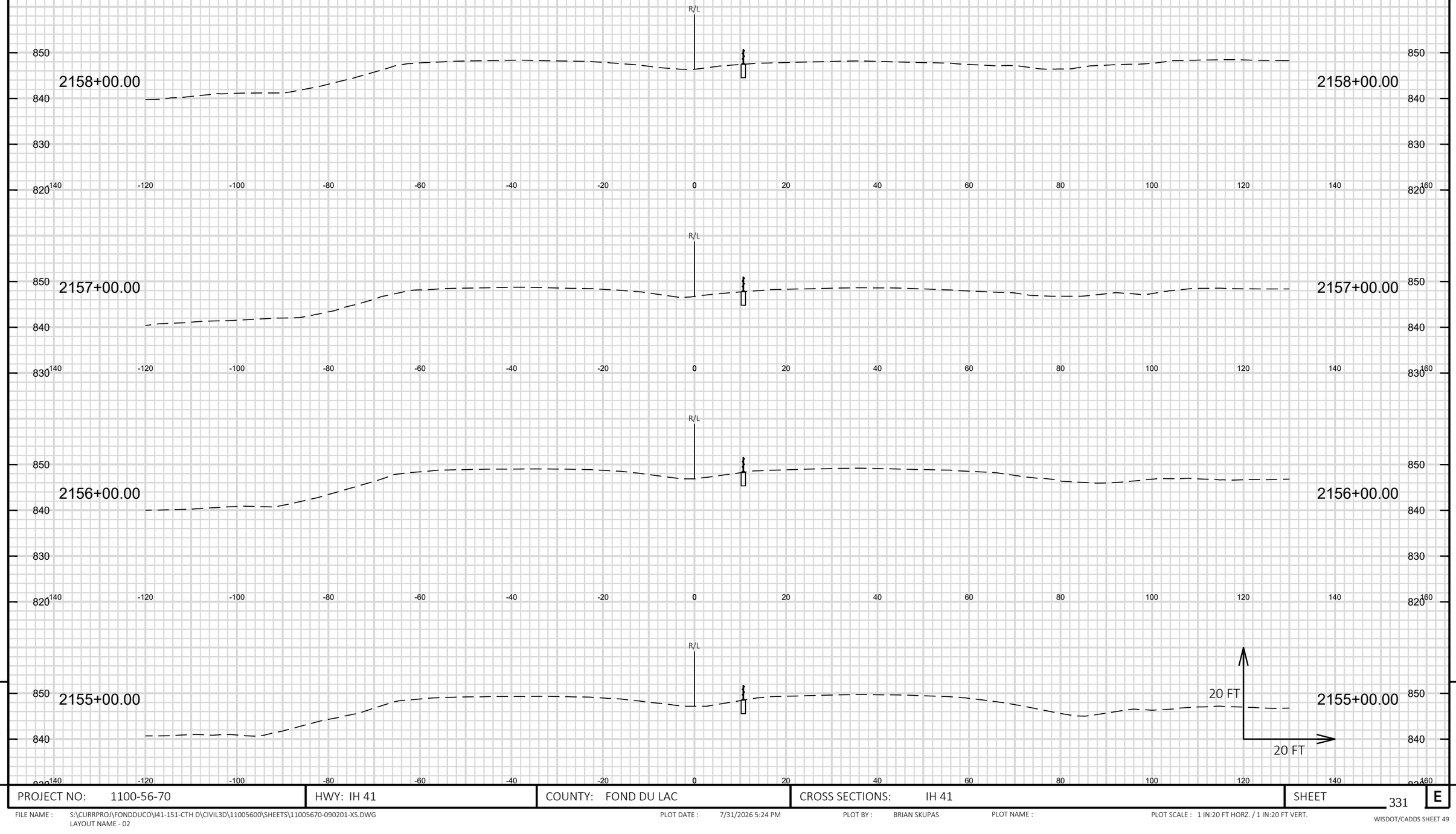
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LAYOUT NAME - 01

PLOT DATE : 7/31/2026 5:24 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 331	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/31/2026 5:24 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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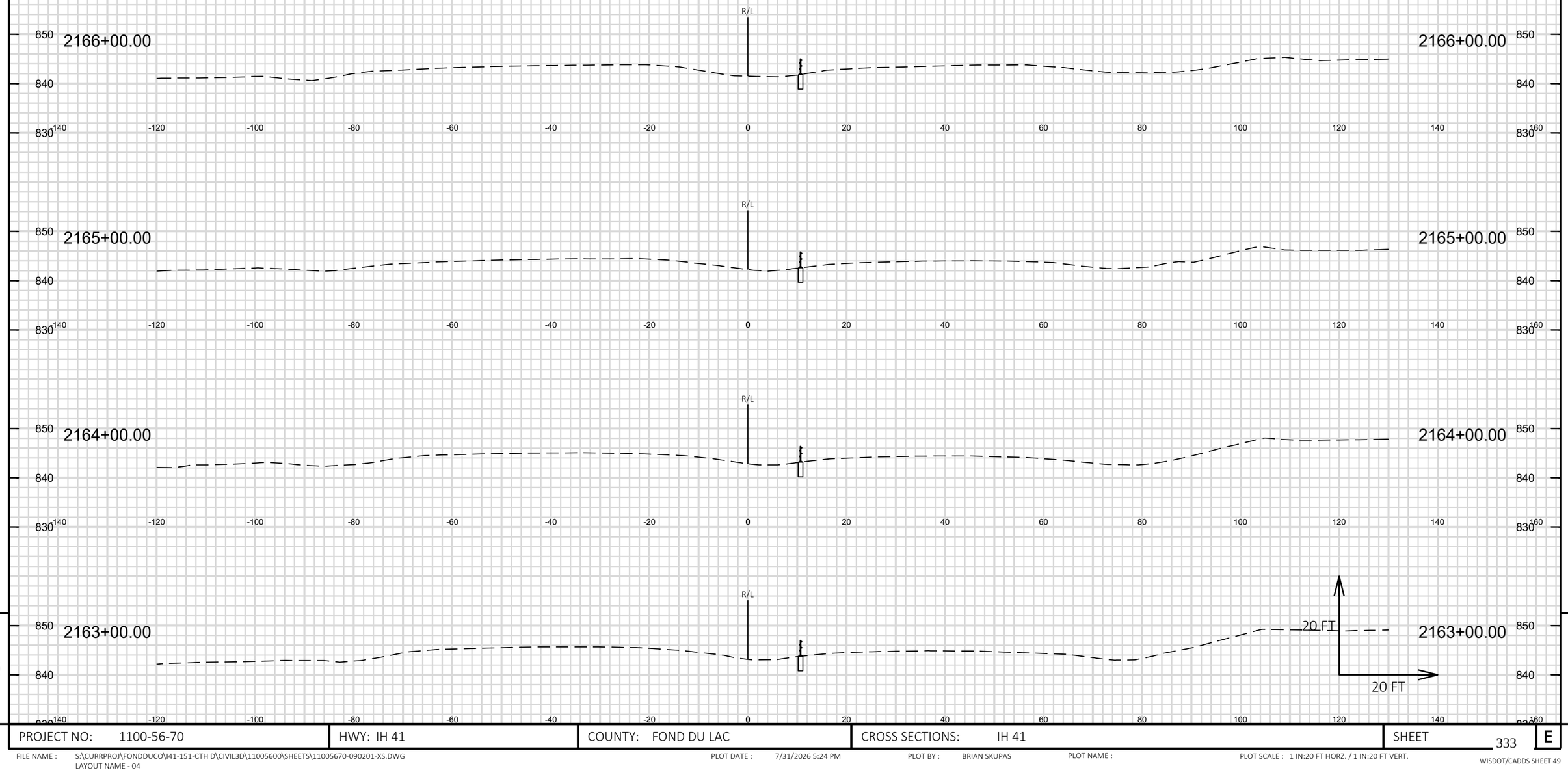
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LAYOUT NAME - 03

PLOT DATE : 7/31/2026 5:24 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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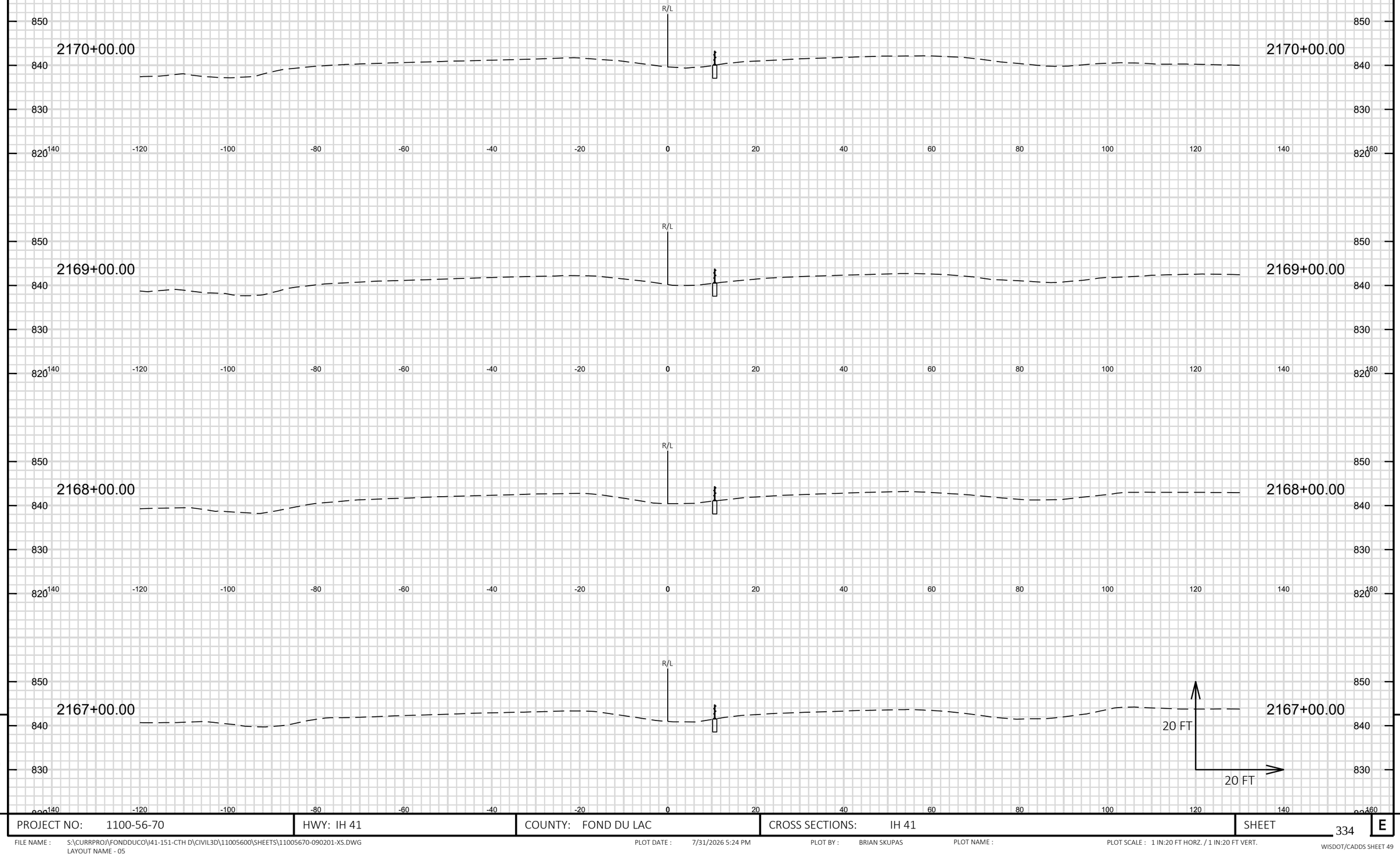
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LAYOUT NAME - 04

PLOT DATE : 7/31/2026 5:24 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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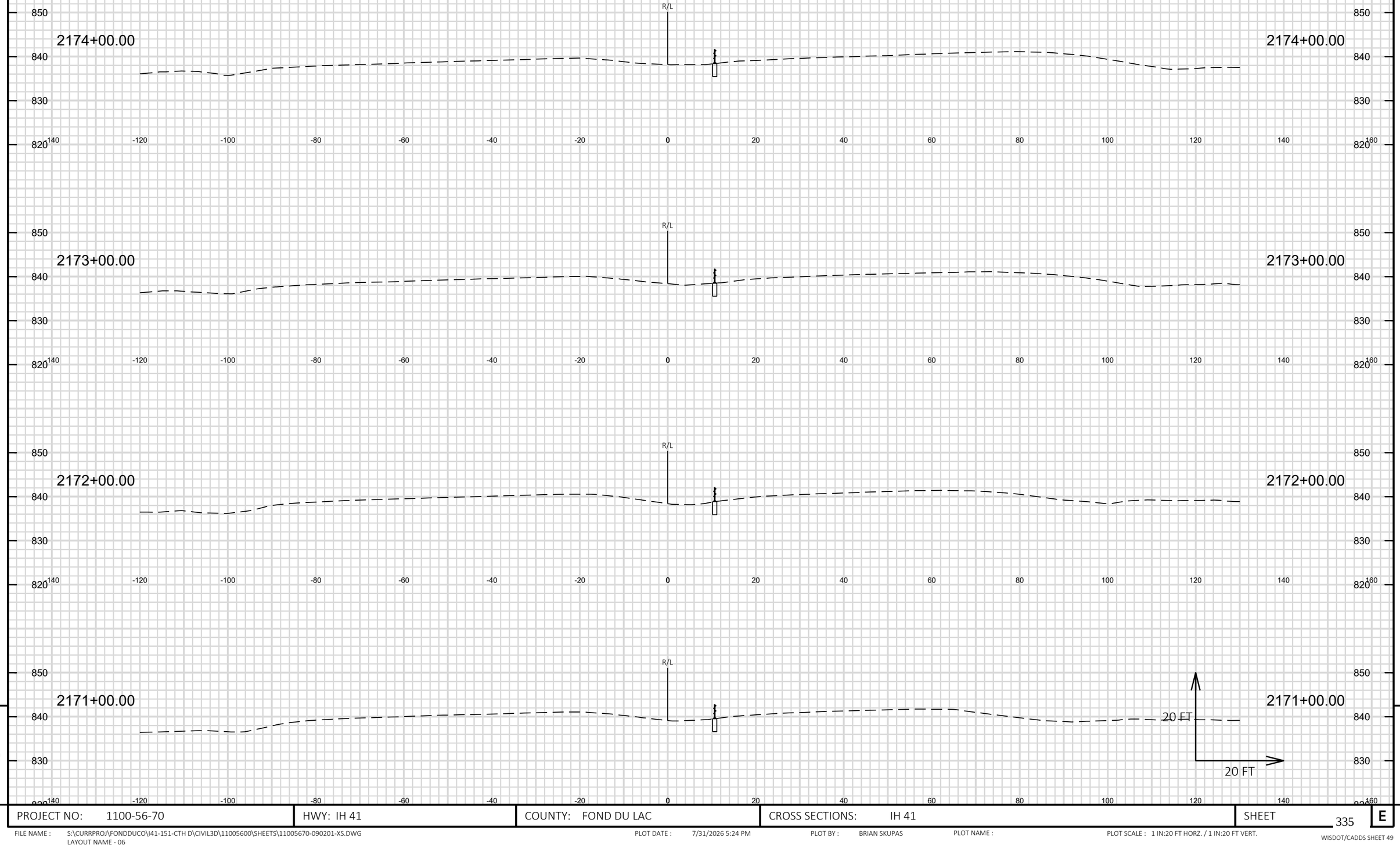
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LAYOUT NAME - 05

PLOT DATE : 7/31/2026 5:24 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

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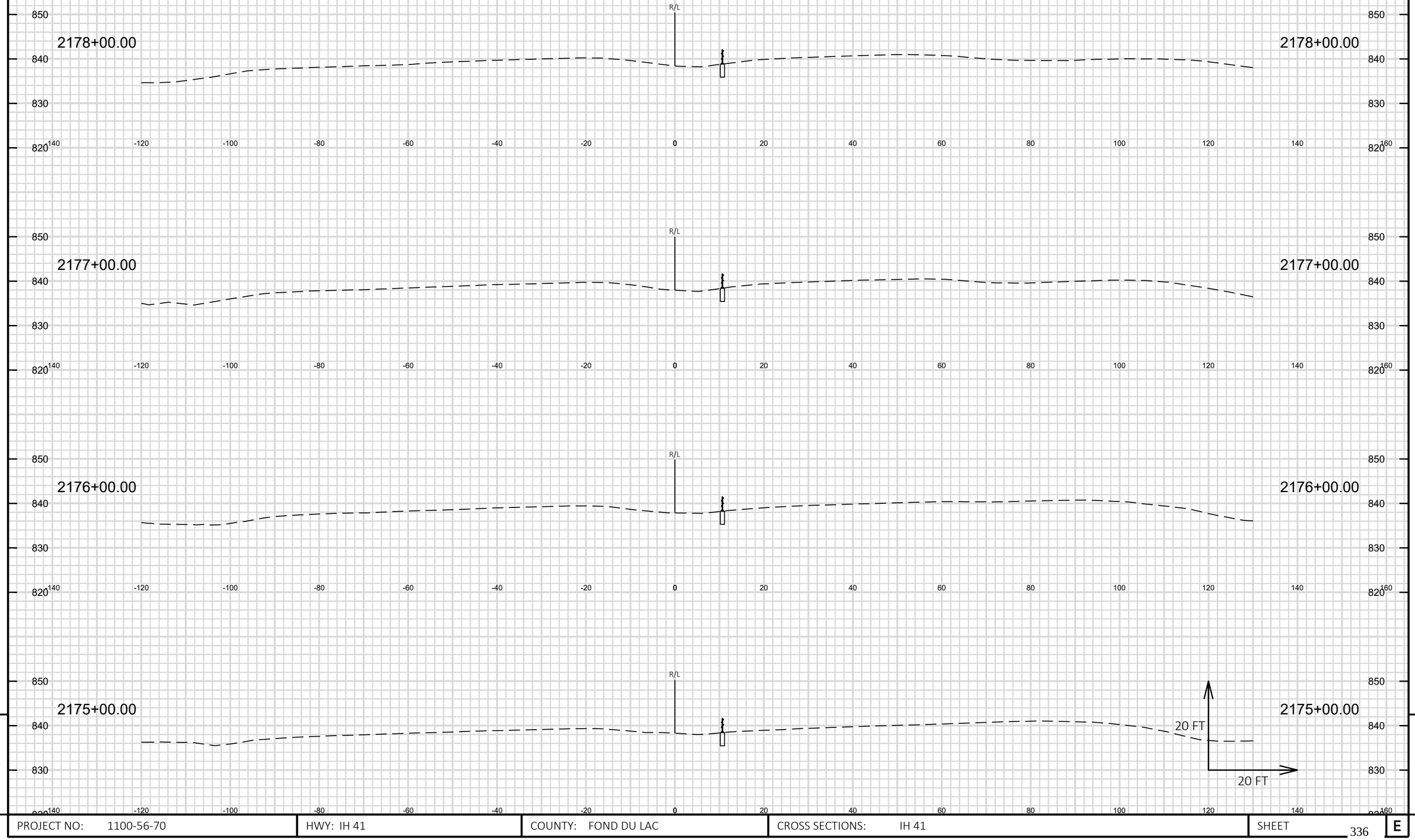
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LAYOUT NAME - 06

PLOT DATE : 7/31/2026 5:24 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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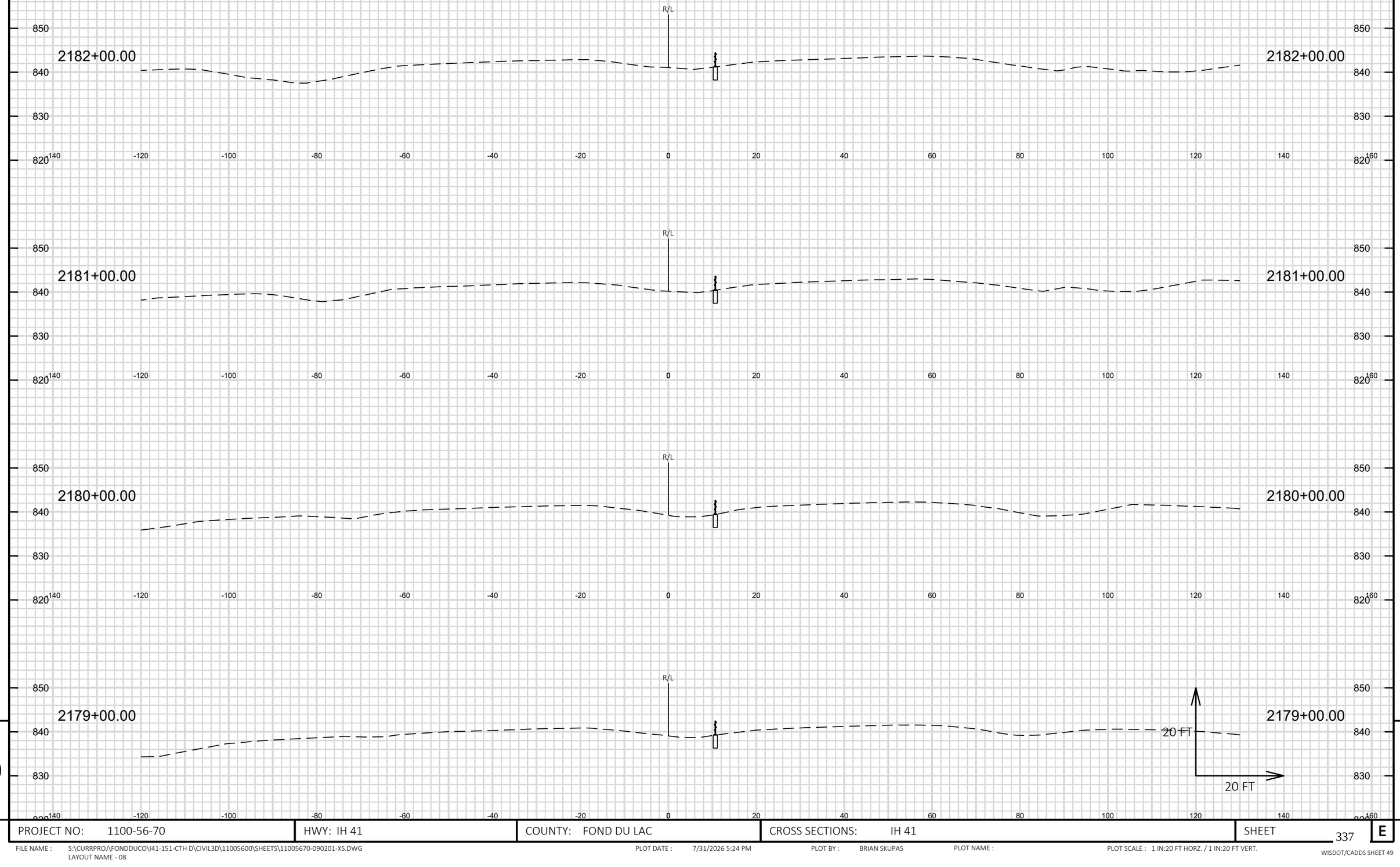
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LAYOUT NAME - 07

PLOT DATE : 7/31/2026 5:24 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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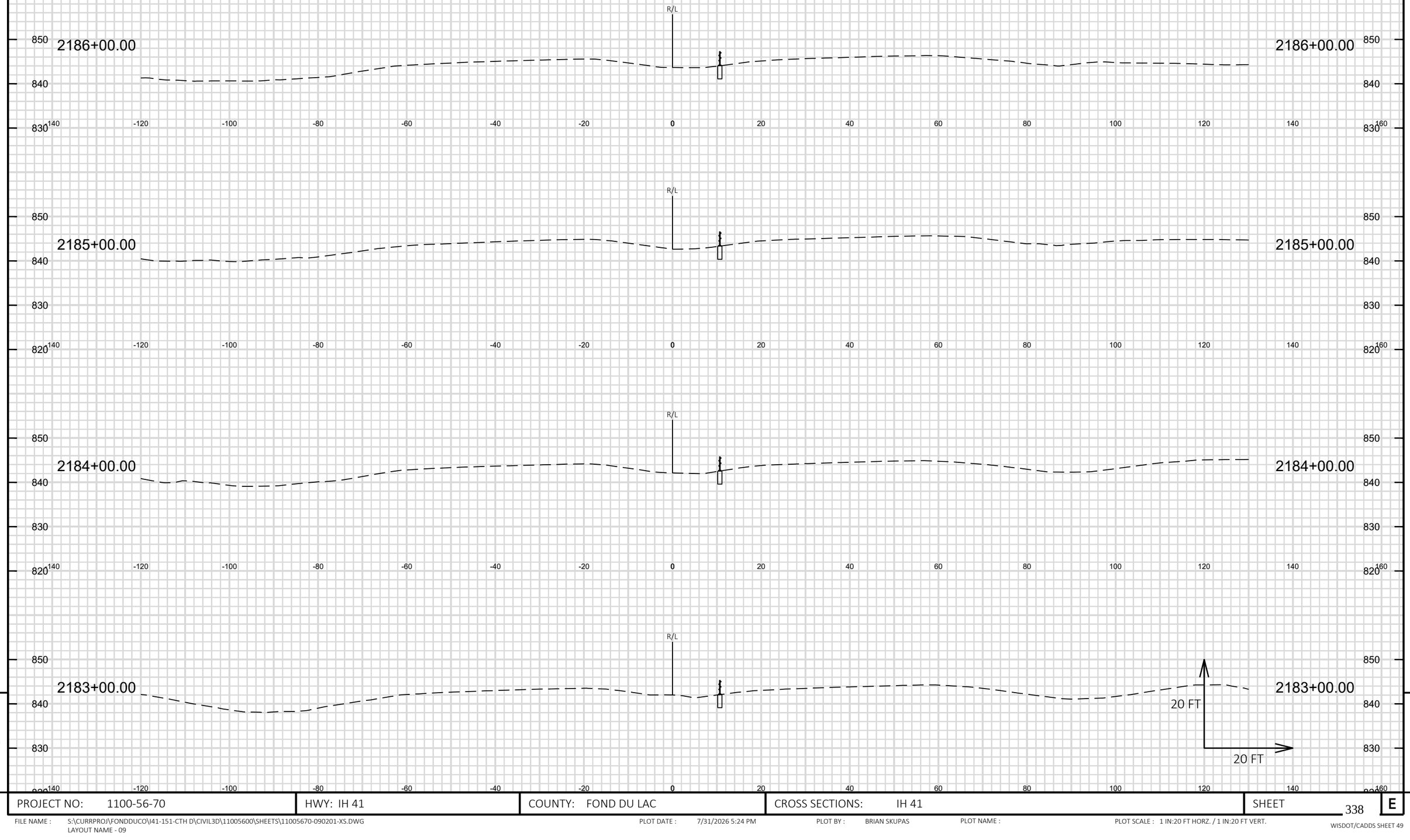
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LAYOUT NAME - 08

PLOT DATE : 7/31/2026 5:24 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



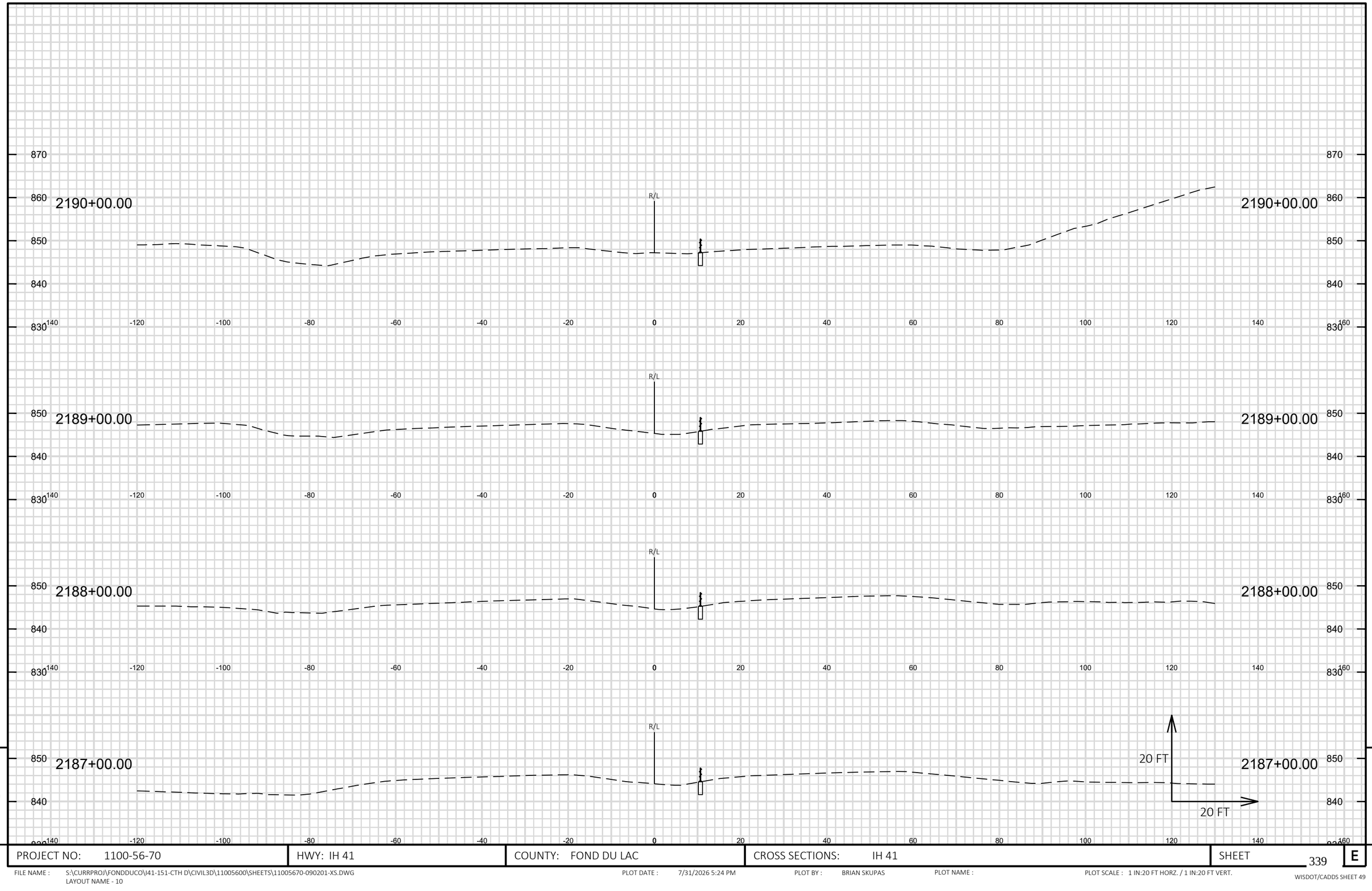
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LAYOUT NAME - 09

PLOT DATE : 7/31/2026 5:24 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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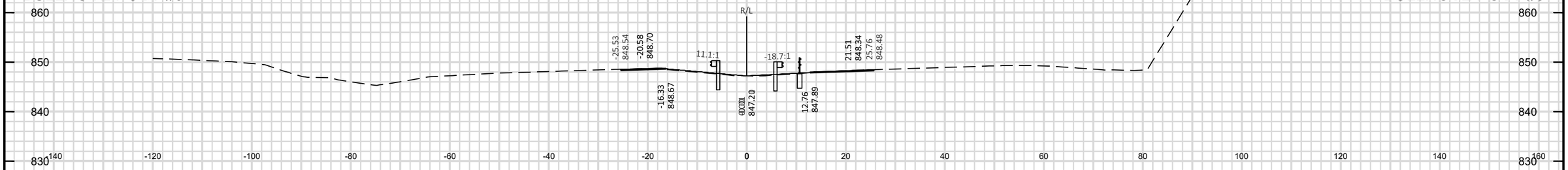
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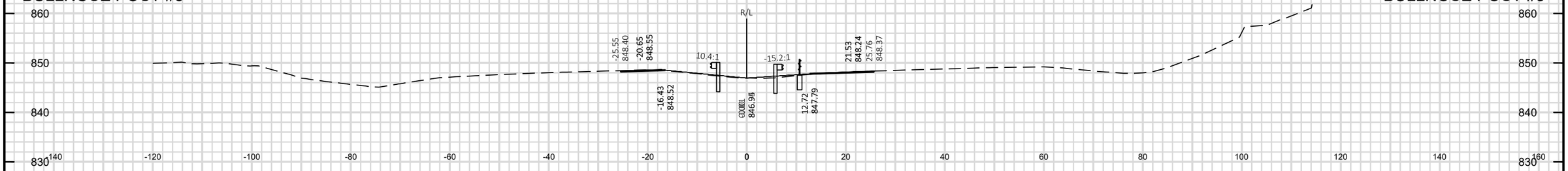
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2190+54.88
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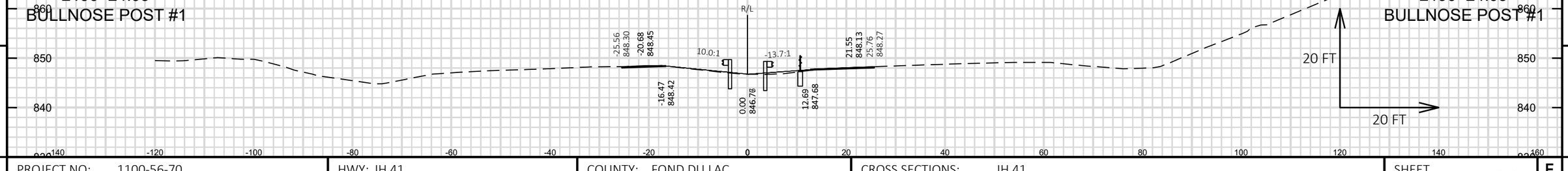
2190+54.88
BULLNOSE POST #9

2190+36.13
BULLNOSE POST #5



2190+36.13
BULLNOSE POST #5

2190+24.03
BULLNOSE POST #1



2190+24.03
BULLNOSE POST #1

9

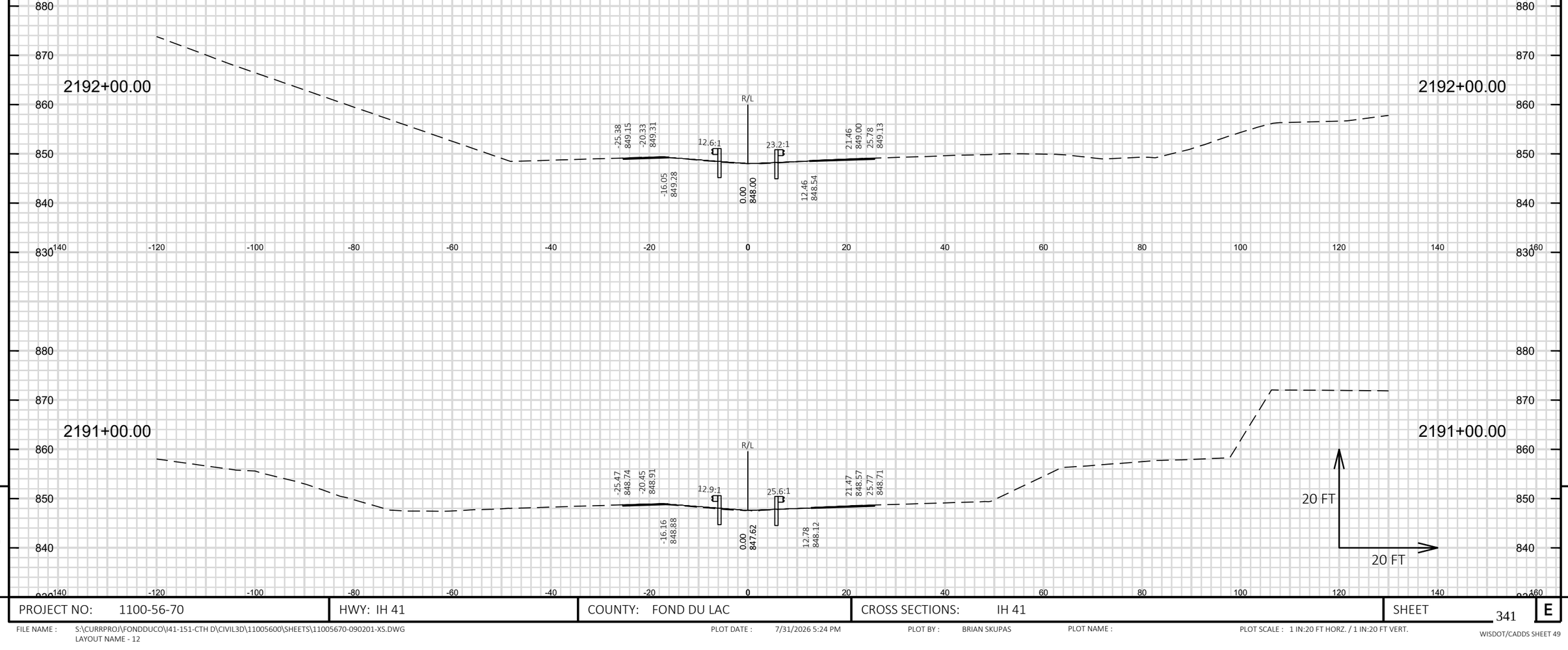
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 340	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 11

PLOT DATE : 7/31/2026 5:24 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

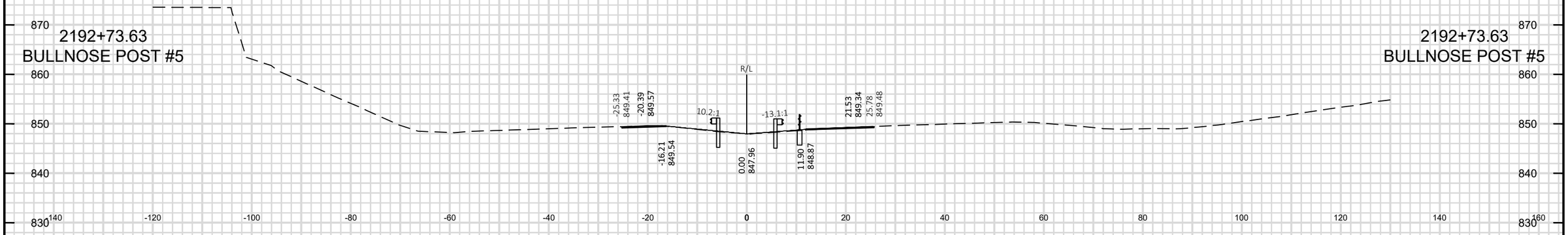
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 341	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 12

PLOT DATE : 7/31/2026 5:24 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

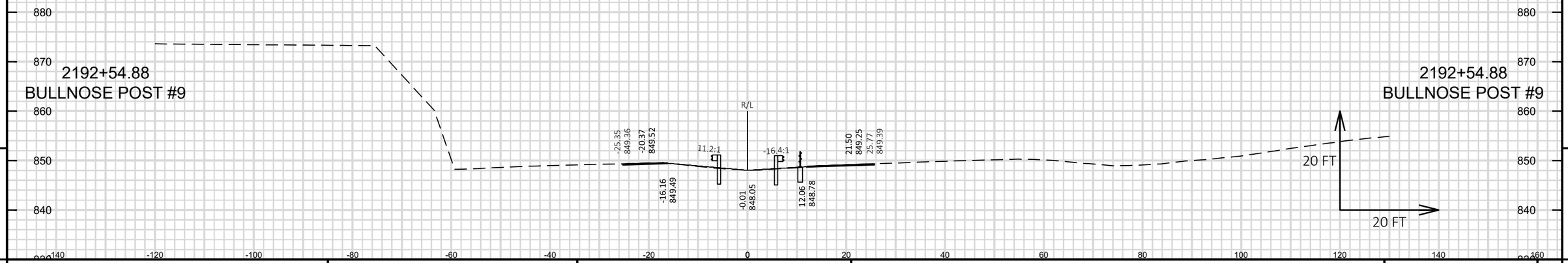
WISDOT/CADDS SHEET 49

2192+73.63
BULLNOSE POST #5



2192+73.63
BULLNOSE POST #5

2192+54.88
BULLNOSE POST #9



2192+54.88
BULLNOSE POST #9

9

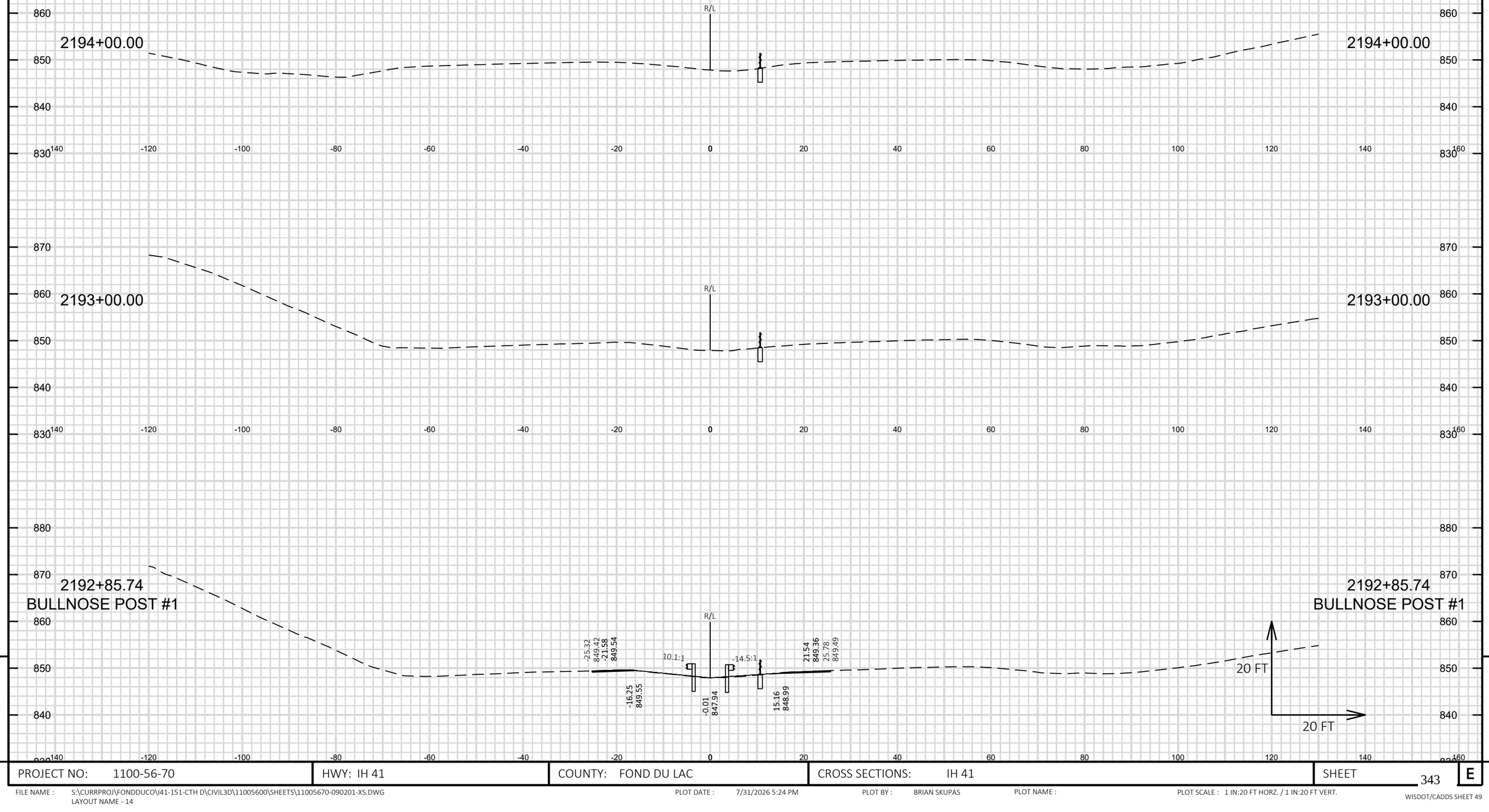
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 342	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 13

PLOT DATE : 7/31/2026 5:24 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

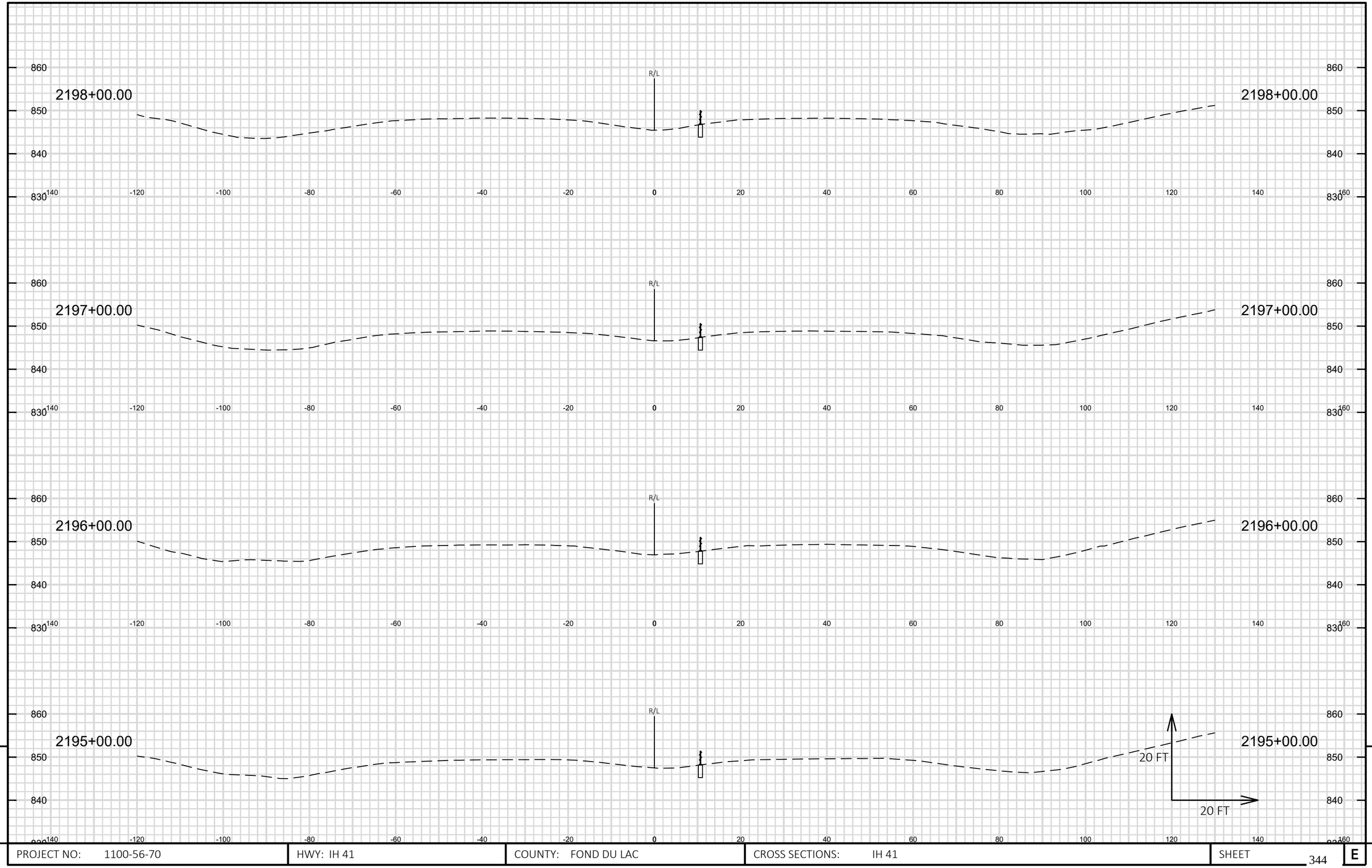
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 343	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 14

PLOT DATE : 7/31/2026 5:24 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

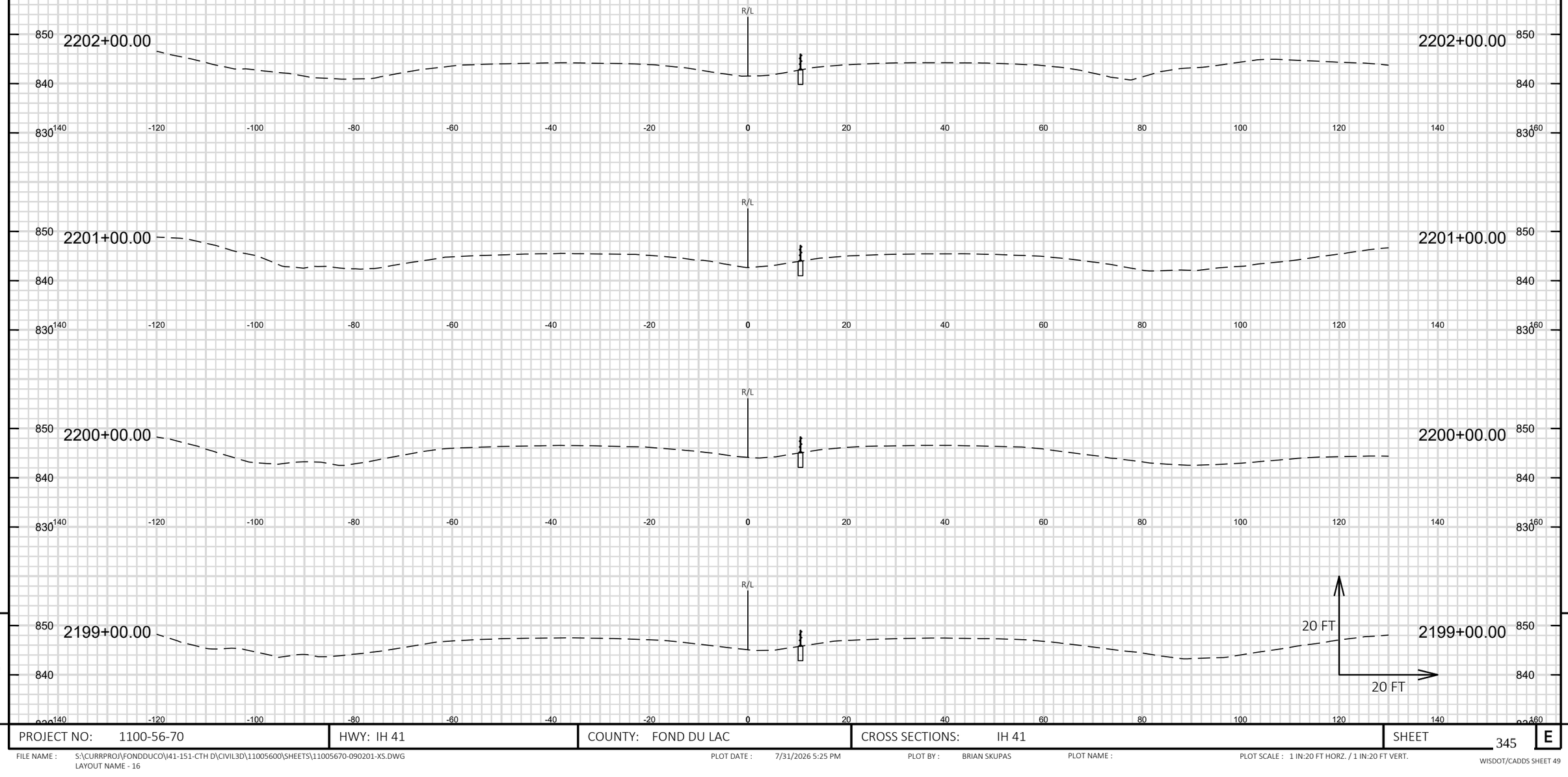
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 344	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 15

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



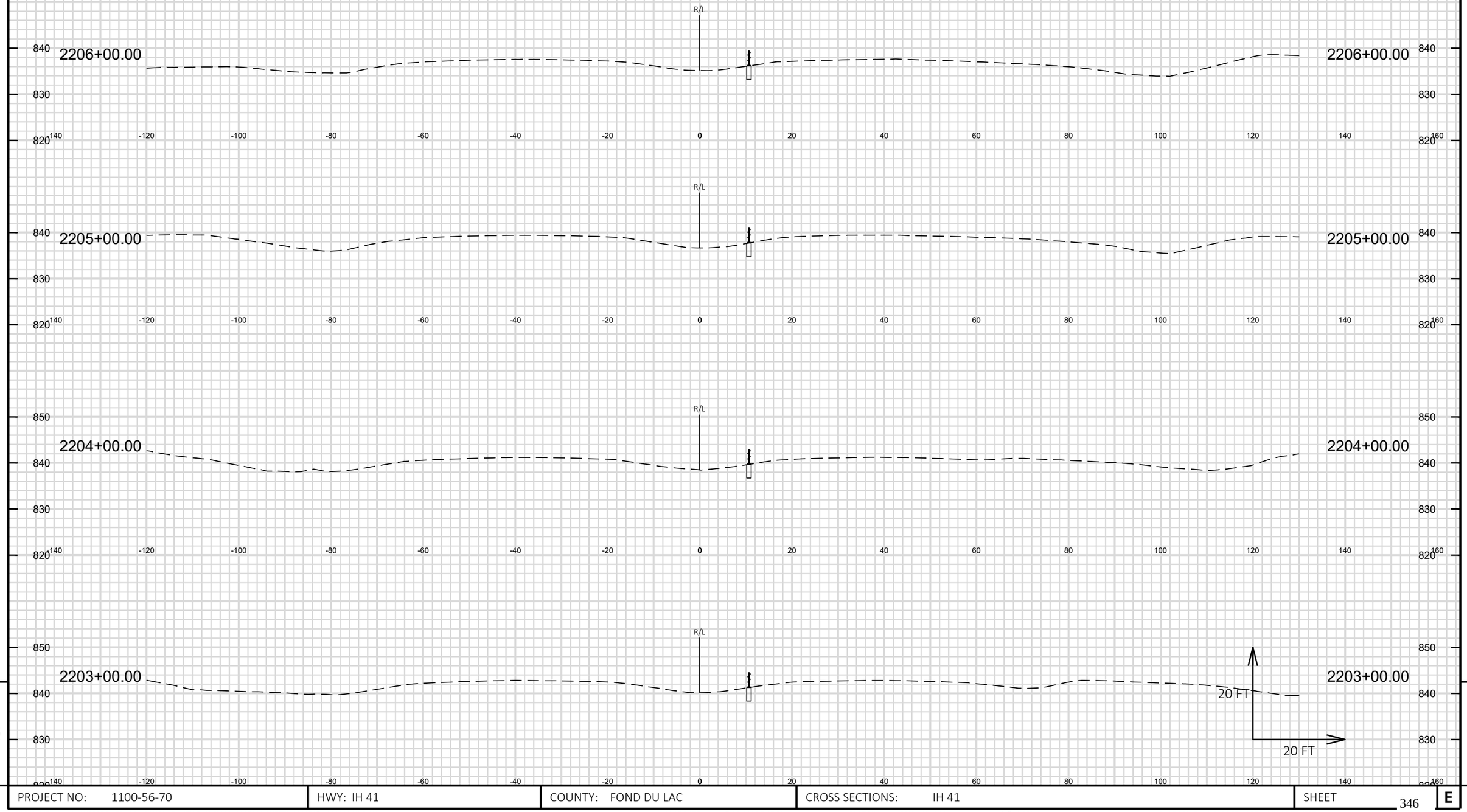
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 345	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 16

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

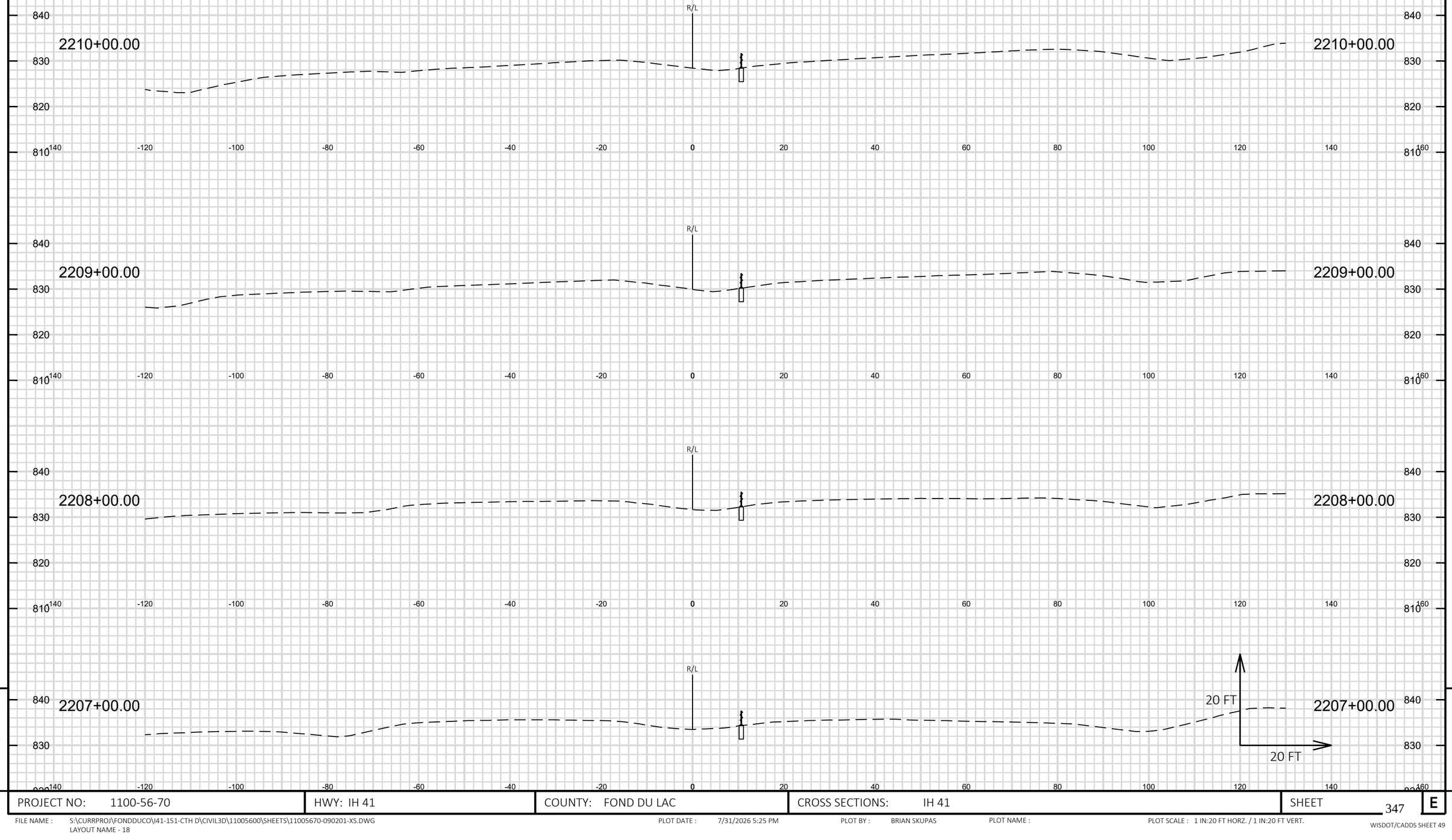
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 346	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 17

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

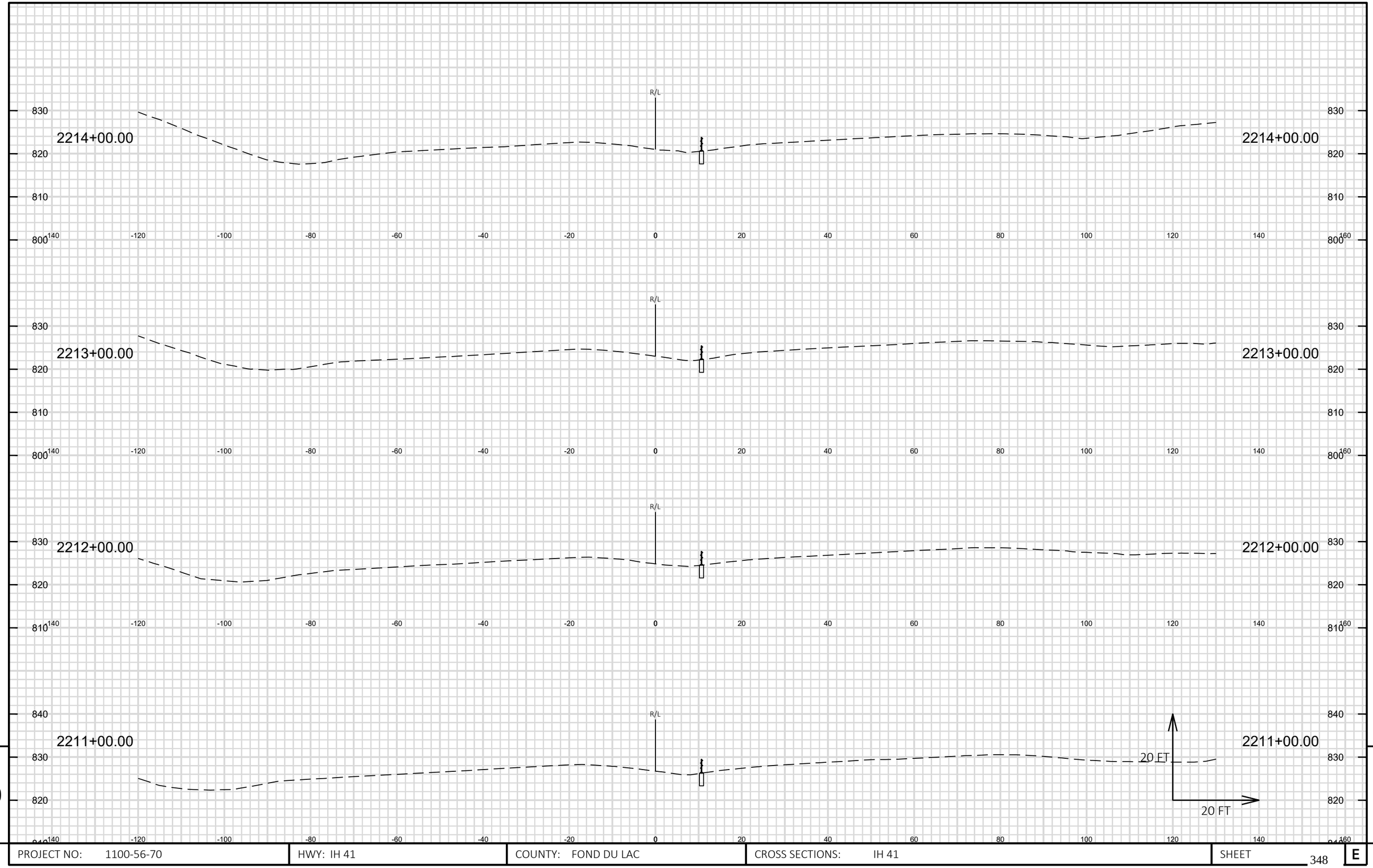
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 347	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 18

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



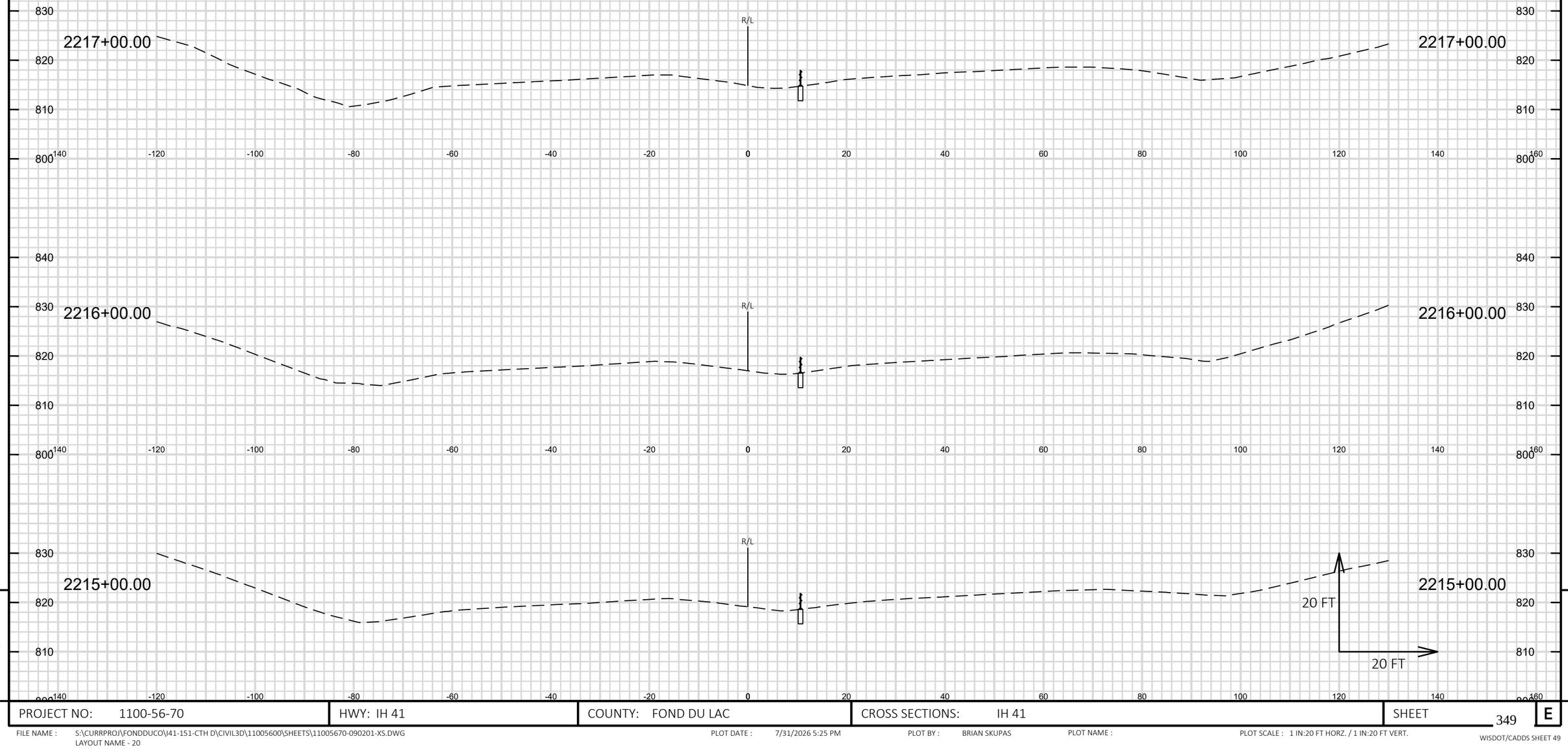
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 348 E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 19

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

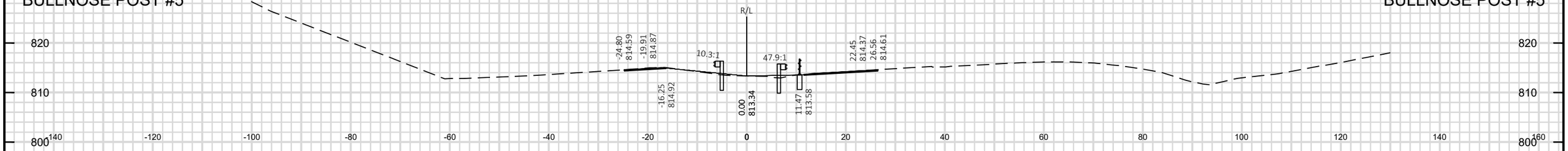
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 349	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 20

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

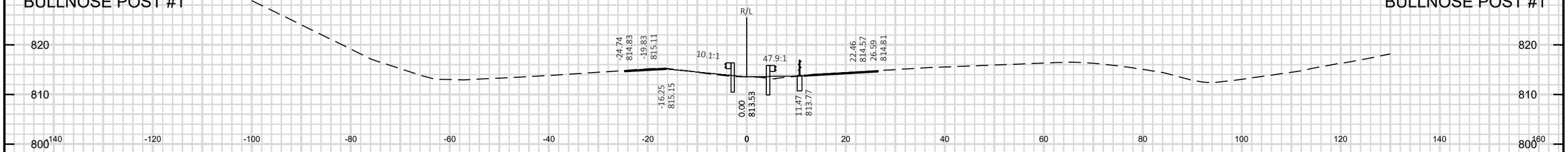
WISDOT/CADDS SHEET 49

2218+14.93
BULLNOSE POST #5



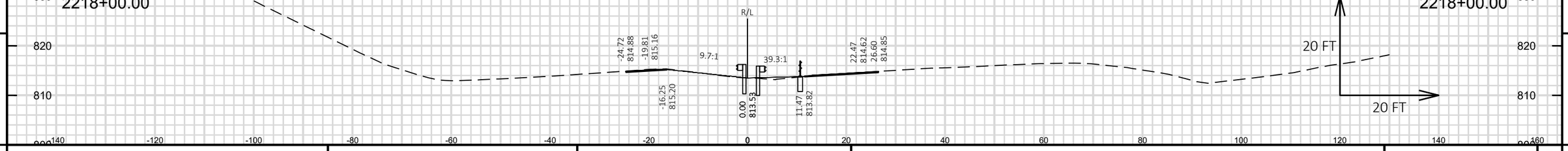
2218+14.93
BULLNOSE POST #5

2218+02.82
BULLNOSE POST #1



2218+02.82
BULLNOSE POST #1

2218+00.00



2218+00.00

9

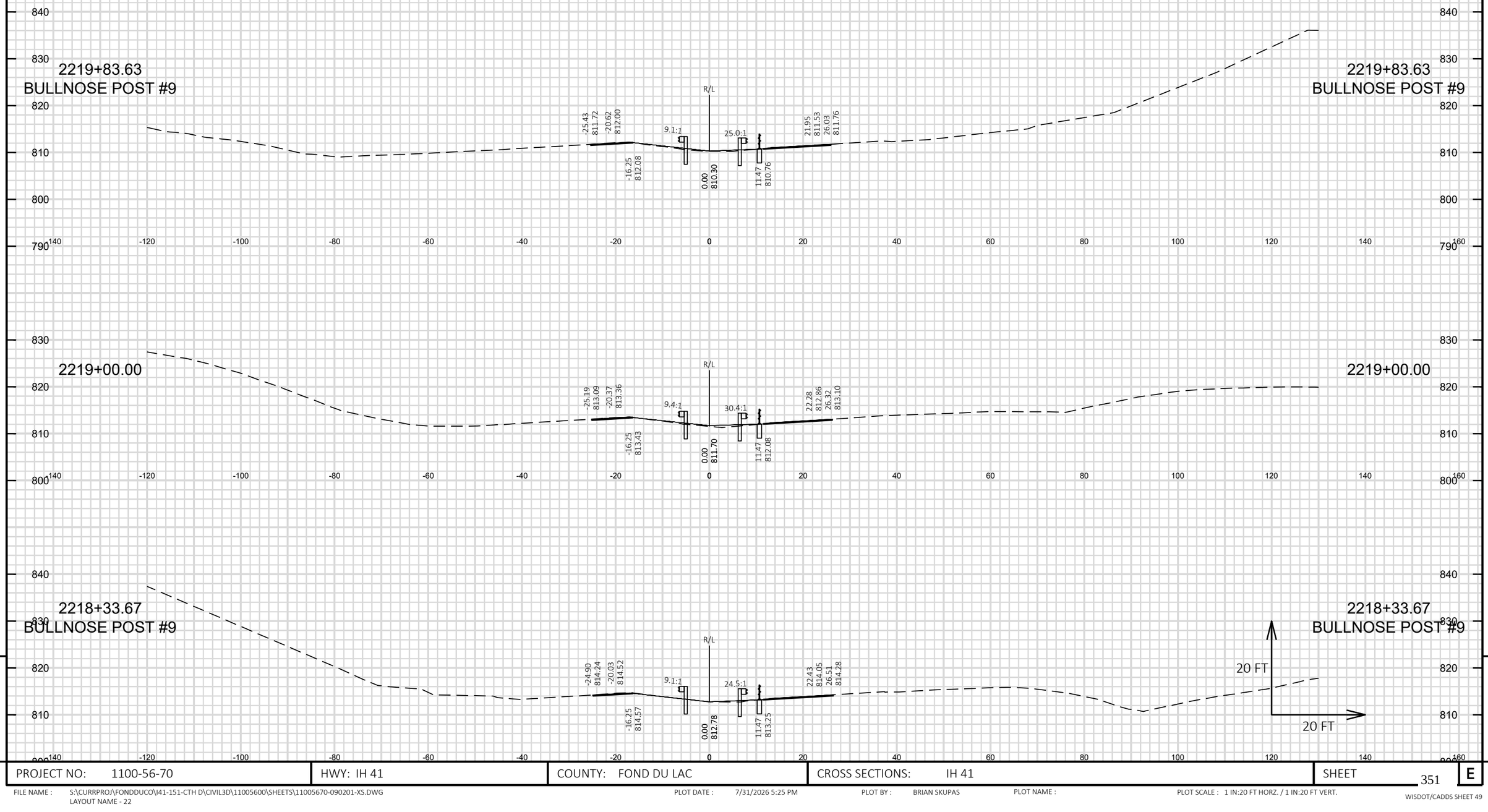
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 350	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 21

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

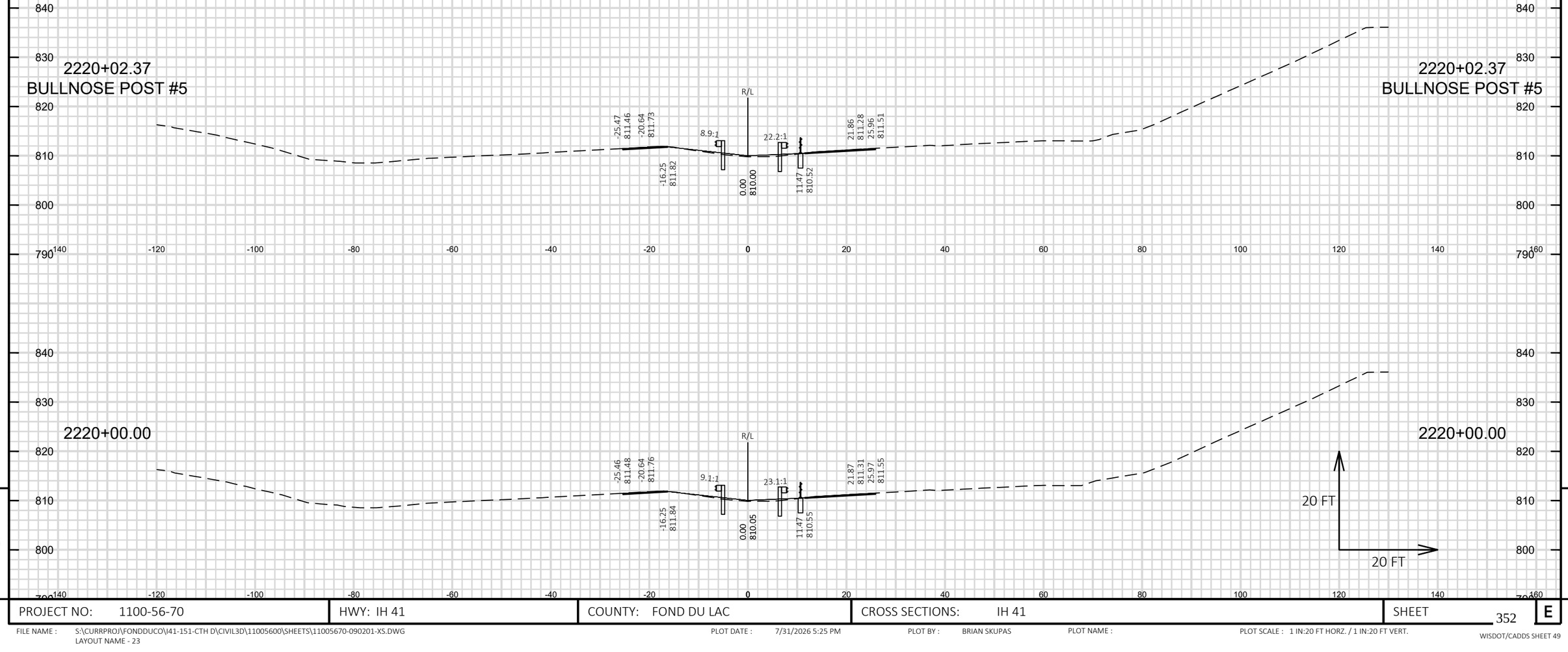
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 351	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 22

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

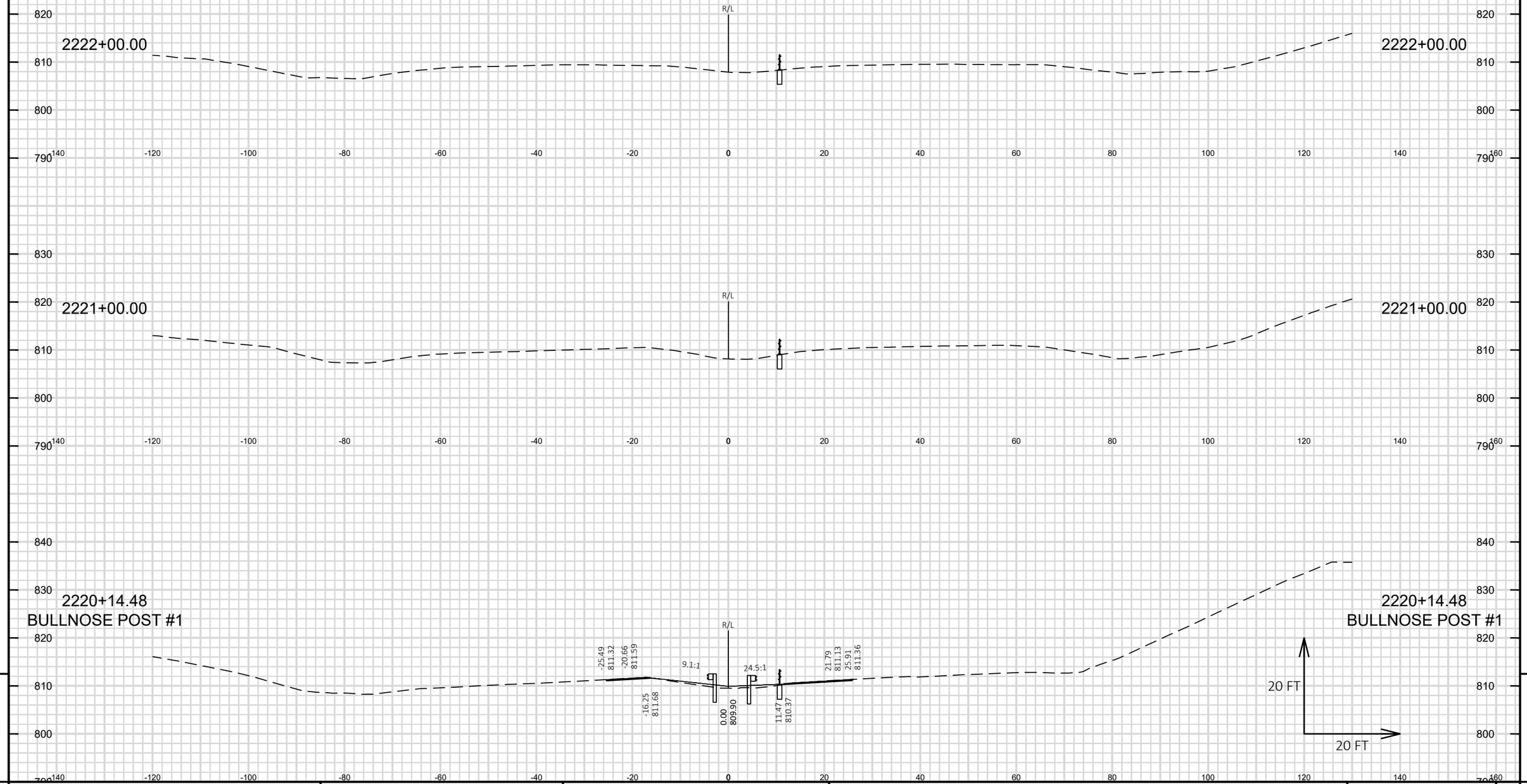
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 352	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 23

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

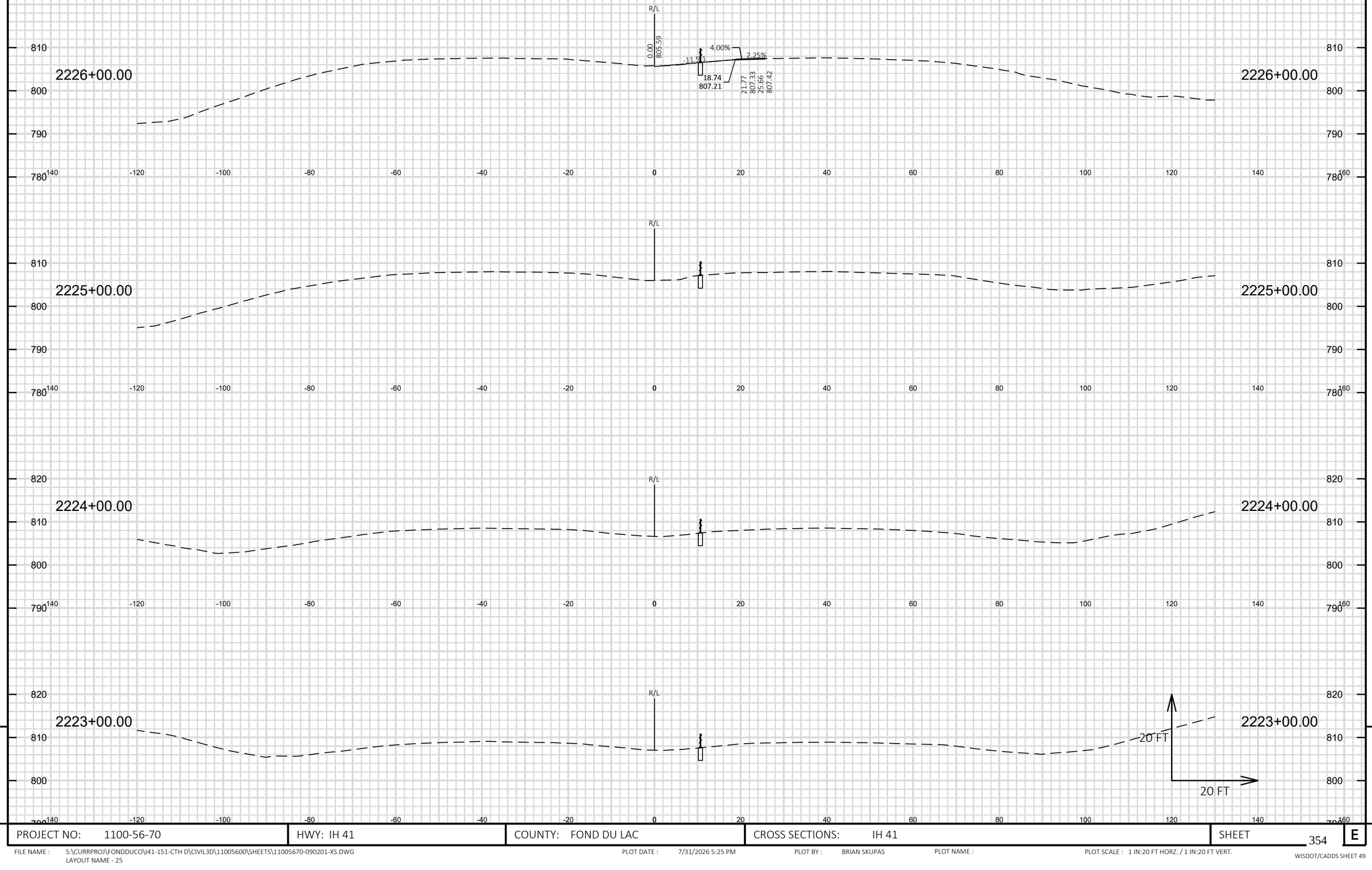
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 353	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 24

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

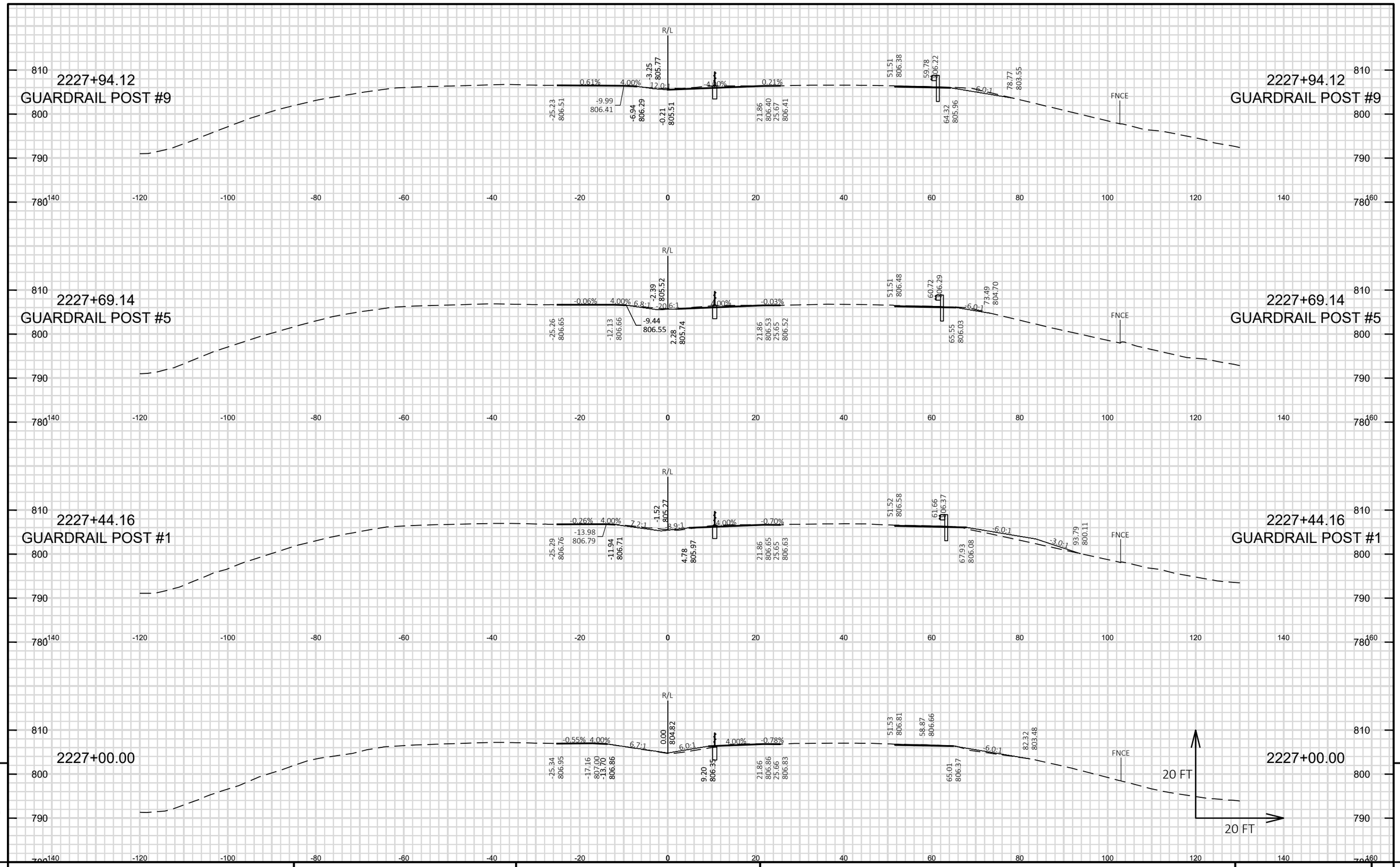
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 354	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 25

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

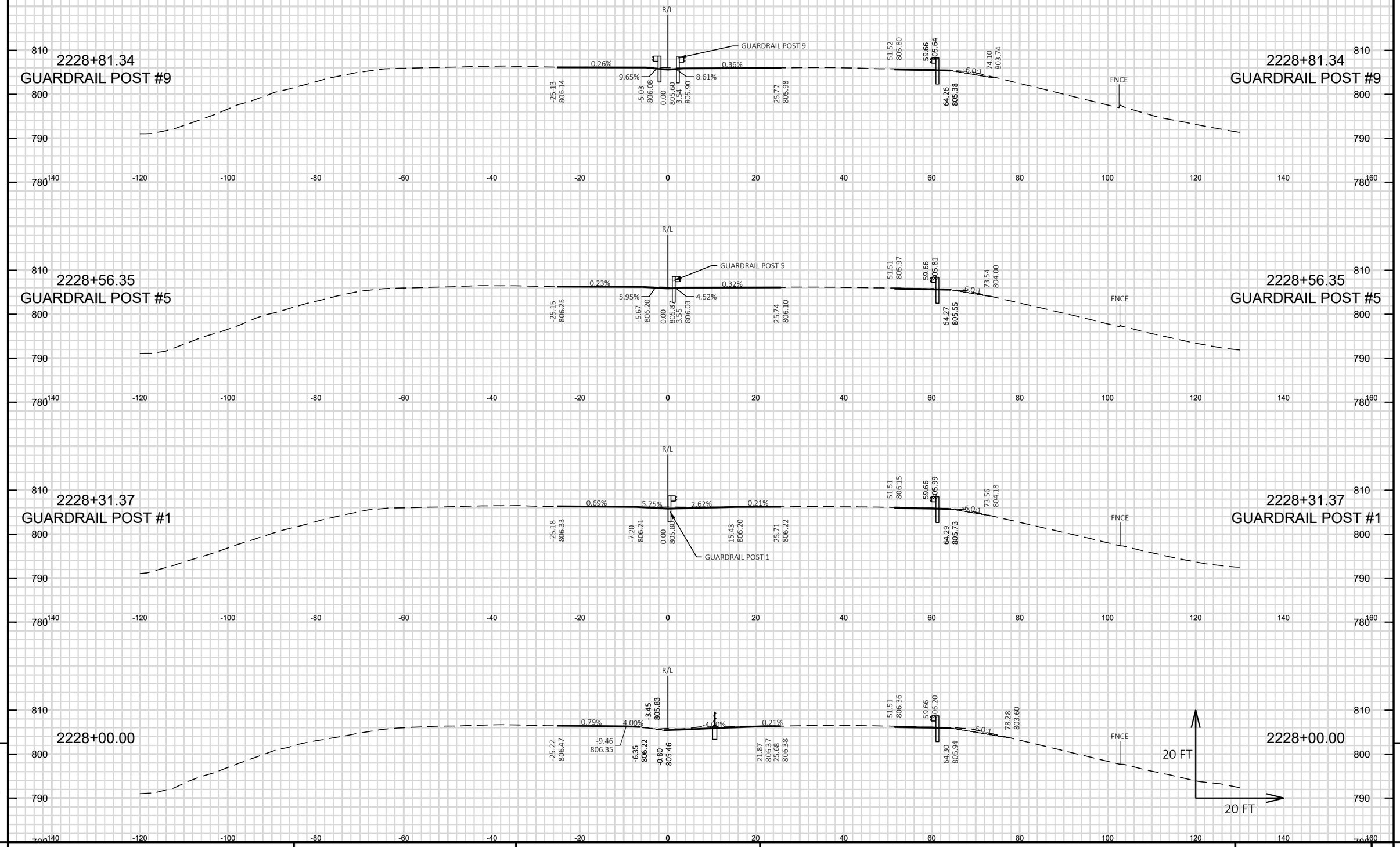


PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 355 E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 26

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

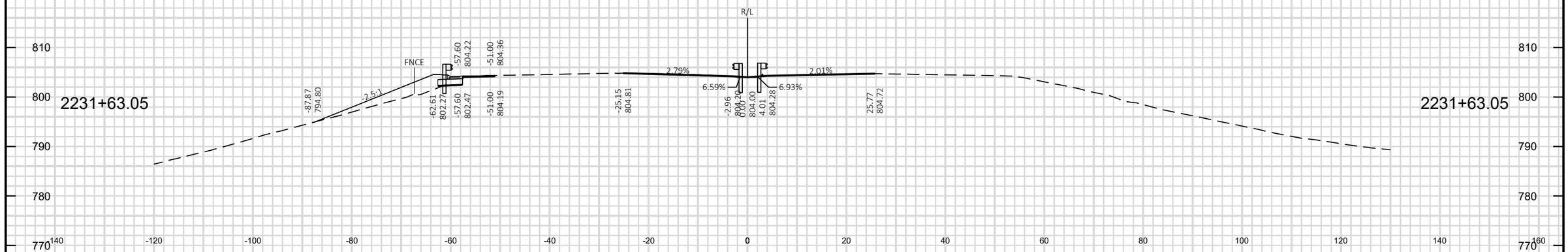
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 356	E

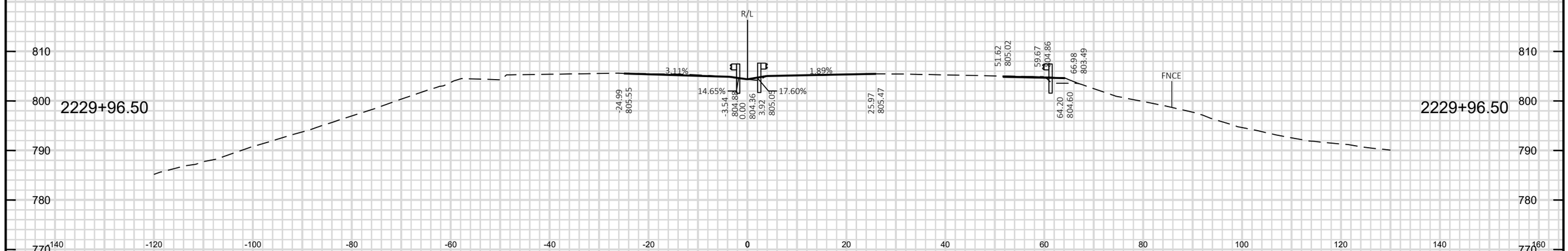
FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 27

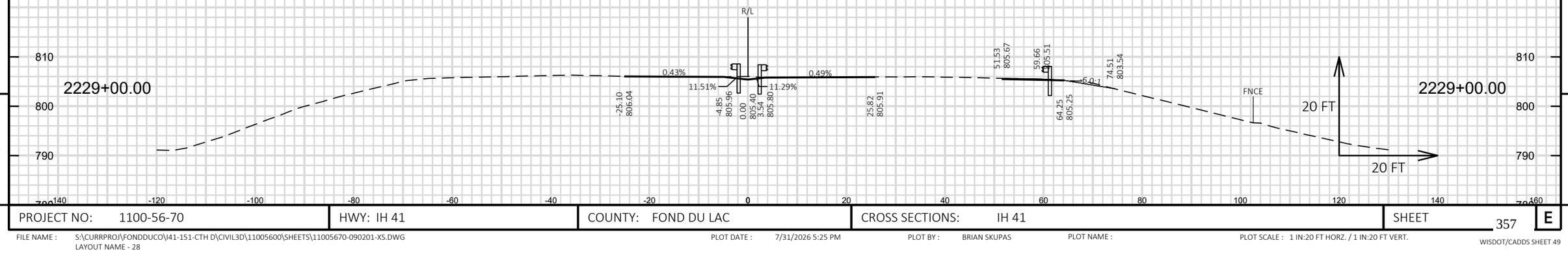
PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



NET EXCEPTION TO C/L LENGTH
2230+13.08 - 2231+45.46





9

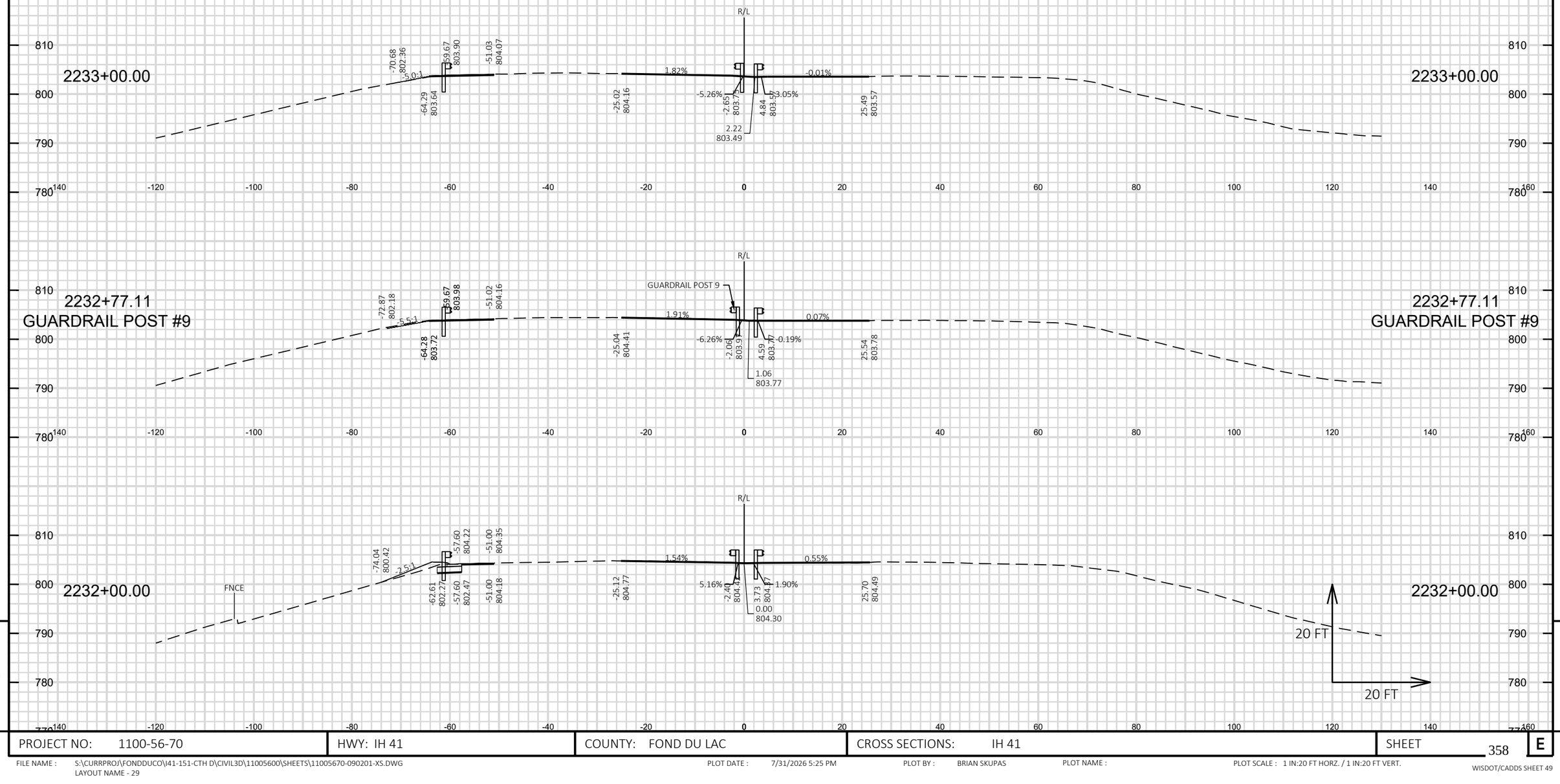
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 357	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 28

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



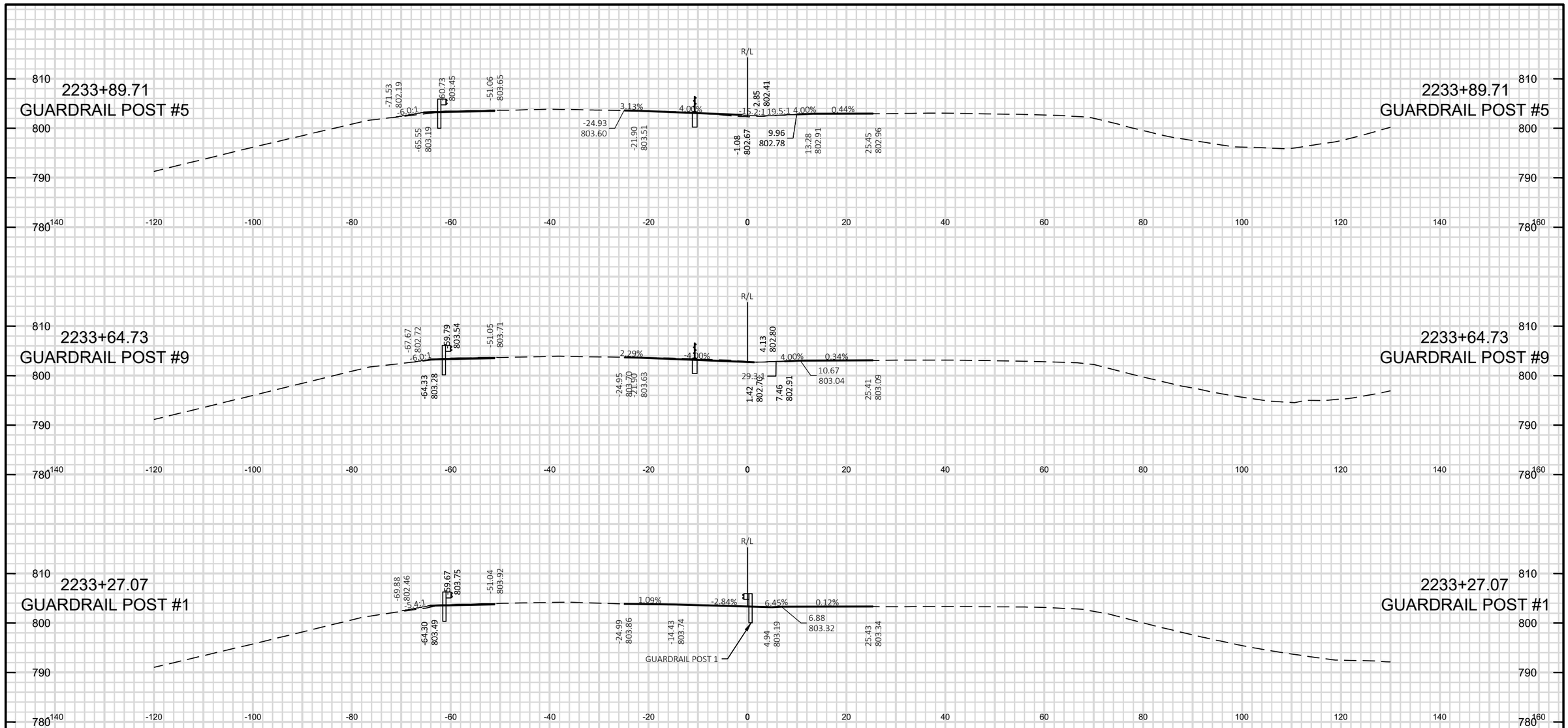
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 358	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 29

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

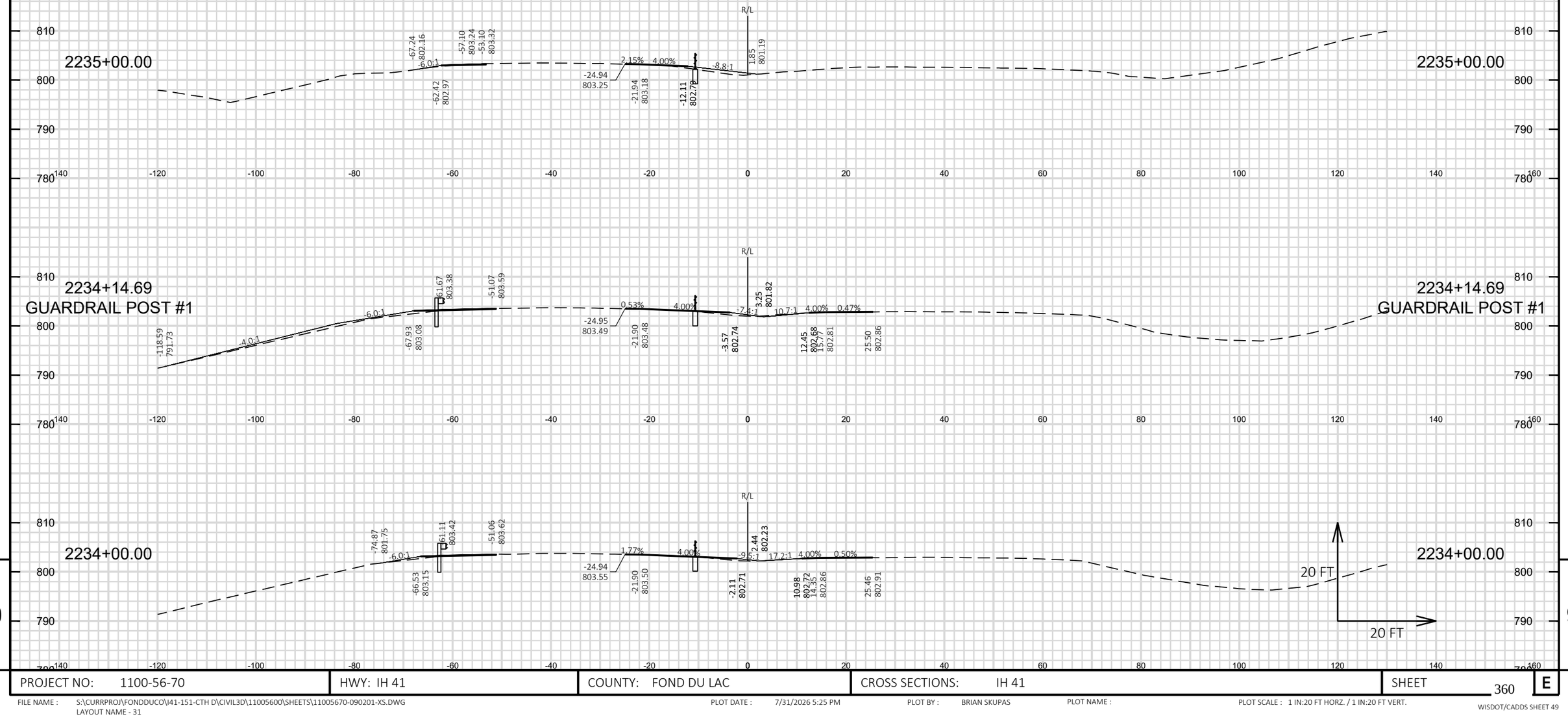
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 359	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 30

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

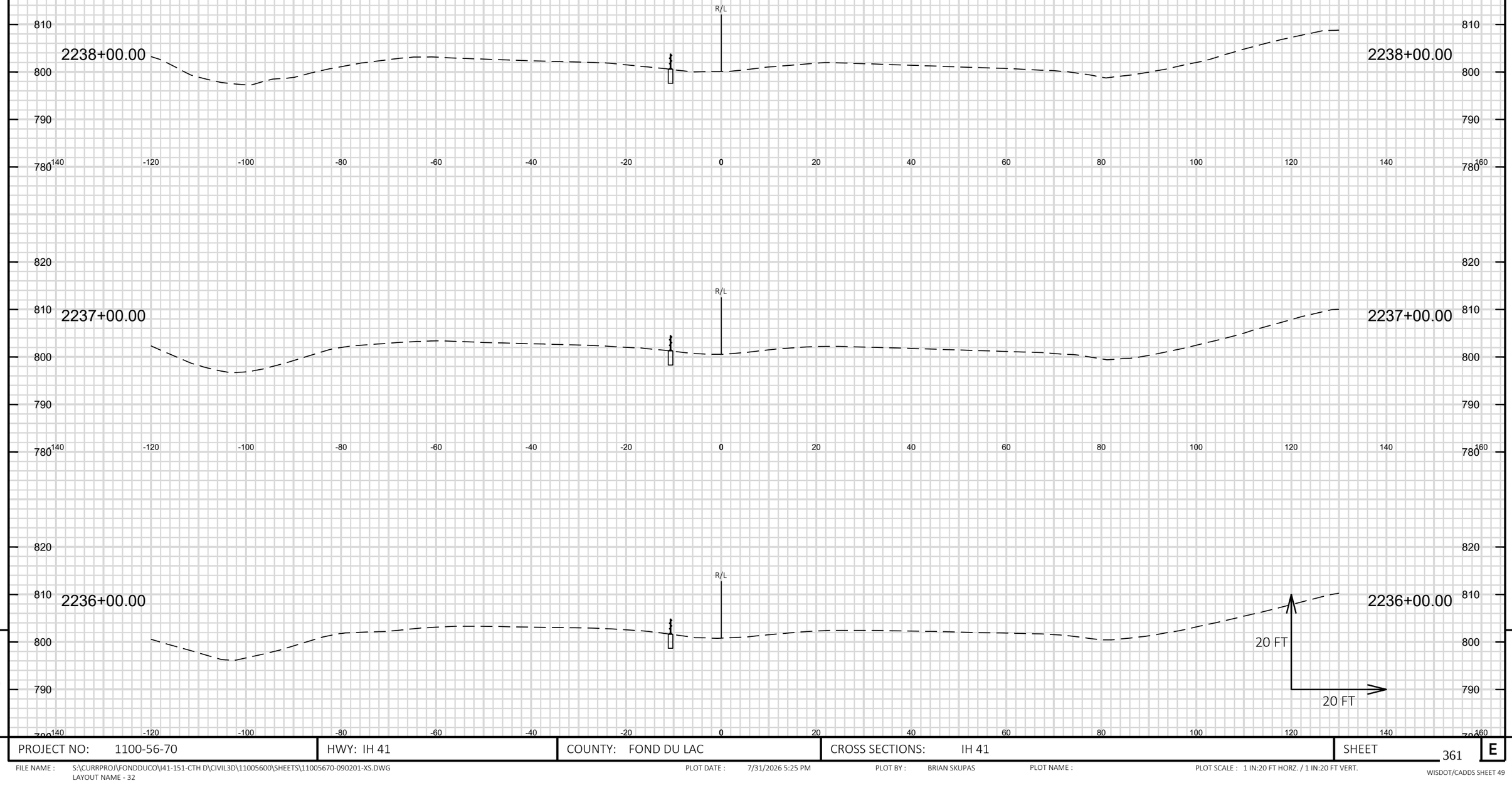
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 360	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 31

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

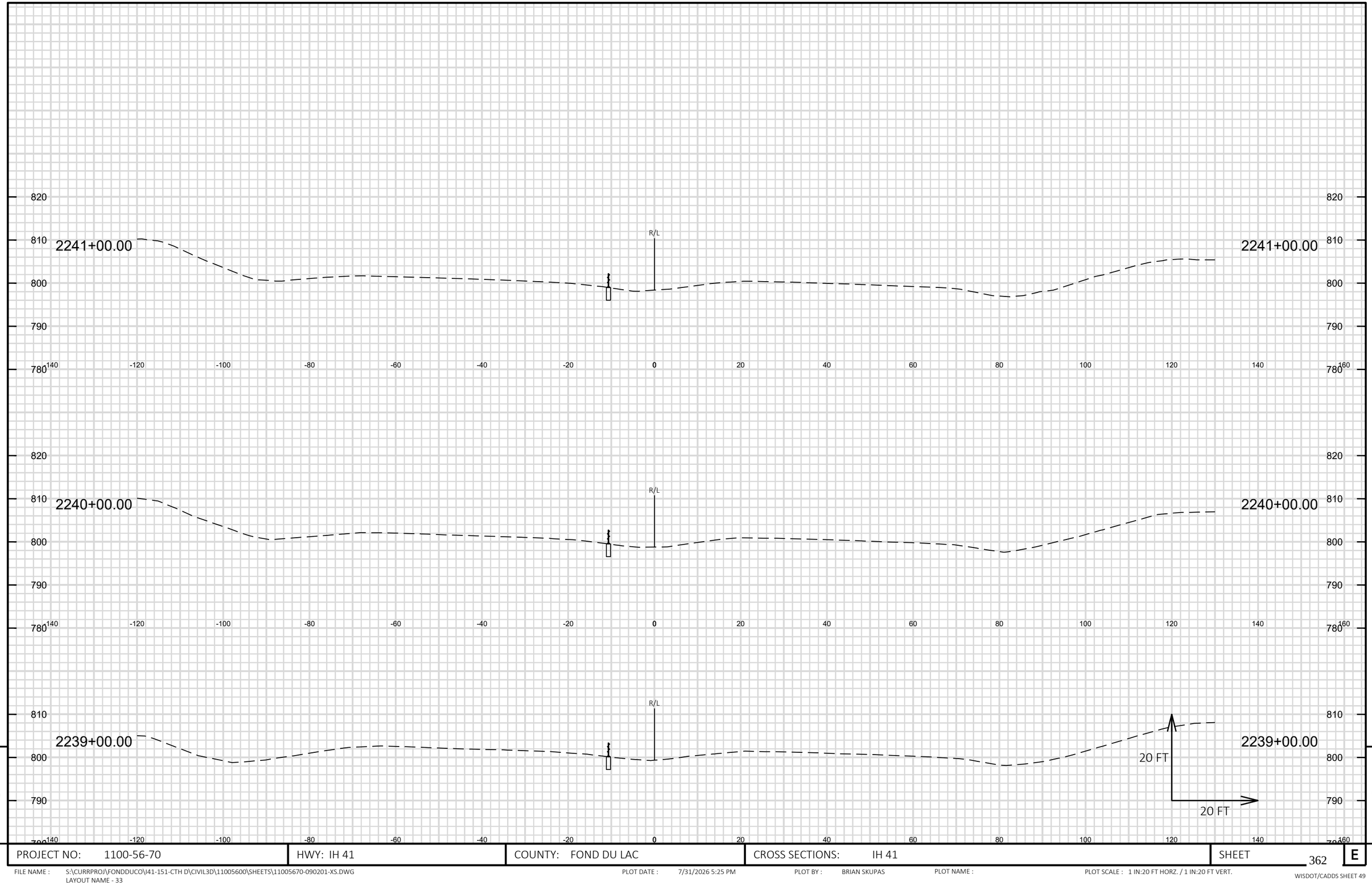
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 361	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 32

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

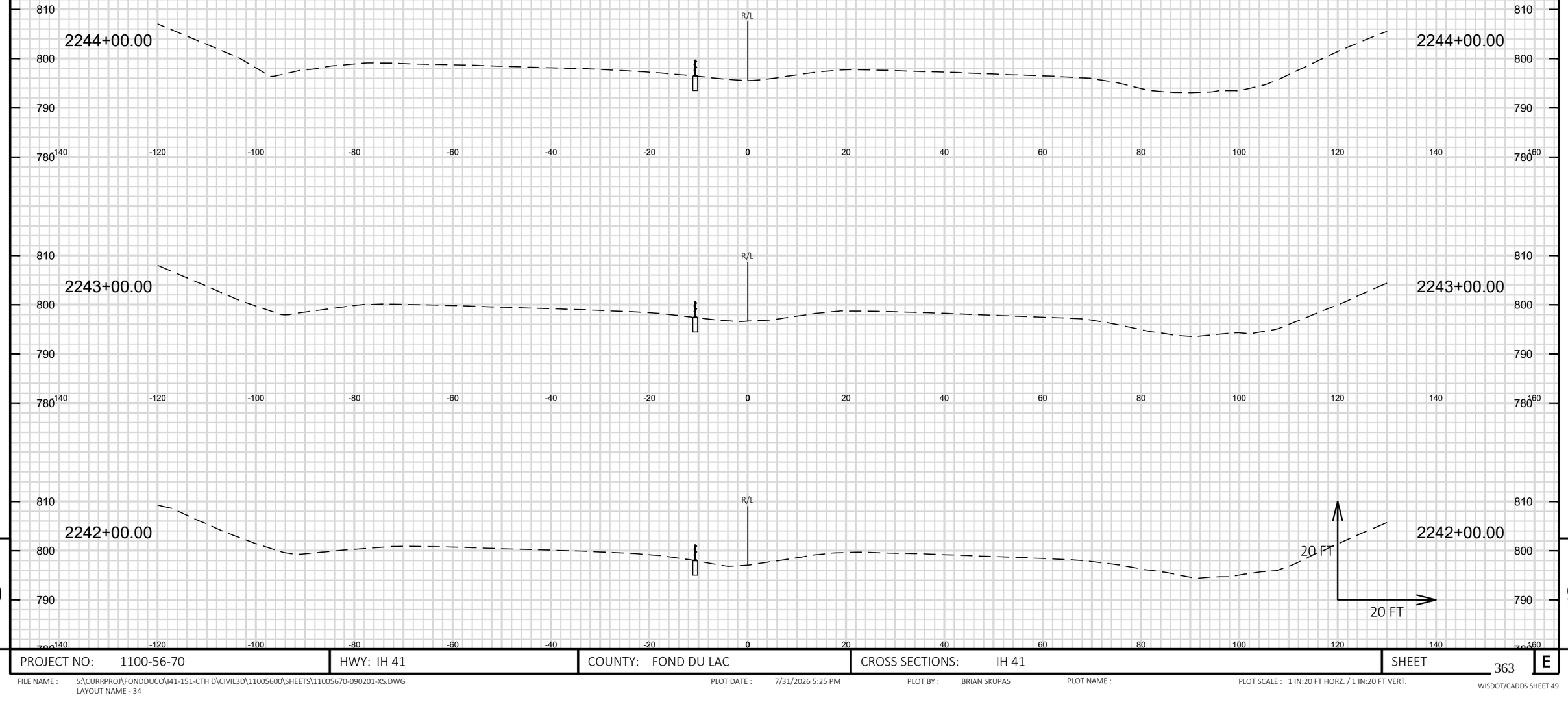
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 362	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 33

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

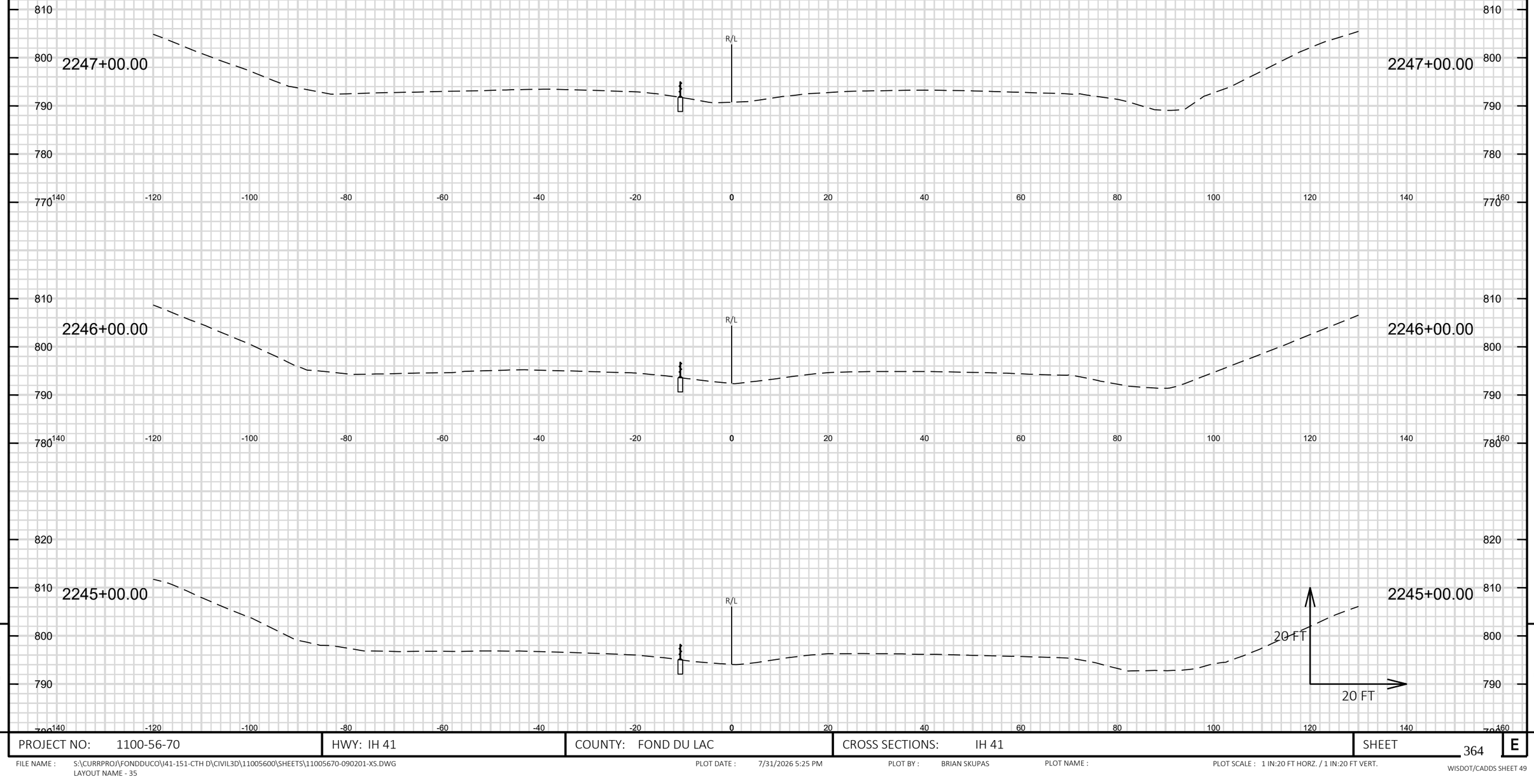
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 363	E

9

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 34

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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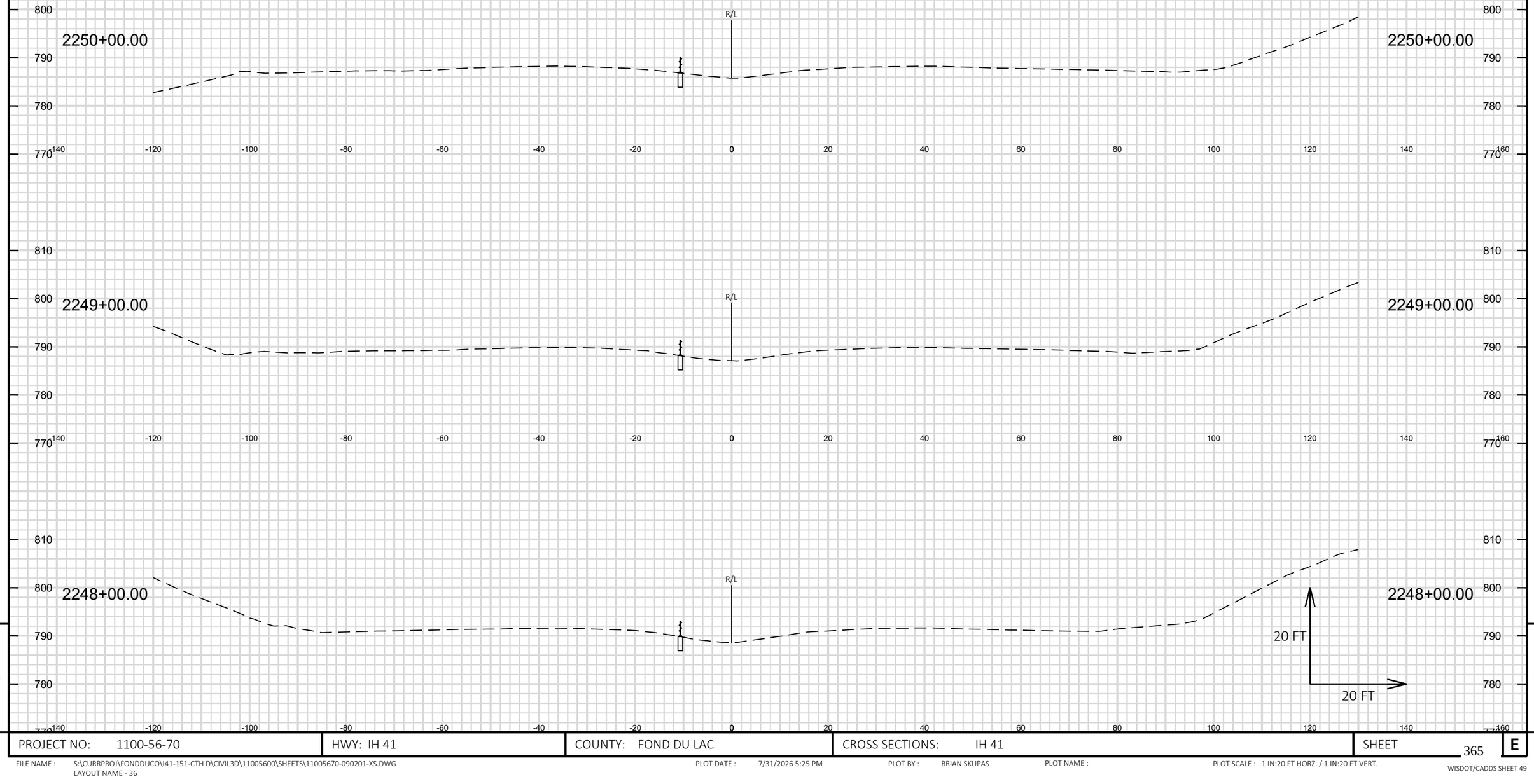
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 364	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 35

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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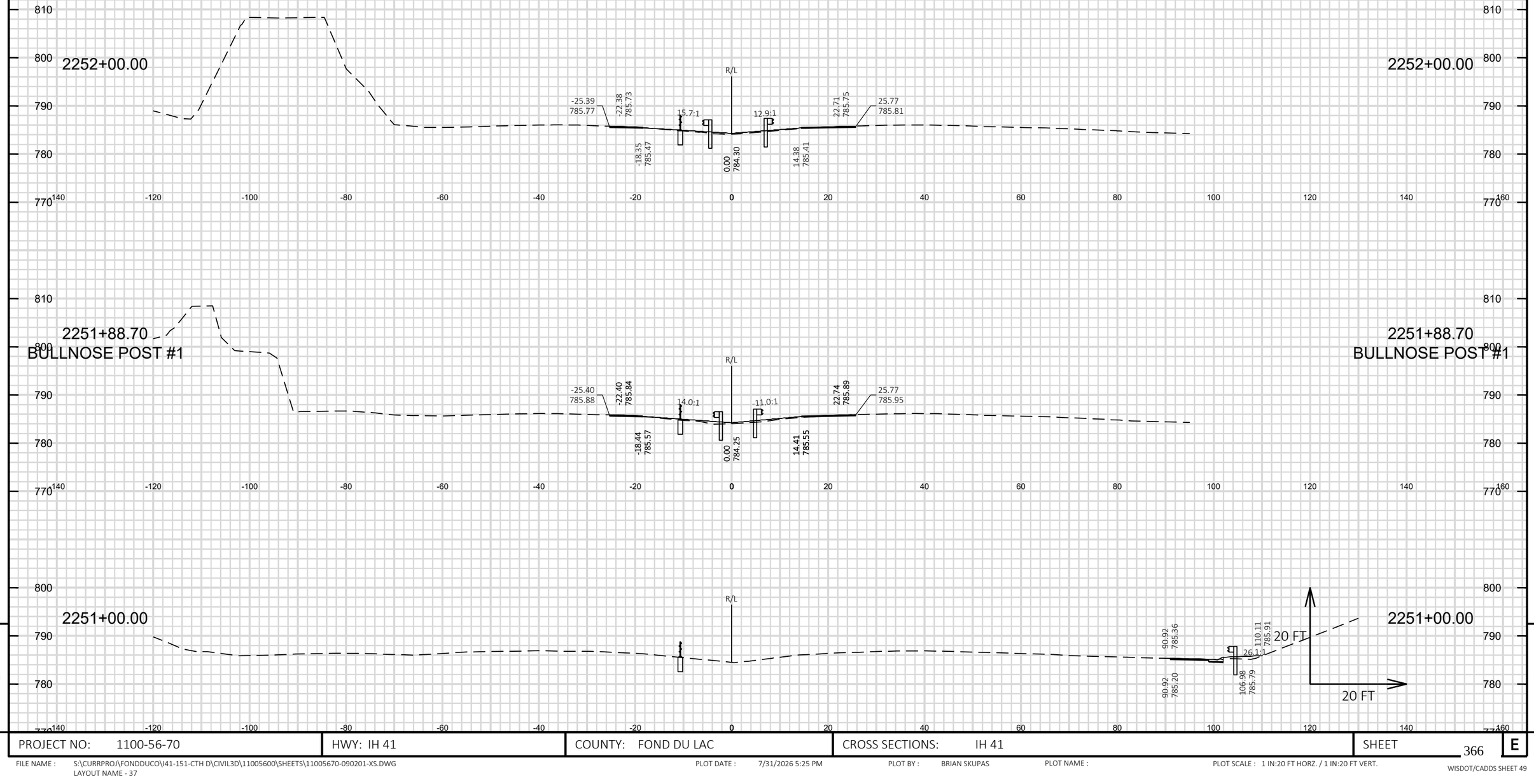
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 365	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 36

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

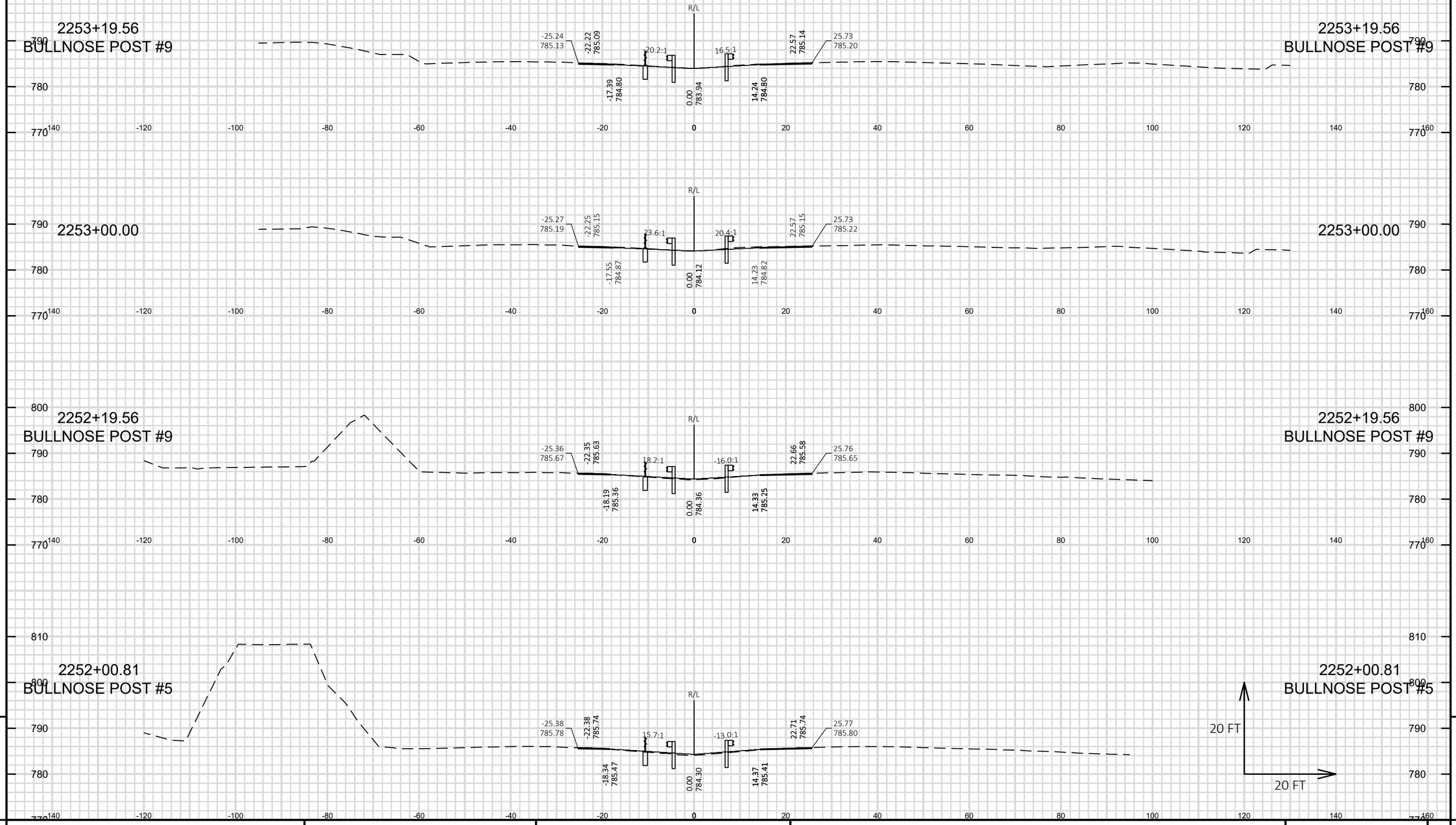


PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 366 E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 37

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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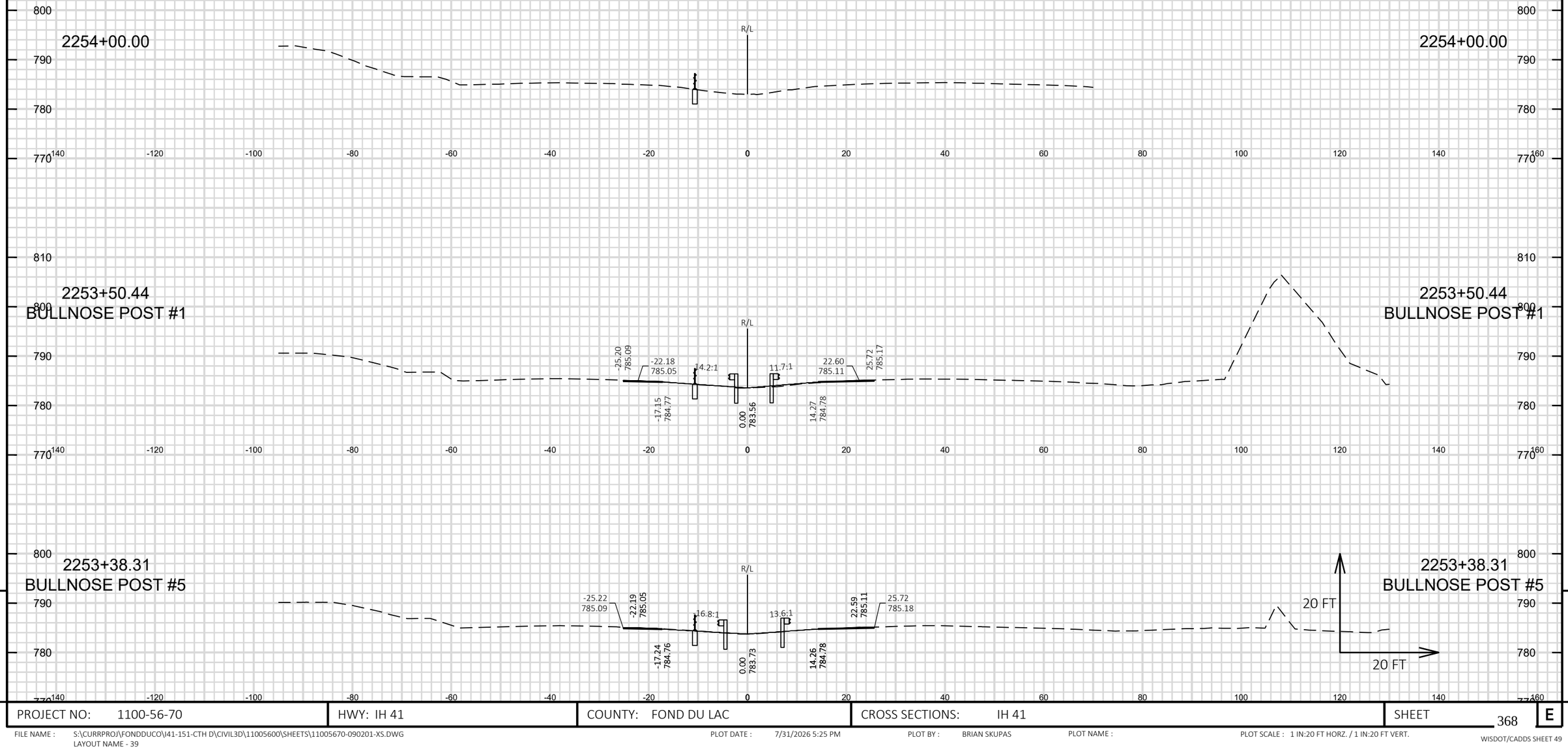
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 367	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 38

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

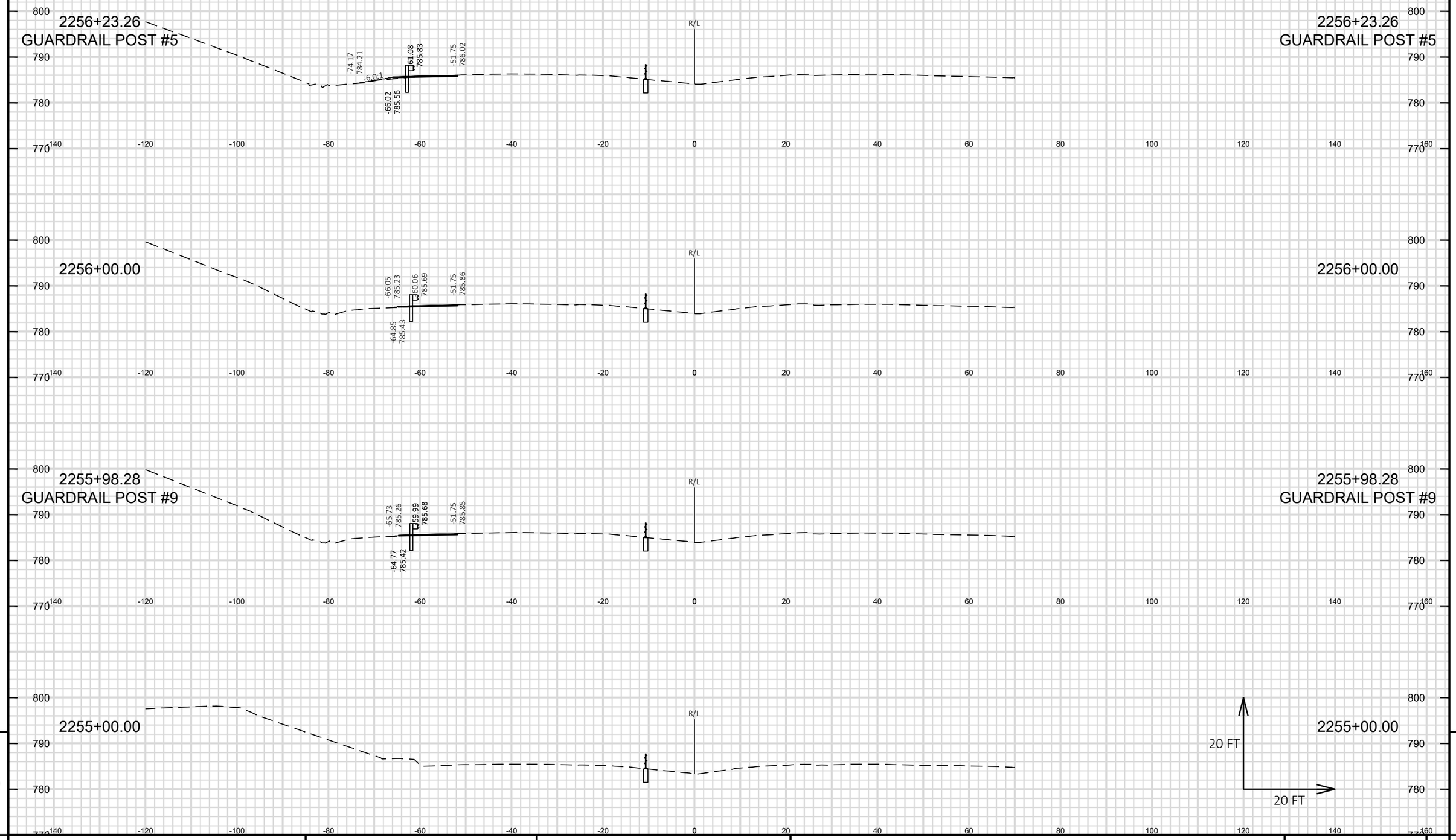


PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 368	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 39

PLOT DATE : 7/31/2026 5:25 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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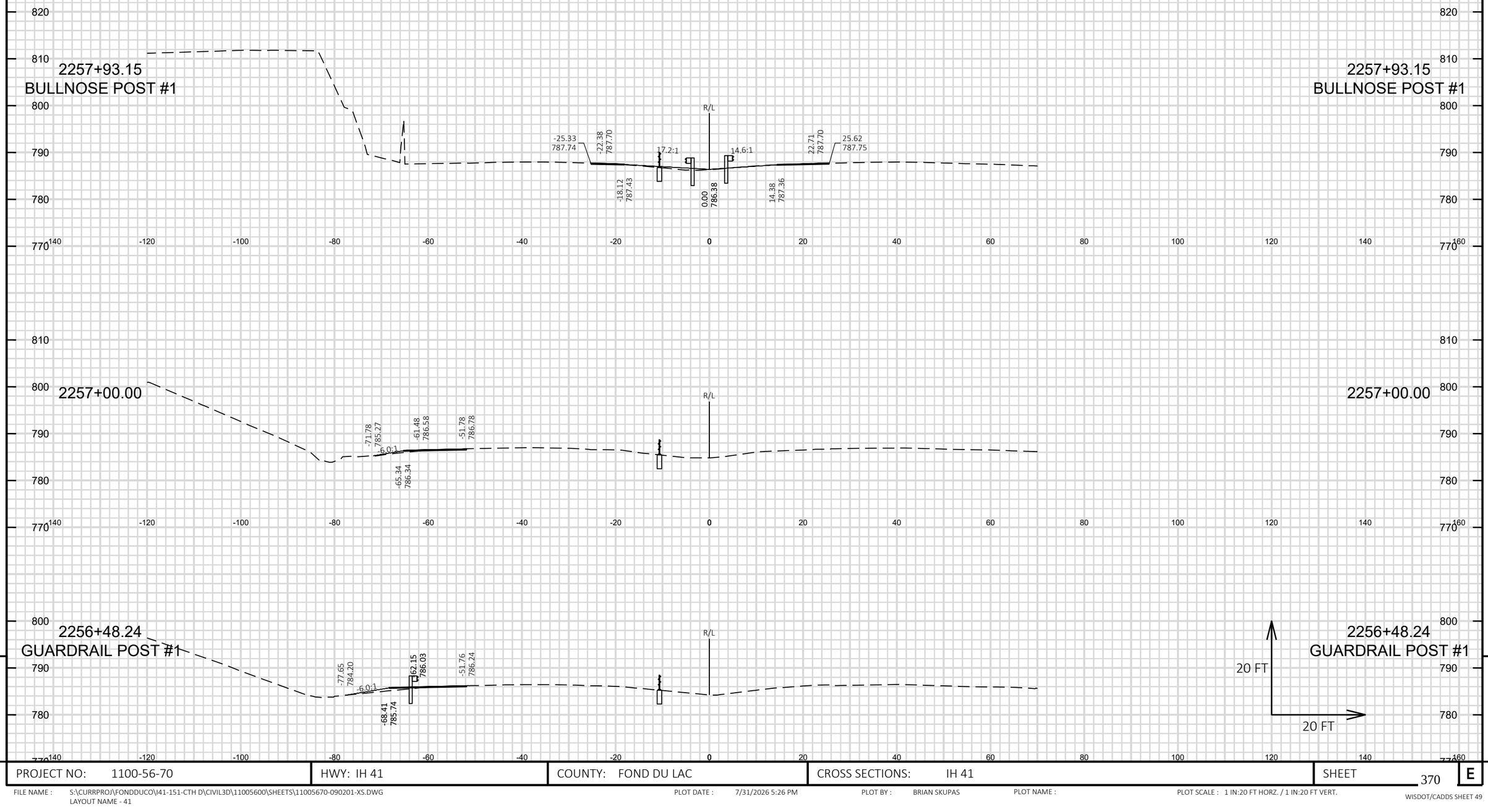
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 369	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 40

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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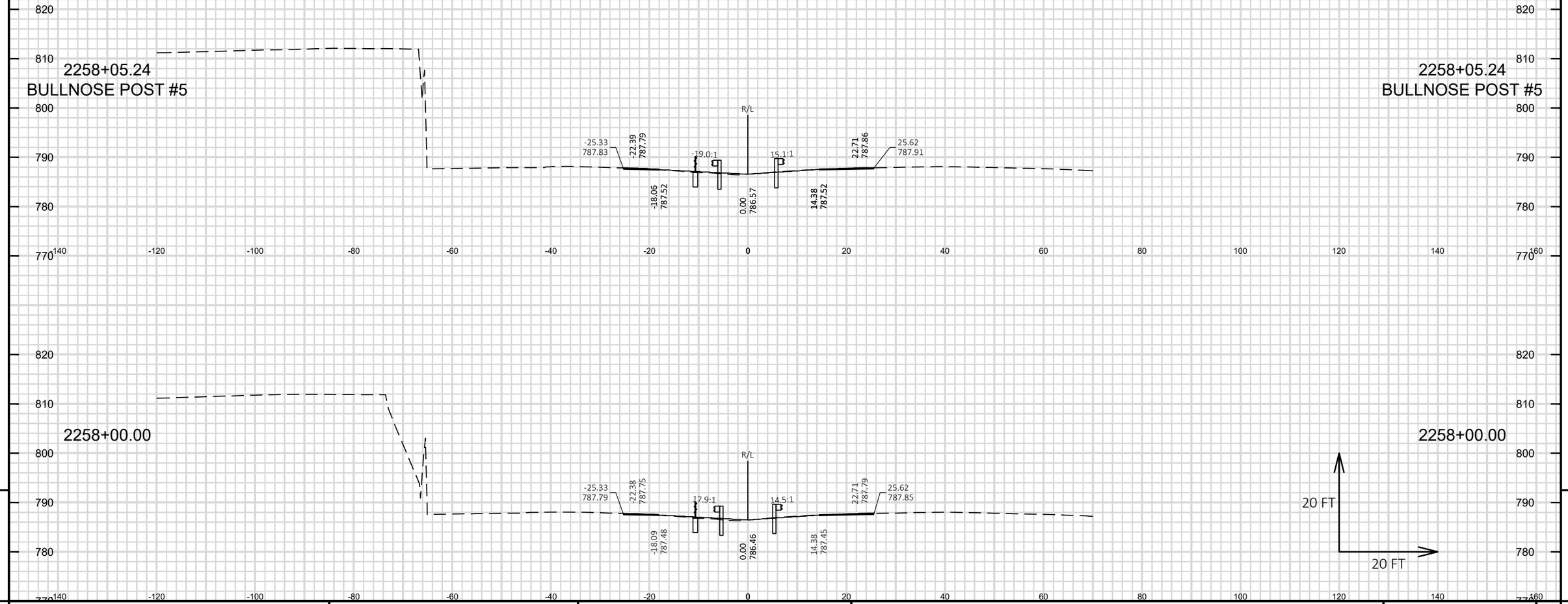
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 370	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 41

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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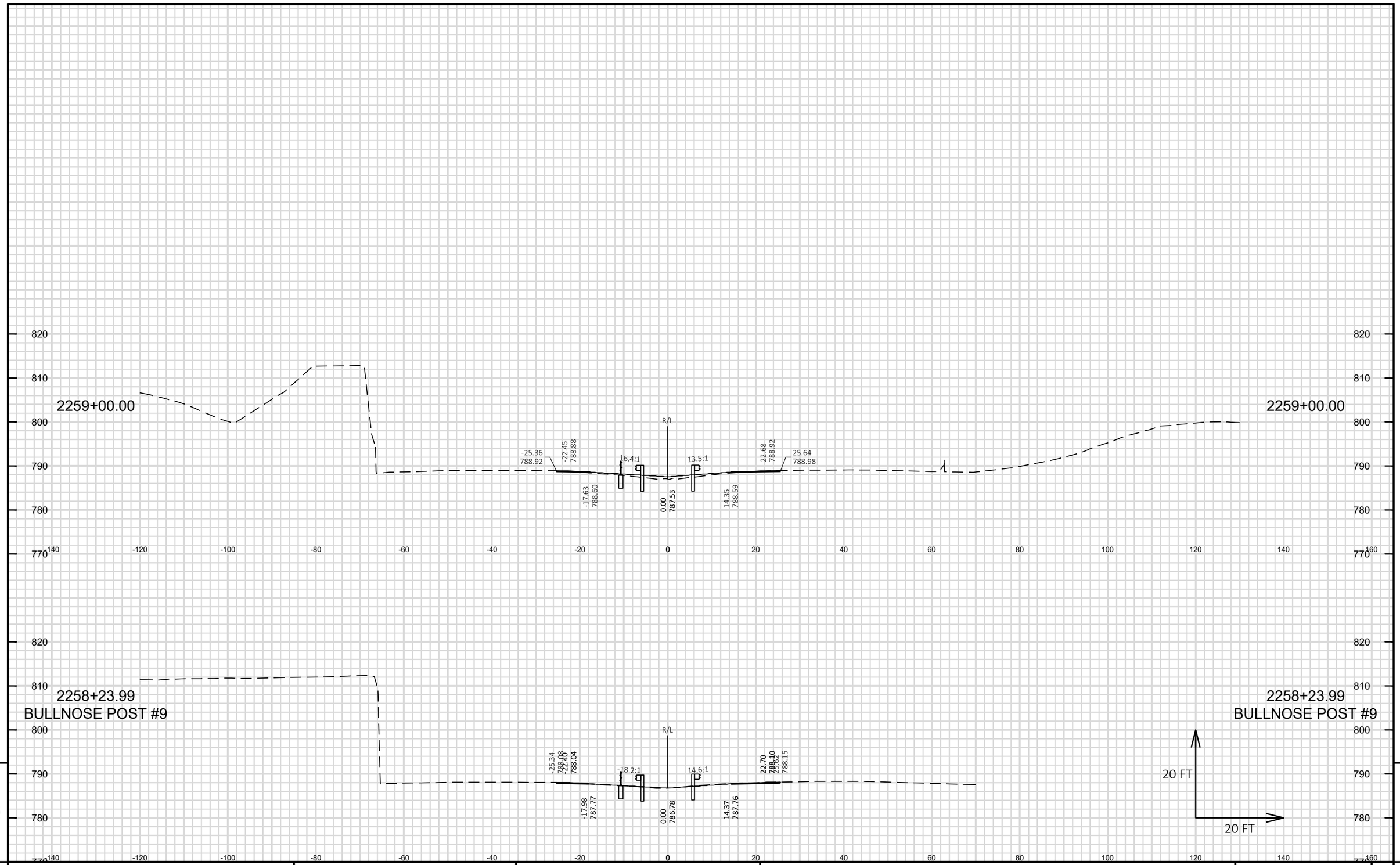
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 371	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 42

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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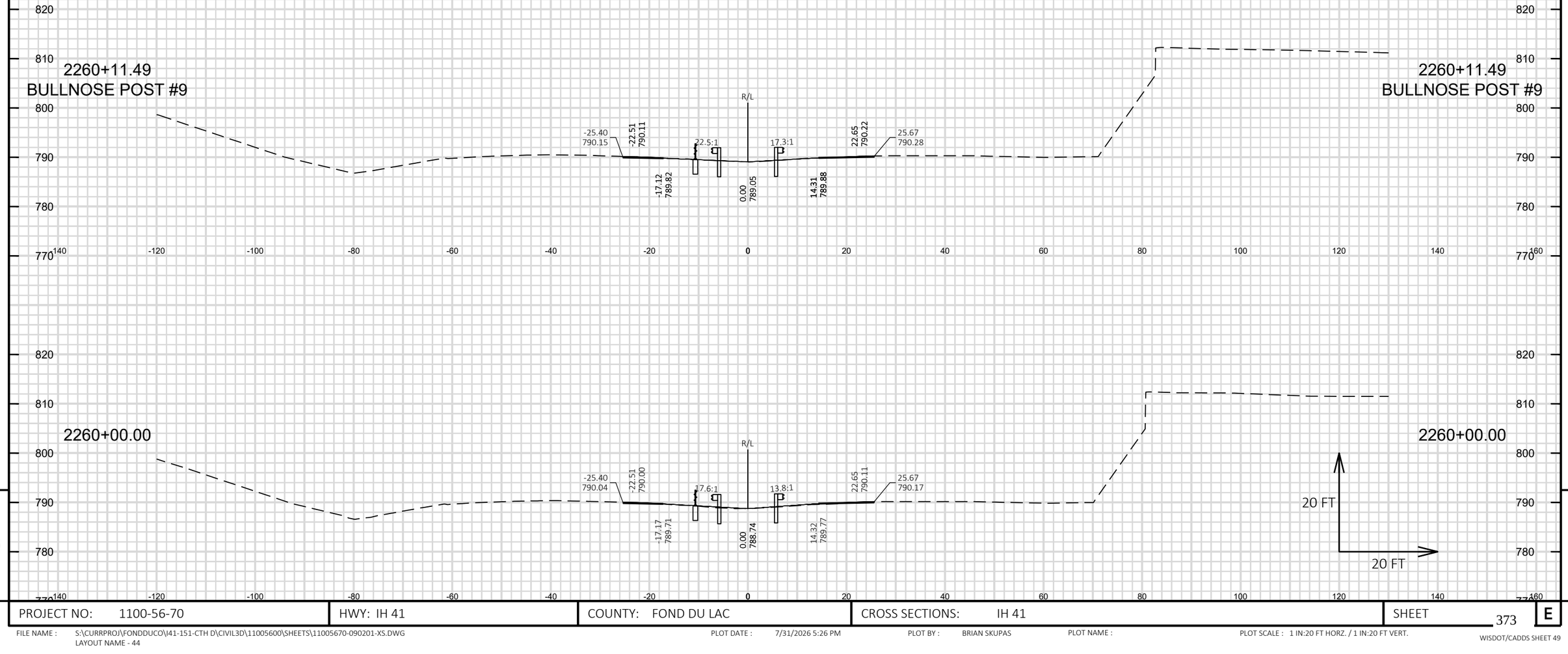
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 372	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 43

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

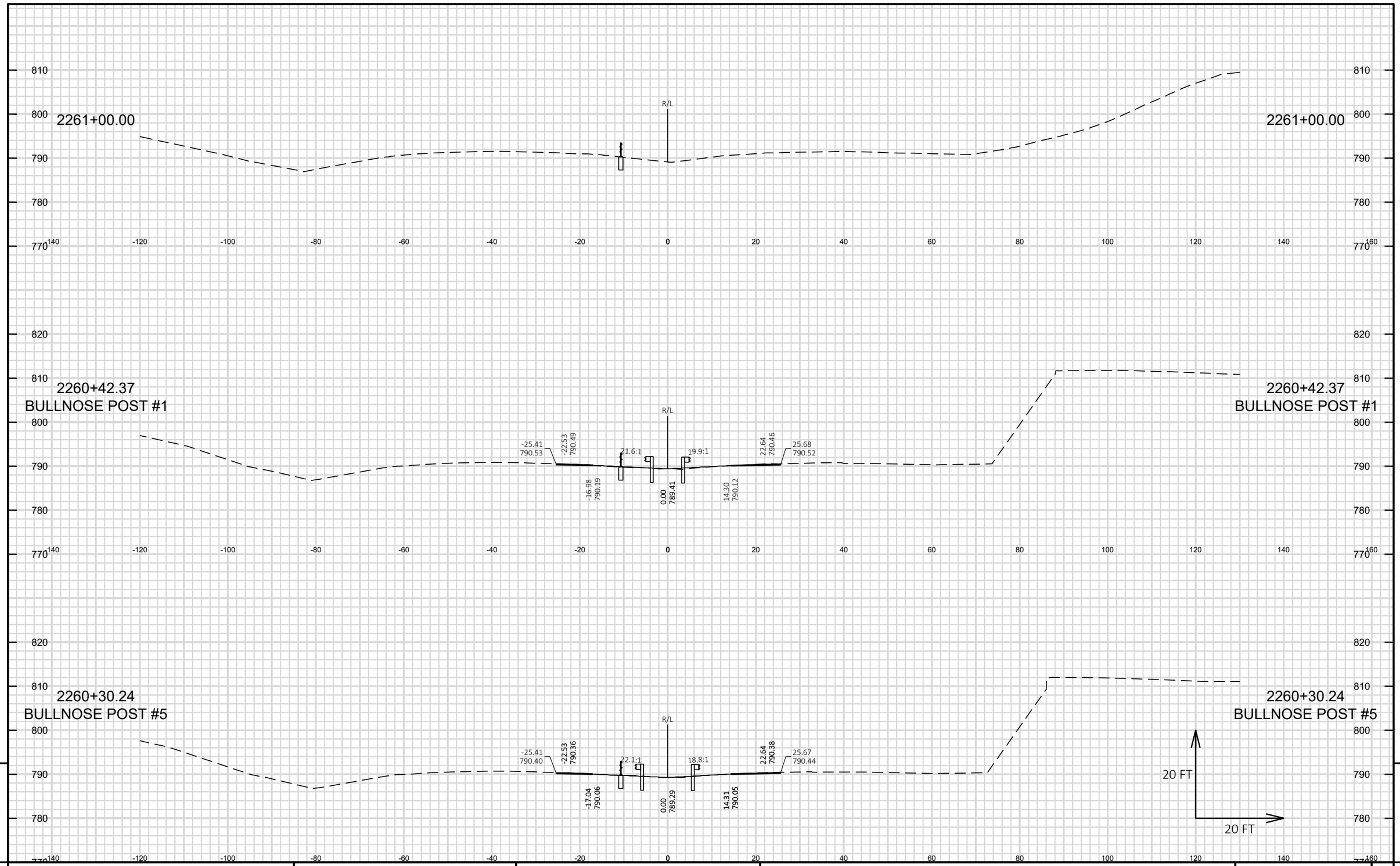


PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 373	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 44

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

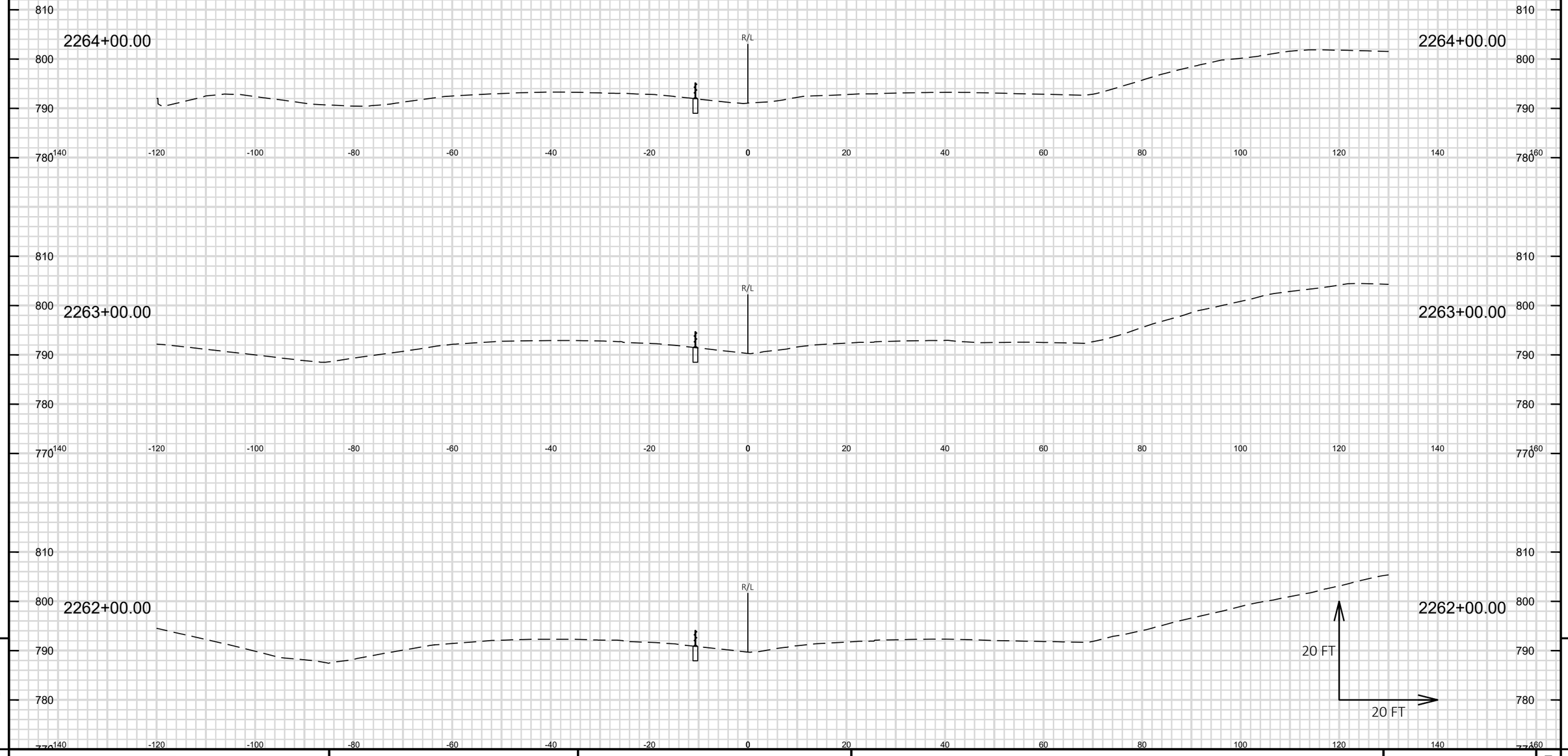
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 374	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 45

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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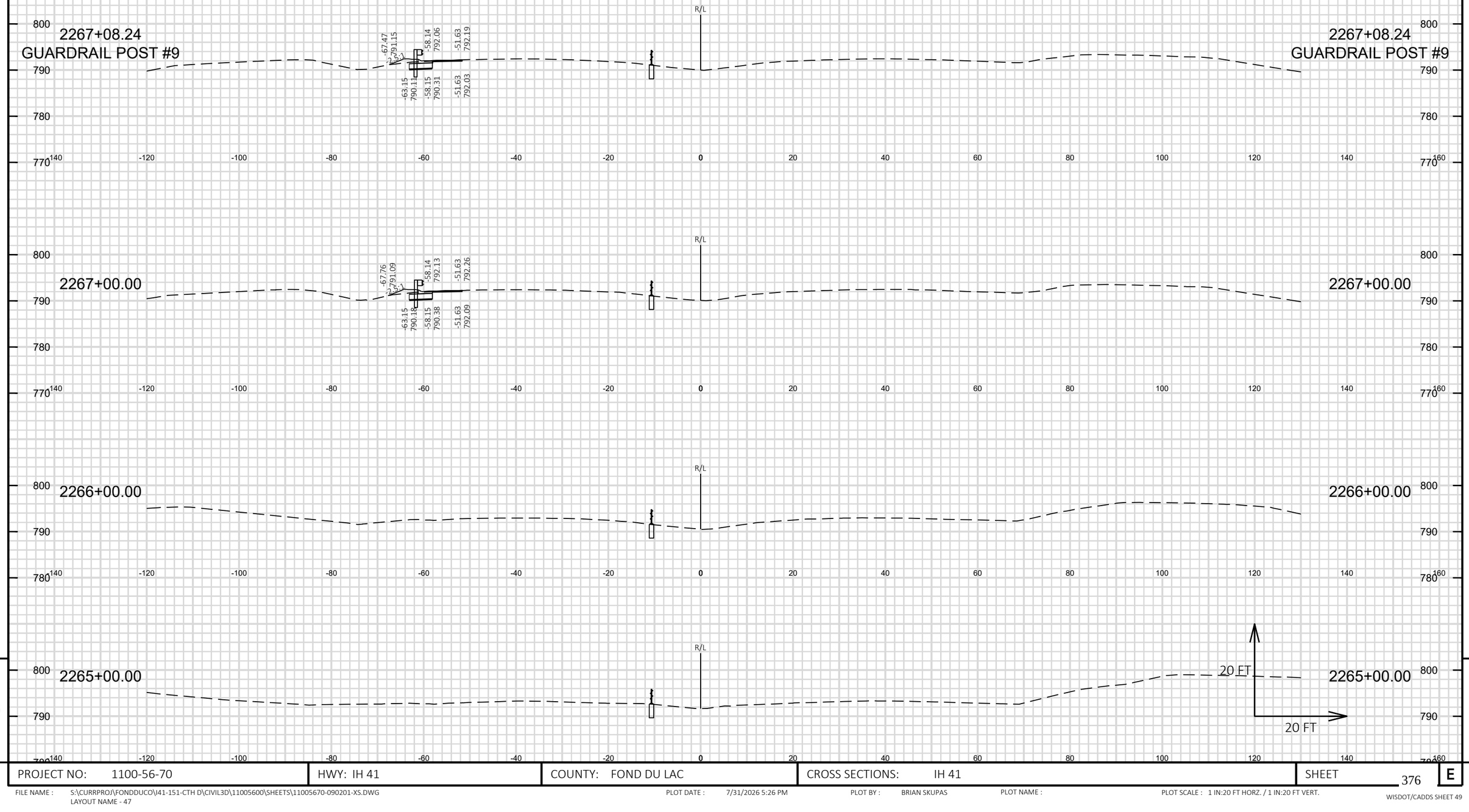
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 375	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 46

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

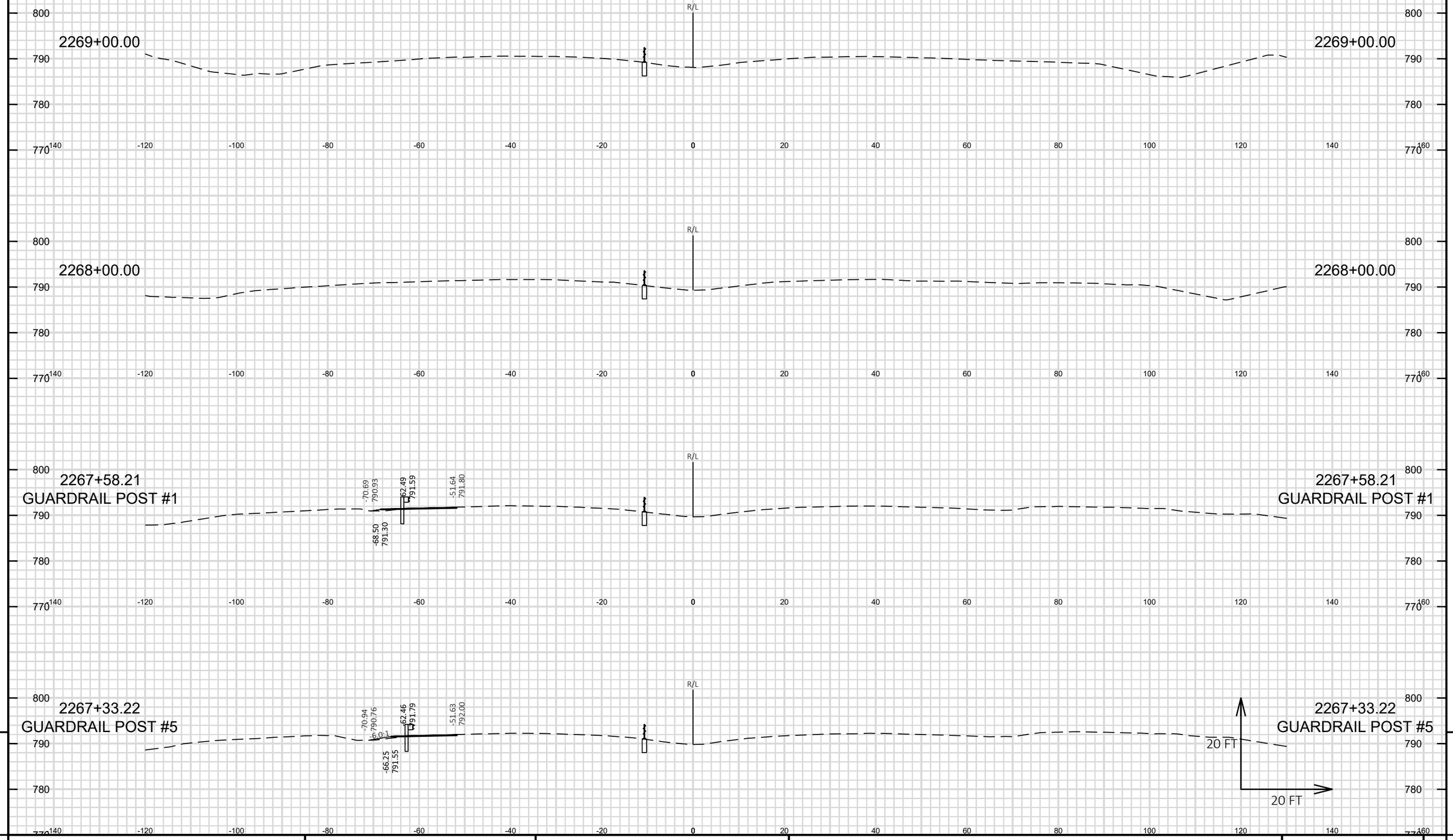
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 376	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 47

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

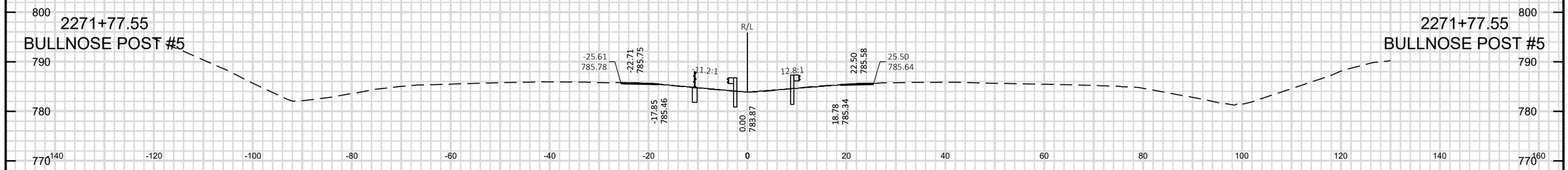
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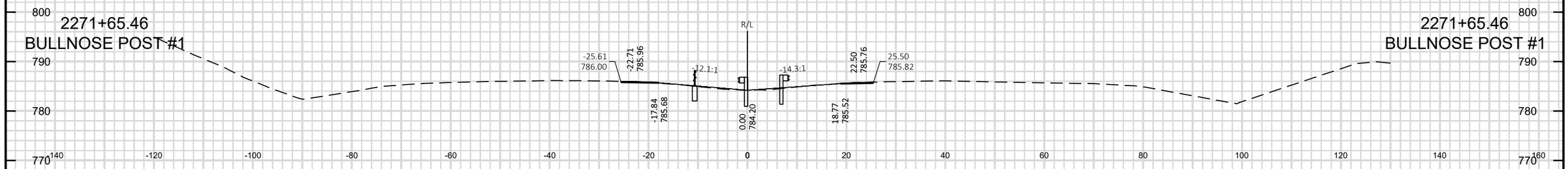
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 377	E

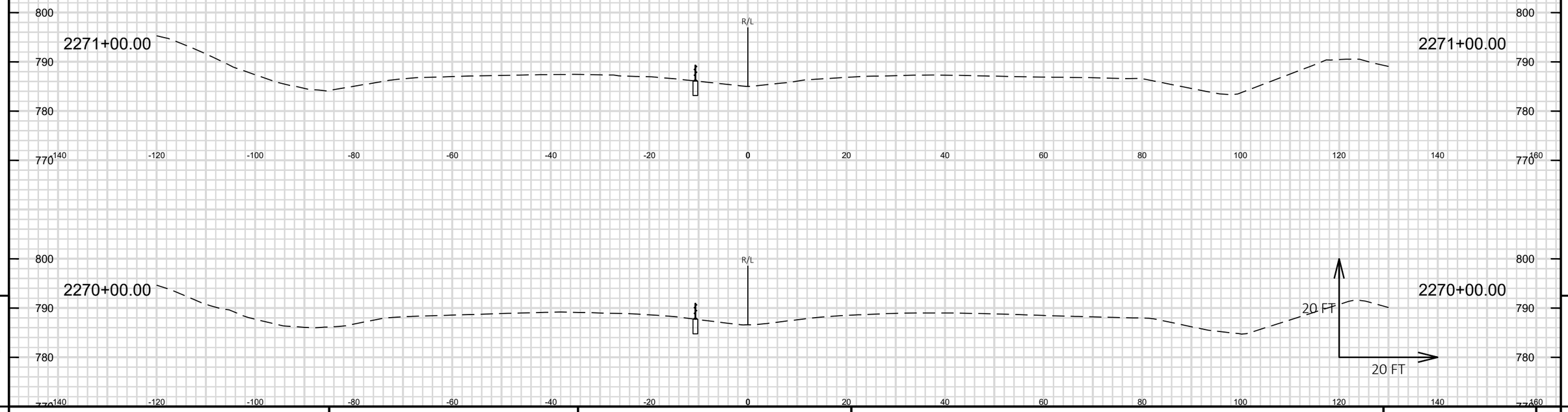
FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 48

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49







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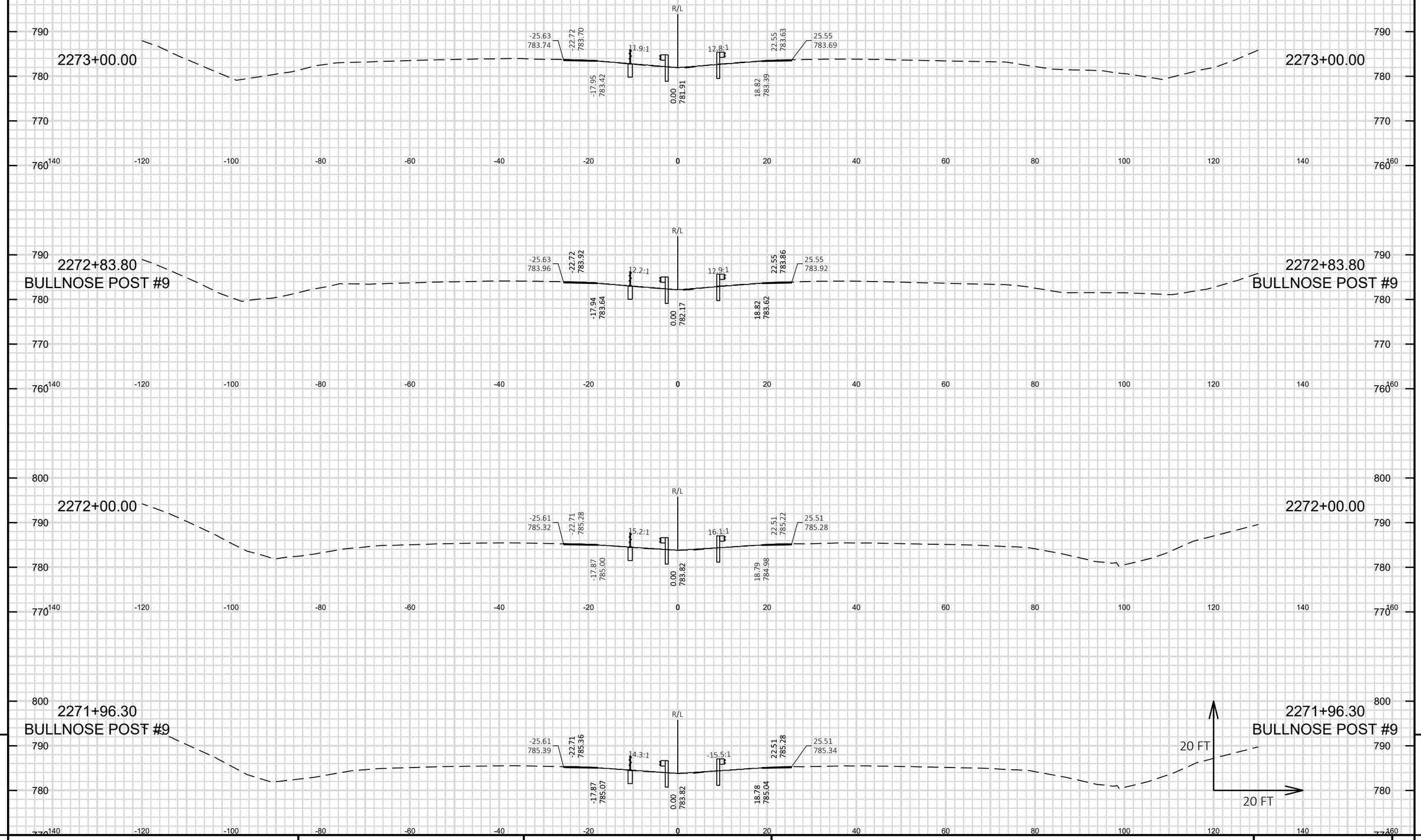
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 378	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 49

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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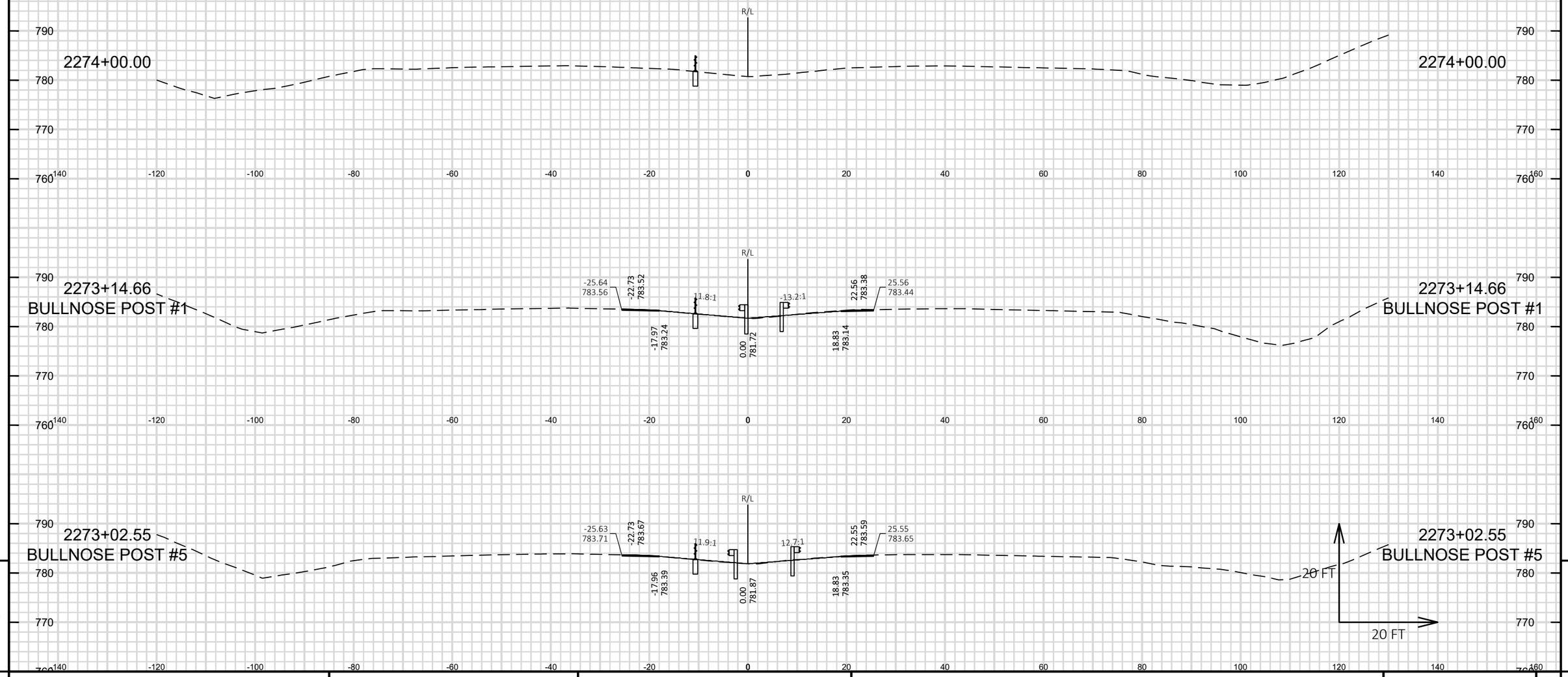
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 379	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 50

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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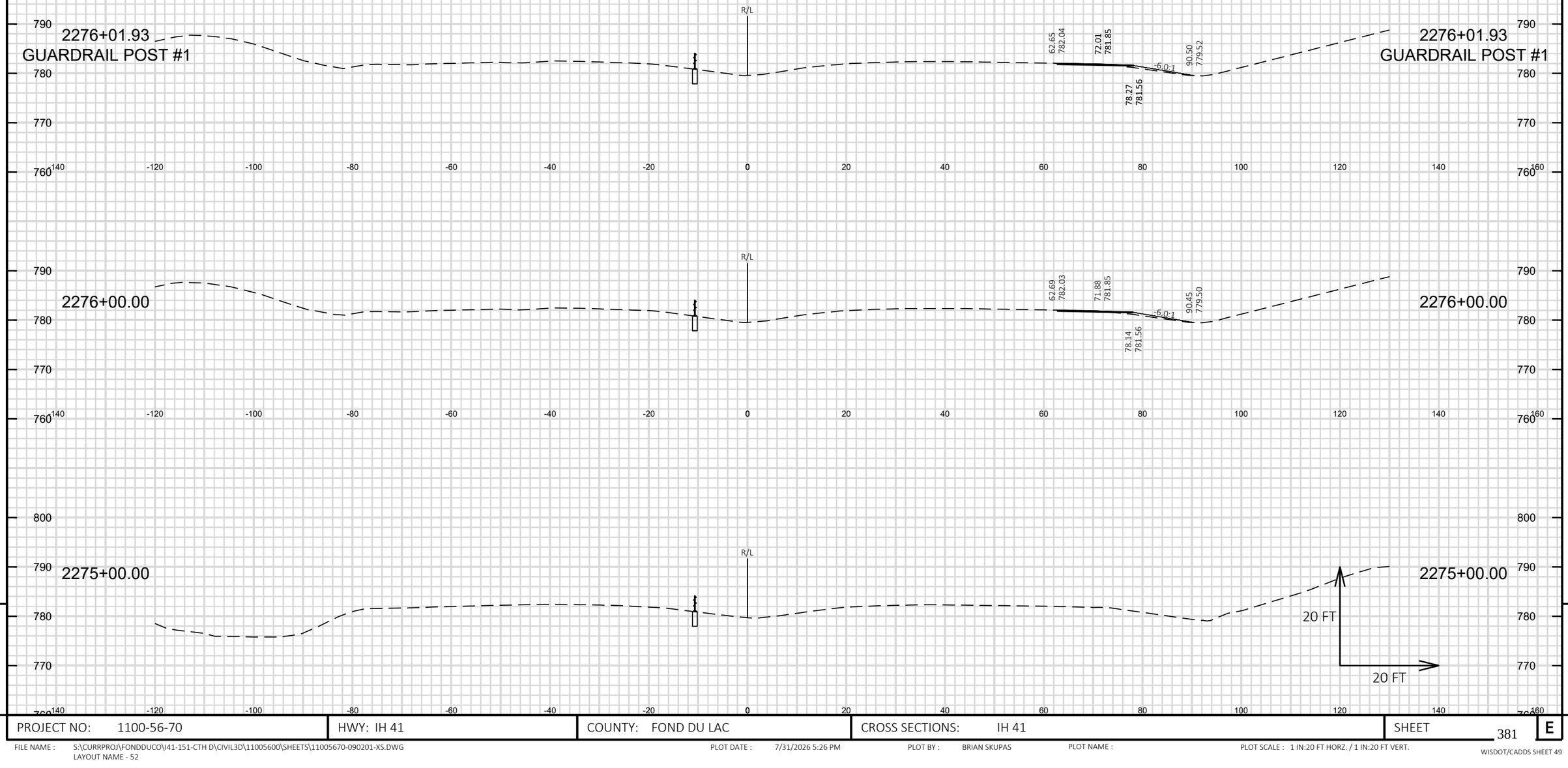
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 380	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 51

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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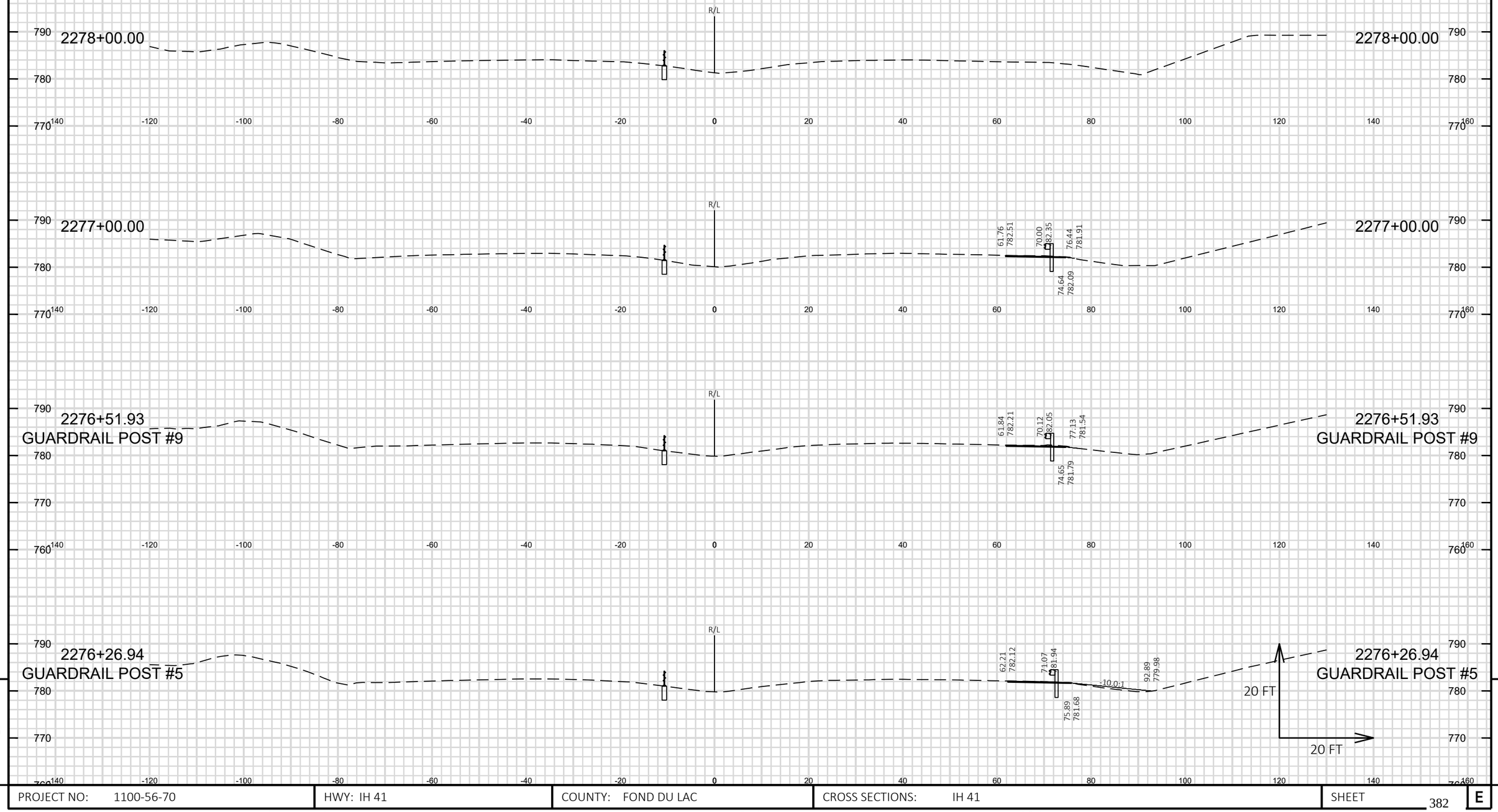
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 381	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 52

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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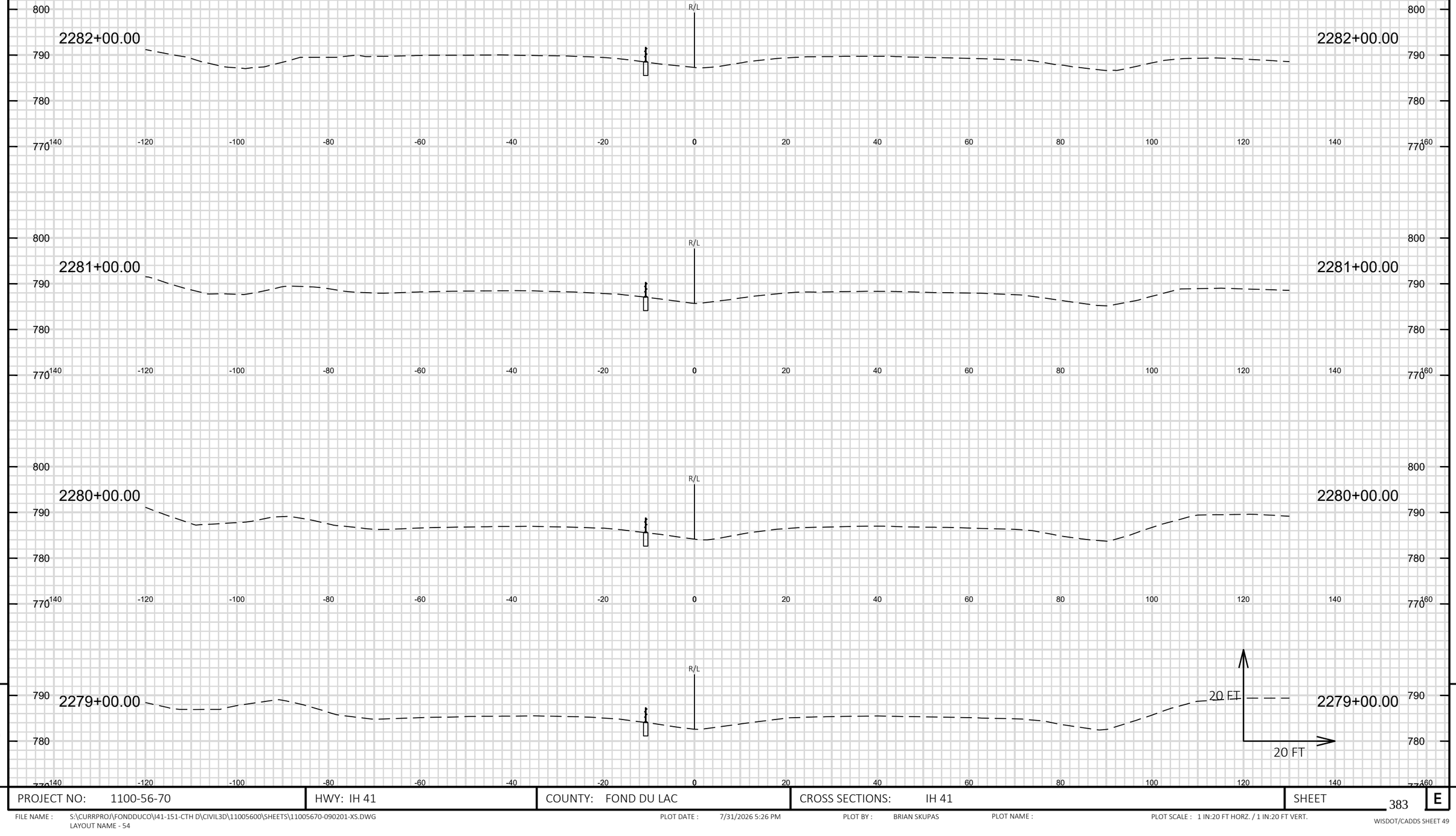
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 382	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 53

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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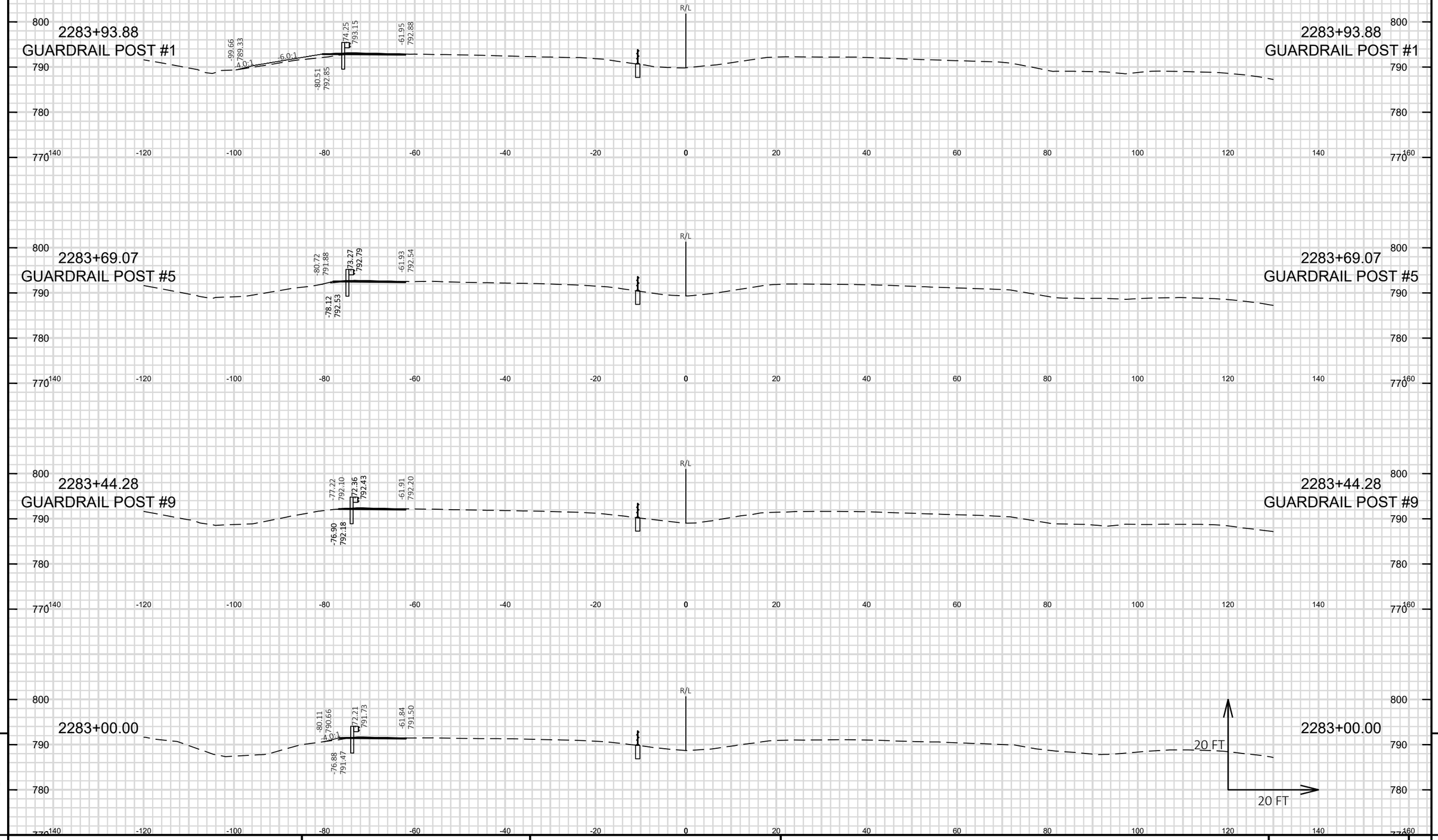
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 383	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 54

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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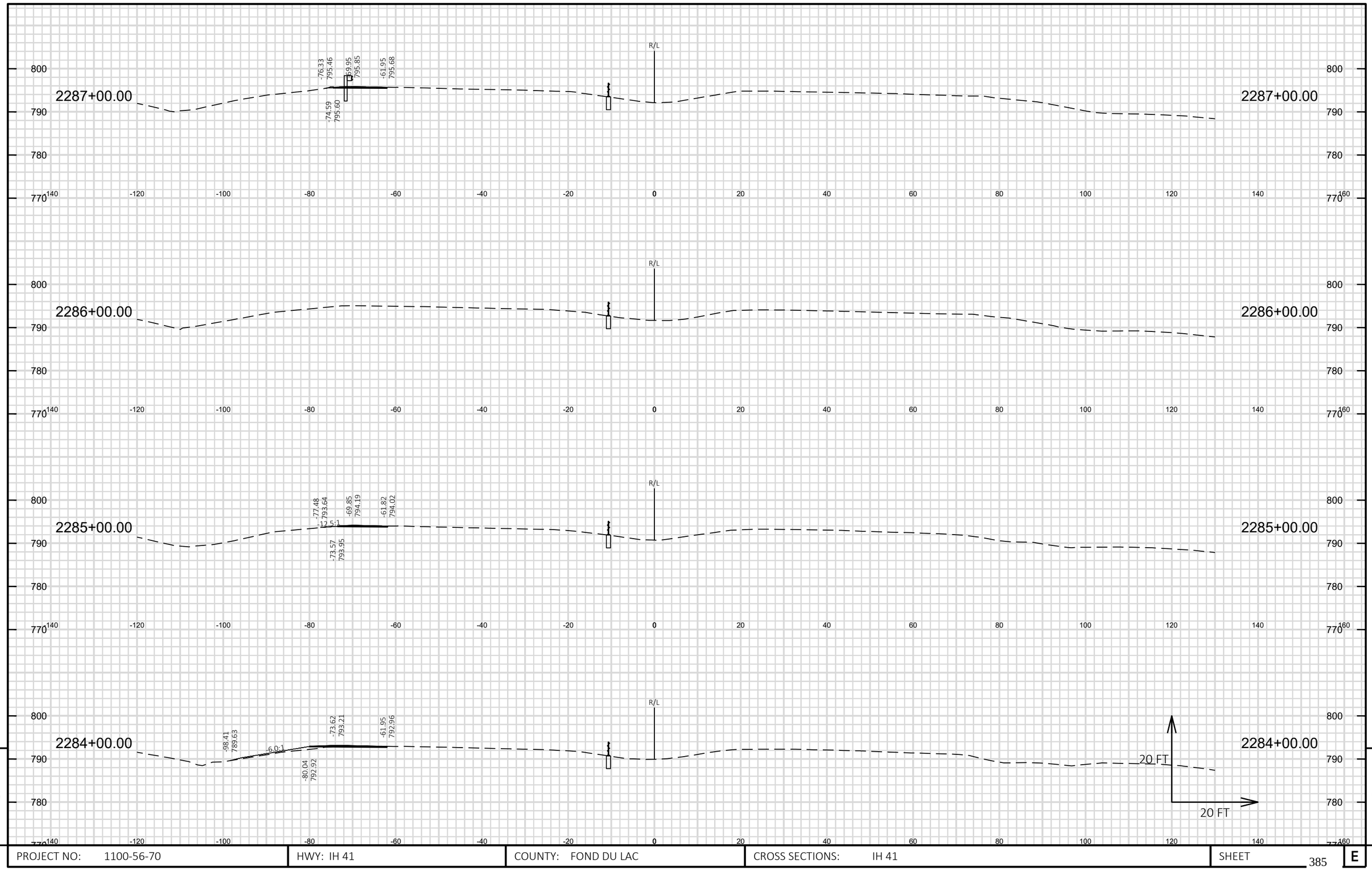
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 384	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 55

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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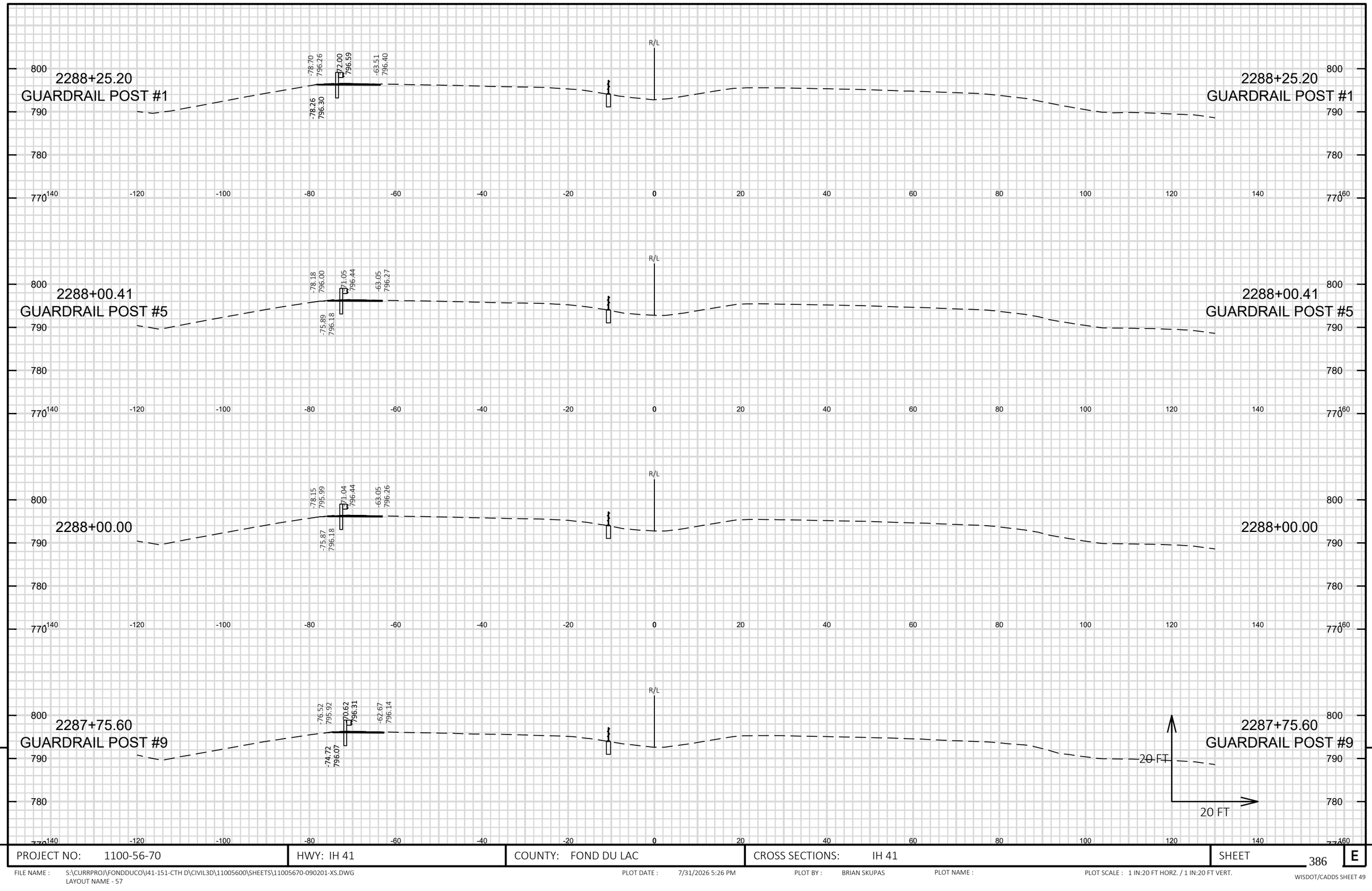
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 385	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 56

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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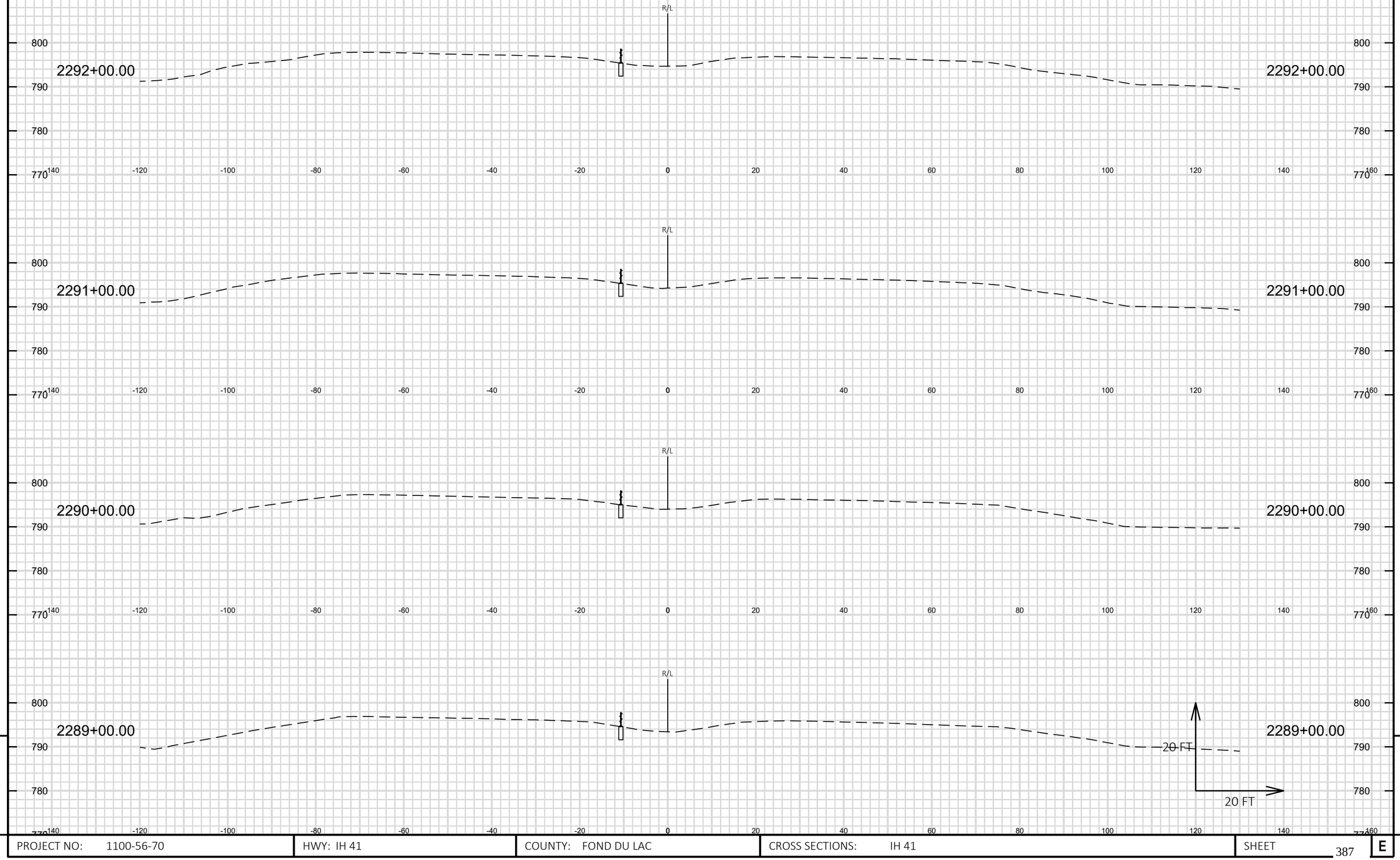
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 386	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 57

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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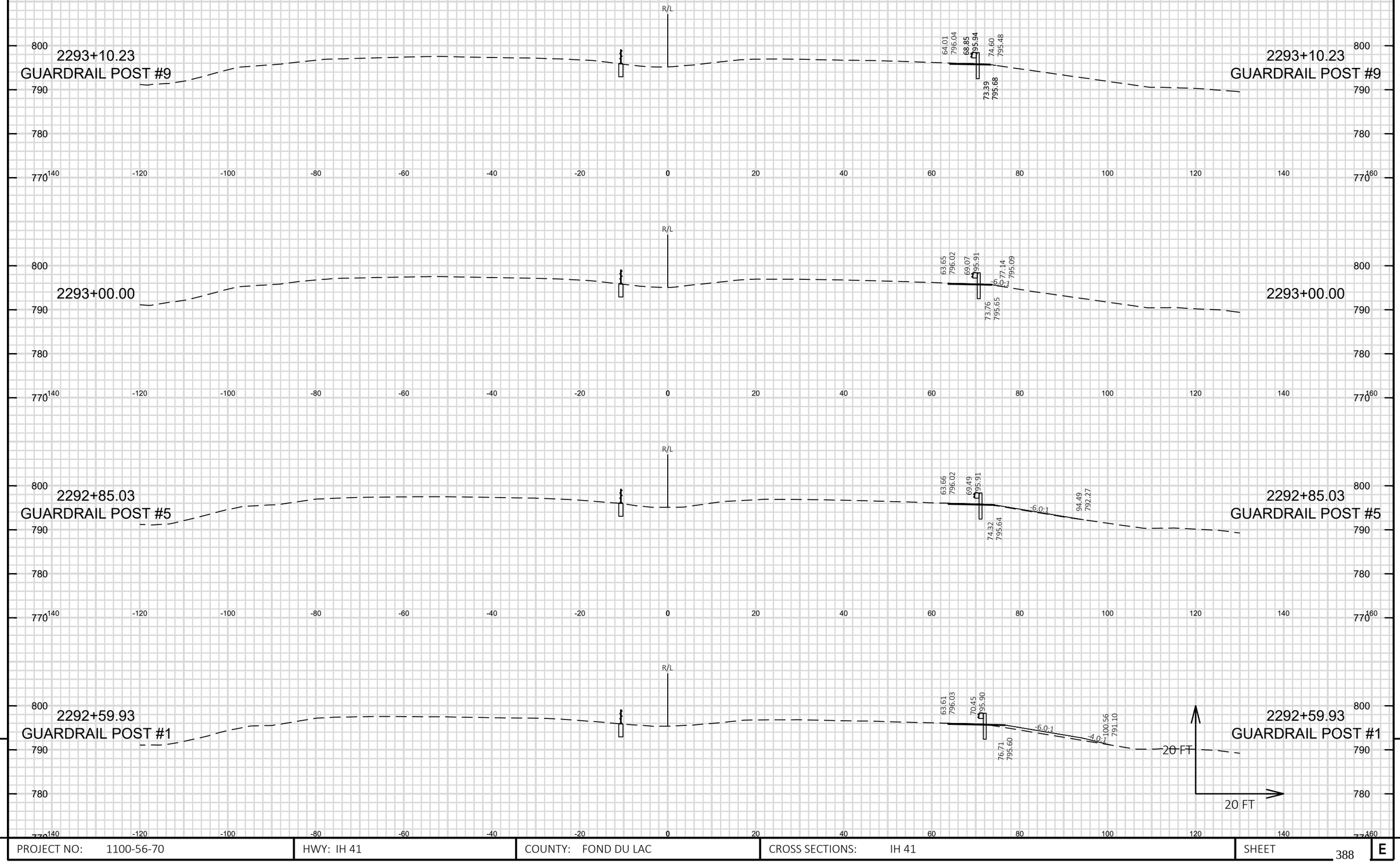
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 387	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 58

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

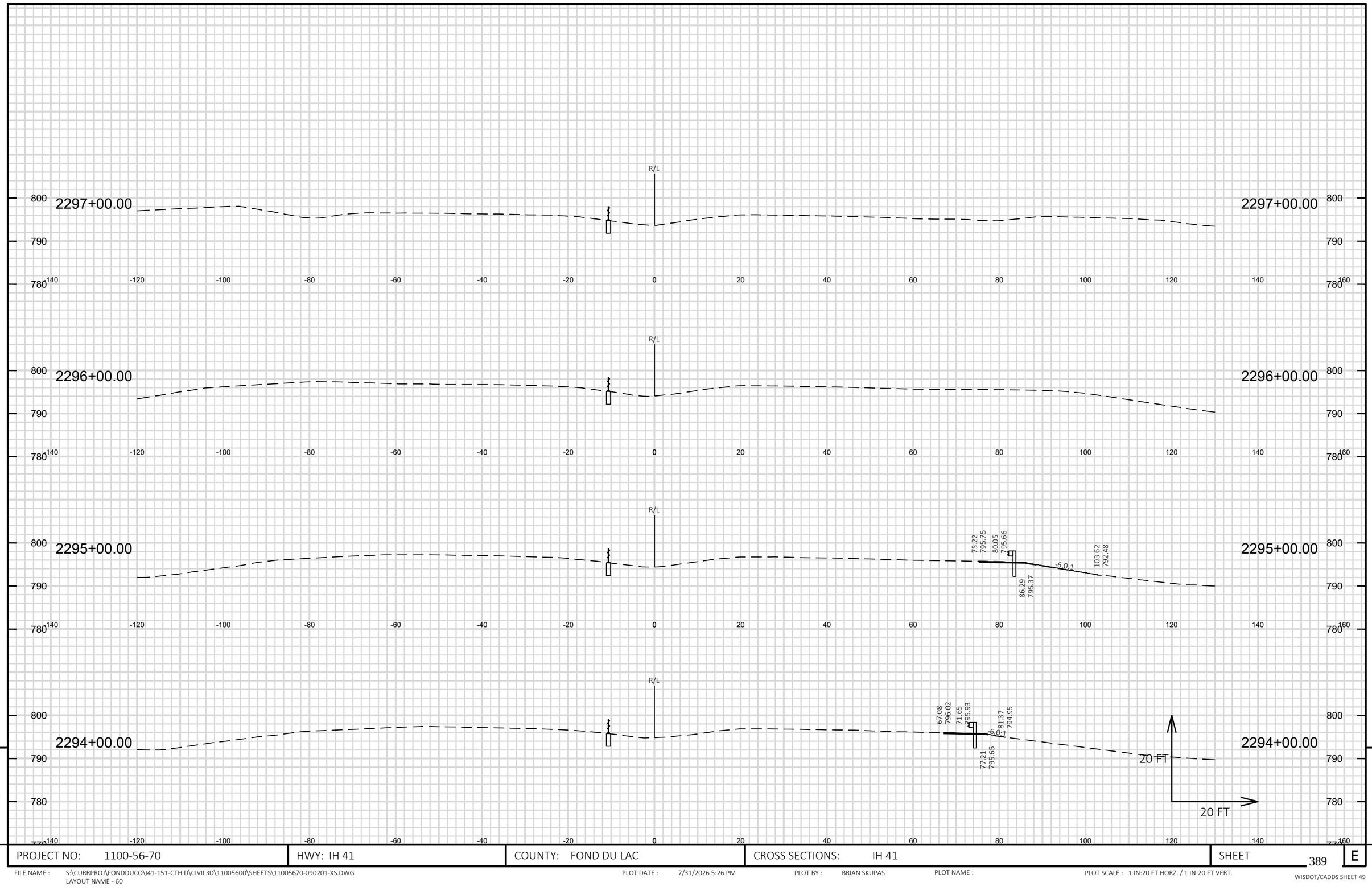
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 388	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 59

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

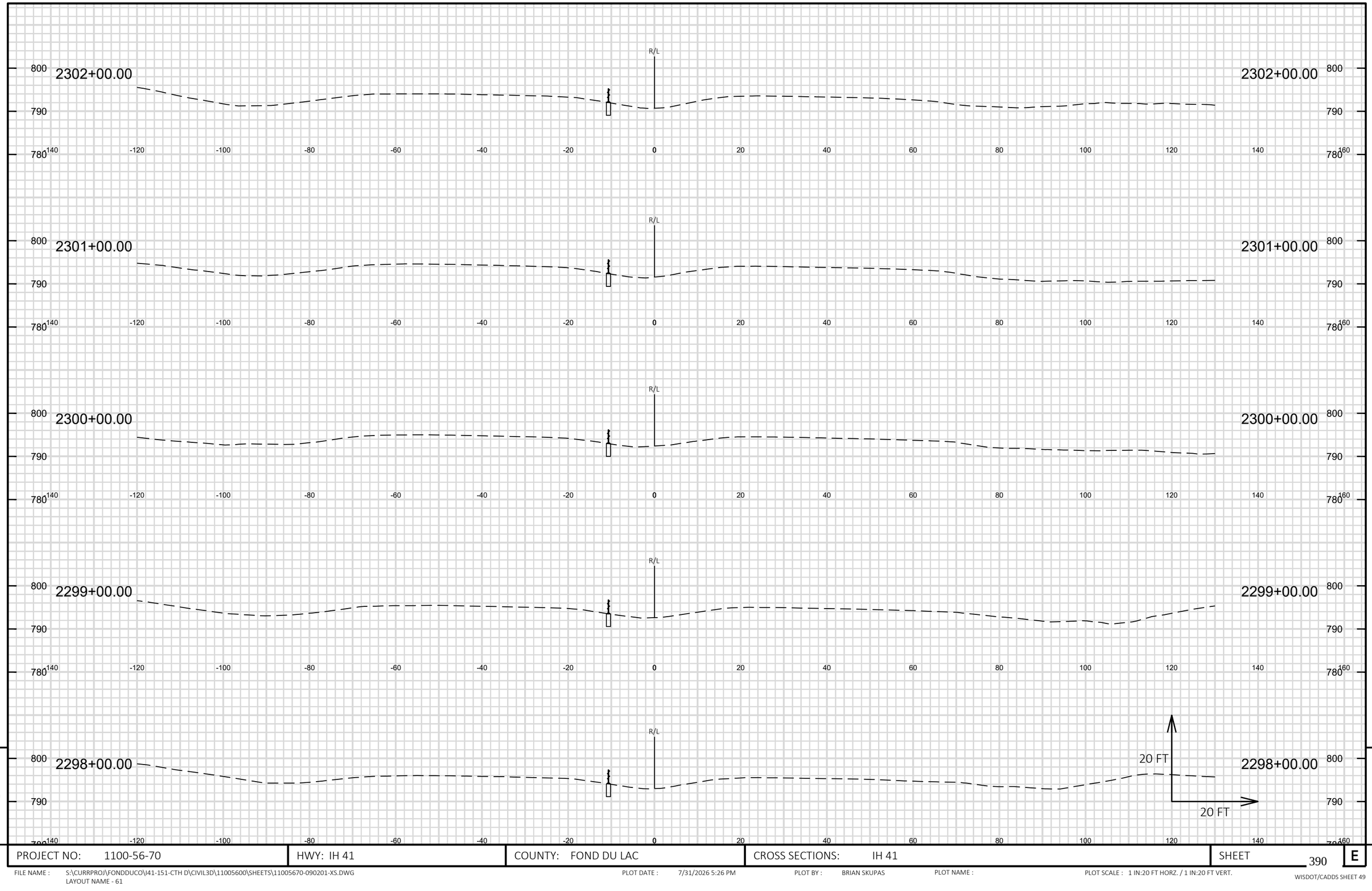
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 389	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 60

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

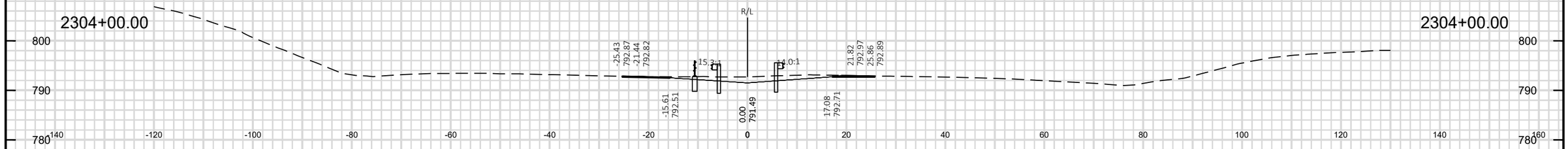
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 390	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 61

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

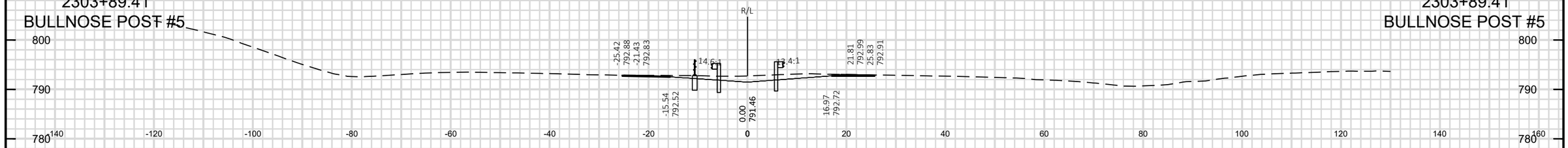
WISDOT/CADDS SHEET 49

2304+00.00



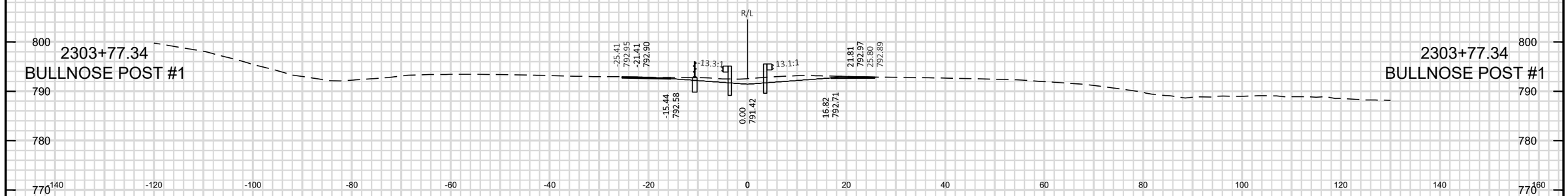
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2303+89.41
BULLNOSE POST #5



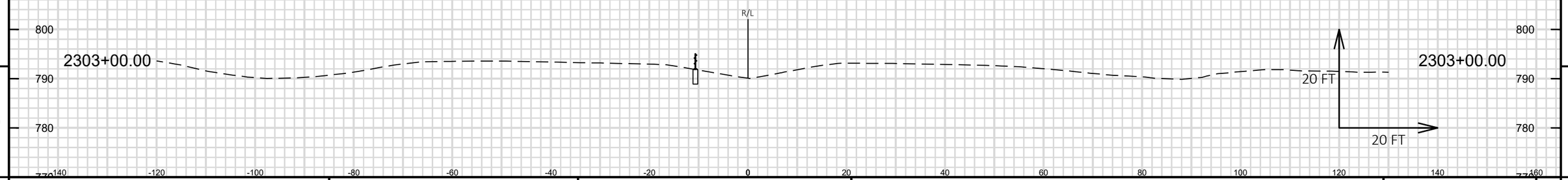
2303+89.41
BULLNOSE POST #5

2303+77.34
BULLNOSE POST #1



2303+77.34
BULLNOSE POST #1

2303+00.00



2303+00.00

9

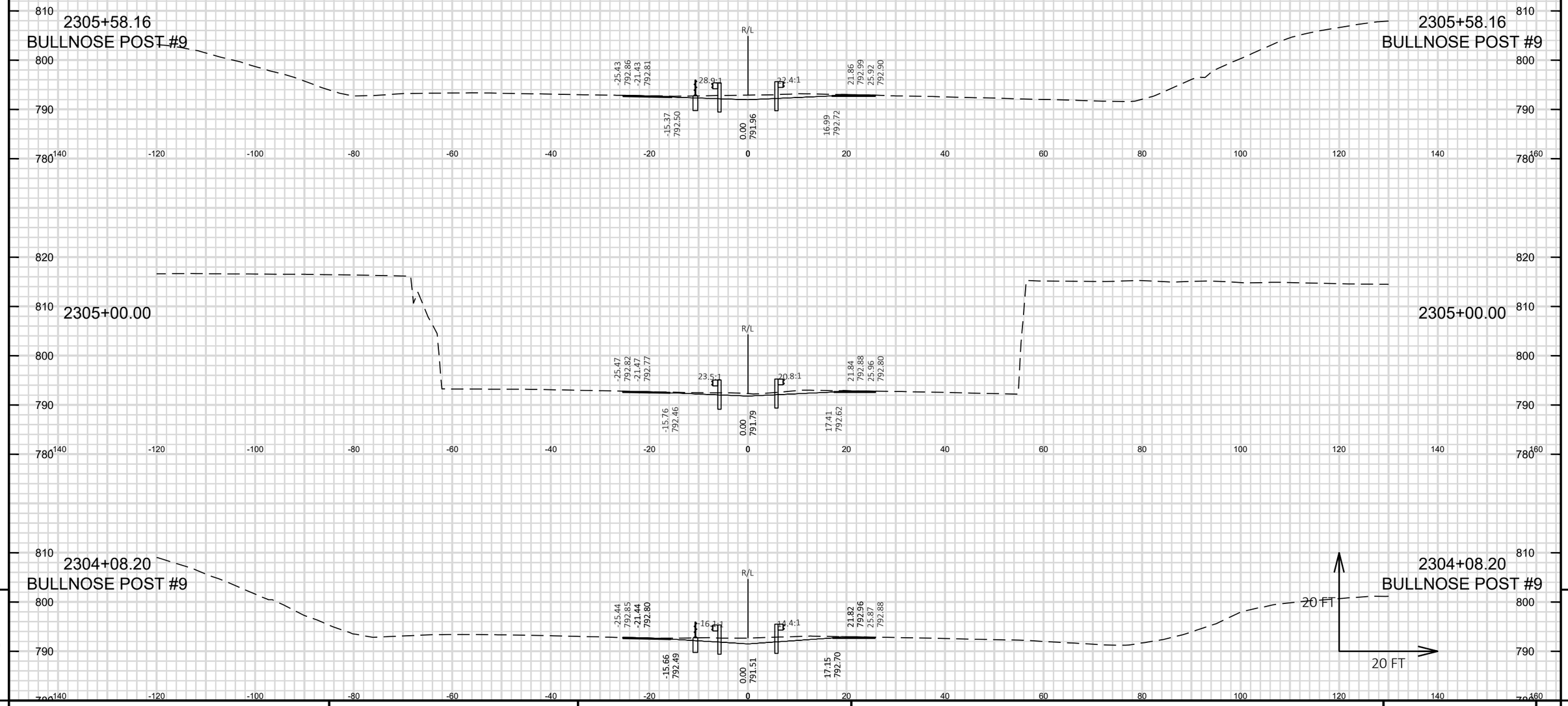
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 391	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 62

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



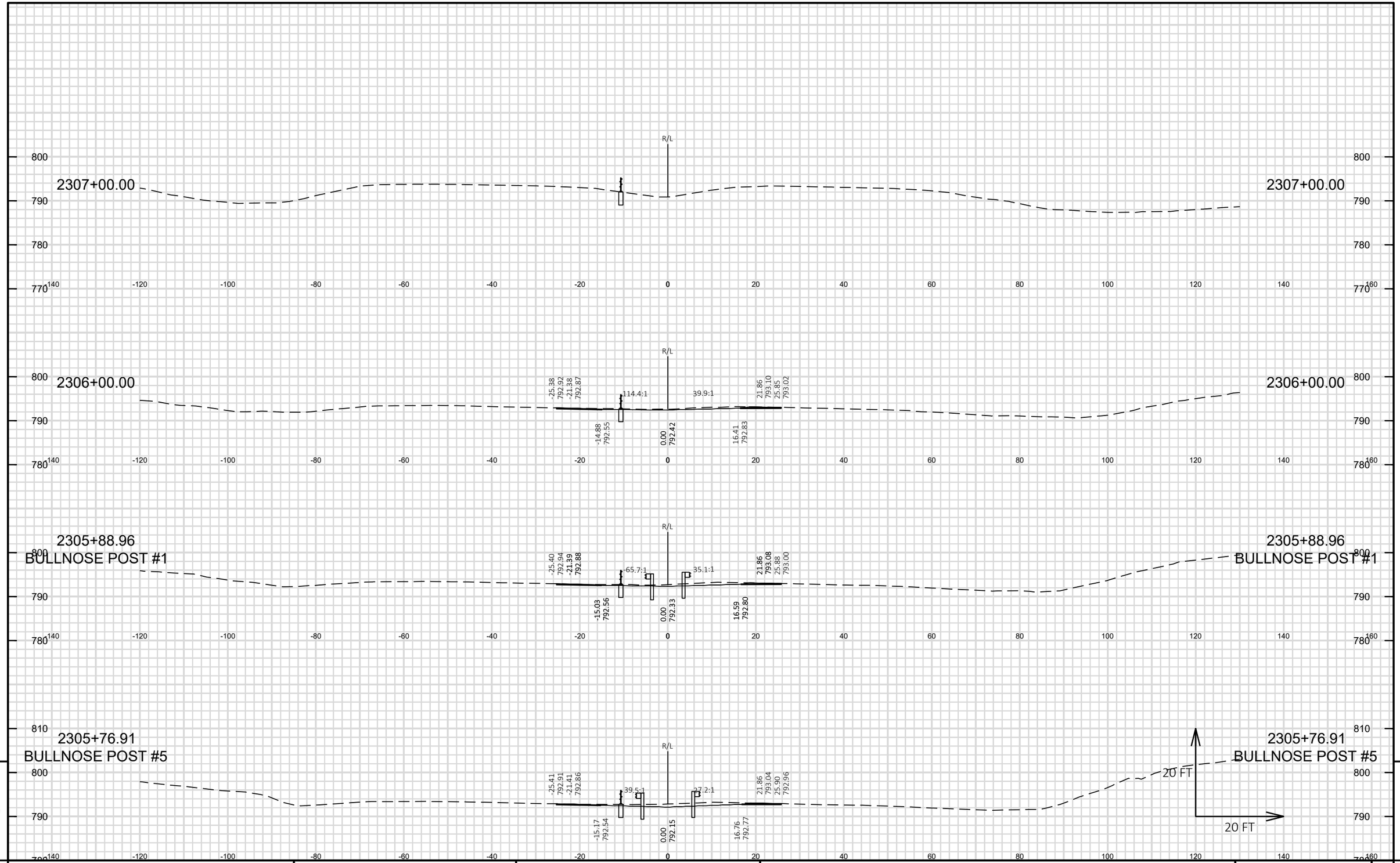
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 392 E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 63

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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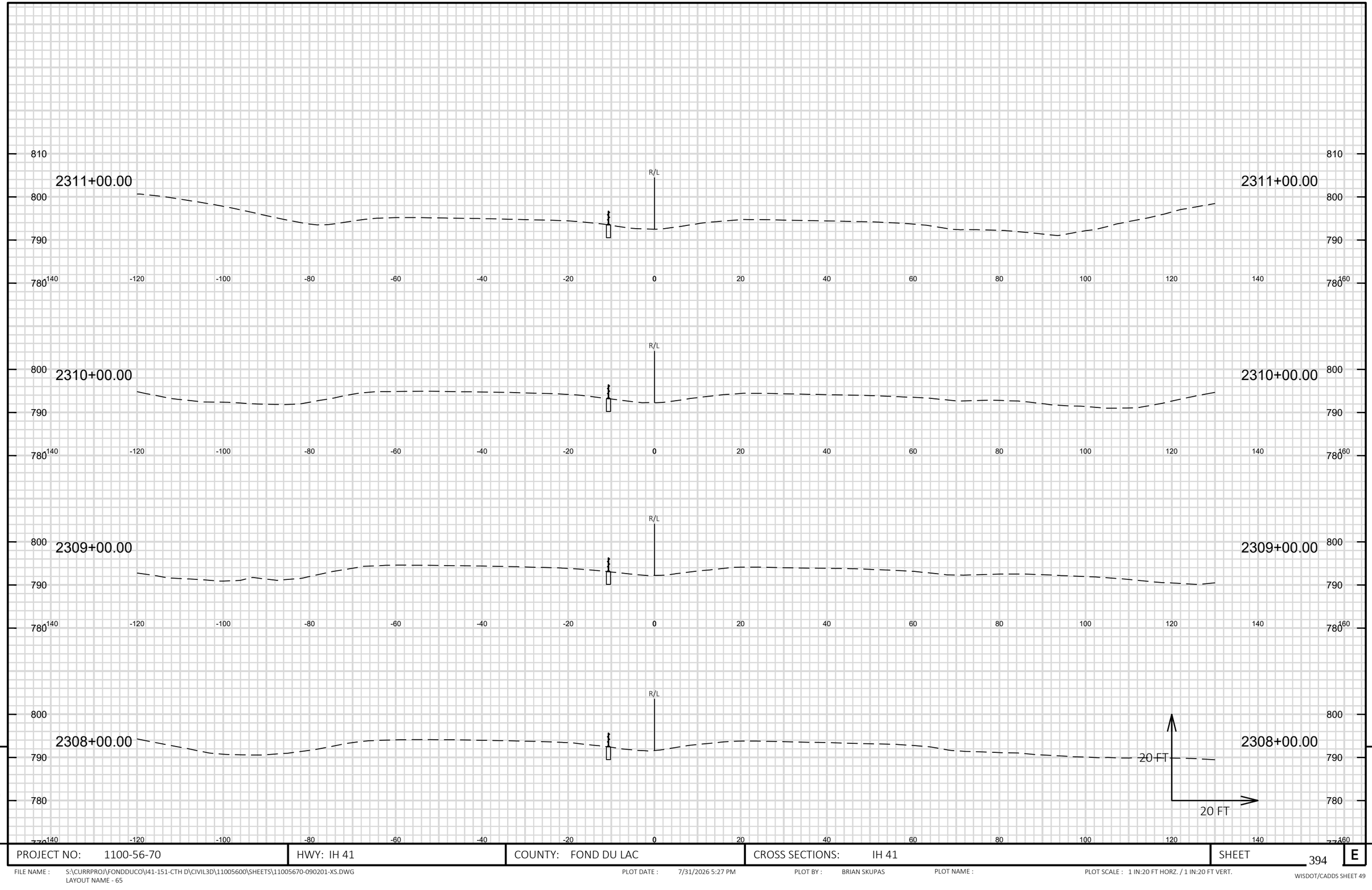
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 393	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 64

PLOT DATE : 7/31/2026 5:26 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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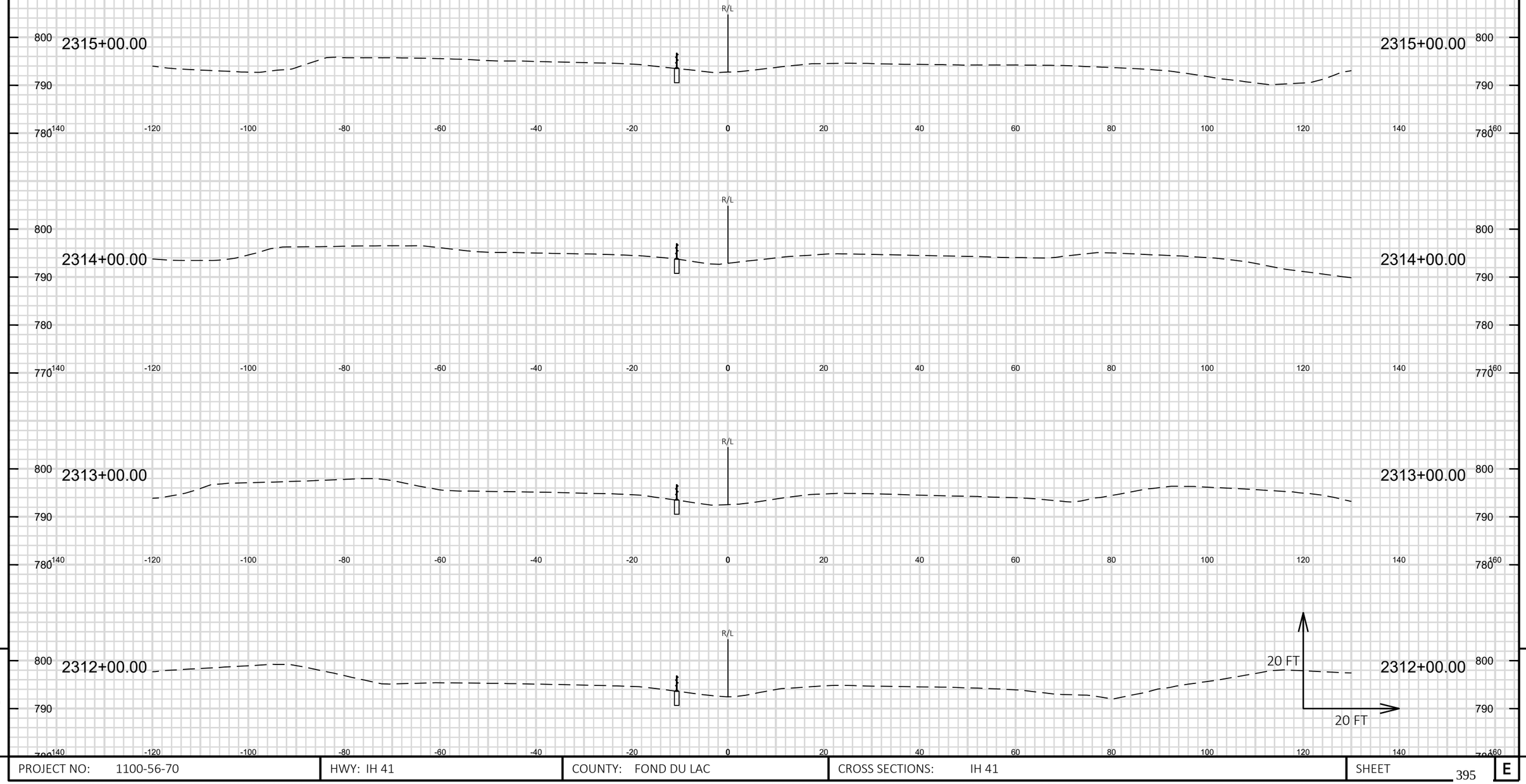
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 394	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 65

PLOT DATE : 7/31/2026 5:27 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

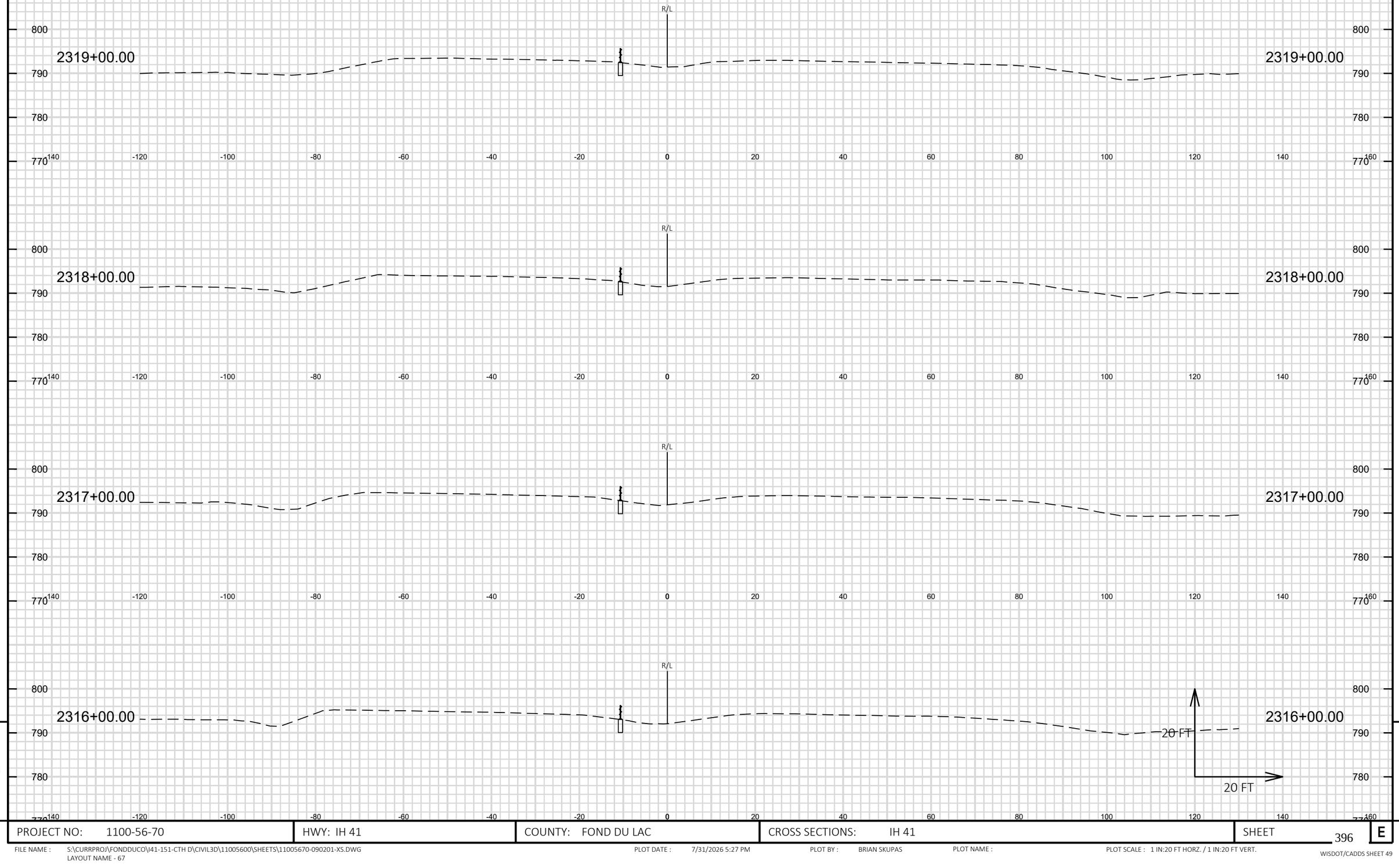
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 395	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 66

PLOT DATE : 7/31/2026 5:27 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

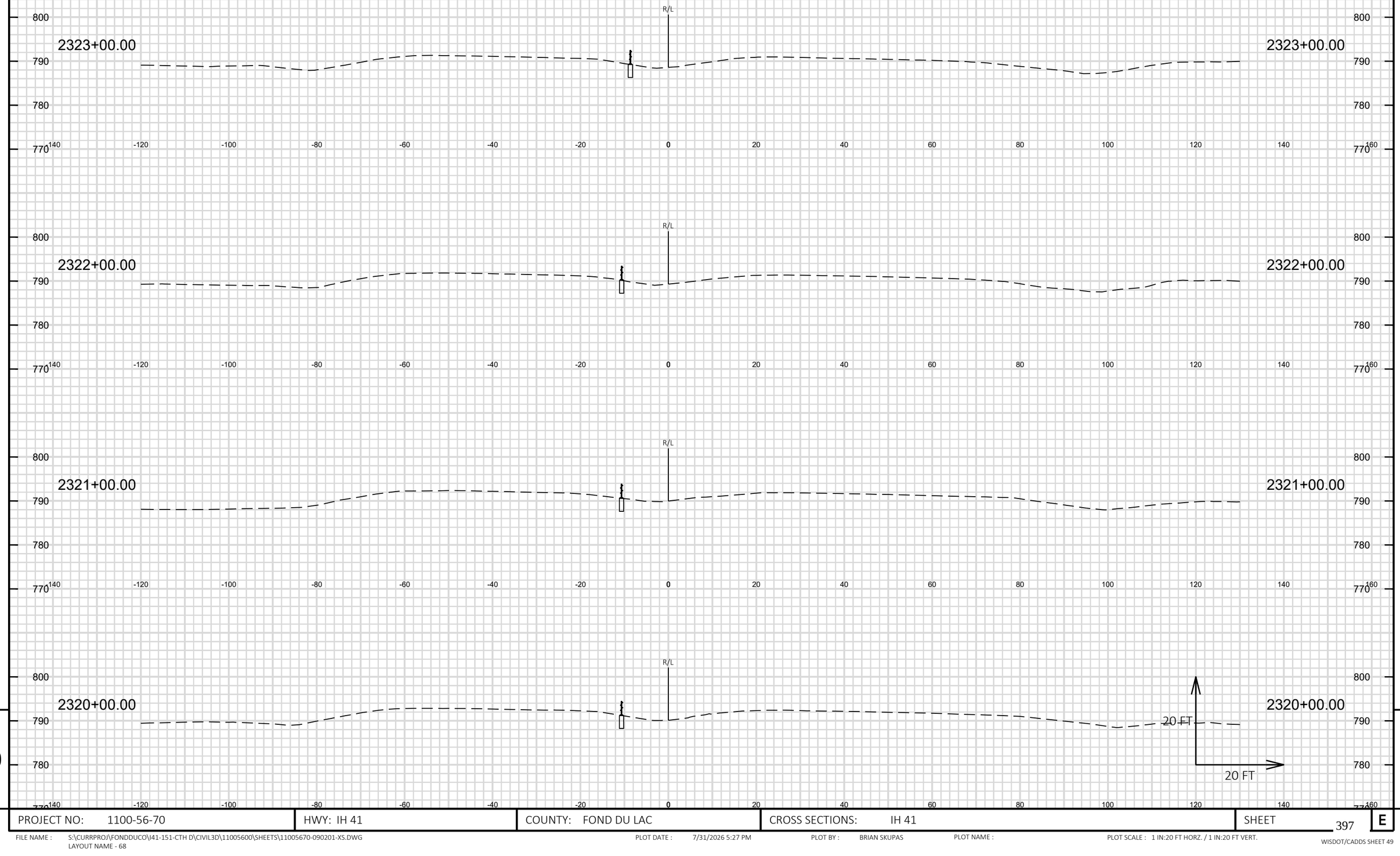
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 396	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 67

PLOT DATE : 7/31/2026 5:27 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

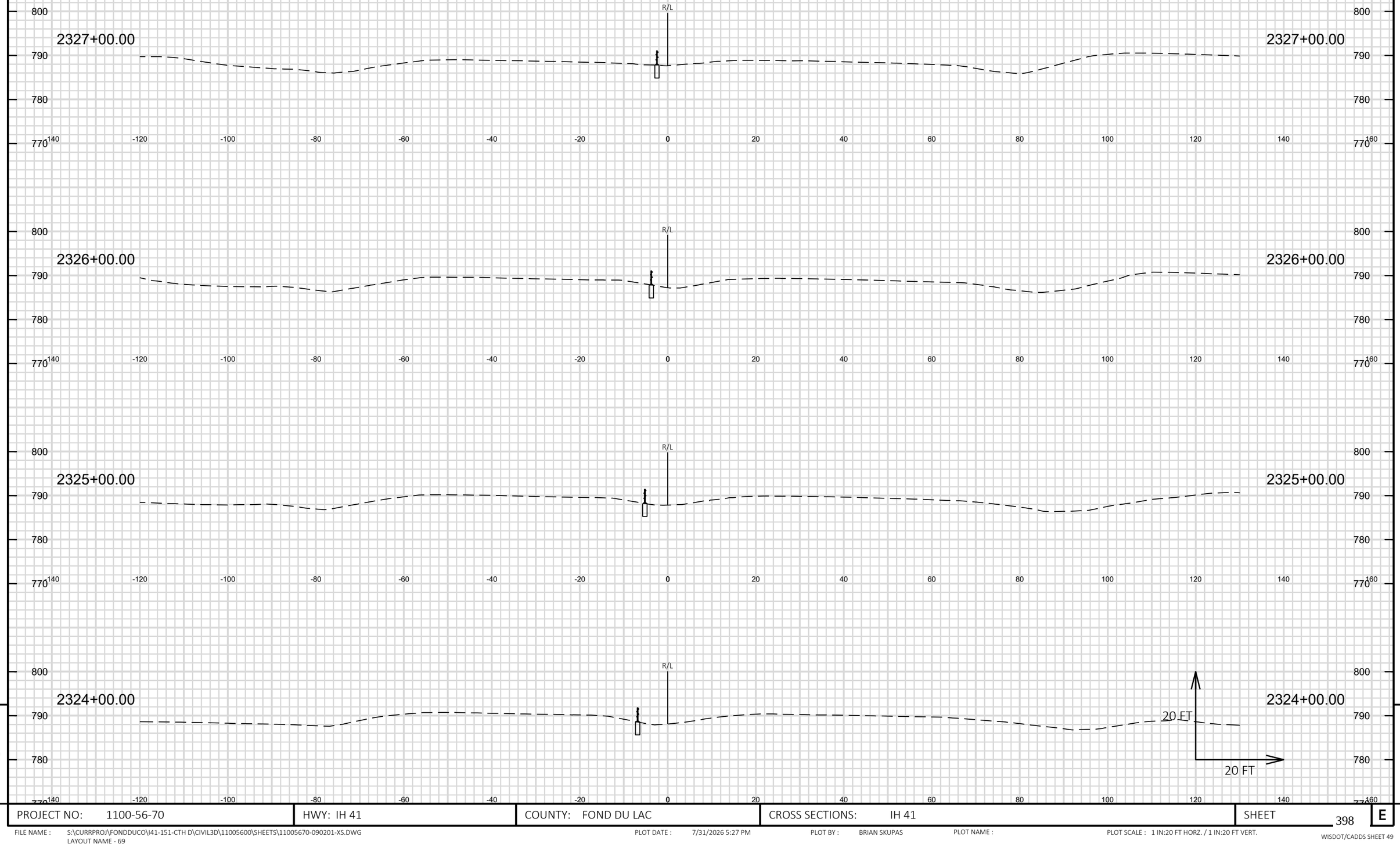
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 397	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 68

PLOT DATE : 7/31/2026 5:27 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

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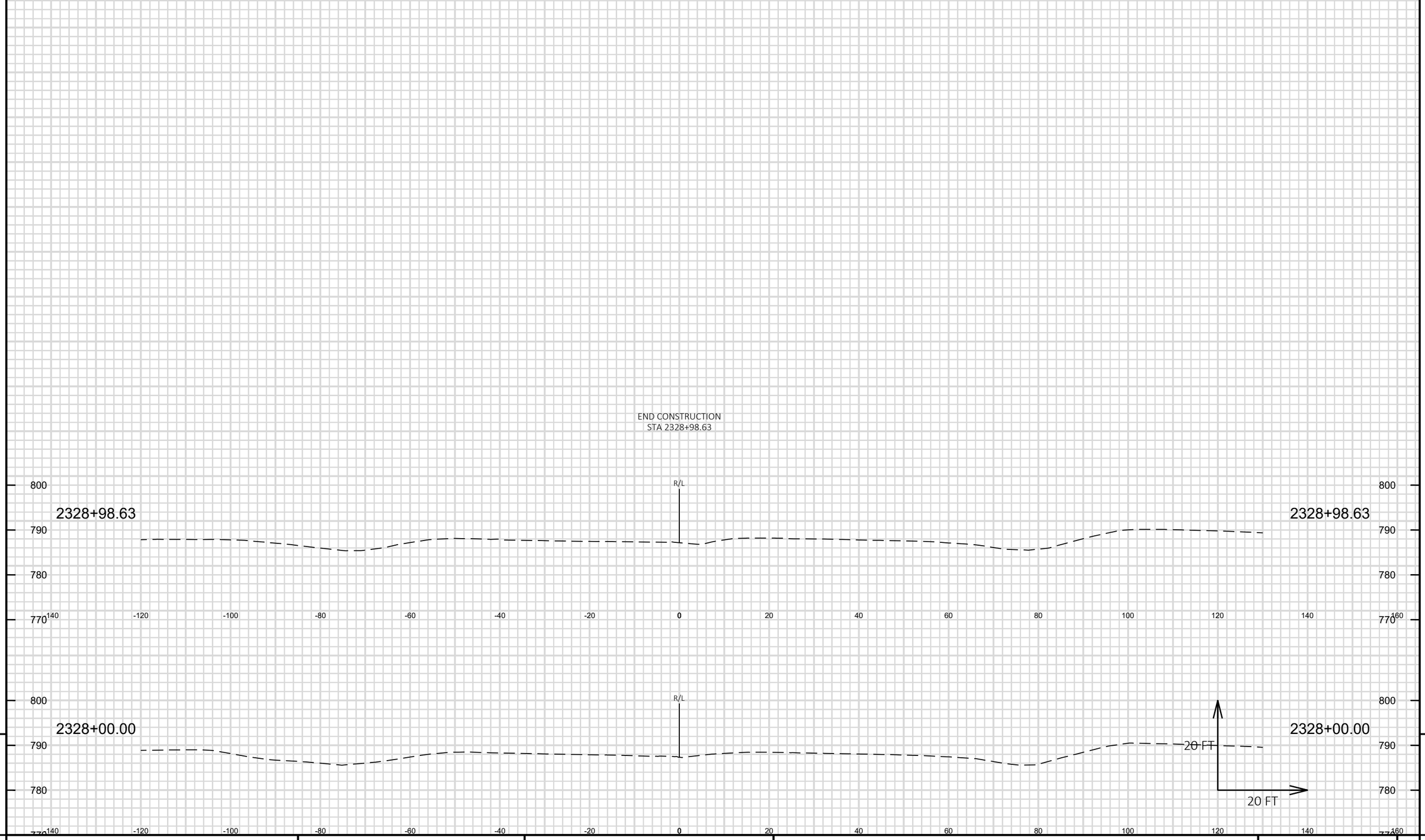
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 398	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 69

PLOT DATE : 7/31/2026 5:27 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

END CONSTRUCTION
STA 2328+98.63



9

9

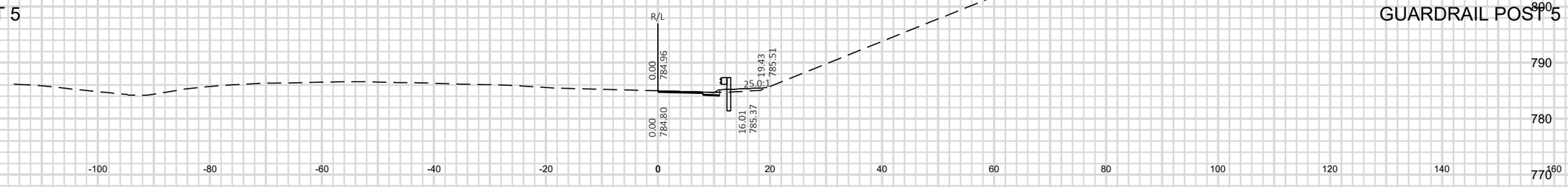
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH 41	SHEET 399	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - 70

PLOT DATE : 7/31/2026 5:27 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

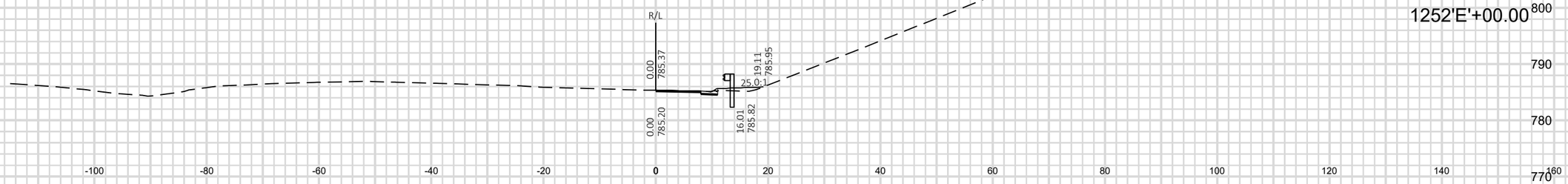
NOTES:
- CURB AND GUTTER SHOWN IS EXISTING AND TO REMAIN IN PLACE

1252'E'+24.46
GUARDRAIL POST 5



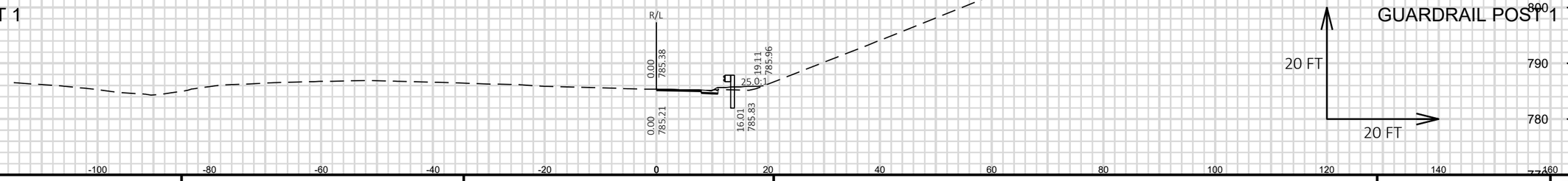
1252'E'+24.46
GUARDRAIL POST 5

1252'E'+00.00



1252'E'+00.00

1251'E'+99.48
GUARDRAIL POST 1



1251'E'+99.48
GUARDRAIL POST 1

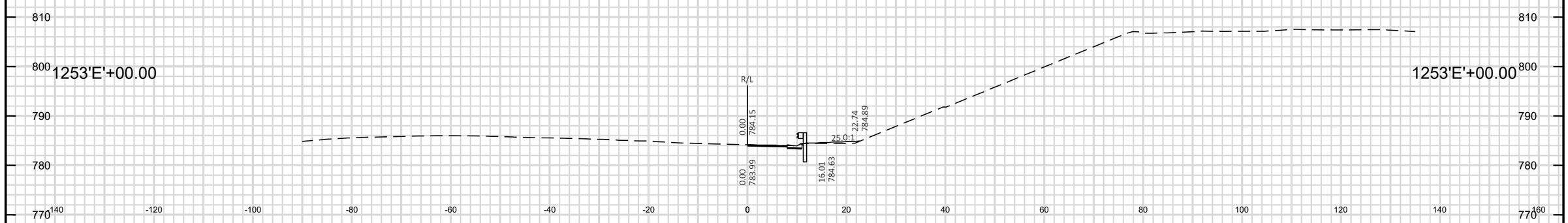
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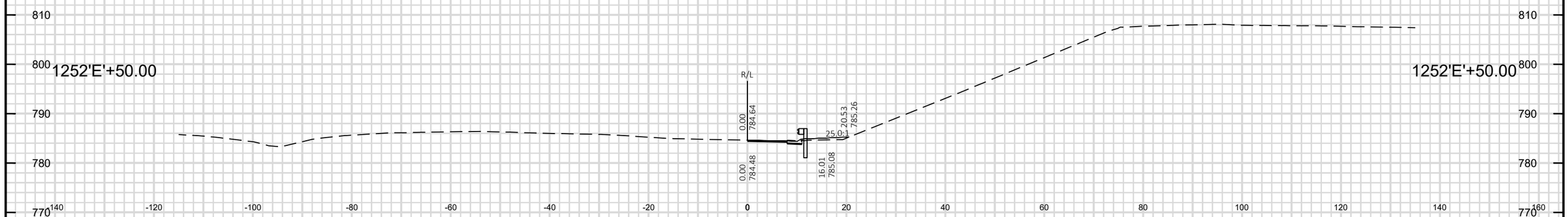
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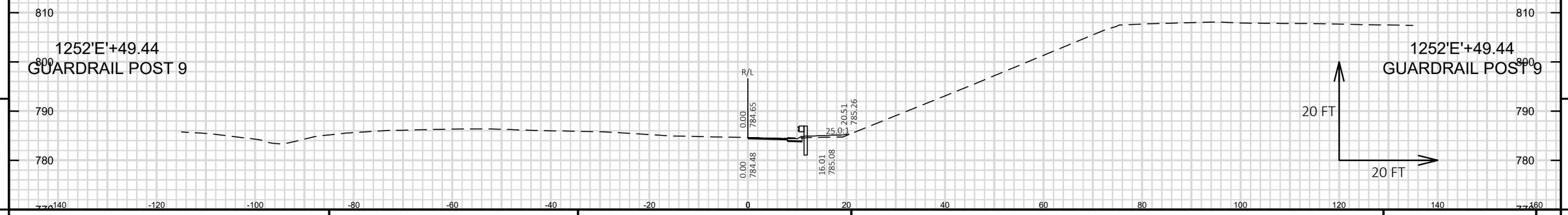
PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: RAMP E	SHEET 400	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - Ramp E - 1
PLOT DATE : 7/31/2026 5:27 PM
PLOT BY : BRIAN SKUPAS
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

NOTES:
- CURB AND GUTTER SHOWN IS EXISTING AND TO REMAIN IN PLACE







9

9

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: RAMP E	SHEET 401	E

9

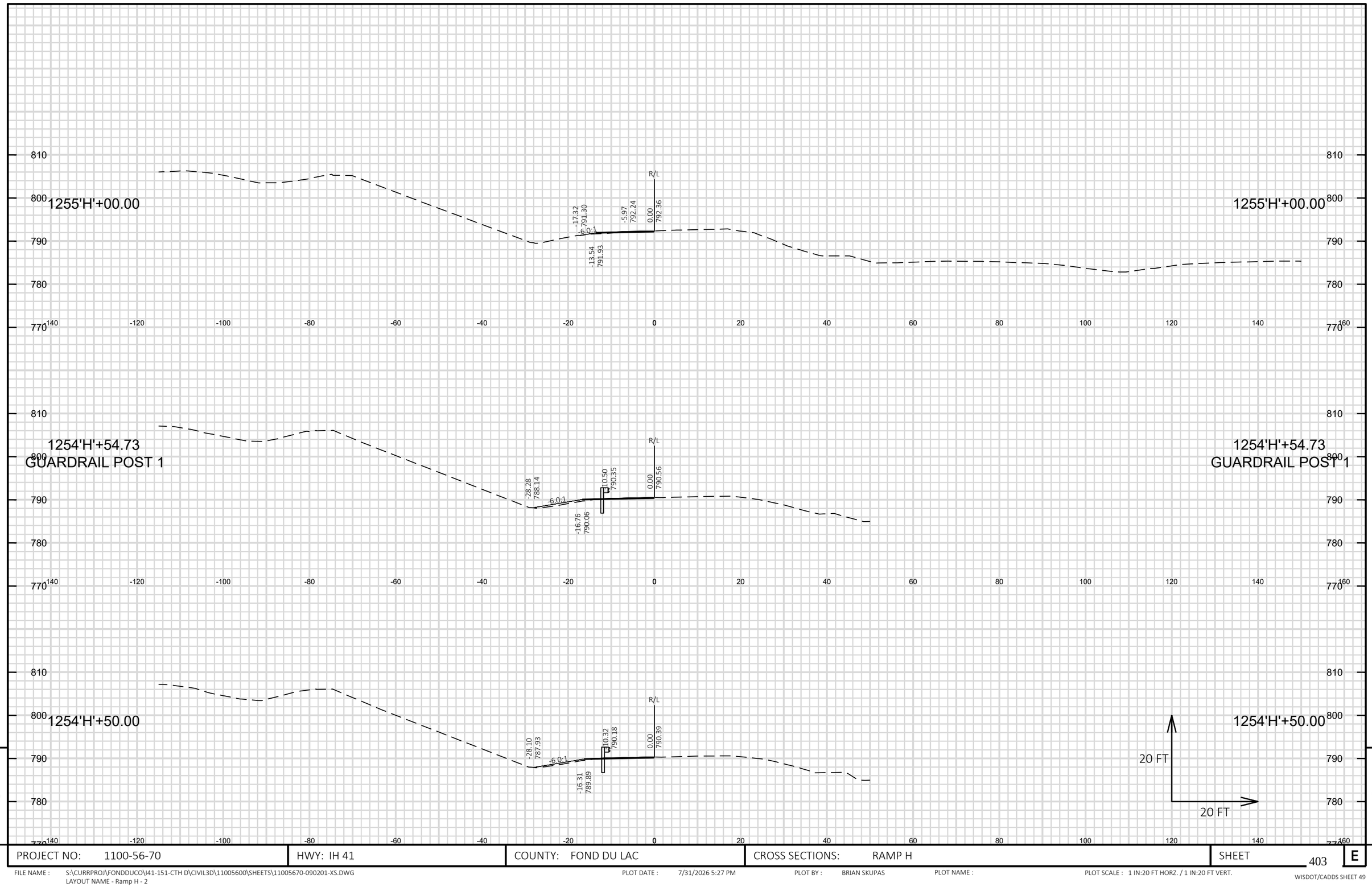
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: RAMP H	SHEET 402	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - Ramp H - 1

PLOT DATE : 7/31/2026 5:27 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

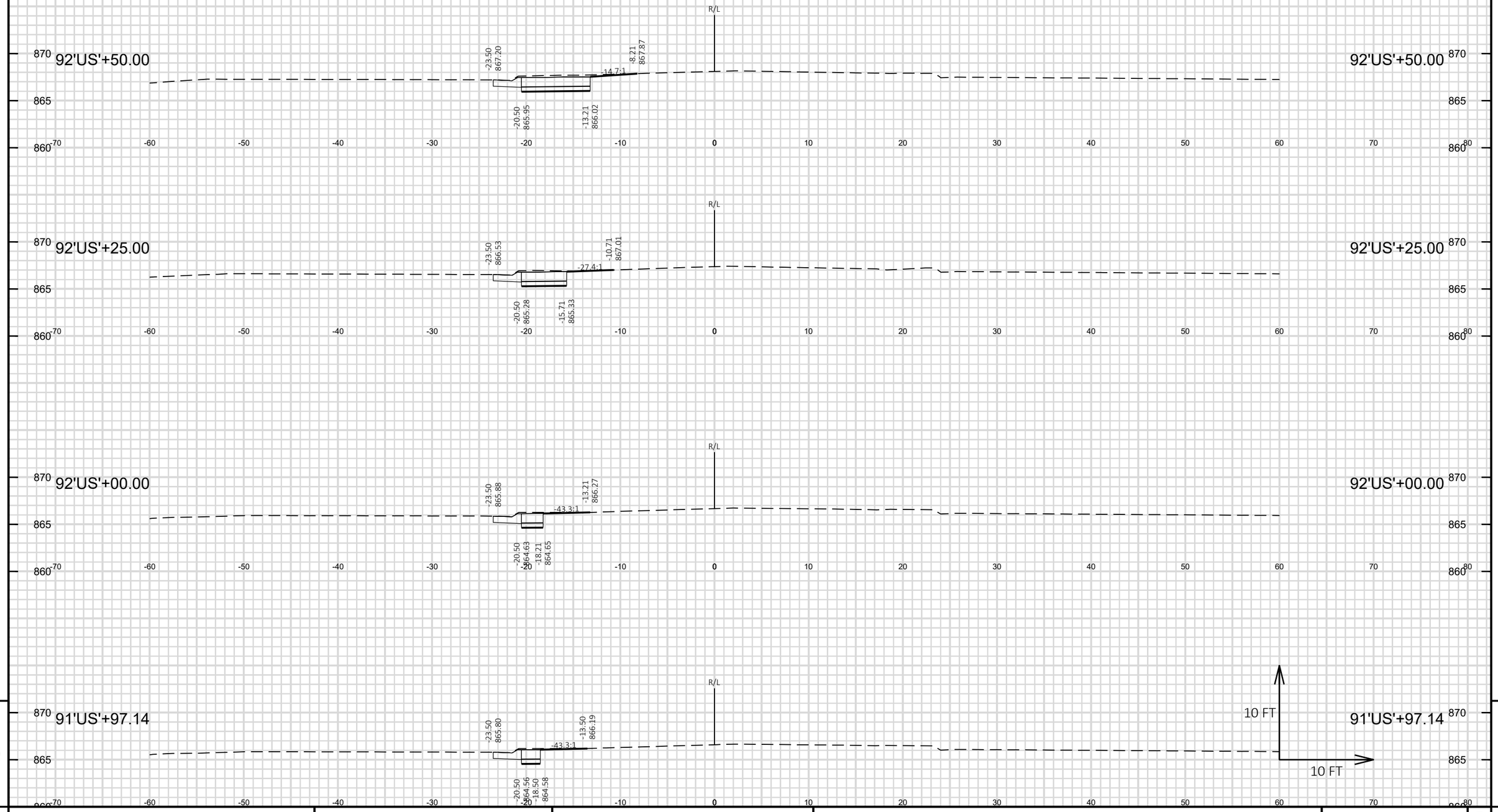
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: RAMP H	SHEET 403	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090201-XS.DWG
LAYOUT NAME - Ramp H - 2

PLOT DATE : 7/31/2026 5:27 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



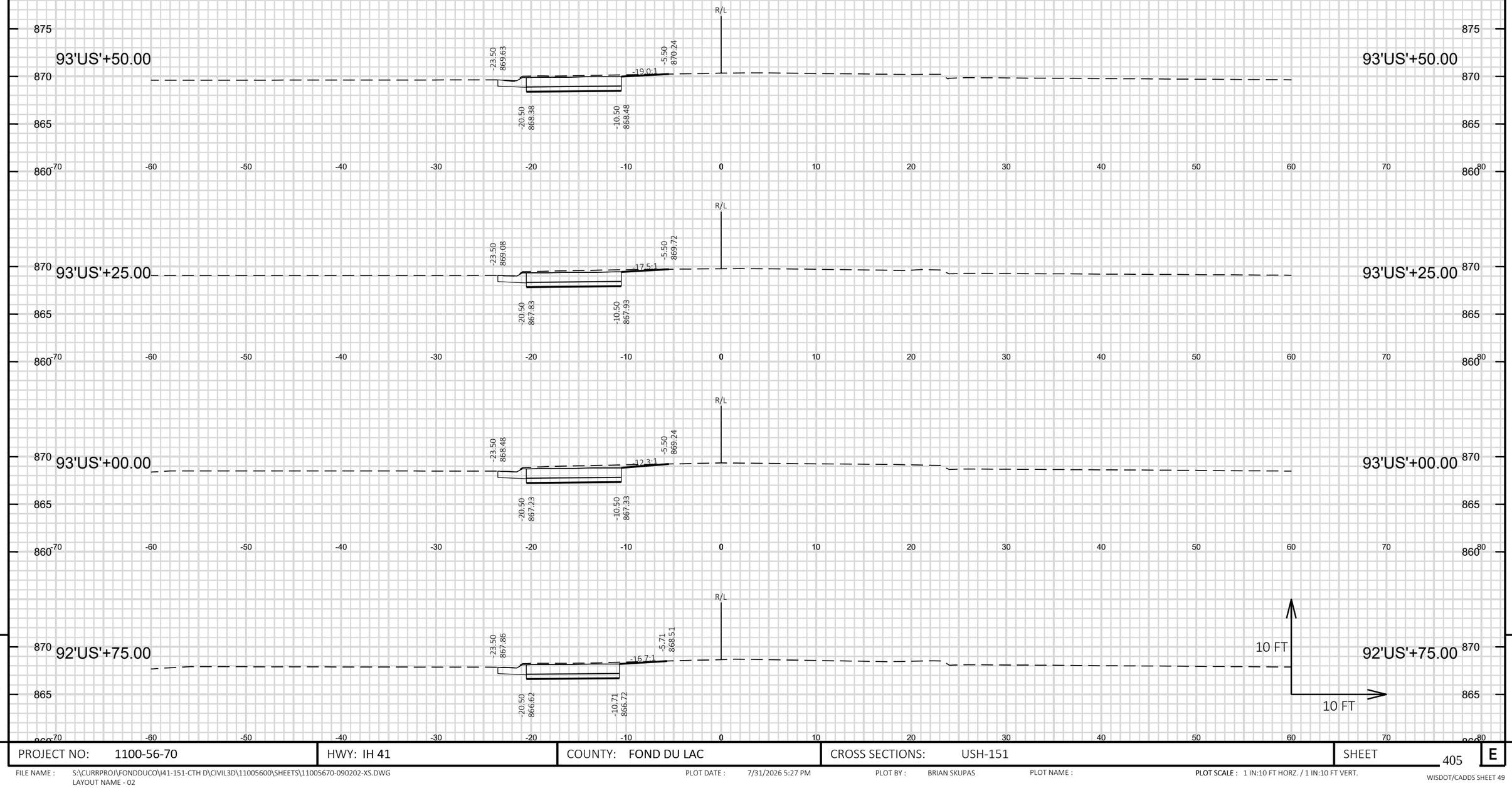
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: USH-151	SHEET 404	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090202-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 7/31/2026 5:27 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

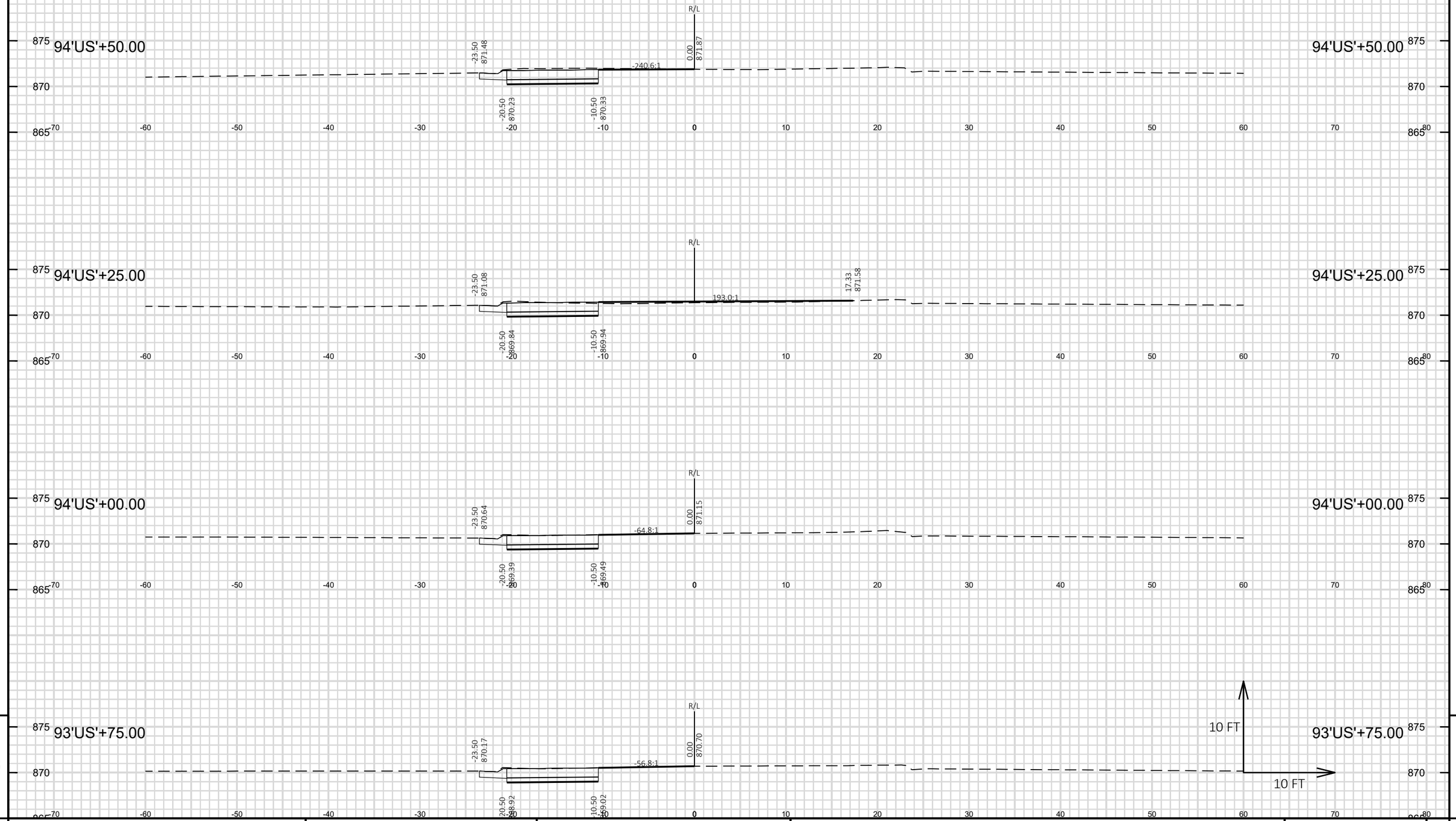
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: USH-151	SHEET 405	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090202-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/31/2026 5:27 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: USH-151	SHEET 406	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090202-XS.DWG
LAYOUT NAME - 03

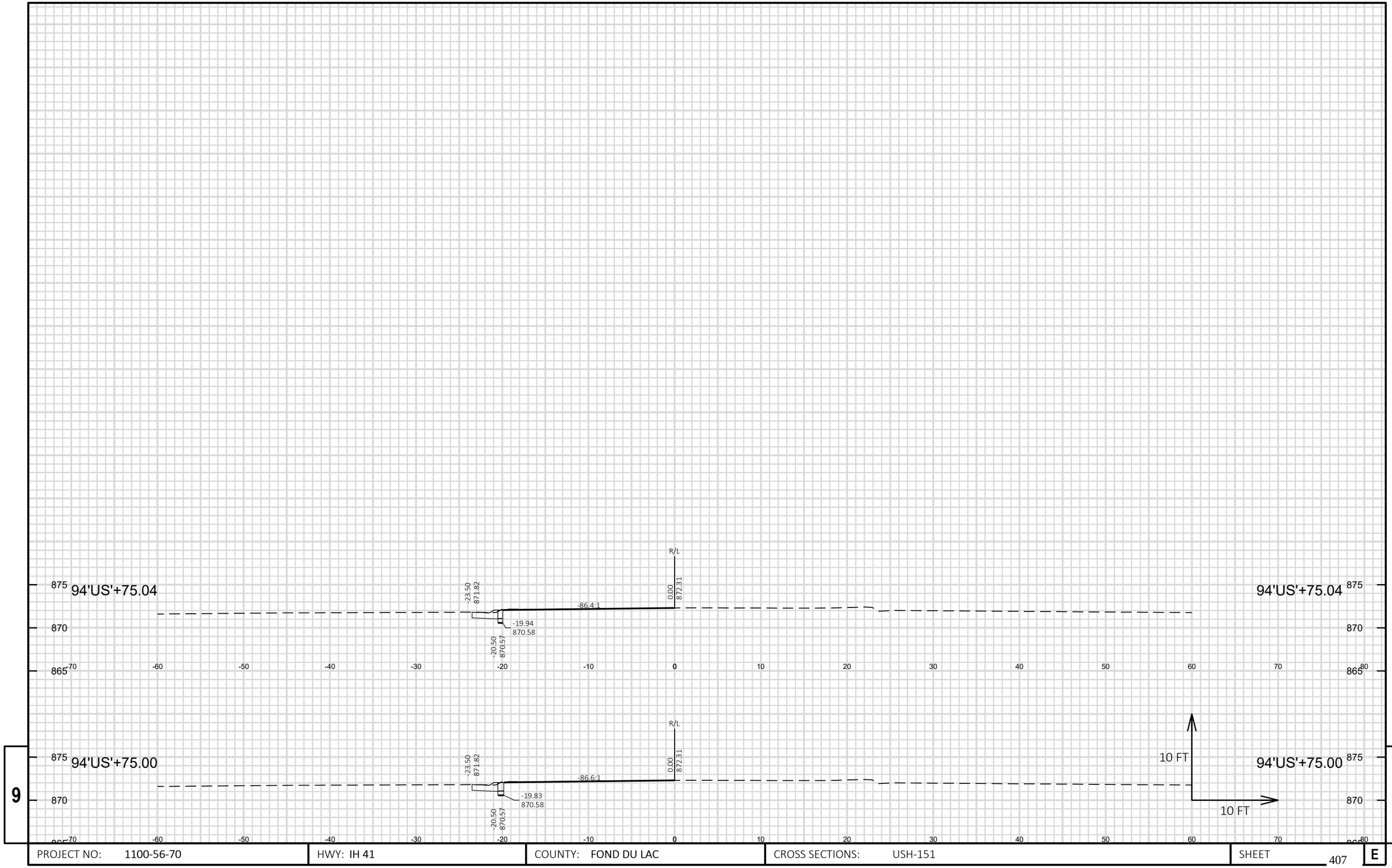
PLOT DATE : 7/31/2026 5:27 PM

PLOT BY : BRIAN SKUPAS

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

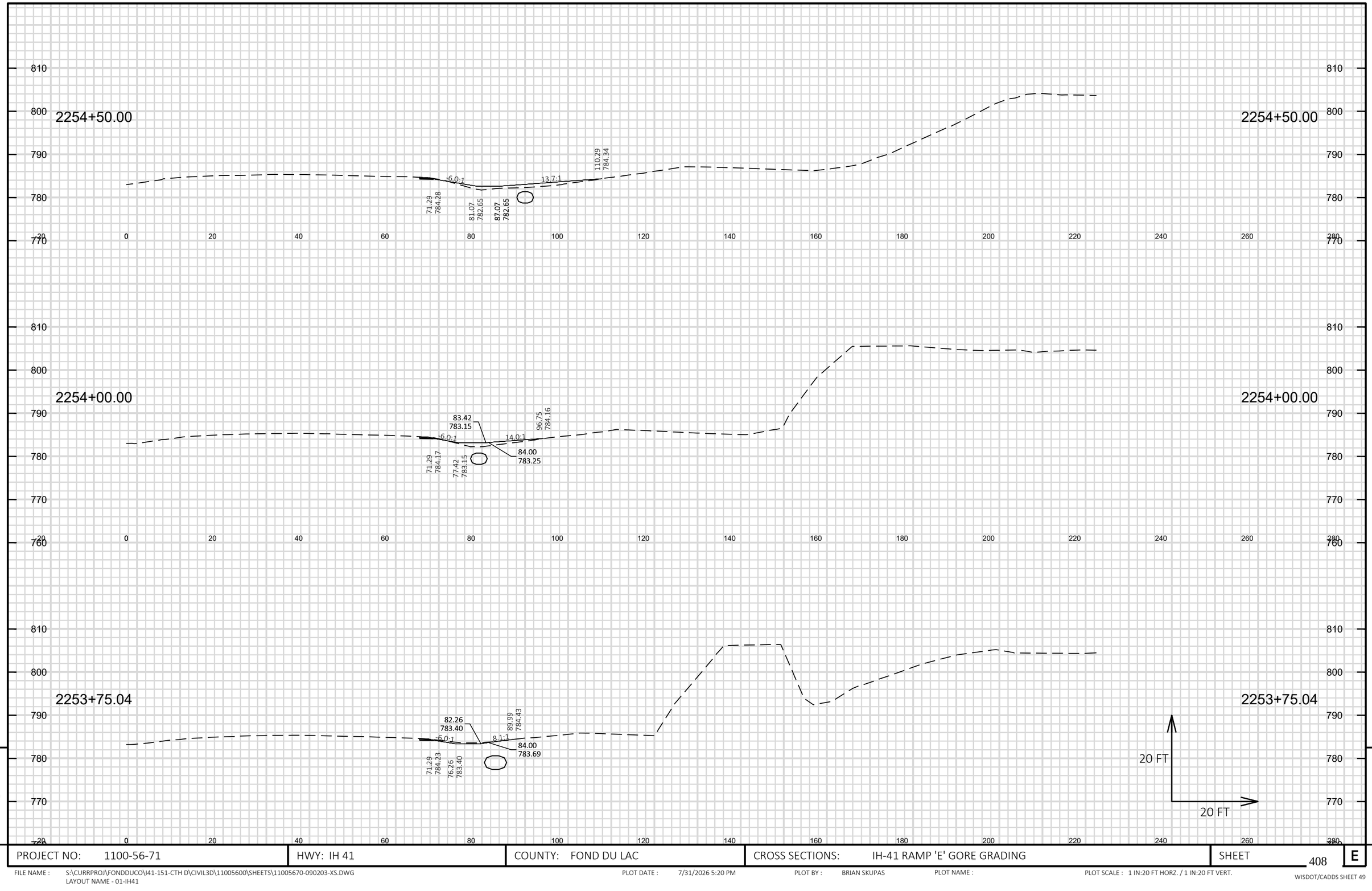
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PROJECT NO: 1100-56-70	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: USH-151	SHEET 407	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090202-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 7/31/2026 5:27 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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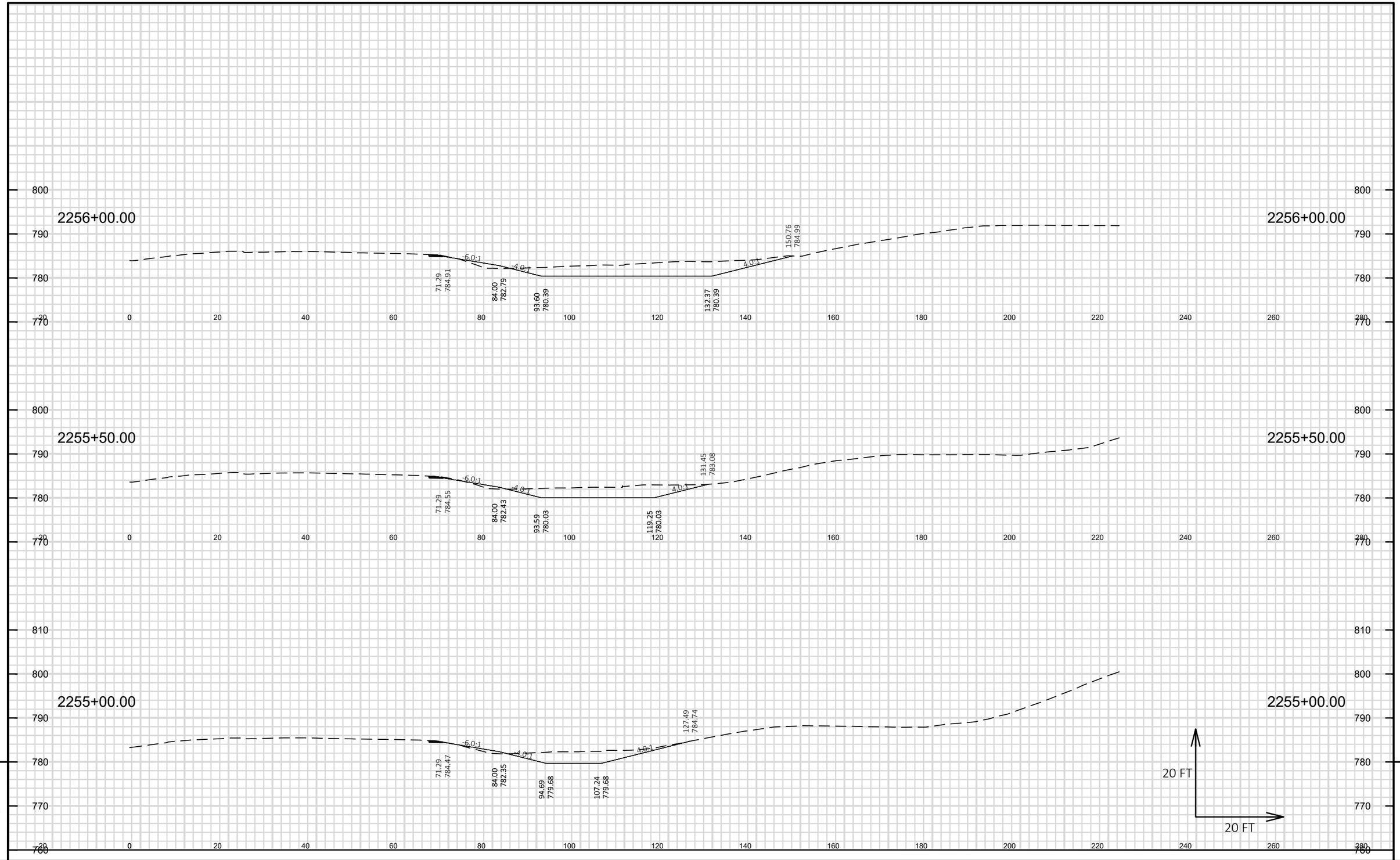
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH-41 RAMP 'E' GORE GRADING	SHEET 408	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090203-XS.DWG
LAYOUT NAME - 01-IH41

PLOT DATE : 7/31/2026 5:20 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

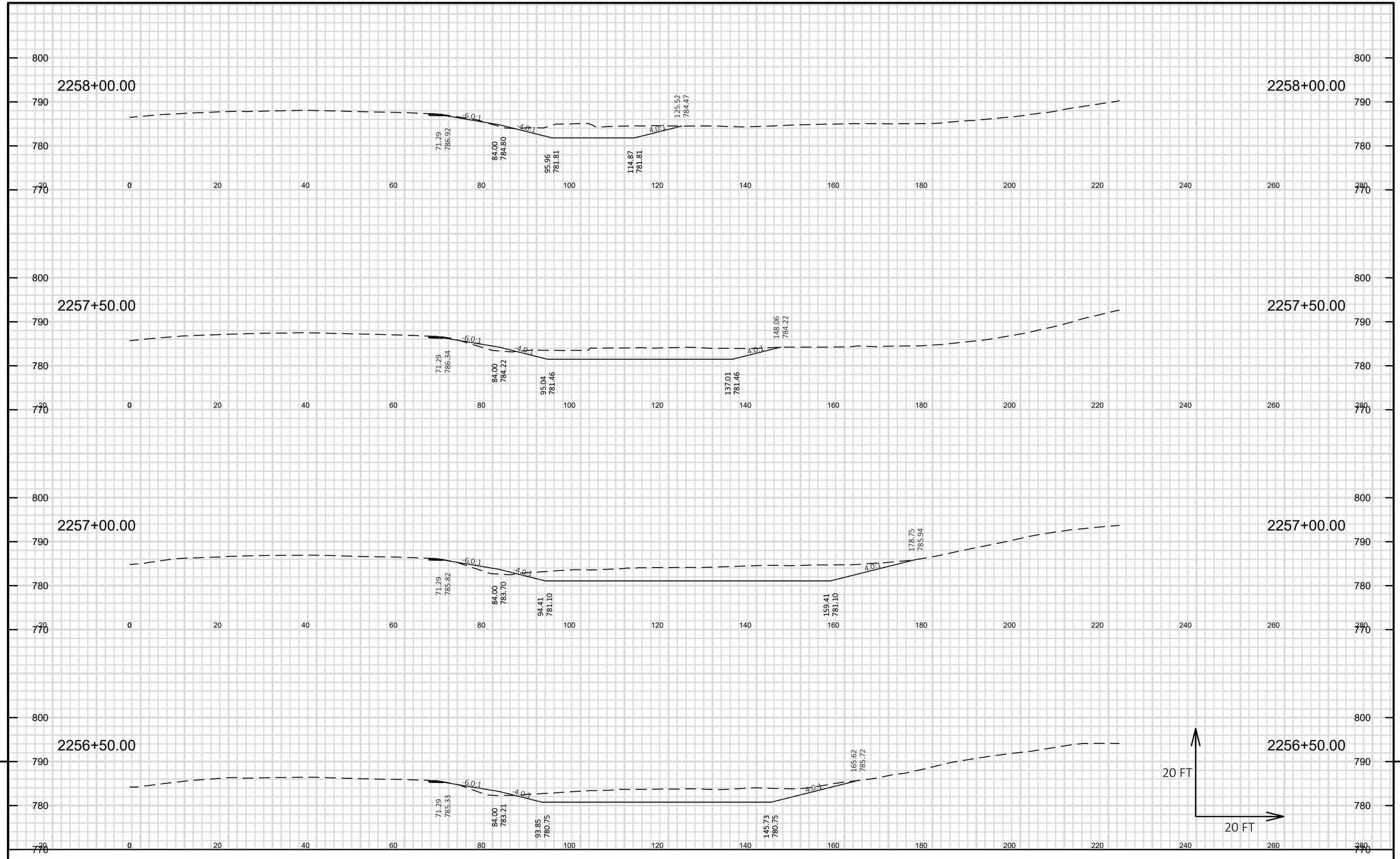
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH-41 RAMP 'E' GORE GRADING	SHEET 409	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090203-XS.DWG
LAYOUT NAME - 02-IH41

PLOT DATE : 7/31/2026 5:20 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



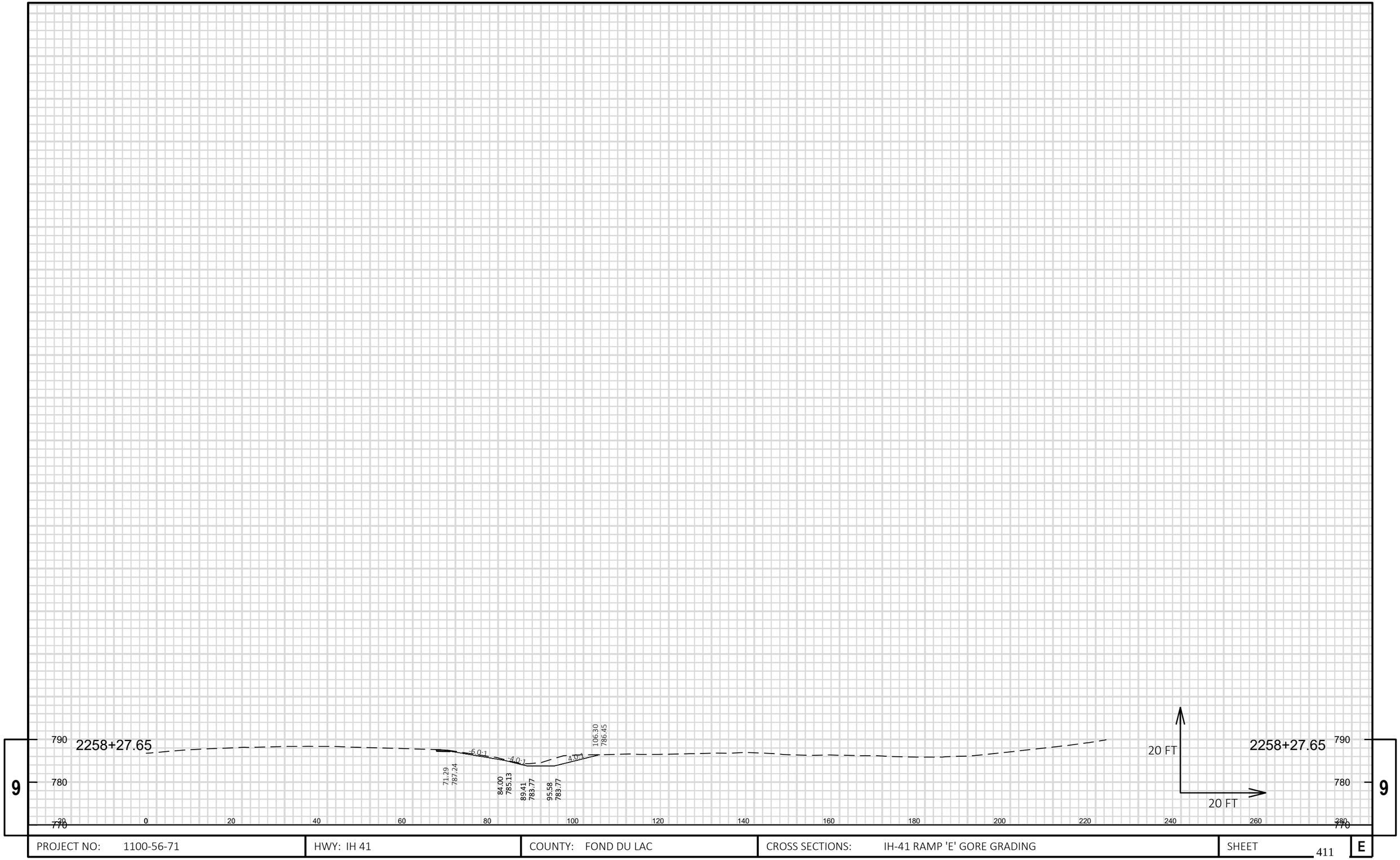
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9

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH-41 RAMP 'E' GORE GRADING	SHEET 410	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090203-XS.DWG
LAYOUT NAME - 03-IH41

PLOT DATE : 7/31/2026 5:21 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

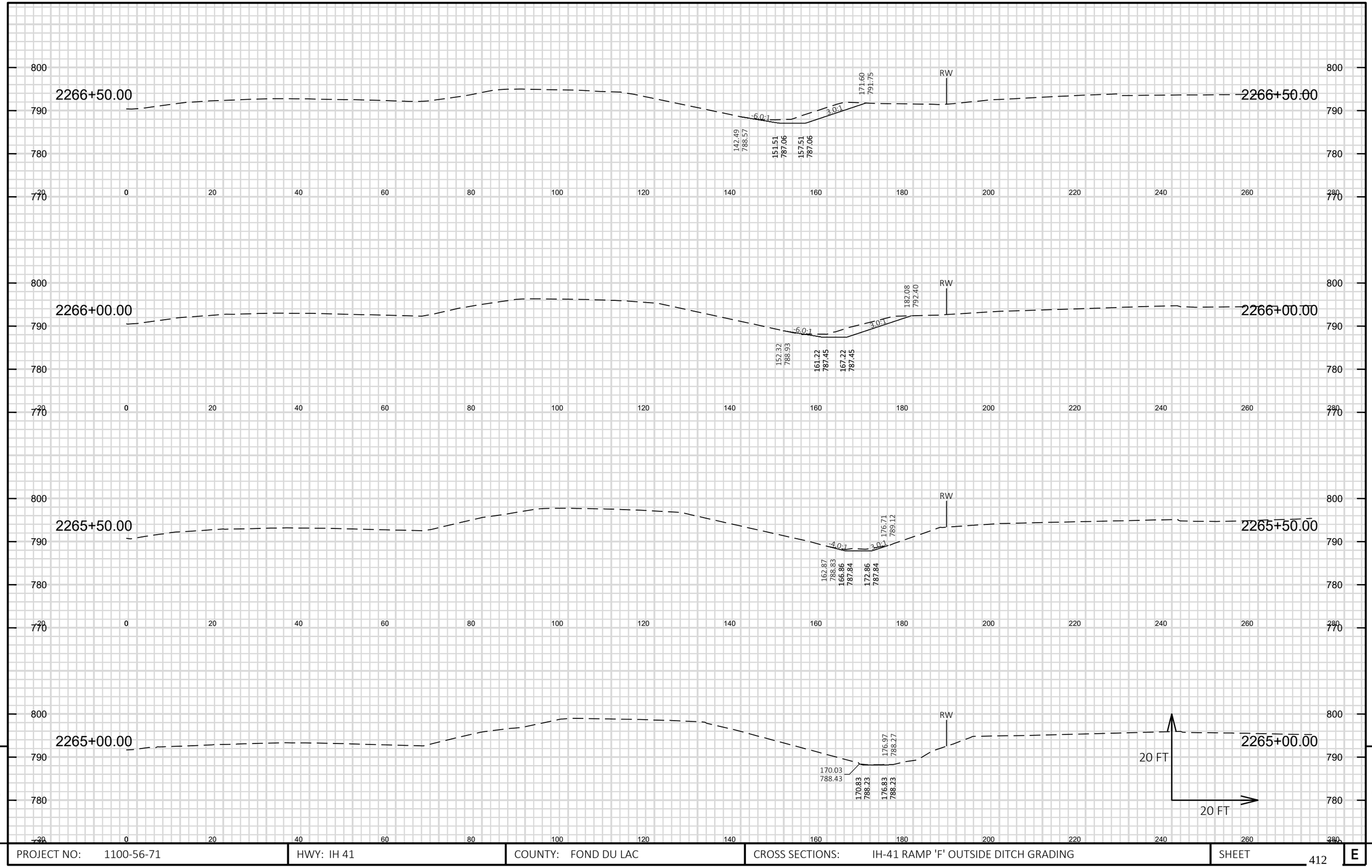
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH-41 RAMP 'E' GORE GRADING	SHEET 411	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090203-XS.DWG
LAYOUT NAME - 04-IH41

PLOT DATE : 7/31/2026 5:21 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

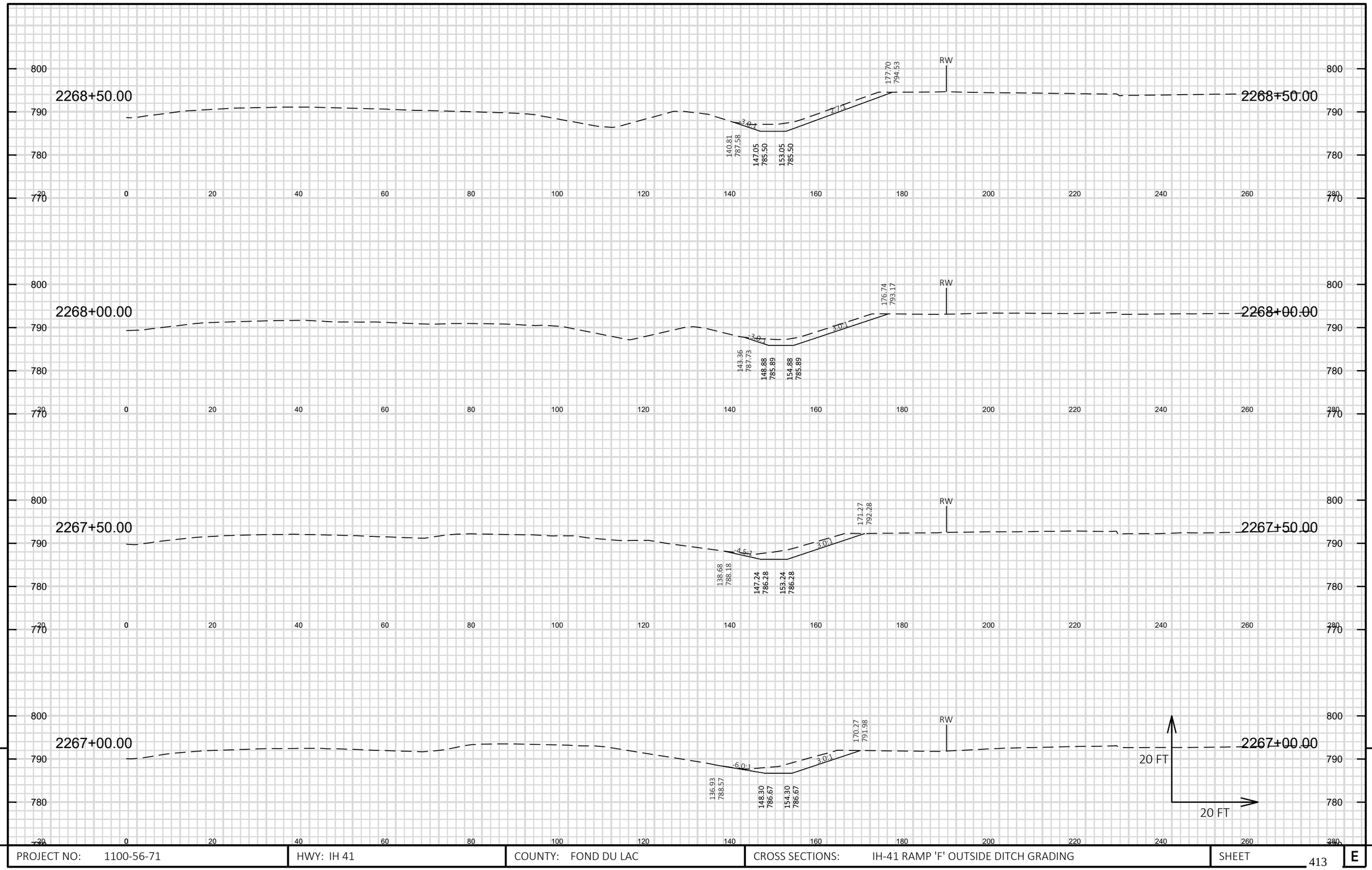
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH-41 RAMP 'F' OUTSIDE DITCH GRADING	SHEET 412	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090203-XS.DWG
LAYOUT NAME - 05-IH41

PLOT DATE : 7/31/2026 5:21 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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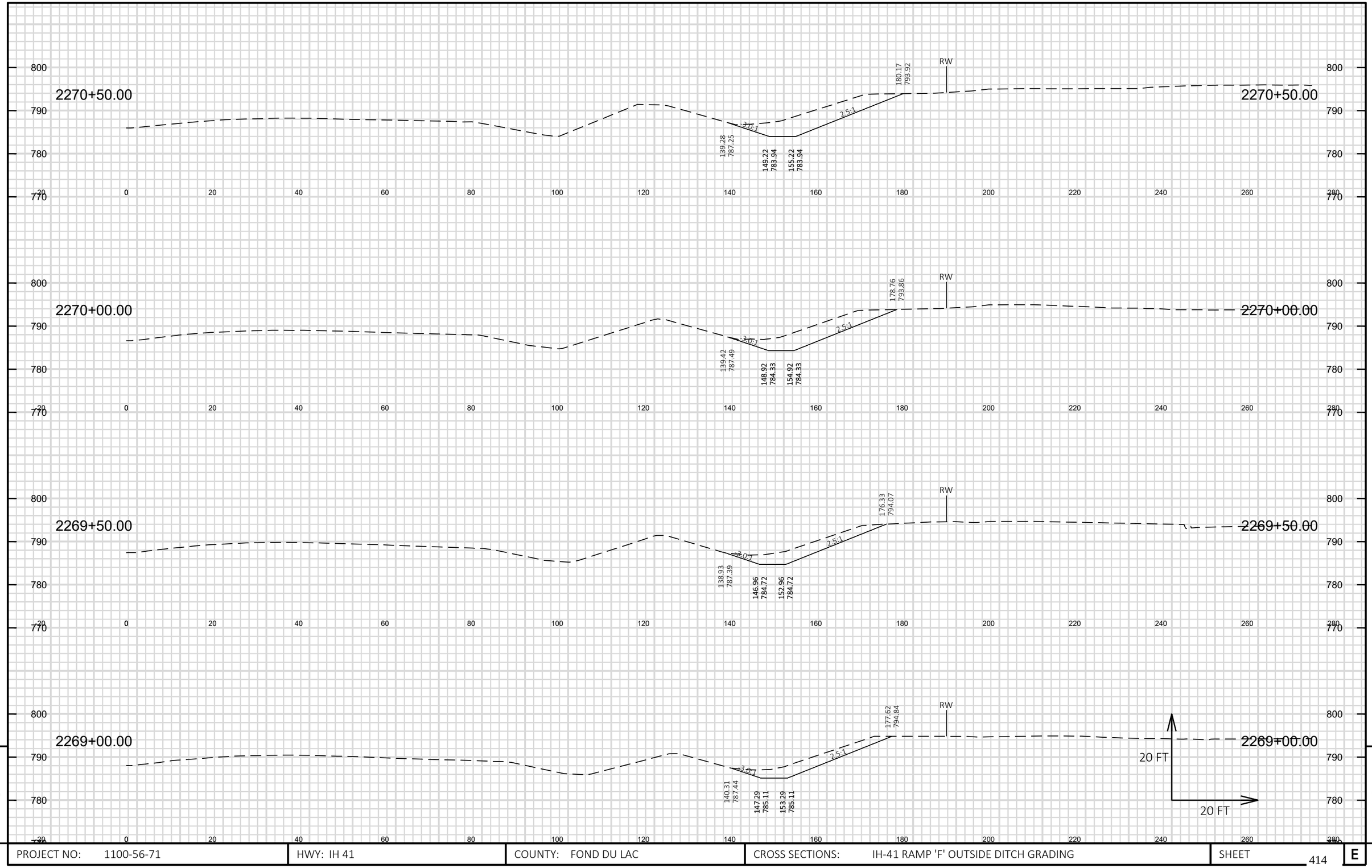
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH-41 RAMP 'F' OUTSIDE DITCH GRADING	SHEET 413	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090203-XS.DWG
LAYOUT NAME - 06-IH41

PLOT DATE : 7/31/2026 5:21 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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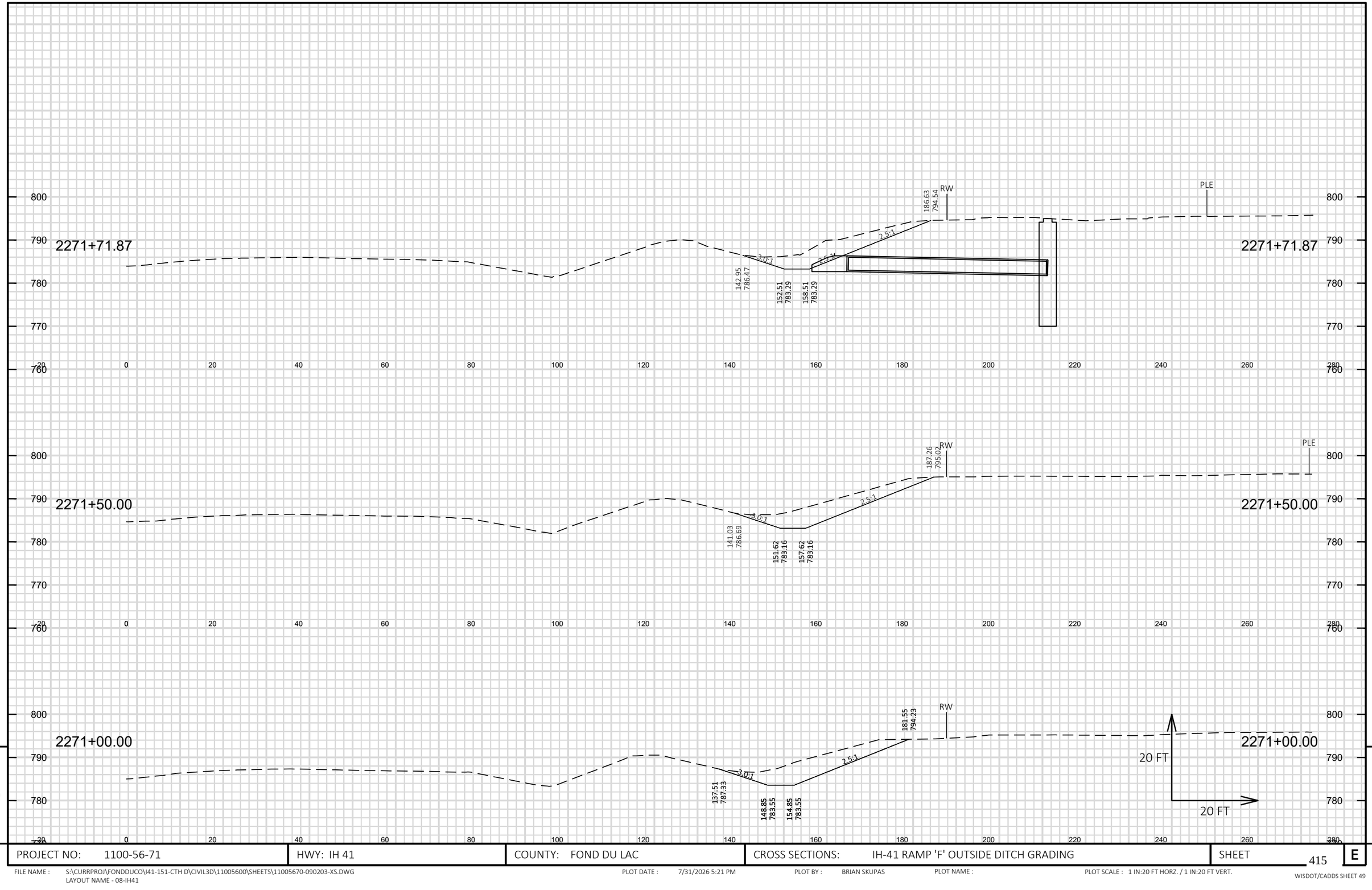
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH-41 RAMP 'F' OUTSIDE DITCH GRADING	SHEET 414	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090203-XS.DWG
LAYOUT NAME - 07-IH41

PLOT DATE : 7/31/2026 5:21 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH-41 RAMP 'F' OUTSIDE DITCH GRADING	SHEET 415	E

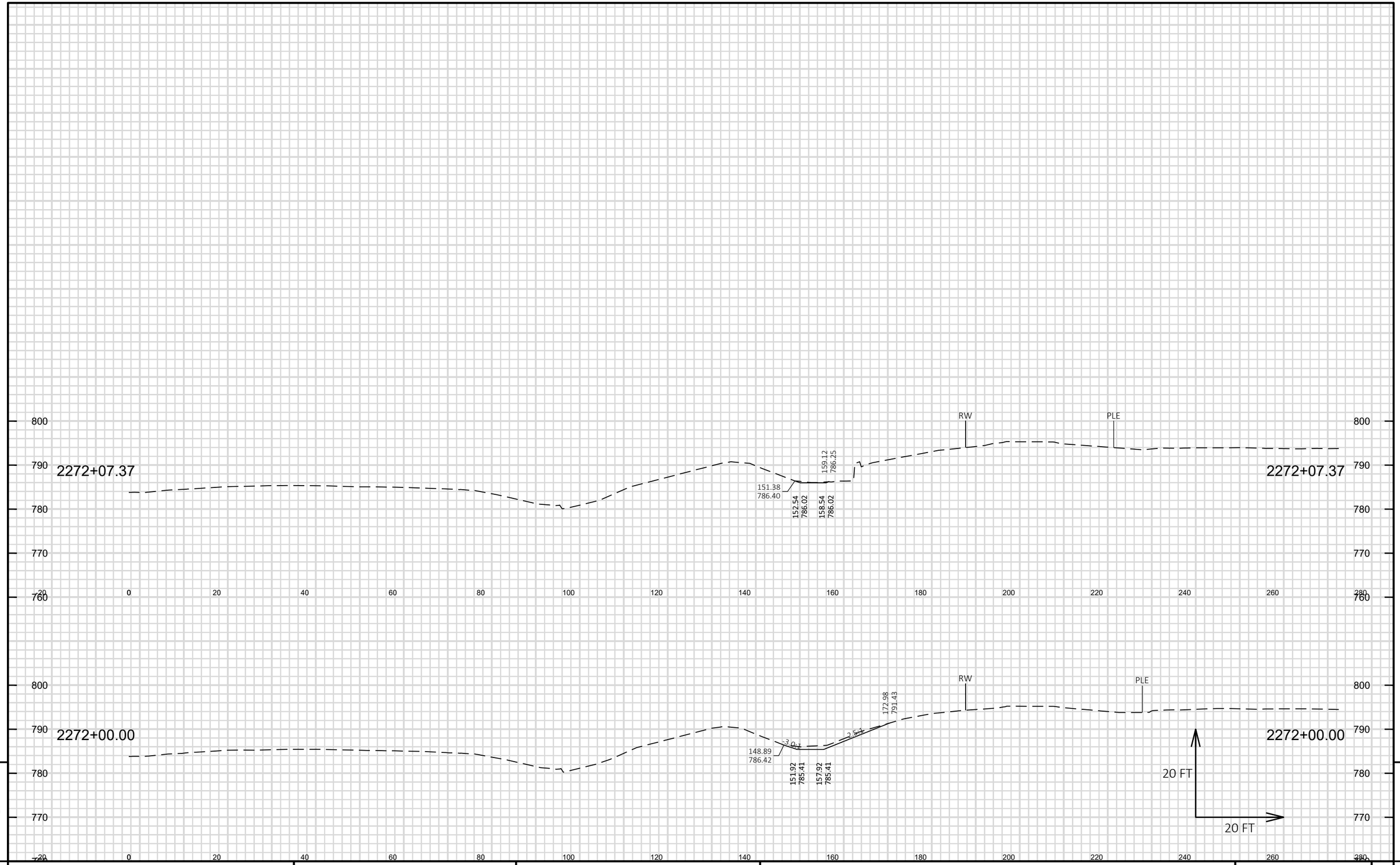
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LAYOUT NAME - 08-IH41

PLOT DATE : 7/31/2026 5:21 PM

PLOT BY : BRIAN SKUPAS

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

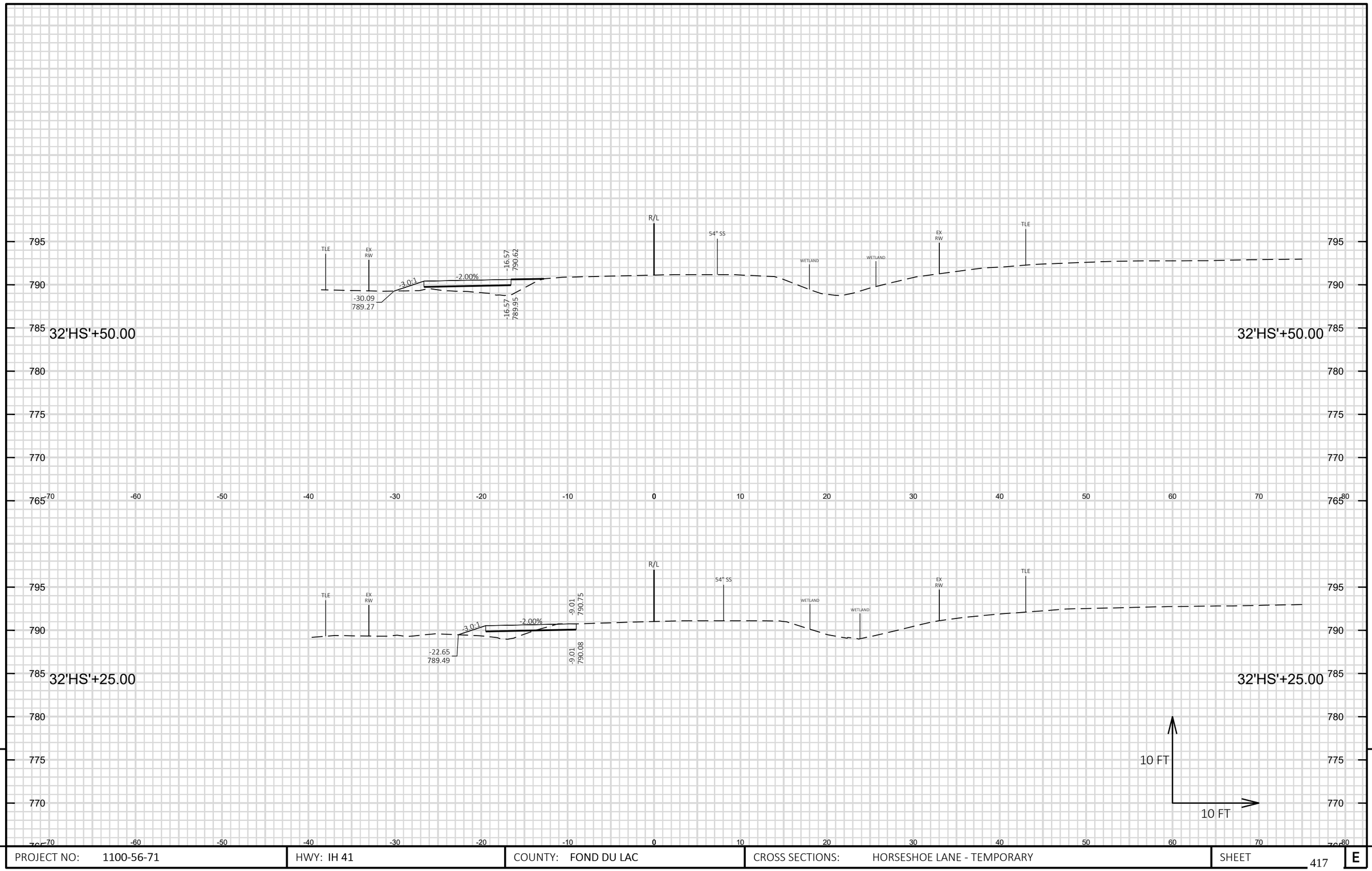


PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: IH-41 RAMP 'F' OUTSIDE DITCH GRADING	SHEET 416	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090203-XS.DWG
LAYOUT NAME - 09-IH41

PLOT DATE : 7/31/2026 5:21 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



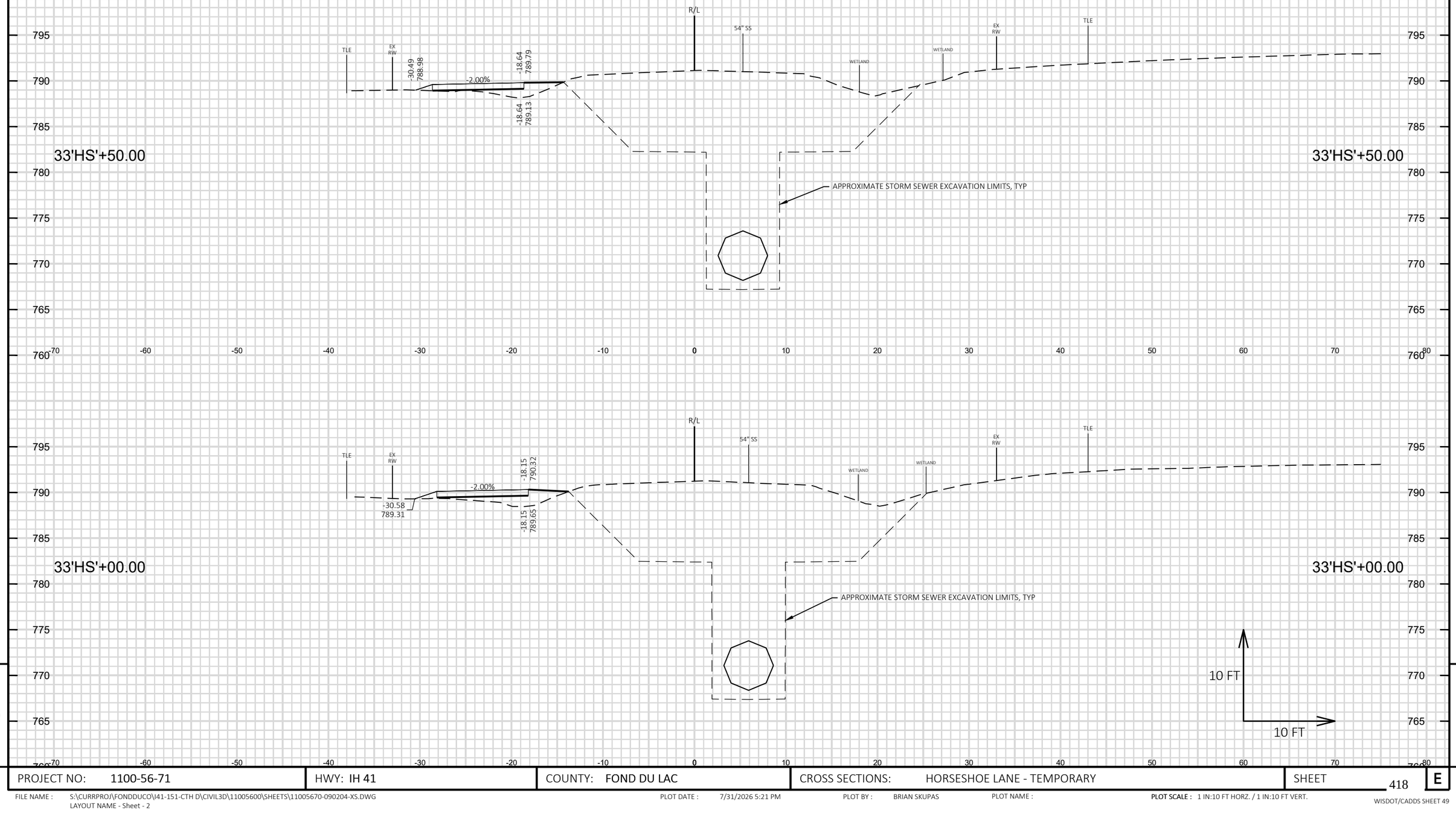
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - TEMPORARY	SHEET 417	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090204-XS.DWG
LAYOUT NAME - Sheet - 1

PLOT DATE : 7/31/2026 5:21 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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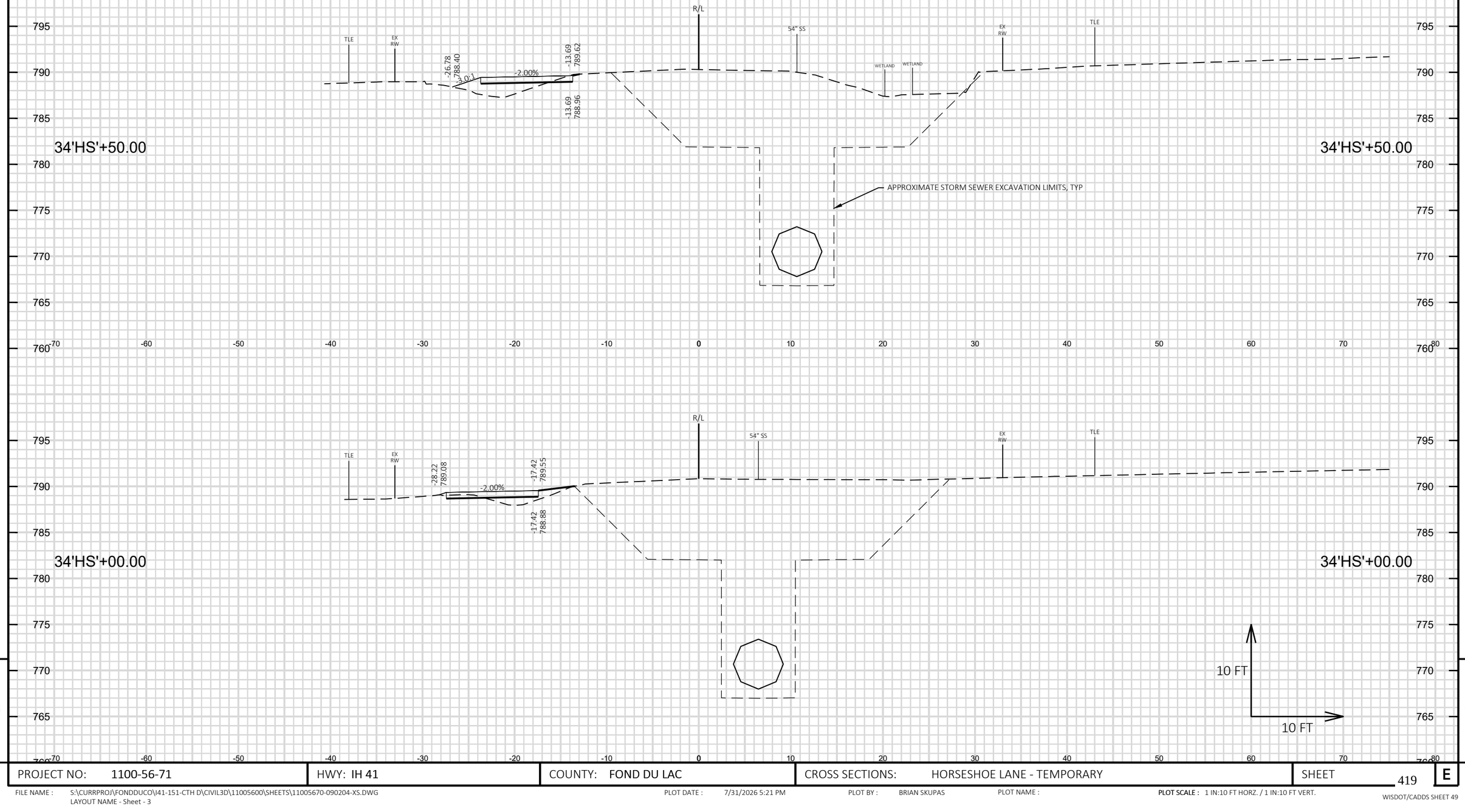
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - TEMPORARY	SHEET 418	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090204-XS.DWG
LAYOUT NAME - Sheet - 2

PLOT DATE : 7/31/2026 5:21 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

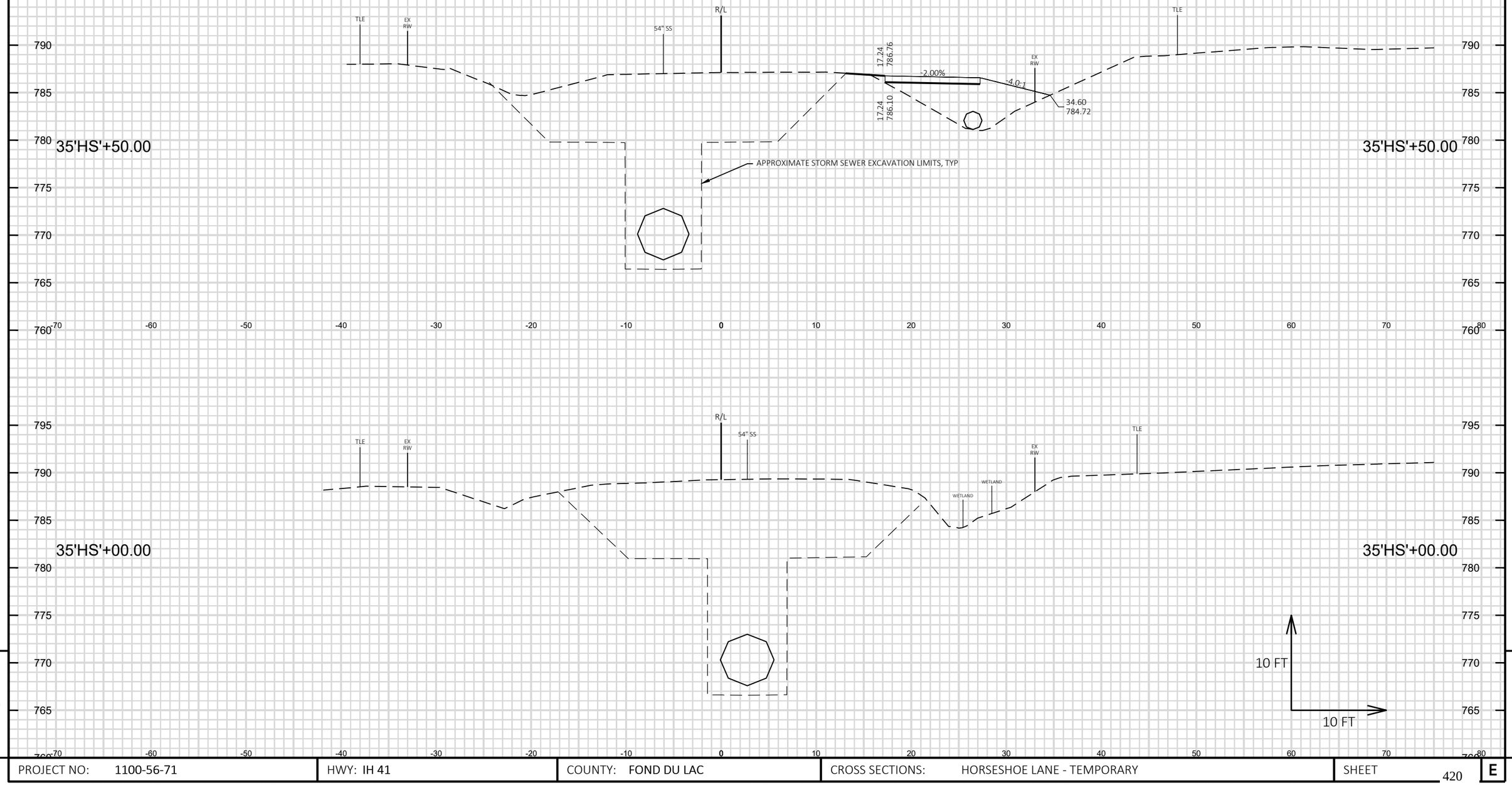
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - TEMPORARY	SHEET 419	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090204-XS.DWG
LAYOUT NAME - Sheet - 3

PLOT DATE : 7/31/2026 5:21 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



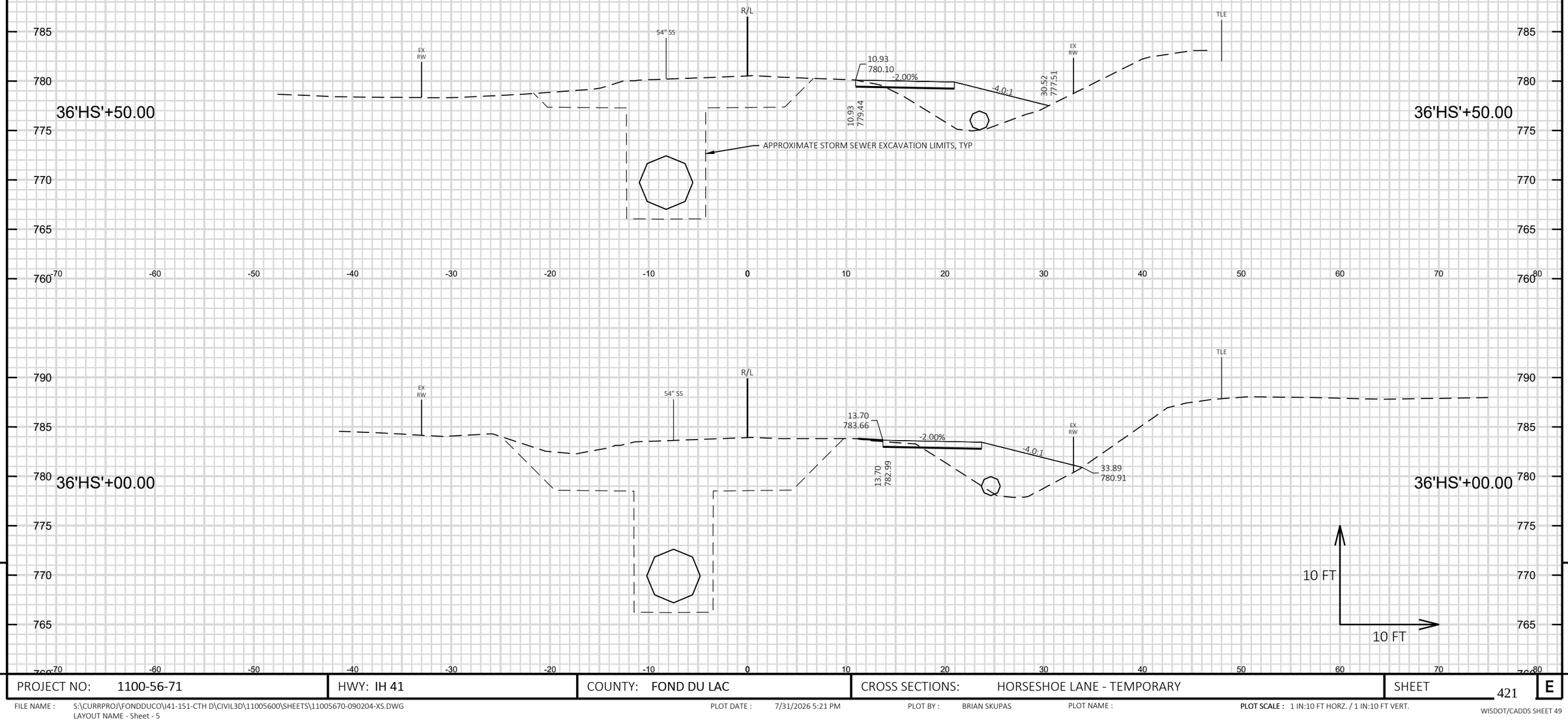
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - TEMPORARY	SHEET 420	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090204-XS.DWG
LAYOUT NAME - Sheet - 4

PLOT DATE : 7/31/2026 5:21 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

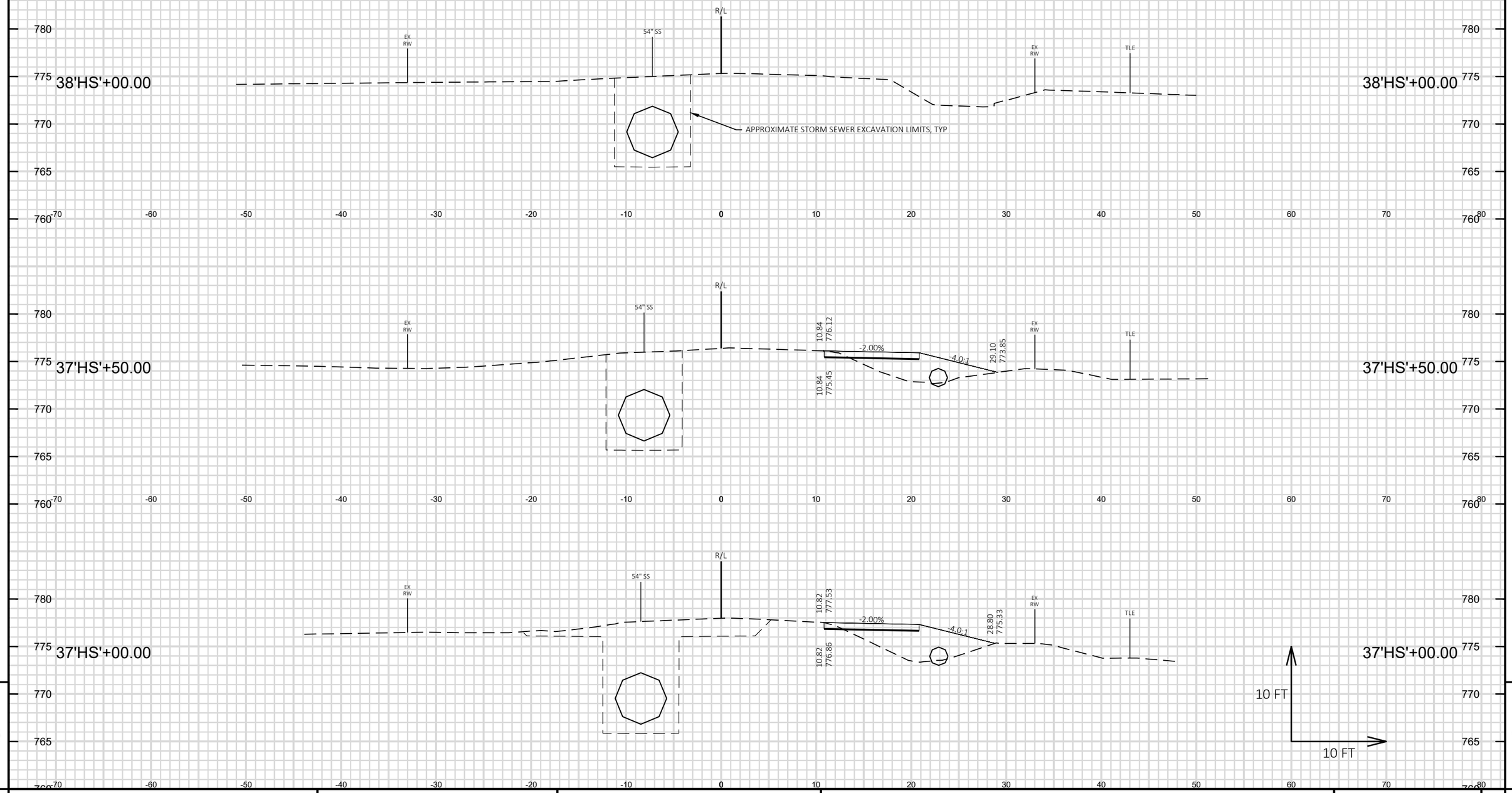


PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - TEMPORARY	SHEET 421	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090204-XS.DWG
LAYOUT NAME - Sheet - 5

PLOT DATE : 7/31/2026 5:21 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



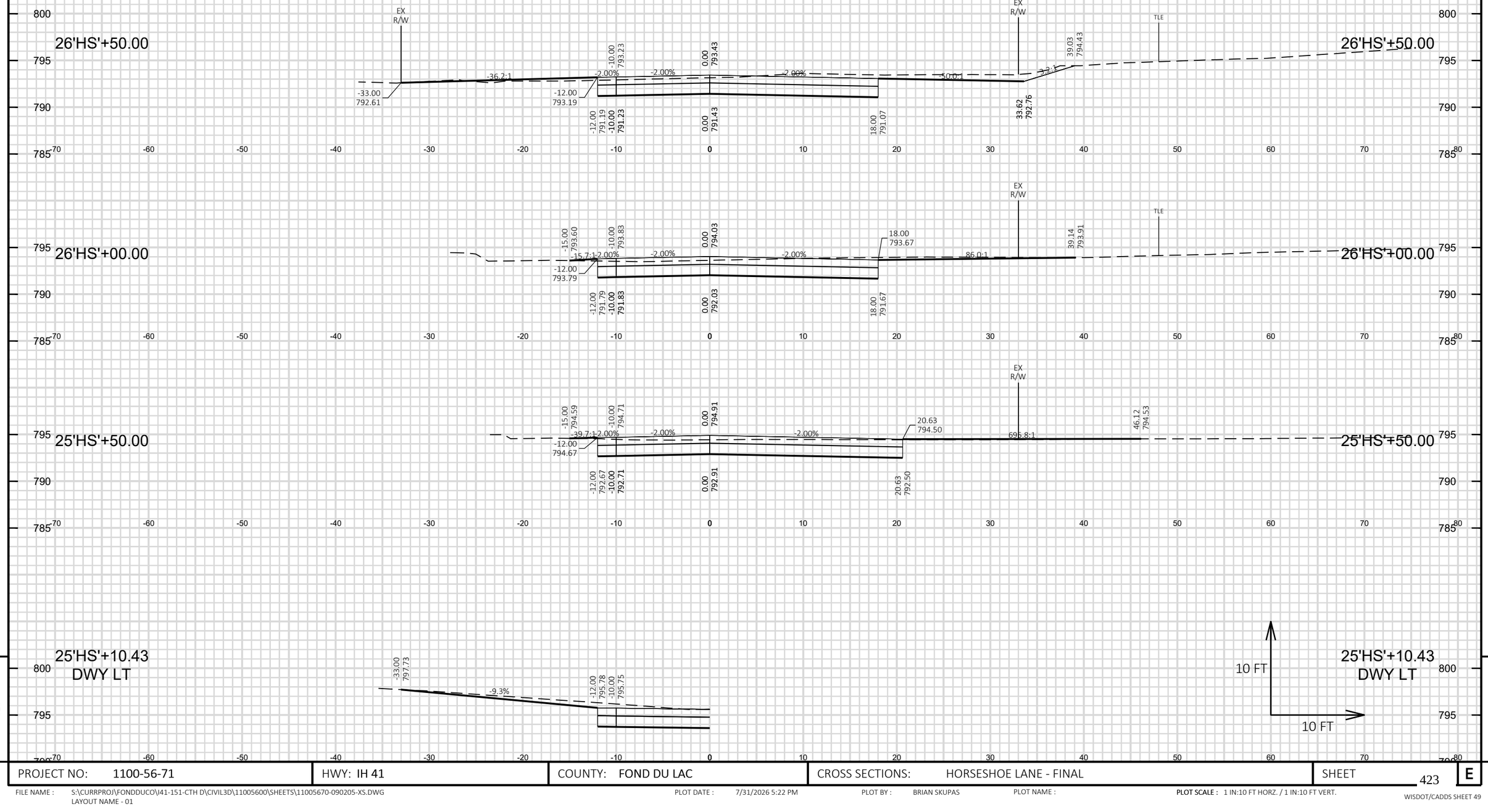
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - TEMPORARY	SHEET 422	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090204-XS.DWG
LAYOUT NAME - Sheet - 6

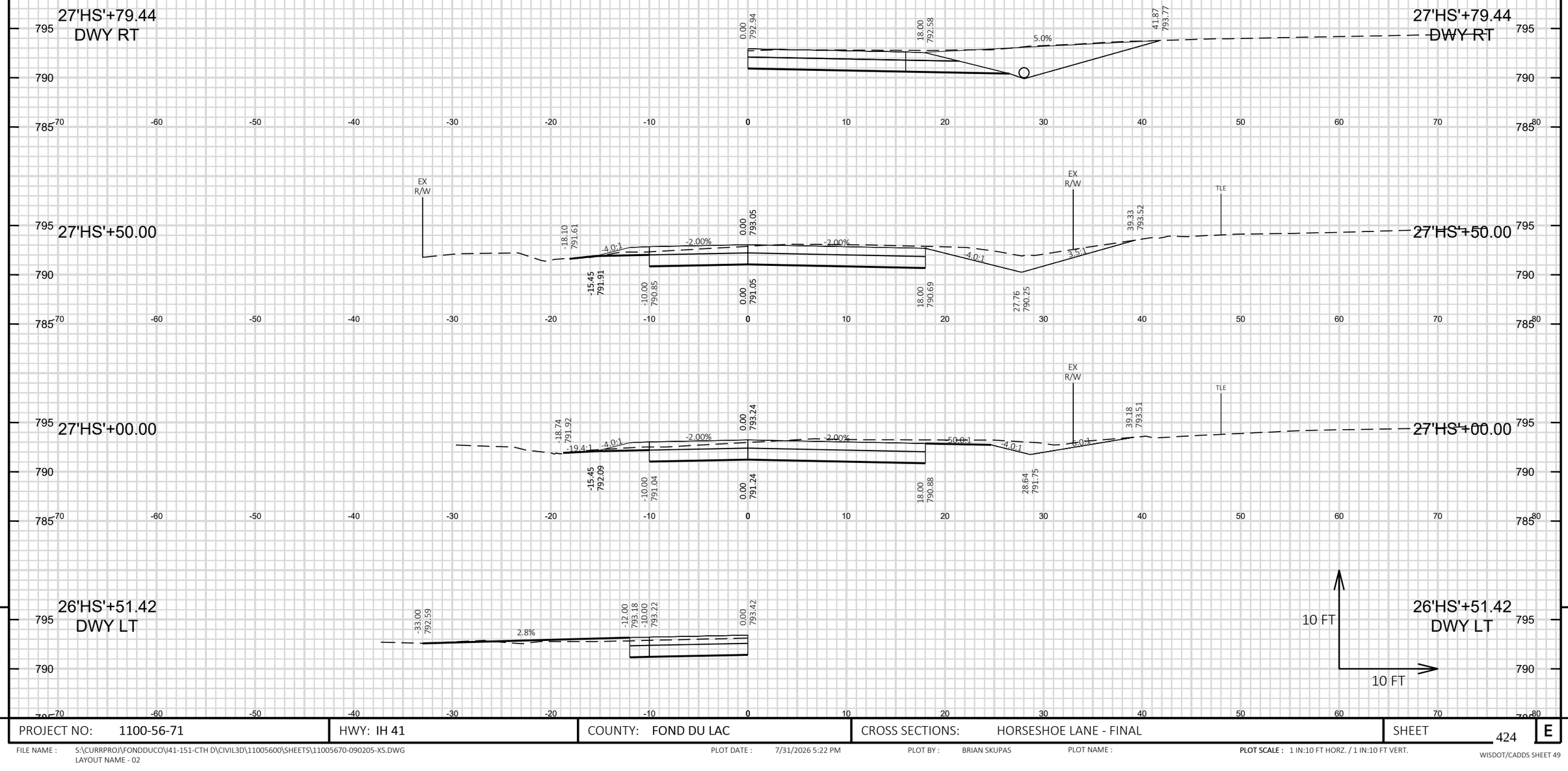
PLOT DATE : 7/31/2026 5:21 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - FINAL	SHEET 423	E



9

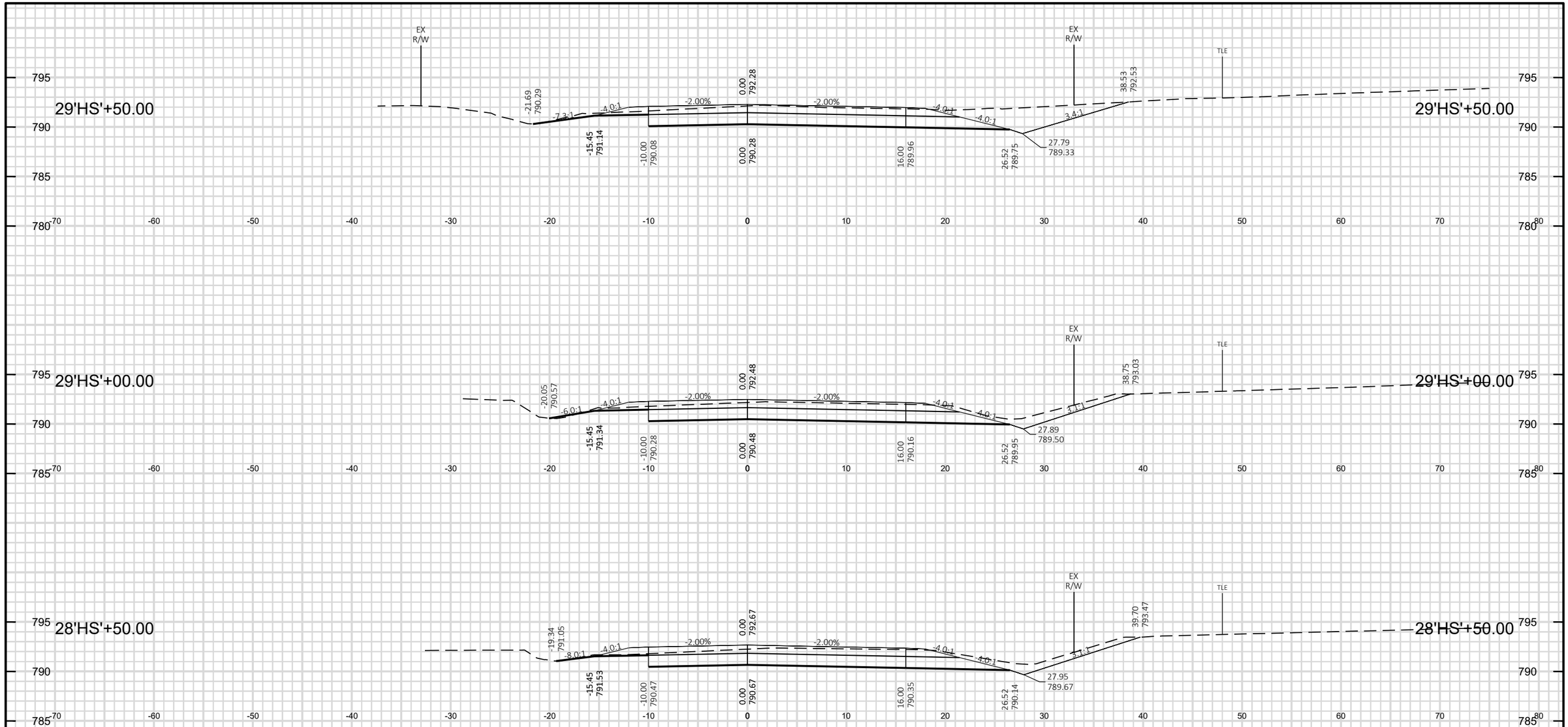
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - FINAL	SHEET 424	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090205-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/31/2026 5:22 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



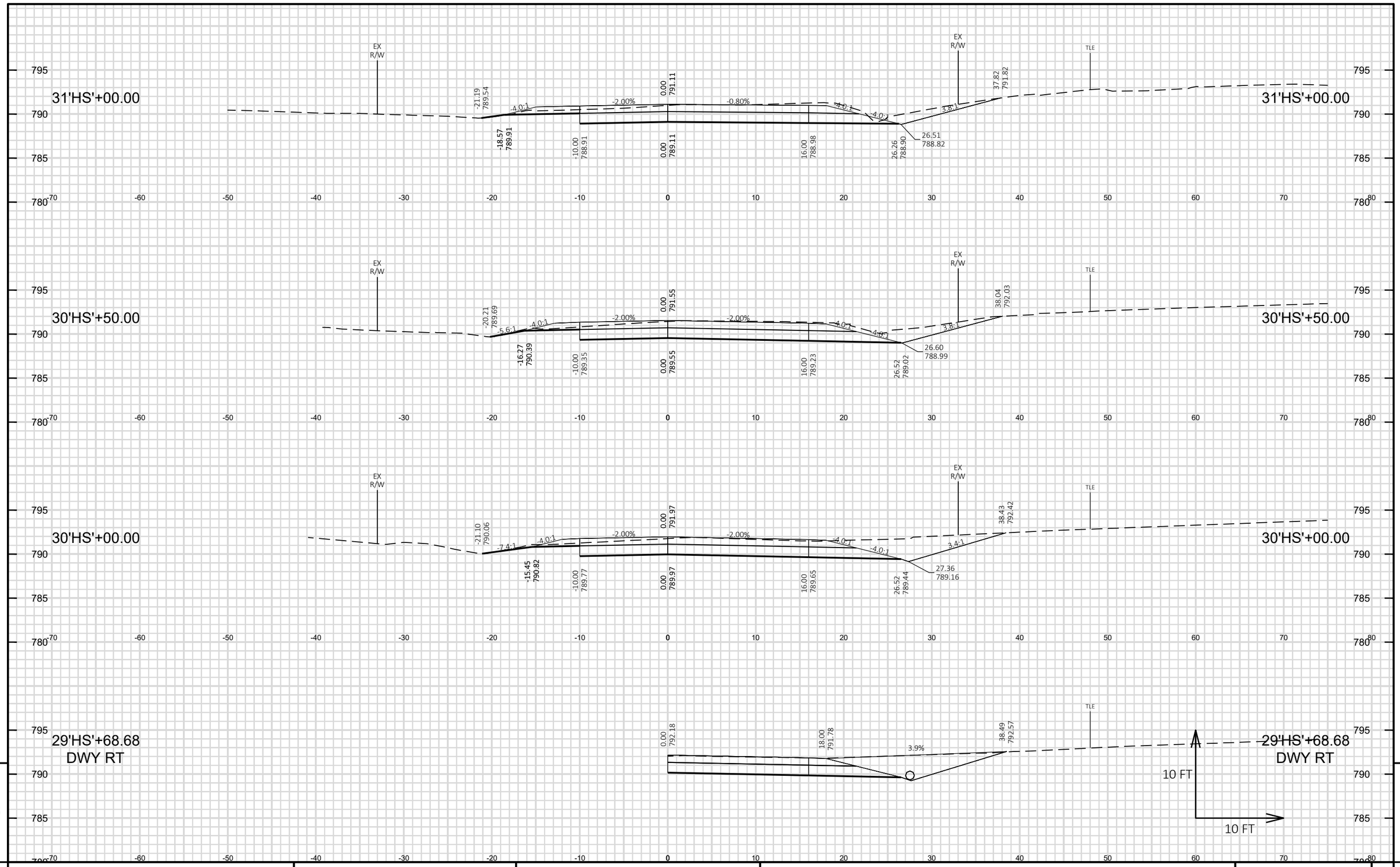
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - FINAL	SHEET 425 E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090205-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 7/31/2026 5:22 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



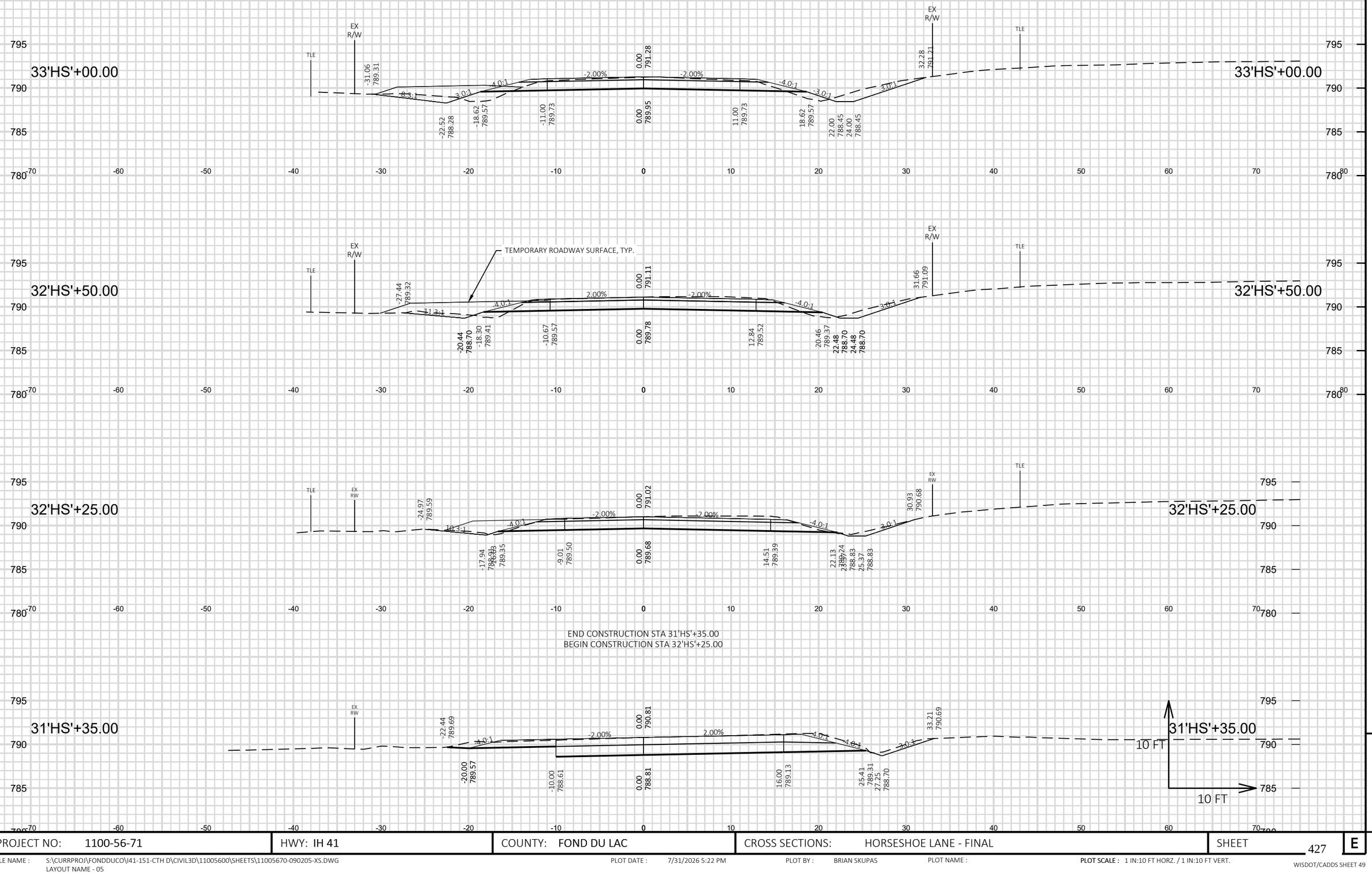
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - FINAL	SHEET 426	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090205-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 7/31/2026 5:22 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

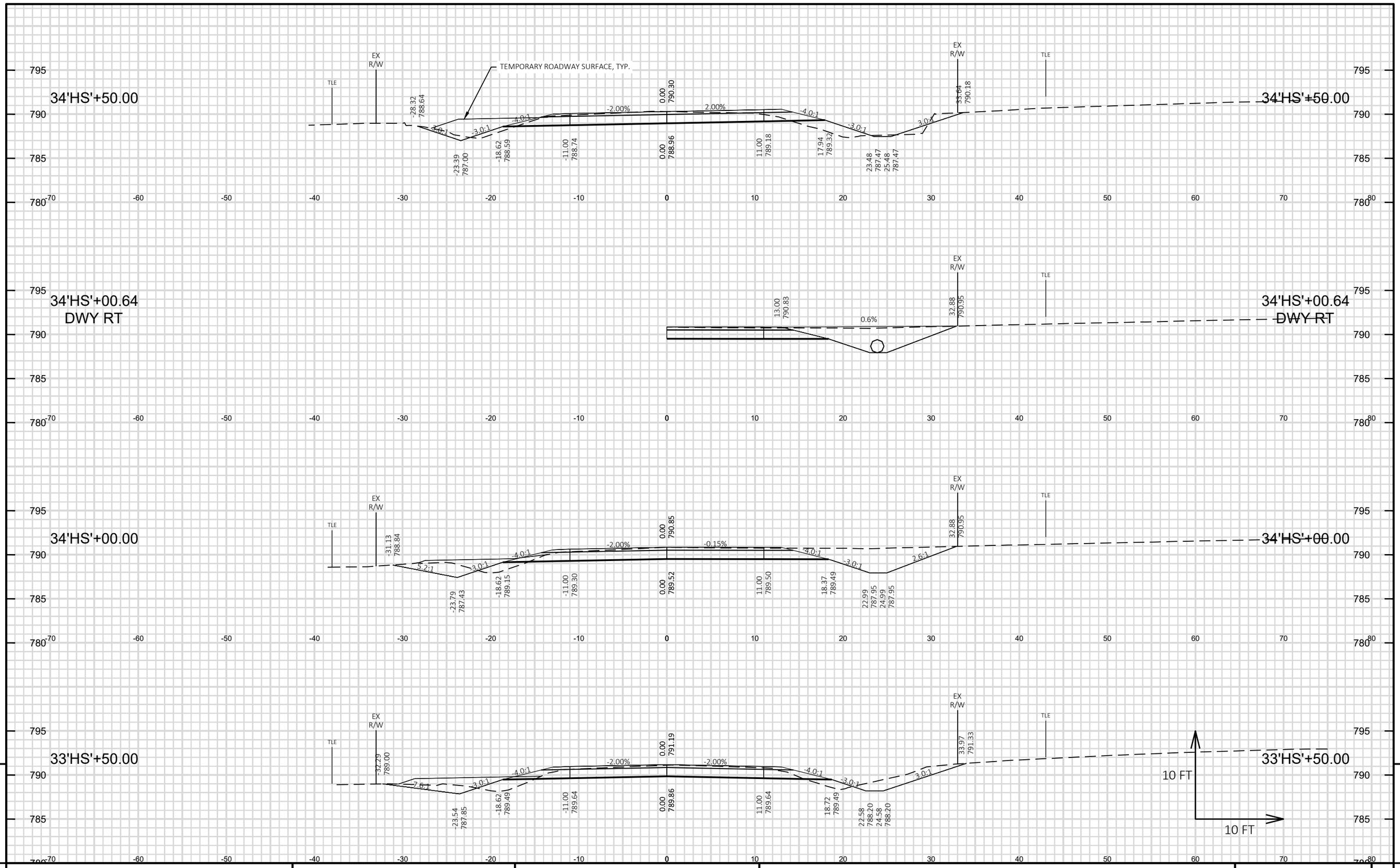


PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - FINAL	SHEET 427 E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090205-XS.DWG
LAYOUT NAME - 05

PLOT DATE : 7/31/2026 5:22 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

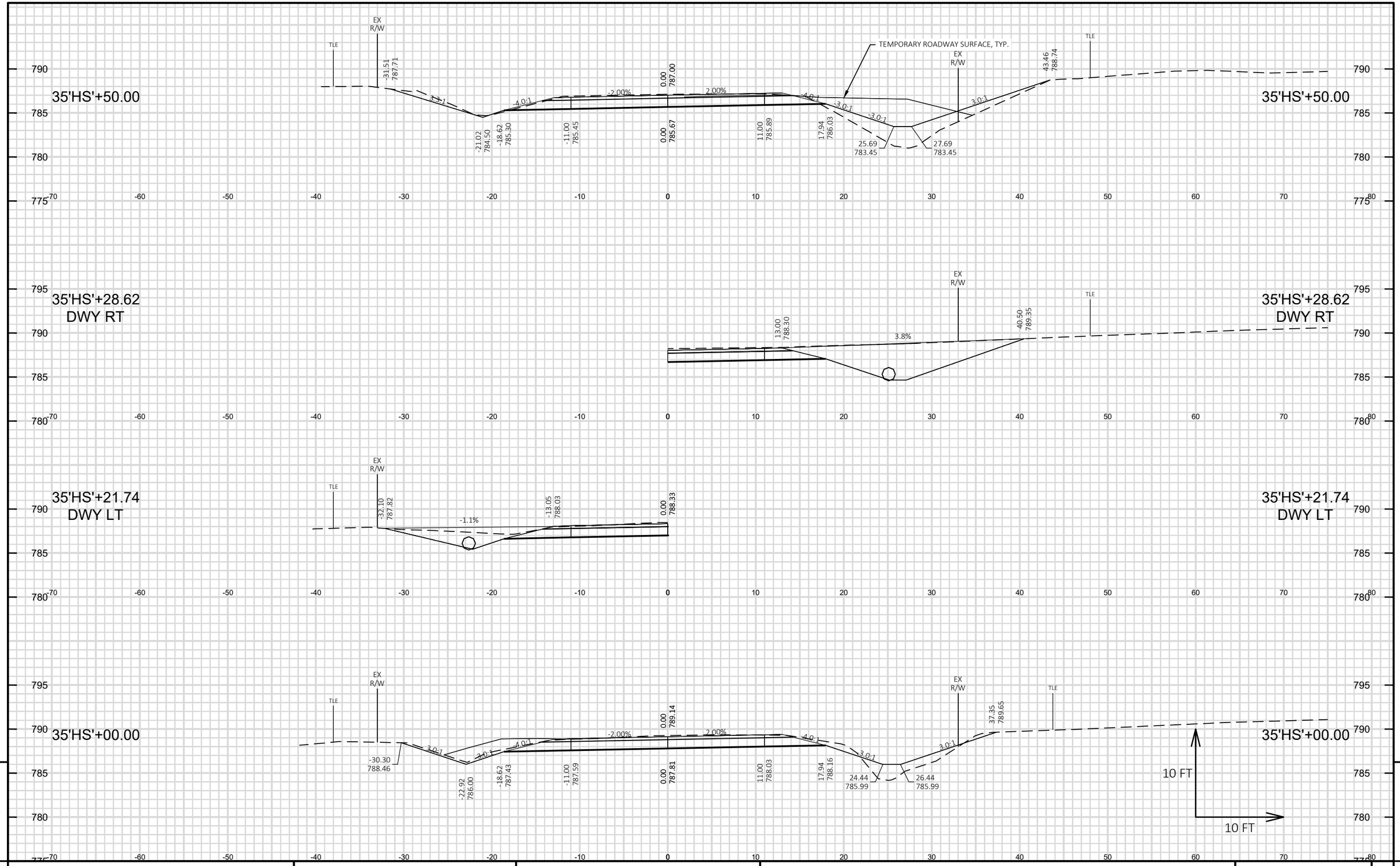


PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - FINAL	SHEET 428 E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090205-XS.DWG
LAYOUT NAME - 06

PLOT DATE : 7/31/2026 5:22 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - FINAL	SHEET 429 E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090205-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 7/31/2026 5:22 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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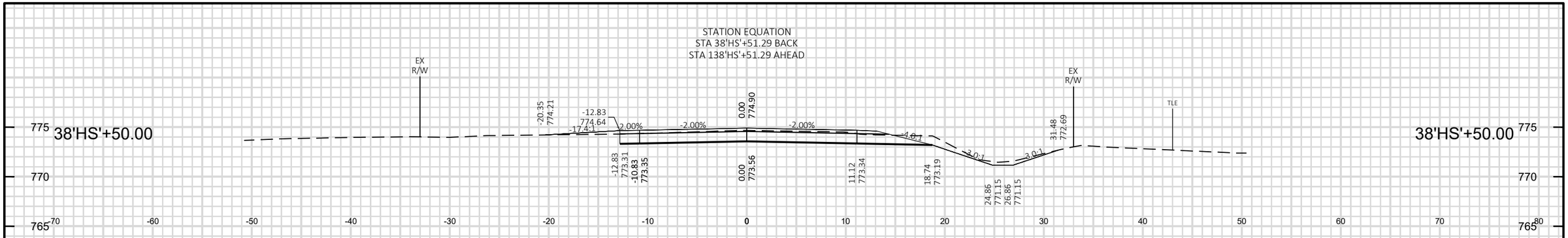
PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - FINAL	SHEET 430	E

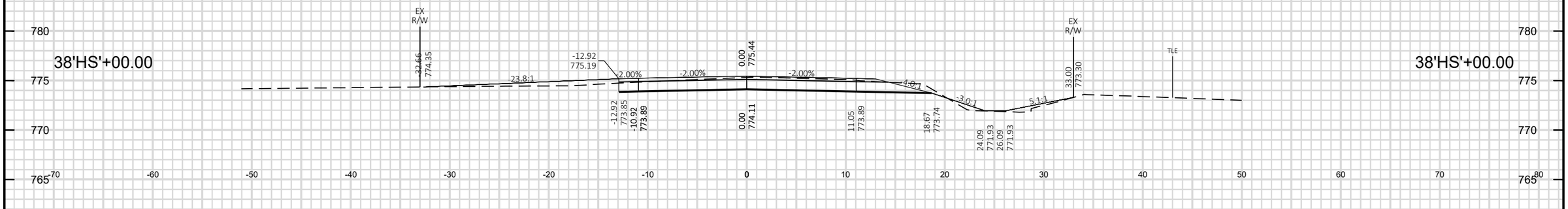
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LAYOUT NAME - 08

PLOT DATE : 7/31/2026 5:22 PM PLOT BY : BRIAN SKUPAS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

STATION EQUATION
STA 38'HS'+51.29 BACK
STA 138'HS'+51.29 AHEAD







9

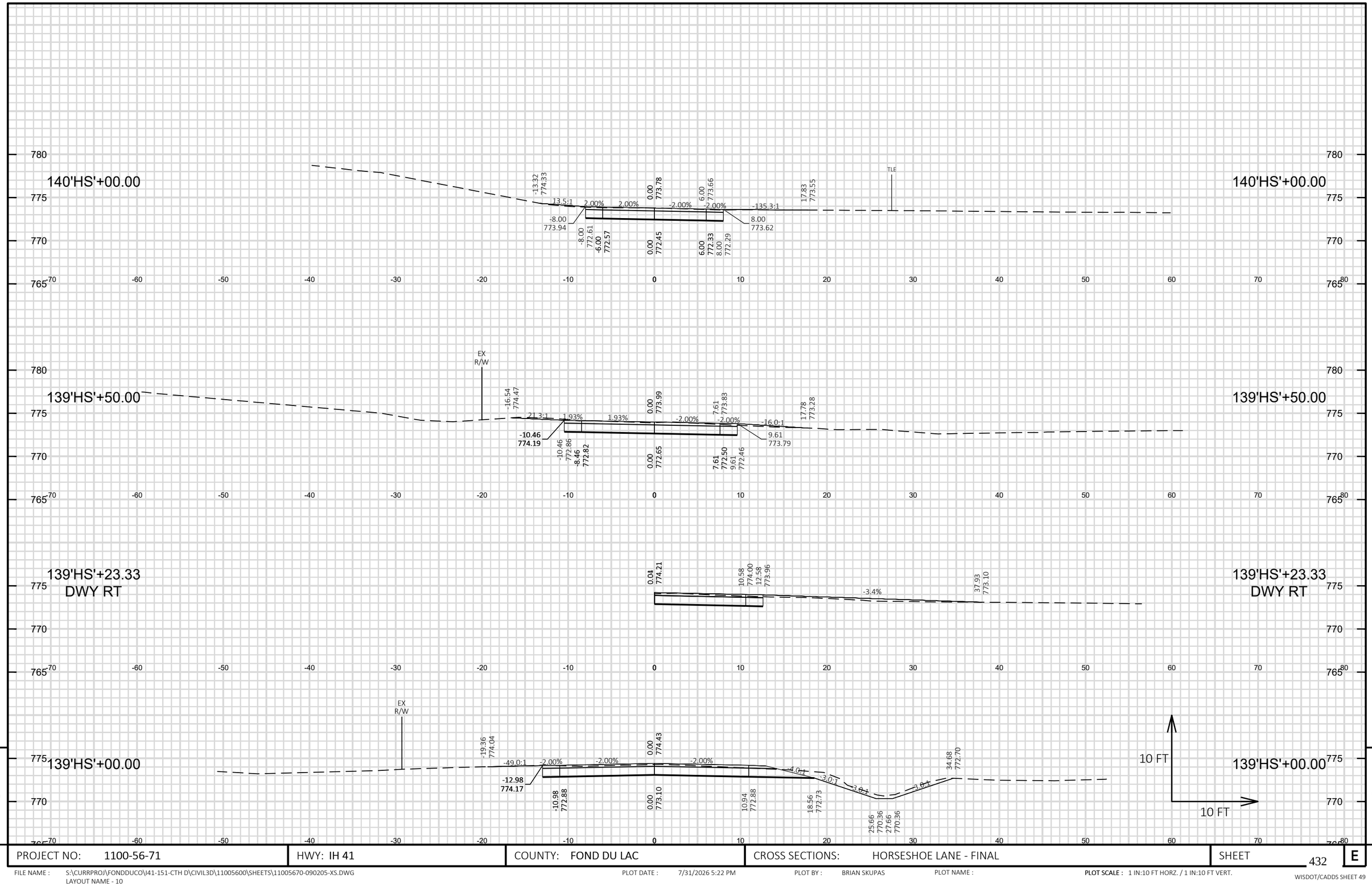
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PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - FINAL	SHEET 431	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090205-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 7/31/2026 5:22 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - FINAL	SHEET 432	E

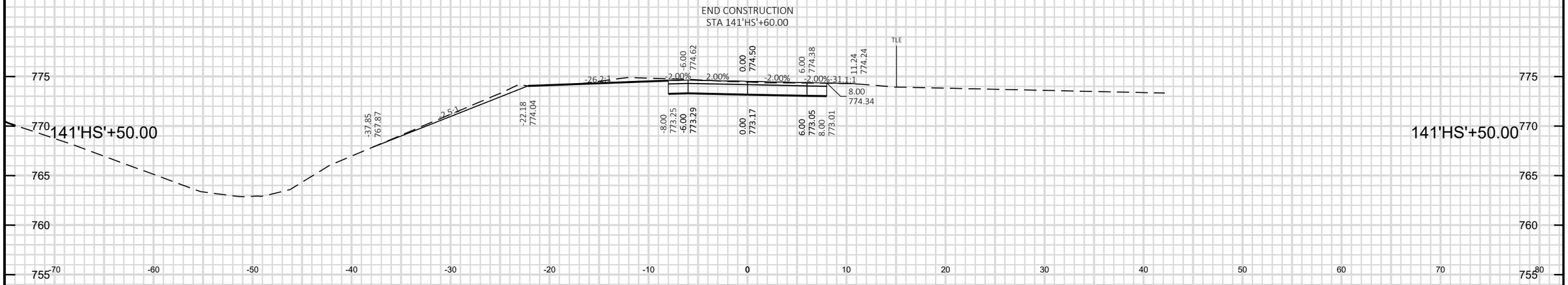
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LAYOUT NAME - 10

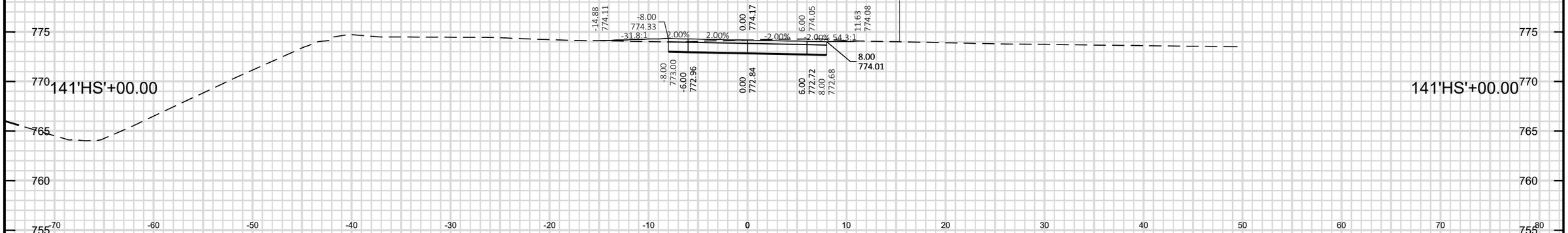
PLOT DATE : 7/31/2026 5:22 PM PLOT BY : BRIAN SKUPAS PLOT NAME :

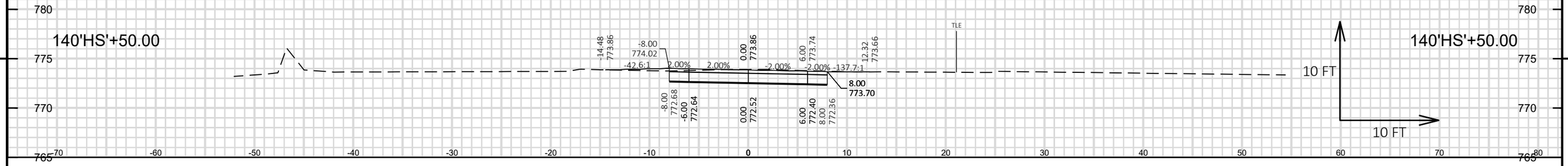
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END CONSTRUCTION
STA 141'HS'+60.00







9

9

PROJECT NO: 1100-56-71	HWY: IH 41	COUNTY: FOND DU LAC	CROSS SECTIONS: HORSESHOE LANE - FINAL	SHEET 433	E

FILE NAME : S:\CURRPROJ\FONDDUCO\I41-151-CTH D\CIVIL3D\11005600\SHEETS\11005670-090205-XS.DWG
LAYOUT NAME - 11

PLOT DATE : 7/31/2026 5:22 PM PLOT BY : BRIAN SKUPAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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