MAD

PROJECT ID: 1067-04-61

WITH: N/A

COUNTY: JEFFERSON

DECEMBER 2025

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (INCLUDES EROSION CONTROL PLANS)
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 = 330



01

DESIGN DESIGNATION

A.A.D.T.	2026	=	45,200
A.A.D.T.	2046	=	50,700
D.H.V.	2046	=	5,680
D.D.		=	55/45
T.		=	10.6%
DESIGN SPEED		=	70 MPH
ESALS		=	19,000,000

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'ER')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

LAKE MILLS - OCONOMOWOC

STH 26 INTERCHANGE AREA

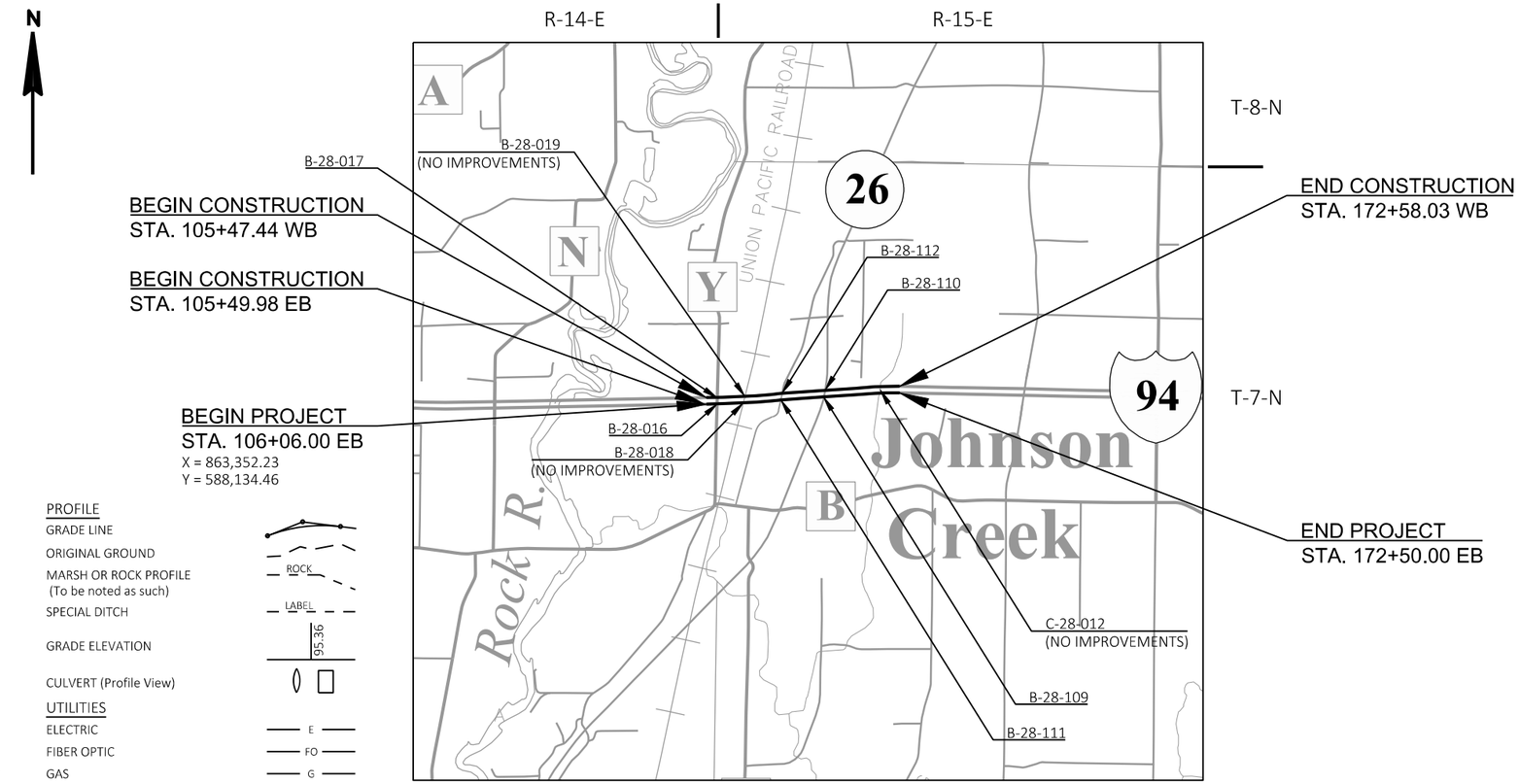
IH 94

JEFFERSON COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1067-04-61	WISC 2026093	1

STATE PROJECT NUMBER

1067-04-61



BEGIN CONSTRUCTION
STA. 105+47.44 WB

BEGIN CONSTRUCTION
STA. 105+49.98 EB

BEGIN PROJECT
STA. 106+06.00 EB
X = 863,352.23
Y = 588,134.46

END CONSTRUCTION
STA. 172+58.03 WB

END PROJECT
STA. 172+50.00 EB

LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 1.258 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), JEFFERSON 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:

STRAND ASSOCIATES®
910 WEST WINGRA DRIVE
MADISON, WISCONSIN 53715-1943
(608) 251-4843

WISCONSIN
ERIC D. HANSON
E - 38350
MADISON, WI
PROFESSIONAL ENGINEER
6-23-25

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	STRAND ASSOCIATES, INC.
Designer	STRAND ASSOCIATES, INC.
Project Manager	DELLA KOENIG, P.E.
Regional Examiner	SW REGION
Regional Supervisor	KYLE HEMP, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 06/24/2025 (Signature)

E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\010101_TI.DWG

PLOT DATE : 6/23/2025 8:54 AM

PLOT BY : HASSETT, TYLER

PLOT NAME :

GENERAL NOTES

THE EB AND WB ALIGNMENTS ARE APPROXIMATELY THE INSIDE MEDIAN LANE EDGE.

THE A AND B ALIGNMENTS ARE APPROXIMATELY THE INSIDE LANE EDGE.

THE W ALIGNMENT IS APPROXIMATELY THE LEFT NORTHBOUND THROUGH TRAVEL LANE EDGE IN DIVIDED LOCATIONS AND THE NORTHBOUND MEDIAN LANE EDGE IN UNDIVIDED LOCATIONS.

THE S ALIGNMENT IS APPROXIMATELY THE NORTHBOUND CENTERLINE.

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

A SAWED JOINT WILL BE REQUIRED WHERE NEW PAVEMENT IS TO MEET AN EXISTING PAVED SURFACE, EXCEPT WHERE NOTED IN THE PLANS.

CONCRETE PAVEMENT REPAIR AND REPLACEMENT LOCATIONS IN THE PLAN ARE APPROXIMATE. VERIFY LOCATIONS WITH ENGINEER.

WITHIN CONCRETE PAVEMENT REPLACEMENT SECTIONS, THE NEW CONTRACTION JOINTS MAY NOT MATCH ABUTTING EXISTING JOINTS BECAUSE OF CHANGES TO STANDARDS AND PRIOR REPAIRS. ADJUST NEW JOINTS TO MATCH EXISTING JOINTS WHERE PRACTICAL. DO NOT EXCEED THE MAXIMUM CONTRACTION JOINT SPACING OF 15'.

THE NEW TINING/FINISHING SHOULD MATCH THE ADJACENT PAVEMENT PATTERN.

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

SECTION 2 ORDER OF SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
* CONSTRUCTION DETAILS
* GUARDRAIL LAYOUT DETAILS
* CURB RAMP DETAILS
PEDESTRIAN ACCOMMODATIONS
TRAFFIC CONTROL
ALIGNMENT DETAILS

*INCLUDES EROSION CONTROL

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 82.1 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.3 ACRES

UTILITY CONTACTS

* EVERSTREAM - COMMUNICATION LINE
SHAD GARCIA
324 E WISCONSIN AVENUE
SUITE 730
MILWAUKEE, WI 53202
(414) 522-6685
SGARCIA@EVERSTREAM.NET

* SPECTRUM - COMMUNICATION LINE
PAUL WAGNER
1348 PLAINFIELD AVENUE
JANESVILLE, WI 53545
(920) 979-2660
PAUL.WAGNER@CHARTER.COM

* TDS TELECOM
JASON KENNY
PO BOX 190 311 ELIZABETH STREET
WATERFORD, WI 53185
(262) 514-2127
JASON.KENNY@TDSTELECOM.COM

* VILLAGE OF JOHNSON CREEK - WATER & SEWER
MATT SCHLATTER
125 DEPOT STREET
JOHNSON CREEK, WI 53038
(920) 253-6635
MATTS@VI.JOHNSONCREEK.WI.GOV

* WE ENERGIES - ELECTRICITY
STEVEN KING
S13 W33800 HWY 18
DELAFIELD, WI 53018
(414) 940-0570
STEVE.KING@WE-ENERGIES.COM

* WE ENERGIES - GAS/PETROLEUM
SCOTT HOLSTEIN
700 SOUTH KANE STREET
BURLINGTON, WI 53105
(262) 949-0490
SCOTT.HOLSTEIN@WE-ENERGIES.COM

* WIN, LLC
TODD ELLICKSON
4955 BULLIS FARM ROAD
EAU CLAIRE, WI 54701
(608) 852-4072
TODD.ELLICKSON@WINTECHNOLOGY.COM

* WINDSTREAM KDL, LLC - COMMUNICATION LINE
LORI KETTER
969 WAUBE LANE
GREEN BAY, WI 54304
(920) 410-6902
LORI.KETTER@WINDSTREAM.COM

* DENOTES DIGGERS HOTLINE MEMBERS

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

DNR LIAISON

ERIC HEGGELUND
DNR SOUTH CENTRAL REGION HEADQUARTERS
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
(608) 228-7927
ERIC.HEGGELUND@WISCONSIN.GOV

WISDOT REGION CONTACT

DELLA KOENIG, P.E.
WISDOT SOUTHWEST REGION
MADISON OFFICE
2101 WRIGHT ST.
MADISON, WI 53704
(608) 246-7963
DELLA.KOENIG@DOT.WI.GOV

WISDOT TRAFFIC SIGNALS CONTACT

LINDSEY HEINECK, P.E.
WISDOT SOUTHWEST REGION
MADISON OFFICE
2101 WRIGHT ST.
MADISON, WI 53704
(608) 246-3866
LINDSEY.HEINECK@DOT.WI.GOV

DESIGN CONSULTANT

ERIC HANSON, P.E.
STRAND ASSOCIATES, INC.
910 WEST WINGRA DRIVE
MADISON, WI 53715
(608) 251-4843
ERIC.HANSON@STRAND.COM

2

TOWN OF FARMINGTON

CTH Y

UNION PACIFIC RAILROAD

RESORT DR

OLD 26 RD

STH 26

LIMNAR LN

TOWN OF FARMINGTON

N

END CONSTRUCTION
STA. 116+30.00 S

END CONSTRUCTION
STA. 115+65.00 W

BEGIN CONSTRUCTION
STA. 105+47.44 WB

END CONSTRUCTION
STA. 172+58.03 WB

B-28-017

B-28-019
(NO IMPROVEMENTS)

B-28-112

B-28-110

B-28-109

B-28-111

B-28-016
(NO IMPROVEMENTS)

B-28-018
(NO IMPROVEMENTS)

C-28-012
(NO IMPROVEMENTS)

RAMP A

RAMP B

IH 94

105WB 105EB 110WB 110EB 115WB 115EB 120WB 120EB 125WB 125EB 130WB 130EB 135WB 139EB 140WB 140EB 145WB 149EB 150WB 150EB 155WB 159EB 160WB 160EB 165WB 169EB 170WB 170EB 175WB 175EB 180WB 180EB

105W 110W 115W 139W 105S 110S 115S

JOHNSON CREEK
PARK & ROAD

BEGIN PROJECT
STA. 106+06.00 EB

BEGIN CONSTRUCTION
STA. 105+49.98 EB

BEGIN CONSTRUCTION
STA. 99+75.00 S

BEGIN CONSTRUCTION
STA. 102+45.00 W

END PROJECT
STA. 172+50.00 EB

VILLAGE LIMITS

MIDGE ST

CTH Y

N. WATERTOWN ST

HARTWIG BLVD

CHURCH ST/STH 26

WRIGHT RD

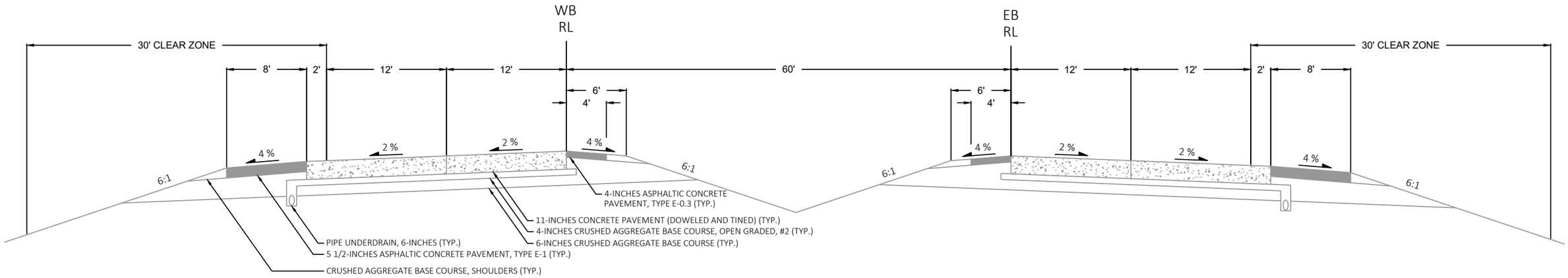
PARKVIEW DR

VILLAGE OF JOHNSON CREEK

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	PROJECT OVERVIEW	SHEET 3	E

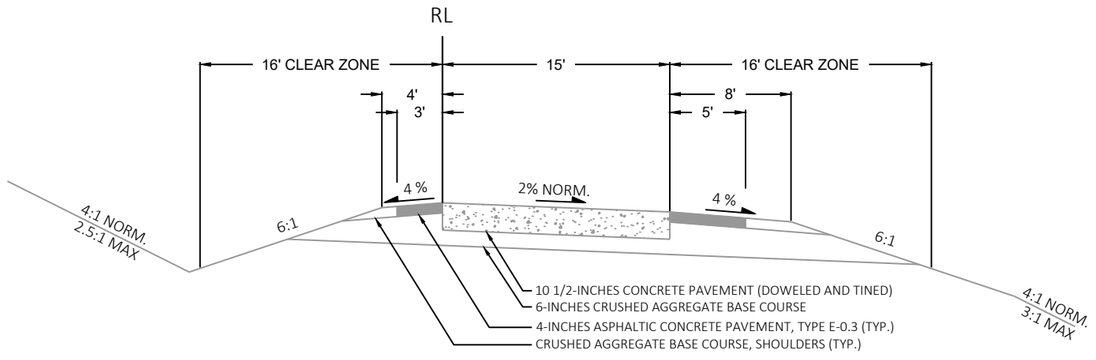
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LAYOUT NAME - 020201_po

PLOT DATE : 7/1/2025 10:44 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:500 FT



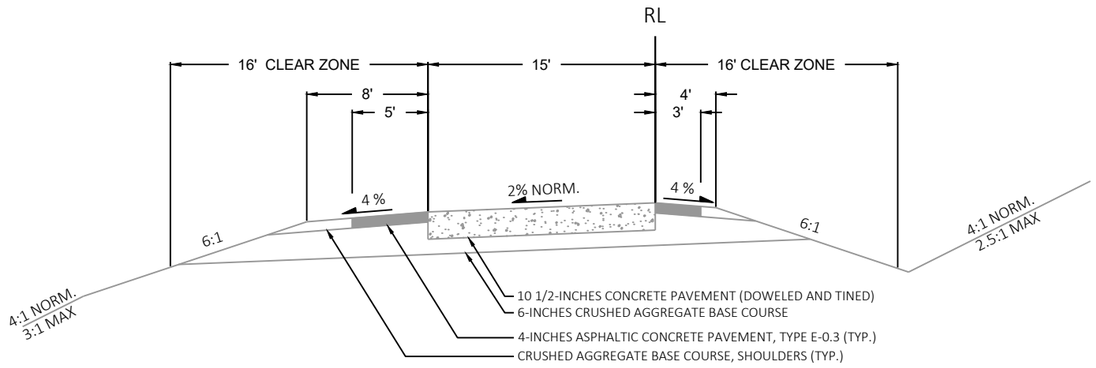
EXISTING TYPICAL SECTION

IH 94
EB STA. 106+06 EB- 172+50 EB
WB STA. 109+15 WB - 172+54 WB



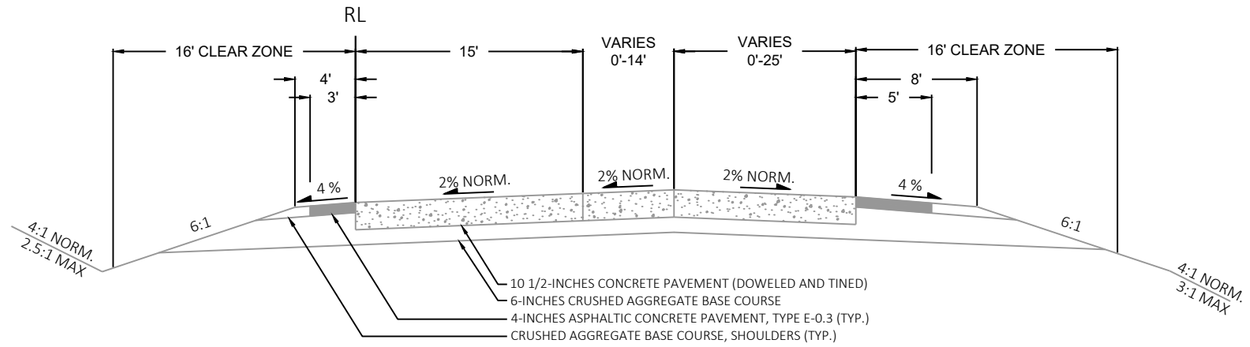
EXISTING TYPICAL SECTION

RAMP A STA. 10+00 A - 18+09 A
RAMP A STA. 47+70 A - 56+44 A



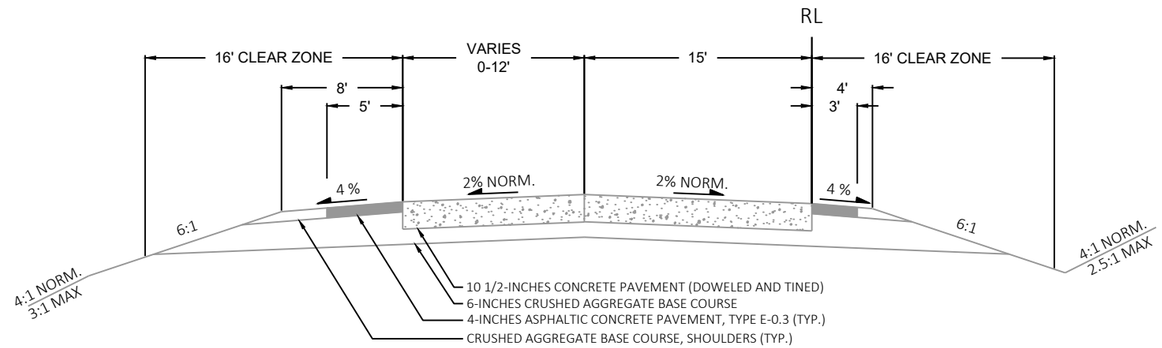
EXISTING TYPICAL SECTION

RAMP B STA. 10+00 B - 18+75 B
RAMP B STA. 45+91 B - 55+56 B



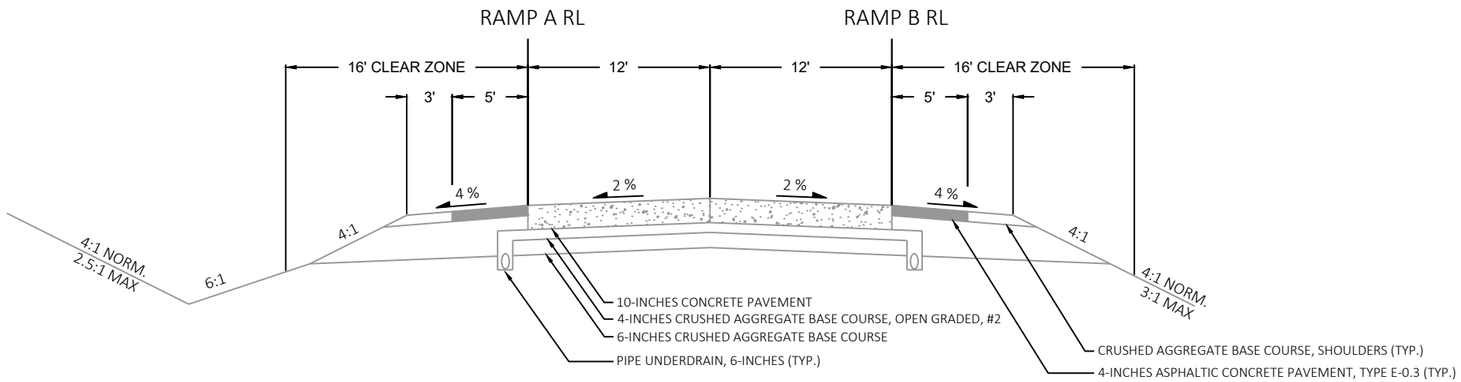
EXISTING TYPICAL SECTION

RAMP A STA. 18+09 A - 23+34 A
RAMP A STA. 39+78 A - 47+70 A



EXISTING TYPICAL SECTION

RAMP B STA. 18+75 B - 26+42 B

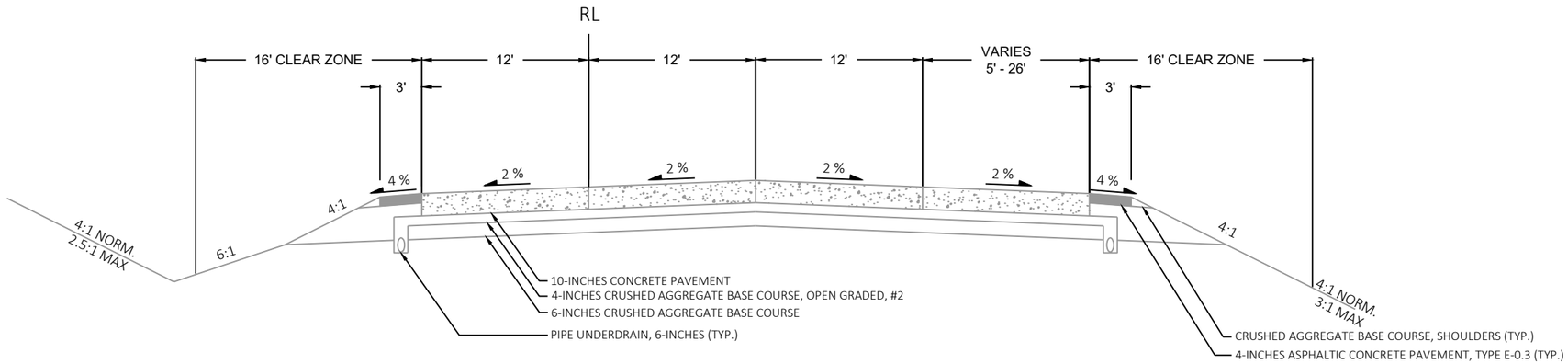


EXISTING TYPICAL SECTION

RAMP A STA. 24+03 A - 34+41 A
RAMP B STA. 27+11 B - 41+74 B

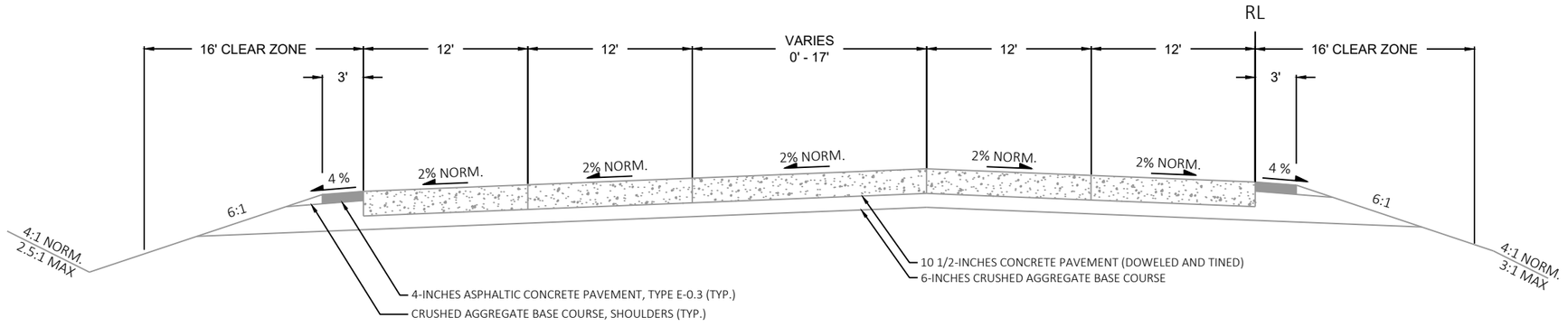
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	EXISTING TYPICAL SECTIONS	SHEET 5	E

2



EXISTING TYPICAL SECTION

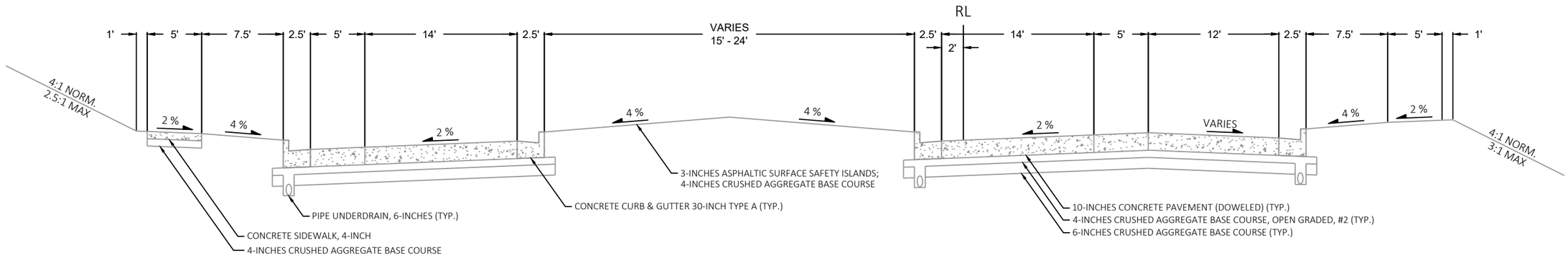
RAMP A STA. 34+41 A - 38+54 A



EXISTING TYPICAL SECTION

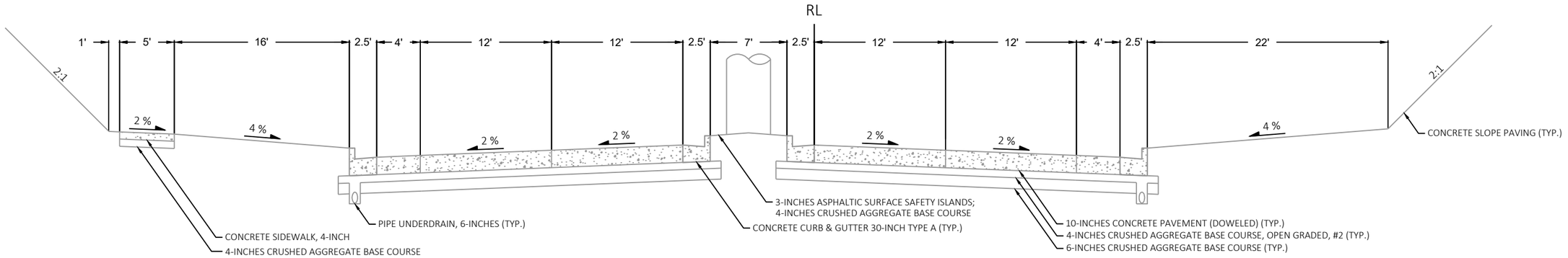
RAMP B STA. 42+93 B - 45+91 B

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	EXISTING TYPICAL SECTIONS	SHEET 6	E



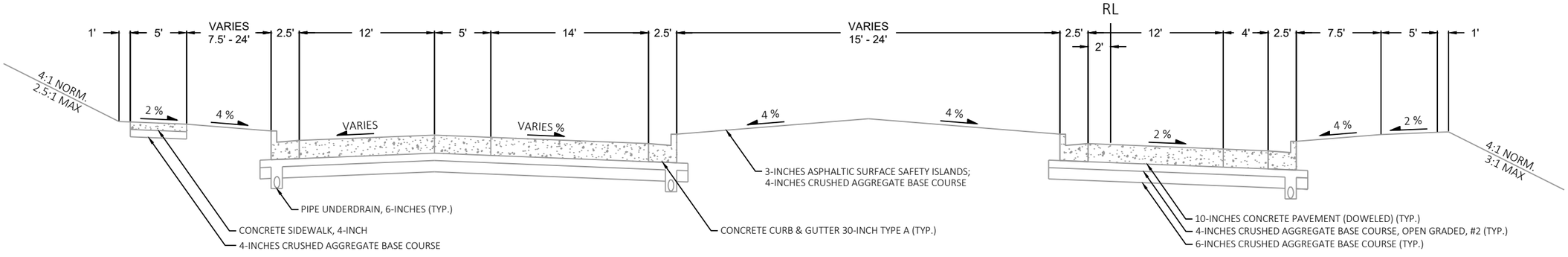
EXISTING TYPICAL SECTION

N. WATERTOWN ST.
STA. 109+05 W - 111+03 W



EXISTING TYPICAL SECTION

N. WATERTOWN ST.
AT STRUCTURES B-28-111 AND B-28-112
STA. 111+03 W - 113+72 W

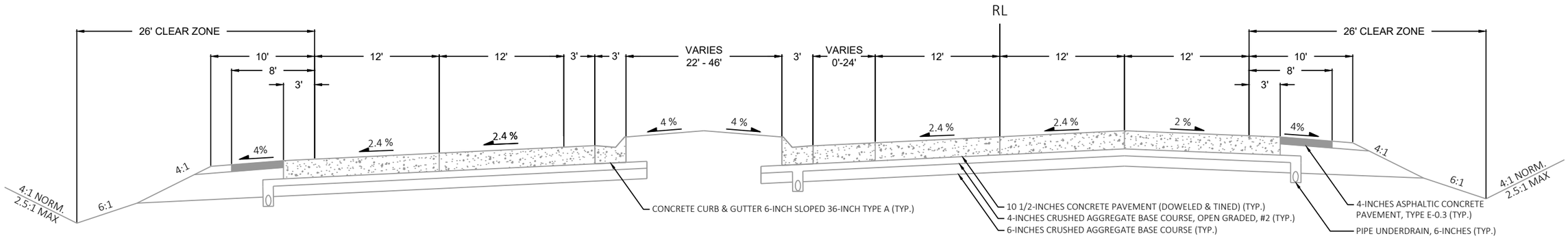


EXISTING TYPICAL SECTION

N. WATERTOWN ST.
STA. 113+72 W - 115+65 W

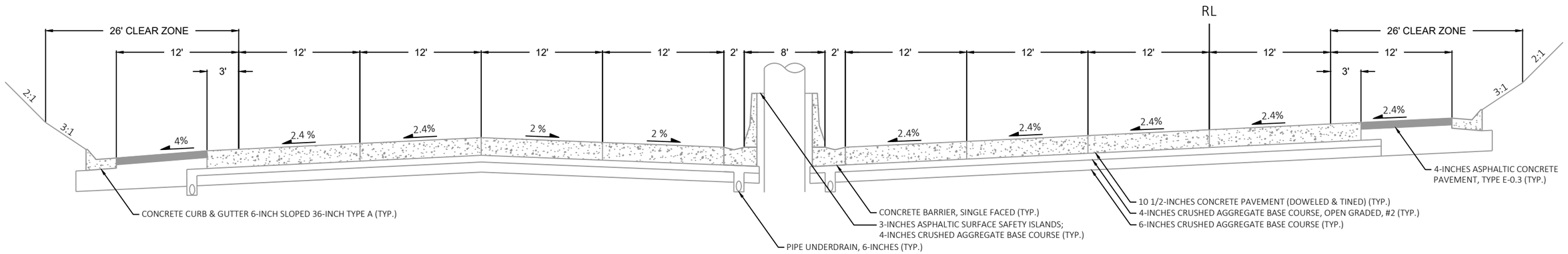
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	EXISTING TYPICAL SECTIONS	SHEET 7	E

2



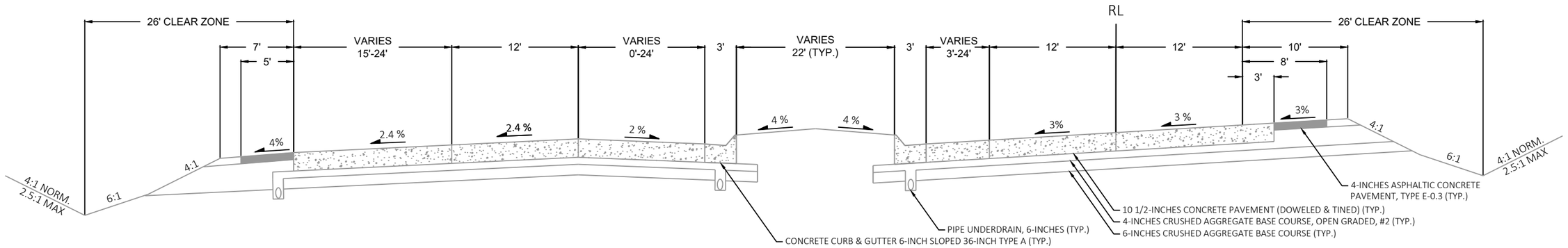
EXISTING TYPICAL SECTION

STH 26
STA. 99+75 S - 107+51 S



EXISTING TYPICAL SECTION

STH 26
AT STRUCTURES B-28-109 AND B-28-110
STA. 107+51 S - 110+57 S



EXISTING TYPICAL SECTION

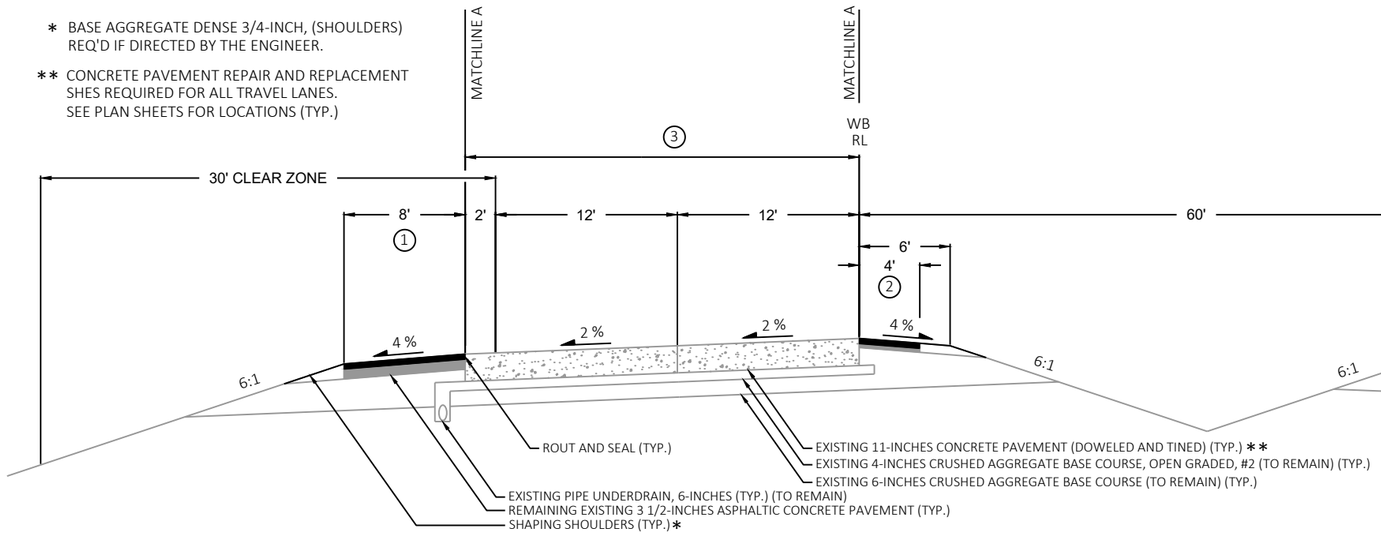
STH 26
STA. 110+57 S - 116+30 S

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	EXISTING TYPICAL SECTIONS	SHEET 8	E

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PLOT BY : HASSETT, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

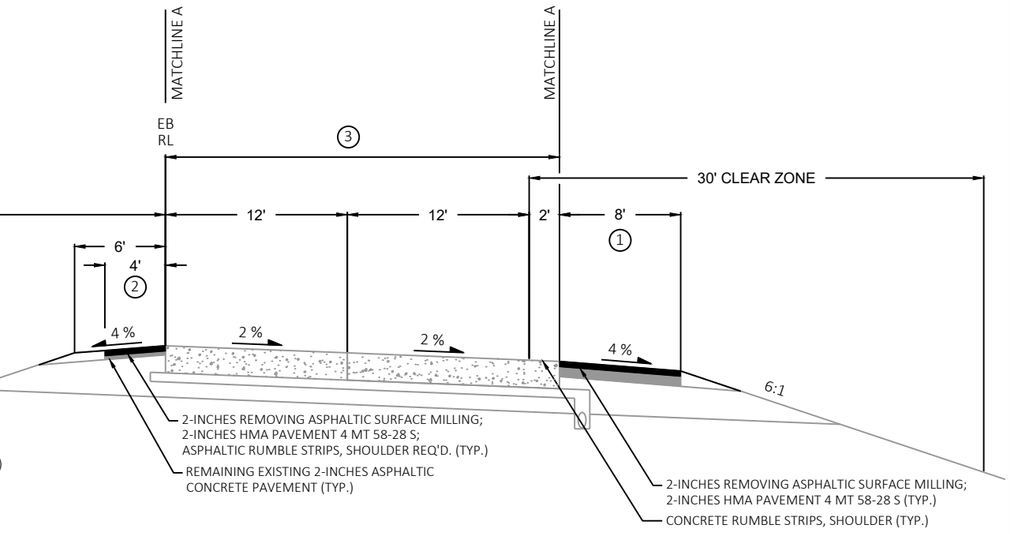
* BASE AGGREGATE DENSE 3/4-INCH, (SHOULDERS) REQ'D IF DIRECTED BY THE ENGINEER.

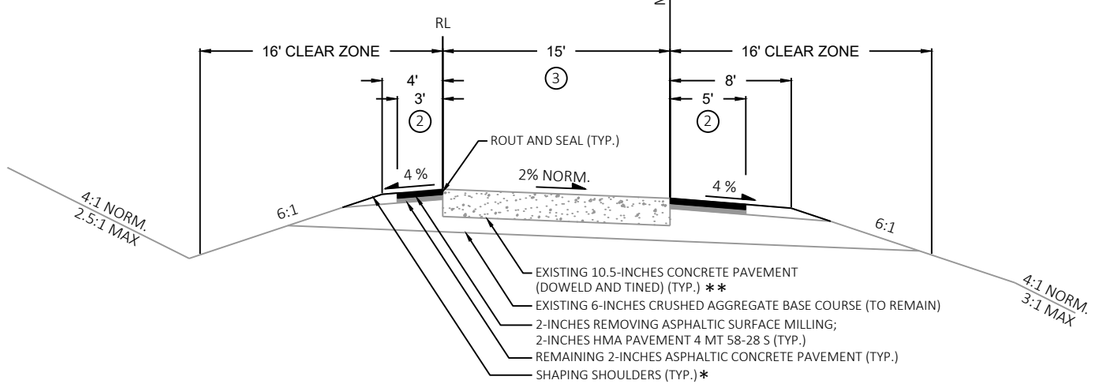
** CONCRETE PAVEMENT REPAIR AND REPLACEMENT SHES REQUIRED FOR ALL TRAVEL LANES. SEE PLAN SHEETS FOR LOCATIONS (TYP.)



FINISHED TYPICAL SECTION

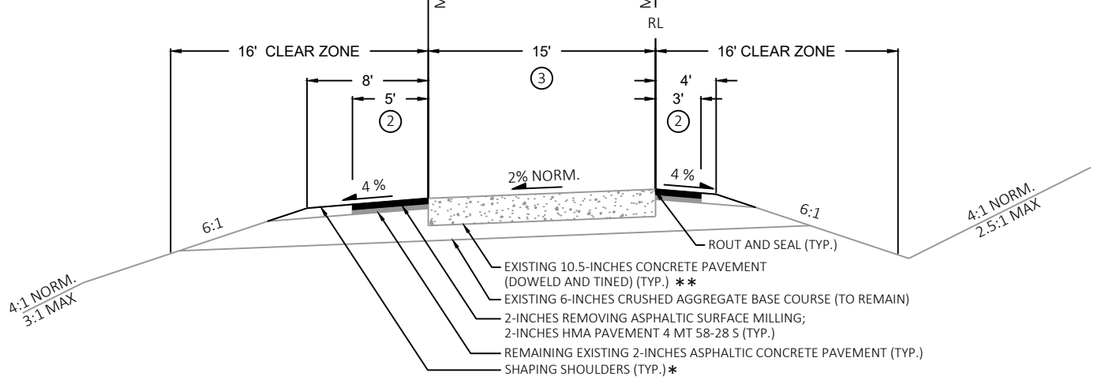
IH 94
EB STA. 106+06 EB- 172+50 EB
WB STA. 109+15 WB - 172+54 WB





FINISHED TYPICAL SECTION

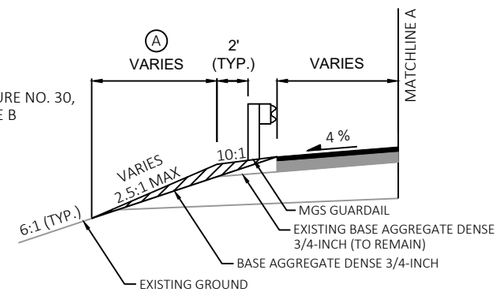
RAMP A STA. 10+00 A - 18+09 A
RAMP A STA. 47+70 A - 56+44 A



FINISHED TYPICAL SECTION

RAMP B STA. 10+00 B - 18+75 B
RAMP B STA. 45+91 B - 55+56 B

(A) SEEDING MIXTURE NO. 30, FERTILIZER TYPE B



MATCHLINE A

SEE GUARDRAIL LAYOUT DETAILS FOR LOCATIONS
(MIRROR WHEN GUARDRAIL IS ON OPPOSITE SIDE OF ROADWAY)

(1) FOR SHOULDER REPLACEMENT AREAS DETERMINED BY ENGINEER:
REMOVING ASPHALTIC SURFACE (FULL DEPTH) (SHOULDERS);
PREPARE FOUNDATION FOR ASPHALTIC PAVING;
5 1/2-INCHES HMA PAVEMENT (2 INCH UPPER LAYER: 4 MT 58-28 S; 3.5-INCH LOWER LAYER: 4 MT 58-28 S) (TYP.)

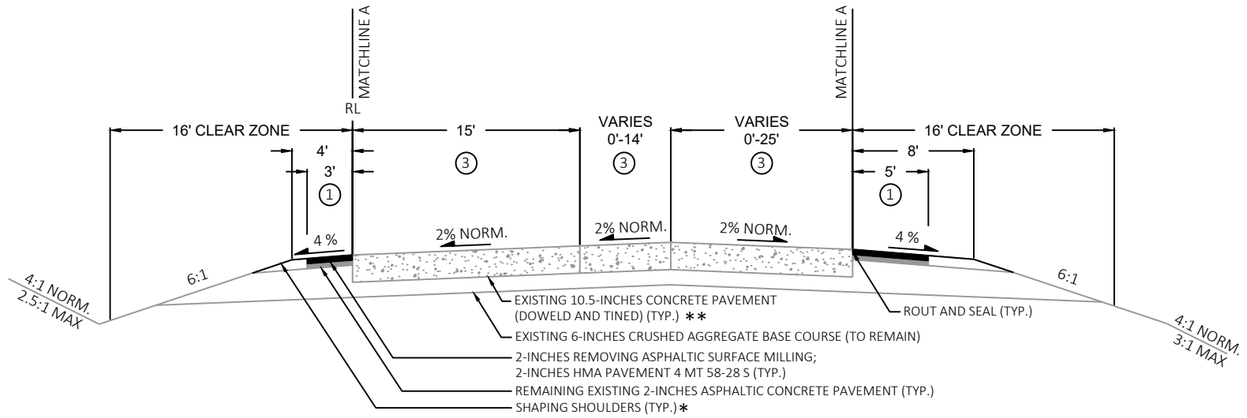
(2) FOR SHOULDER REPLACEMENT AREAS DETERMINED BY ENGINEER:
REMOVING ASPHALTIC SURFACE (FULL DEPTH) (SHOULDERS);
PREPARE FOUNDATION FOR ASPHALTIC PAVING;
4-INCHES HMA PAVEMENT 4 MT 58-28 S (TYP.)

(3) CONTINUOUS DIAMOND GRINDING CONCRETE PAVEMENT REQ'D.
(SEE PLAN SHEETS AND MISCELLANEOUS QUANITIES FOR LIMITS)

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	FINISHED TYPICAL SECTIONS	SHEET 9	E

* BASE AGGREGATE DENSE 3/4-INCH, (SHOULDERS) REQ'D IF DIRECTED BY THE ENGINEER.

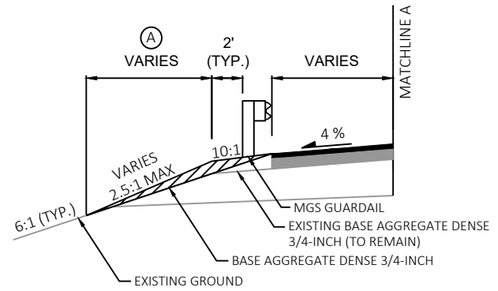
** CONCRETE PAVEMENT REPAIR AND REPLACEMENT SHES REQUIRED FOR ALL TRAVEL LANES. SEE PLAN SHEETS FOR LOCATIONS (TYP.)



FINISHED TYPICAL SECTION

RAMP A STA. 18+09 A - 23+34 A
RAMP A STA. 39+78 A - 47+70 A

Ⓐ SEEDING MIXTURE NO. 30, FERTILIZER TYPE B

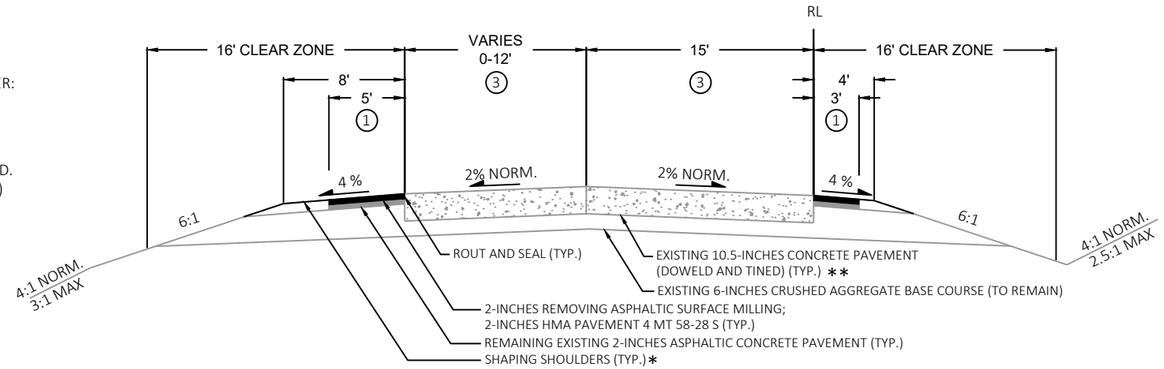


MATCHLINE A

SEE GUARDRAIL LAYOUT DETAILS FOR LOCATIONS
(MIRROR WHEN GUARDRAIL IS ON OPPOSITE SIDE OF ROADWAY)

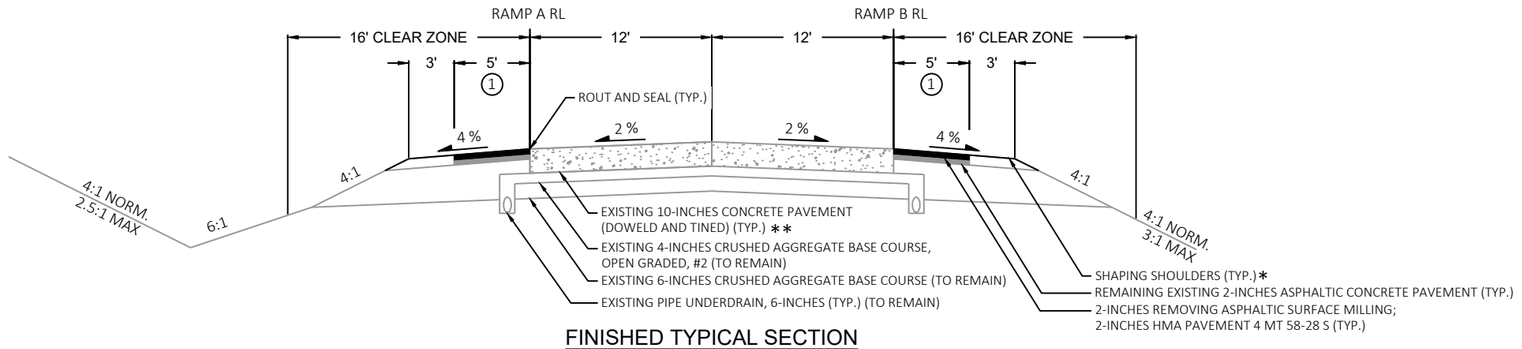
① FOR SHOULDER REPLACEMENT AREAS DETERMINED BY ENGINEER: REMOVING ASPHALTIC SURFACE (FULL DEPTH) (SHOULDERS); PREPARE FOUNDATION FOR ASPHALTIC PAVING; 4-INCHES HMA PAVEMENT 4 MT 58-28 S (TYP.)

③ CONTINUOUS DIAMOND GRINDING CONCRETE PAVEMENT REQ'D. (SEE PLAN SHEETS AND MISCELLANEOUS QUANITIES FOR LIMITS)



FINISHED TYPICAL SECTION

RAMP B STA. 18+75 B - 26+42 B



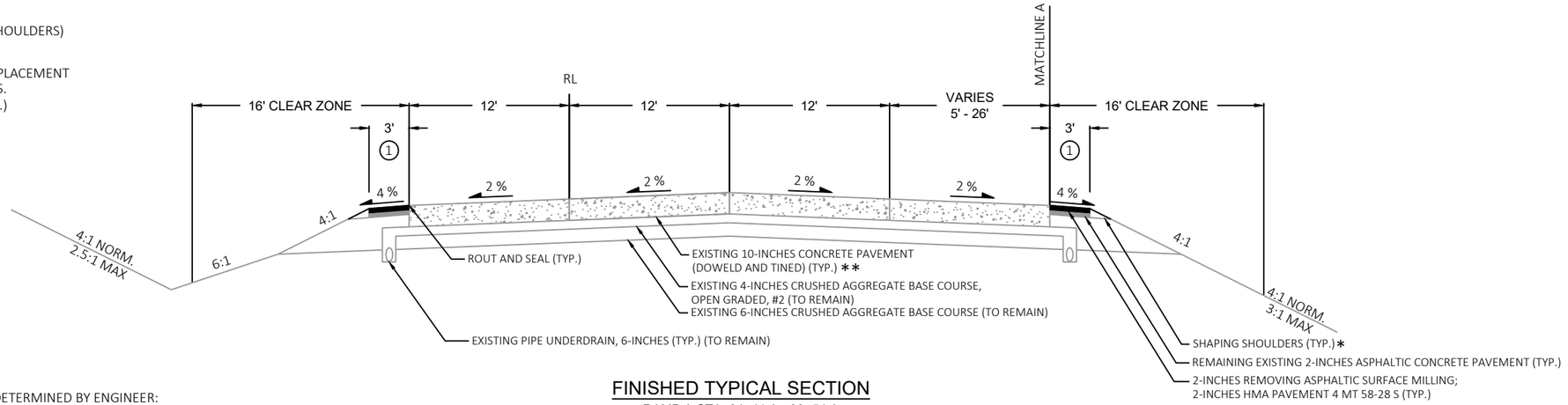
FINISHED TYPICAL SECTION

RAMP A STA. 24+03 A - 34+41 A
RAMP B STA. 27+11 B - 41+74 B

2

* BASE AGGREGATE DENSE 3/4-INCH, (SHOULDERS) REQ'D IF DIRECTED BY THE ENGINEER.

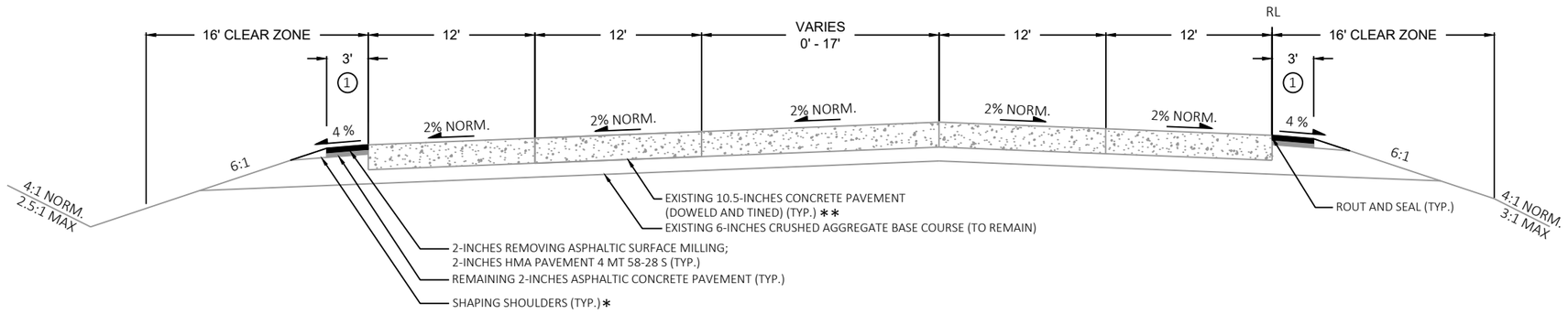
** CONCRETE PAVEMENT REPAIR AND REPLACEMENT SHES REQUIRED FOR ALL TRAVEL LANES. SEE PLAN SHEETS FOR LOCATIONS (TYP.)



FINISHED TYPICAL SECTION

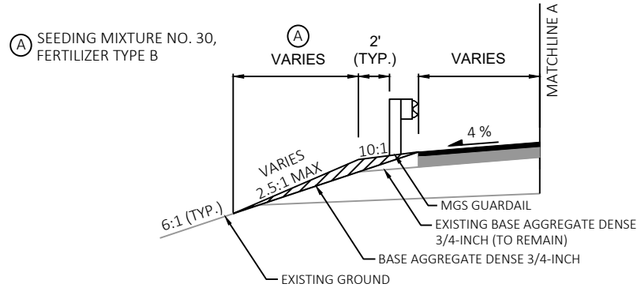
RAMP A STA. 34+41 A - 38+54 A

(1) FOR SHOULDER REPLACEMENT AREAS DETERMINED BY ENGINEER:
REMOVING ASPHALTIC SURFACE (FULL DEPTH) (SHOULDERS);
PREPARE FOUNDATION FOR ASPHALTIC PAVING;
4-INCHES HMA PAVEMENT 4 MT 58-28 S (TYP.)



FINISHED TYPICAL SECTION

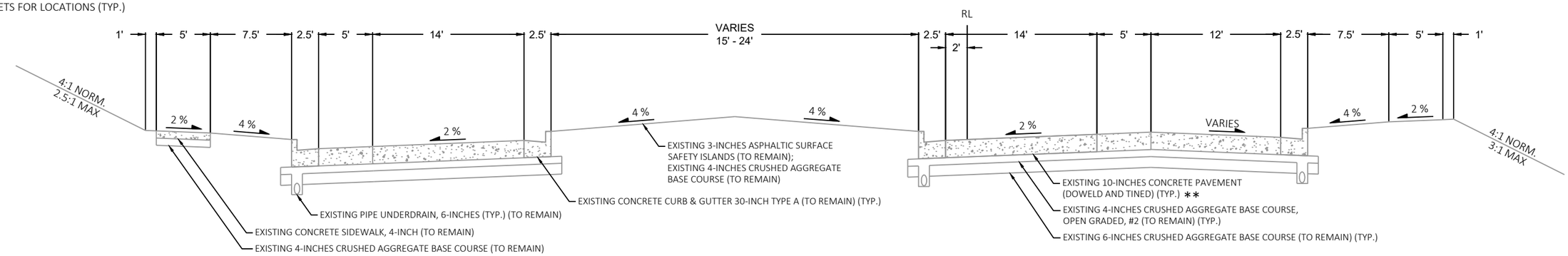
RAMP B STA. 42+93 B - 45+91 B



MATCHLINE A

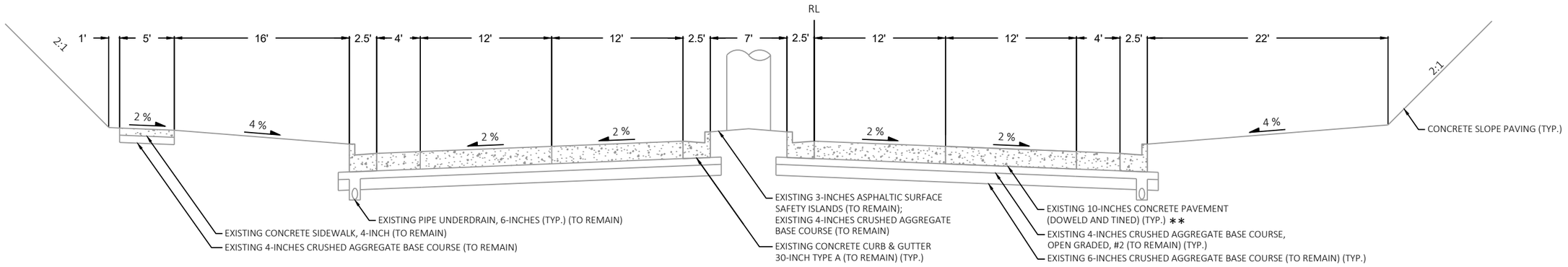
SEE GUARDRAIL LAYOUT DETAILS FOR LOCATIONS
(MIRROR WHEN GUARDRAIL IS ON OPPOSITE SIDE OF ROADWAY)

** CONCRETE PAVEMENT REPAIR AND REPLACEMENT SHES REQUIRED FOR ALL TRAVEL LANES. SEE PLAN SHEETS FOR LOCATIONS (TYP.)



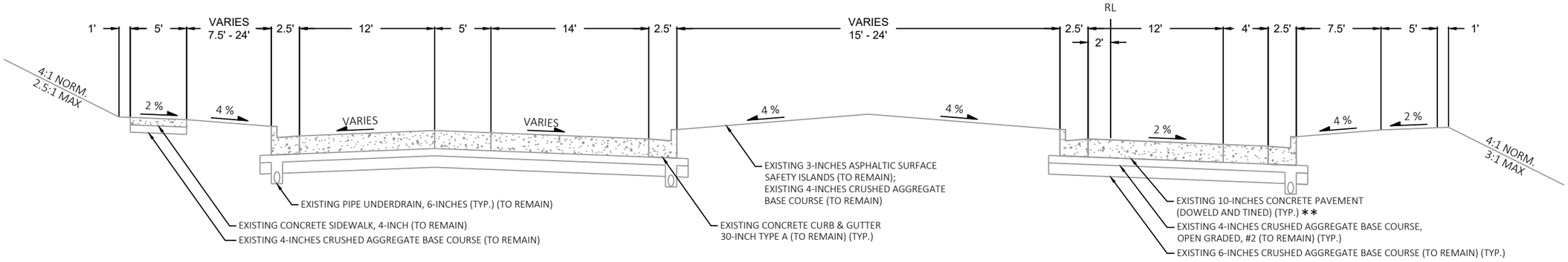
FINISHED TYPICAL SECTION

N. WATERTOWN ST.
STA. 109+05 W - 111+03 W



FINISHED TYPICAL SECTION

N. WATERTOWN ST.
AT STRUCTURES B-28-111 AND B-28-112
STA. 111+03 W - 113+72 W



FINISHED TYPICAL SECTION

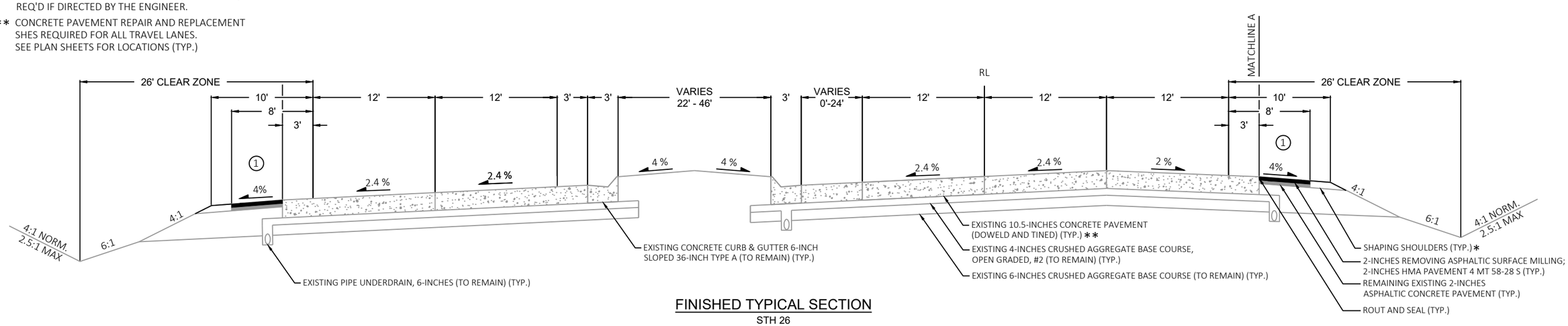
N. WATERTOWN ST.
STA. 113+72 W - 115+65 W

2

2

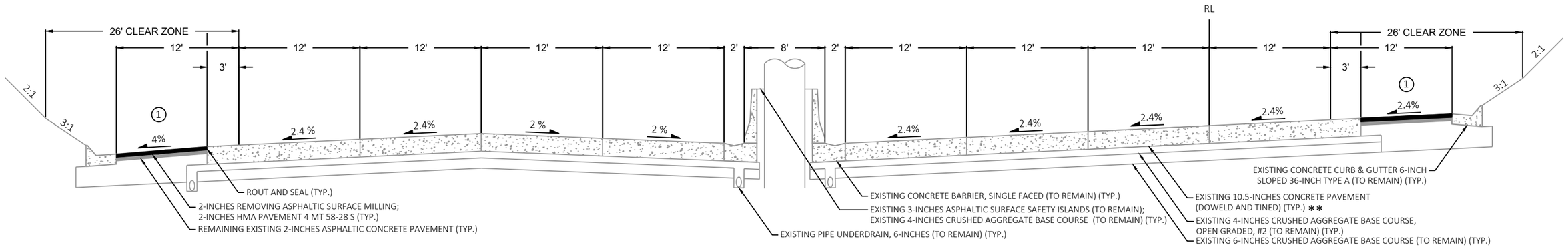
* BASE AGGREGATE DENSE 3/4-INCH, (SHOULDERS) REQ'D IF DIRECTED BY THE ENGINEER.

** CONCRETE PAVEMENT REPAIR AND REPLACEMENT SHES REQUIRED FOR ALL TRAVEL LANES. SEE PLAN SHEETS FOR LOCATIONS (TYP.)



FINISHED TYPICAL SECTION

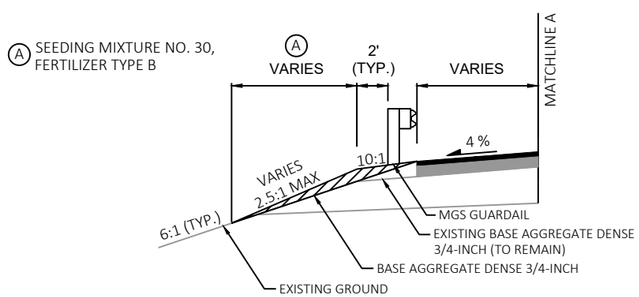
STH 26
STA. 99+75 S - 107+51 S



FINISHED TYPICAL SECTION

STH 26
AT STRUCTURES B-28-109 AND B-28-110
STA. 107+51 S - 110+57 S

(1) FOR SHOULDER REPLACEMENT AREAS DETERMINED BY ENGINEER:
REMOVING ASPHALTIC SURFACE (FULL DEPTH) (SHOULDERS);
PREPARE FOUNDATION FOR ASPHALTIC PAVING;
4-INCHES HMA PAVEMENT 4 MT 58-28 S (TYP.)



MATCHLINE A

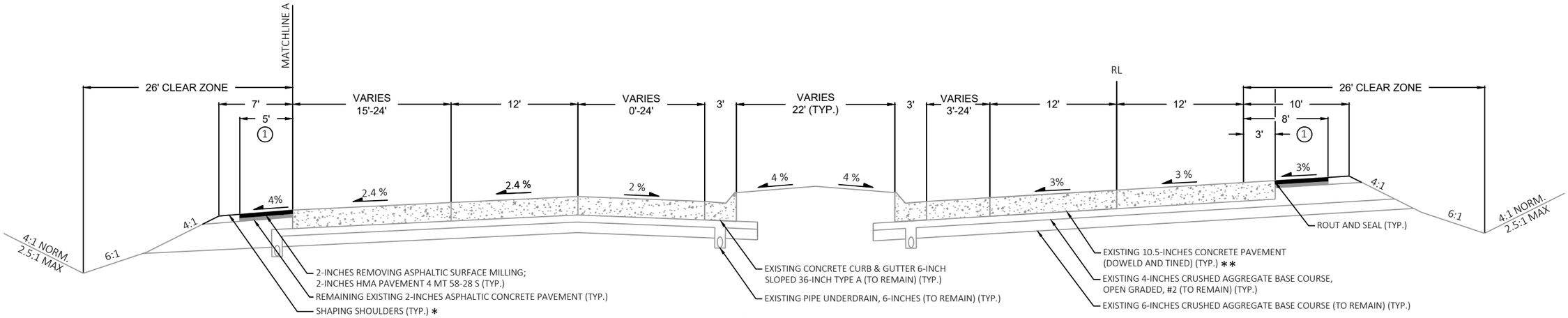
SEE GUARDRAIL LAYOUT DETAILS FOR LOCATIONS
(MIRROR WHEN GUARDRAIL IS ON OPPOSITE SIDE OF ROADWAY)

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	FINISHED TYPICAL SECTIONS	SHEET 13	E

2

∗ BASE AGGREGATE DENSE 3/4-INCH, (SHOULDERS) REQ'D IF DIRECTED BY THE ENGINEER.

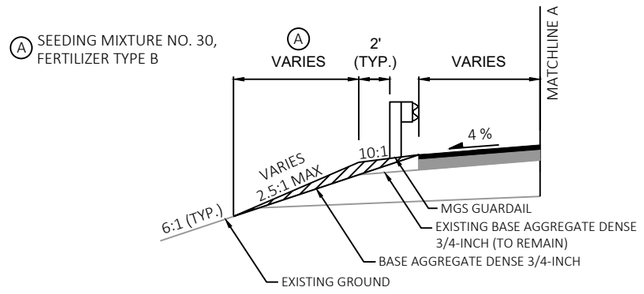
∗∗ CONCRETE PAVEMENT REPAIR AND REPLACEMENT SHES REQUIRED FOR ALL TRAVEL LANES. SEE PLAN SHEETS FOR LOCATIONS (TYP.)



FINISHED TYPICAL SECTION

STH 26
STA. 110+57 S - 115+65 S

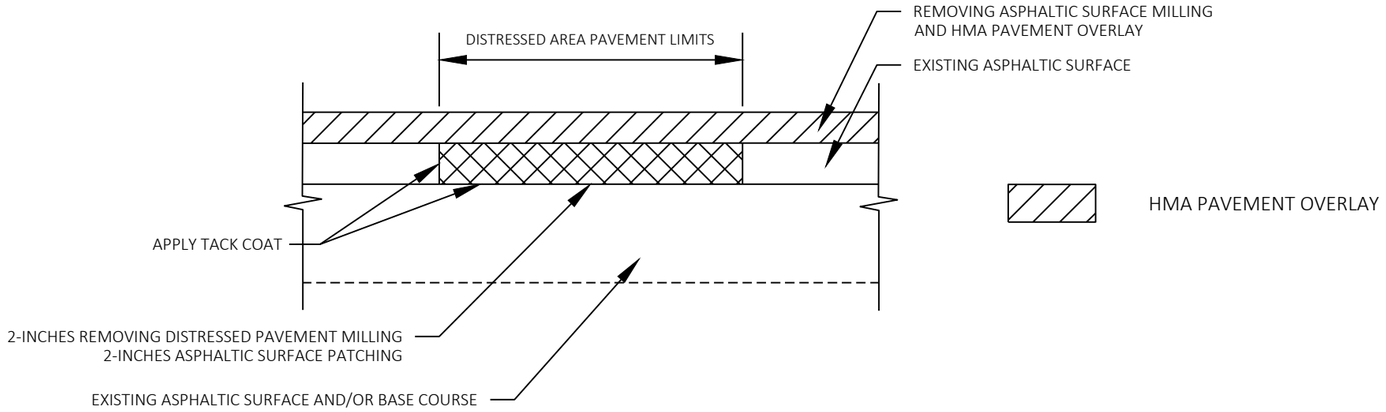
① FOR SHOULDER REPLACEMENT AREAS DETERMINED BY ENGINEER:
REMOVING ASPHALTIC SURFACE (FULL DEPTH) (SHOULDERS);
PREPARE FOUNDATION FOR ASPHALTIC PAVING;
4-INCHES HMA PAVEMENT 4 MT 58-28 S (TYP.)



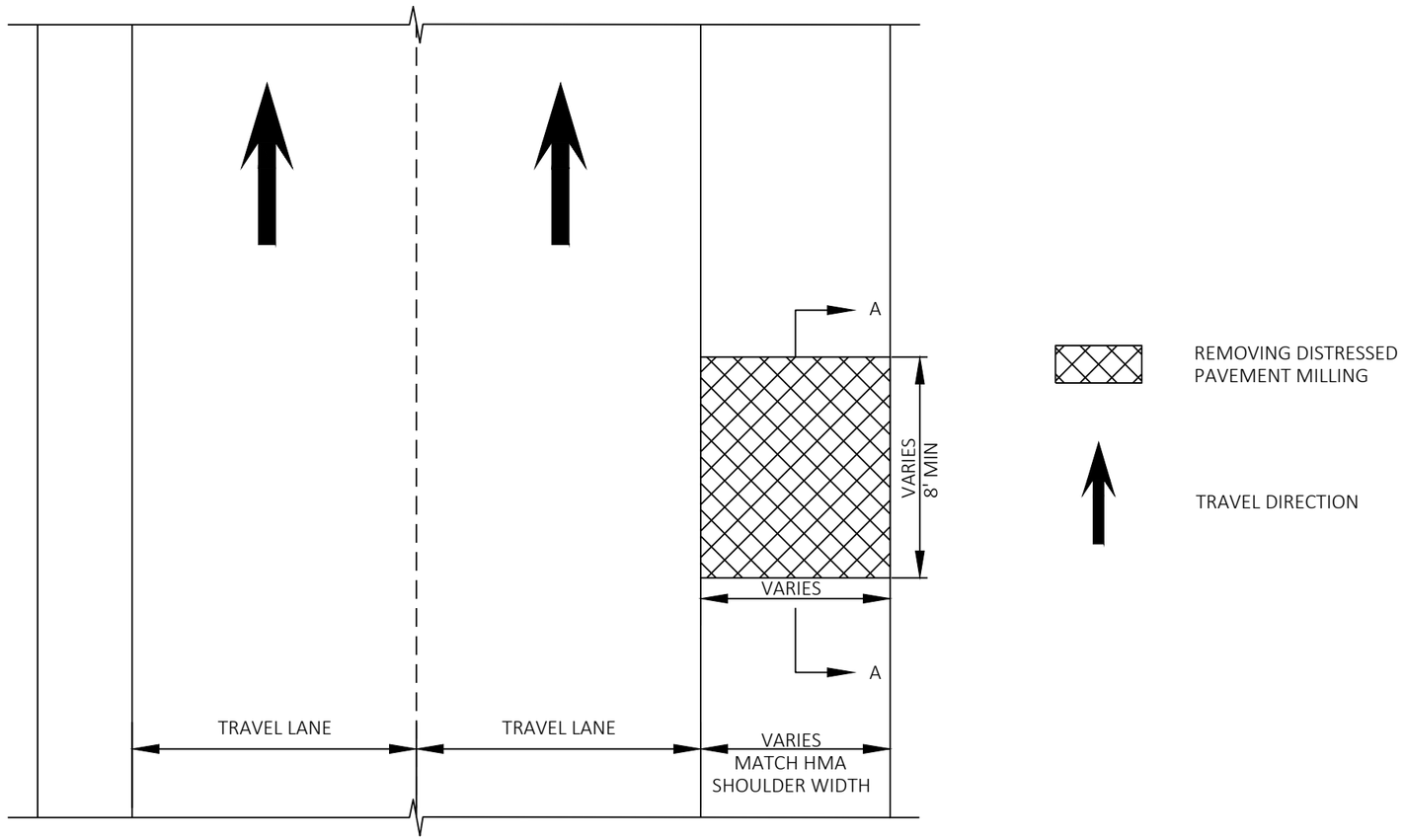
MATCHLINE A

SEE GUARDRAIL LAYOUT DETAILS FOR LOCATIONS
(MIRROR WHEN GUARDRAIL IS ON OPPOSITE SIDE OF ROADWAY)

2



REMOVING DISTRESSED PAVEMENT MILLING
SECTION A-A



PLAN VIEW

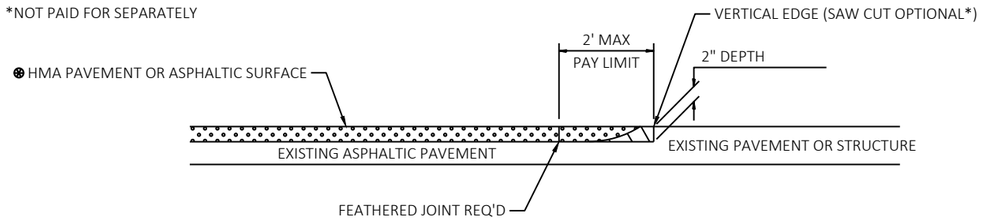
EXACT LOCATION AND LIMITS OF REMOVING DISTRESSED PAVEMENT MILLING TO BE DETERMINED BY THE ENGINEER IN THE FIELD

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CONSTRUCTION DETAILS	SHEET 15	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\021001_CD.DWG
LAYOUT NAME - 021001_cd
PLOT DATE : 7/1/2025 10:44 AM
PLOT BY : HASSETT, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

NOT TO SCALE

*NOT PAID FOR SEPARATELY



⊛ SEE TYPICAL FINISHED SECTIONS FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

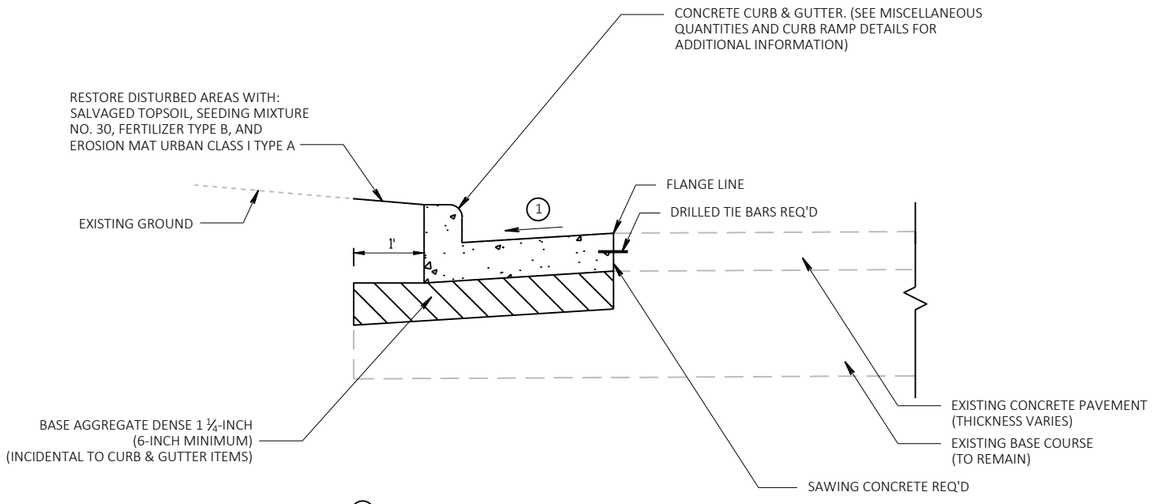
REMOVING ASPHALTIC SURFACE MILLING

REMOVE ASPHALTIC SURFACE WEDGE AT BUTT JOINT TO CREATE VERTICAL EDGE PAID FOR UNDER BID ITEM REMOVING ASPHALTIC SURFACE BUTT JOINTS.

REMOVING ASPHALTIC SURFACE BUTT JOINTS DETAIL (NO PROFILE CHANGE)

MAINLINE, RAMPS, AND STH 26 SHOULDERS,
AND JOHNSON CREEK PARK AND RIDE

NOT TO SCALE

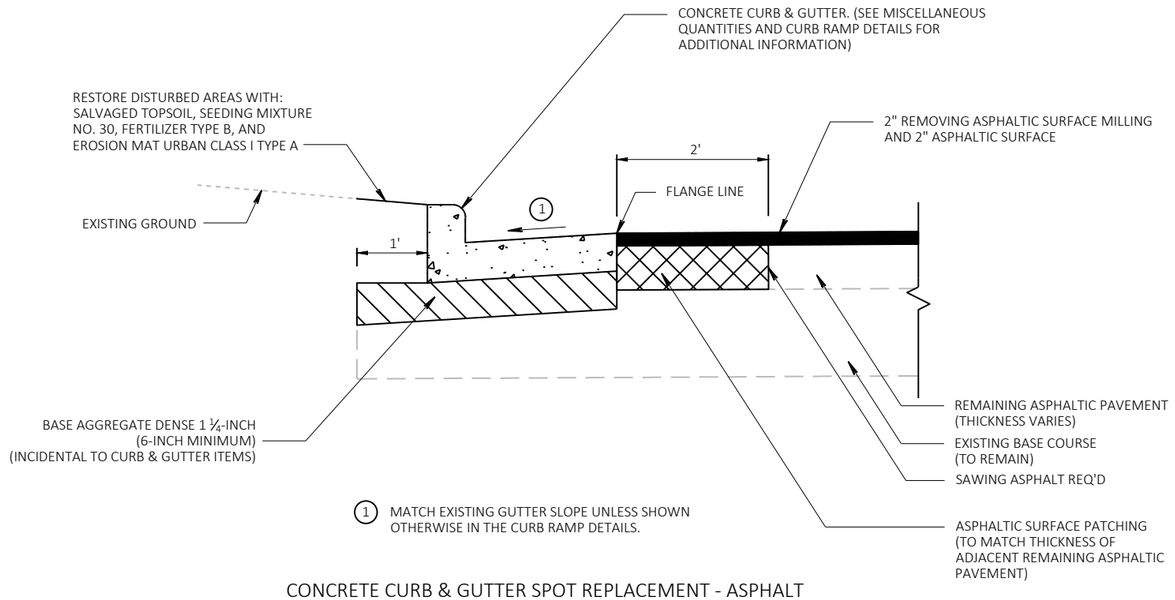


(1) MATCH EXISTING GUTTER SLOPE UNLESS SHOWN OTHERWISE IN THE CURB RAMP DETAILS.

CONCRETE CURB & GUTTER SPOT REPLACEMENT - CONCRETE

CURB RAMP REPLACEMENT LOCATIONS

NOT TO SCALE



(1) MATCH EXISTING GUTTER SLOPE UNLESS SHOWN OTHERWISE IN THE CURB RAMP DETAILS.

CONCRETE CURB & GUTTER SPOT REPLACEMENT - ASPHALT

CURB RAMP REPLACEMENT LOCATIONS

PAVEMENT MARKING LEGEND

1. MARKING PARKING STALL EPOXY, WHITE
2. MARKING LINE EPOXY 4-INCH, YELLOW
3. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING STOP LINE EPOXY 18-INCH, WHITE
6. MARKING SYMBOL EPOXY, WHITE (HANDICAP SYMBOL)

N

10' (TYP.)
30' (TYP.)
12'
12'
CENTER MARKINGS IN ROADWAY AROUND CURVE
11 SPACES AT 9 FT = 99 FT
11 SPACES AT 9 FT = 99 FT
10 SPACES AT 9 FT = 90 FT
6 SPACES AT 9 FT = 54 FT
16'
1 (TYP.)
12 SPACES AT 9 FT = 108 FT
14 SPACES AT 9 FT = 126 FT
12 SPACES AT 9 FT = 108 FT
8 SPACES AT 9 FT = 72 FT
18' (TYP.)
9'
5'
8'
5'
45°
12'
12'
12'
12'
16'
STA. 104+33.4 W
141.4' LT
R=45'
STA. 103+91.5 W
124.9' LT
STA. 104+28.0 W
96.8' LT
15'
15'
REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D
2-INCHES REMOVING ASPHALTIC SURFACE MILLING
2-INCHES ASPHALTIC SURFACE
22'
50'
4'
6'
REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D
107+00 W
106+00 W
105+00 W
104+00 W
103+00 W
102+00 W
NORTH WATERTOWN STREET

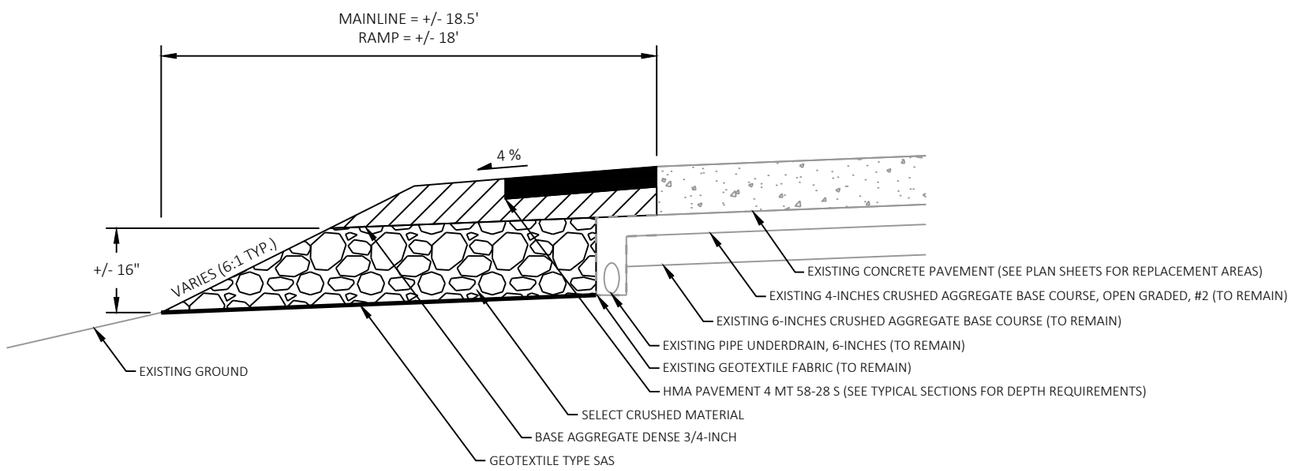
* (1) POSTS TUBULAR STEEL 2X2-INCH X 12-FT REQ'D
(2) MOVING SIGNS TYPE II REQ'D
(1) REMOVING SMALL SIGN SUPPORTS REQ'D
1-1, 1-2

** (1) POSTS TUBULAR STEEL 2X2-INCH X 12-FT REQ'D
(4) MOVING SIGNS TYPE II REQ'D
(1) REMOVING SMALL SIGN SUPPORTS REQ'D
1-3, 1-4, 1-5, 1-6

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CONSTRUCTION DETAIL - JOHNSON CREEK PARK & ROAD	SHEET 17	E

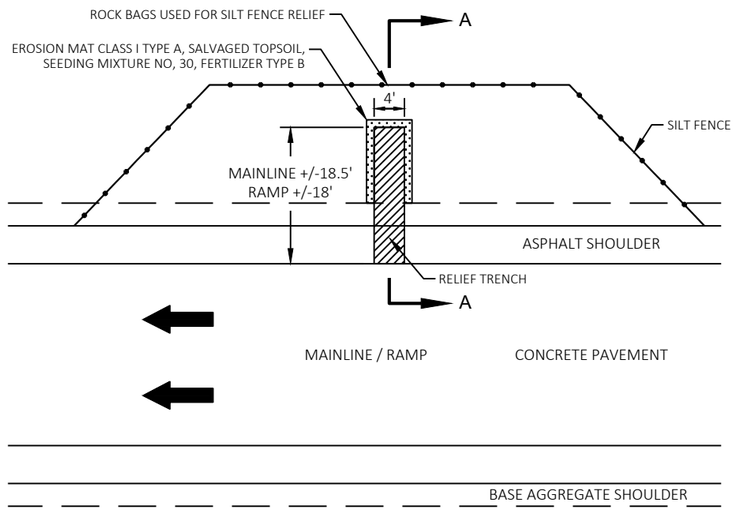
FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\021003_CD.DWG
LAYOUT NAME - 021003_cd
PLOT DATE : 7/1/2025 10:44 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOT TO SCALE
(MIRRORED FOR RIGHT SIDE)



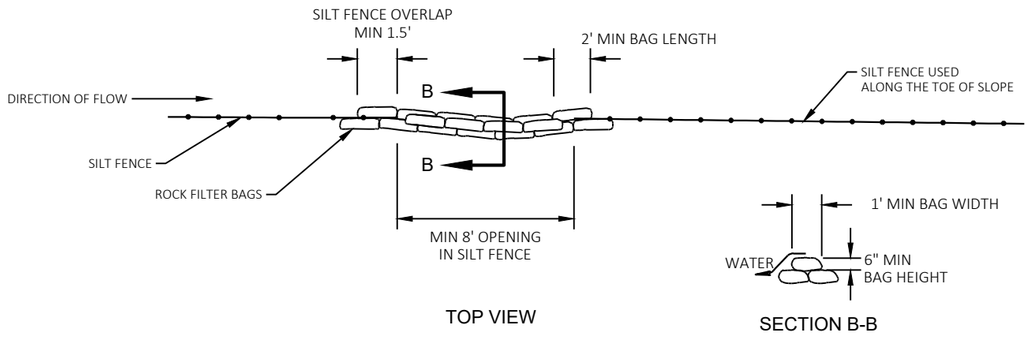
SECTION A - A

NOT TO SCALE



RELIEF TRENCH DETAIL

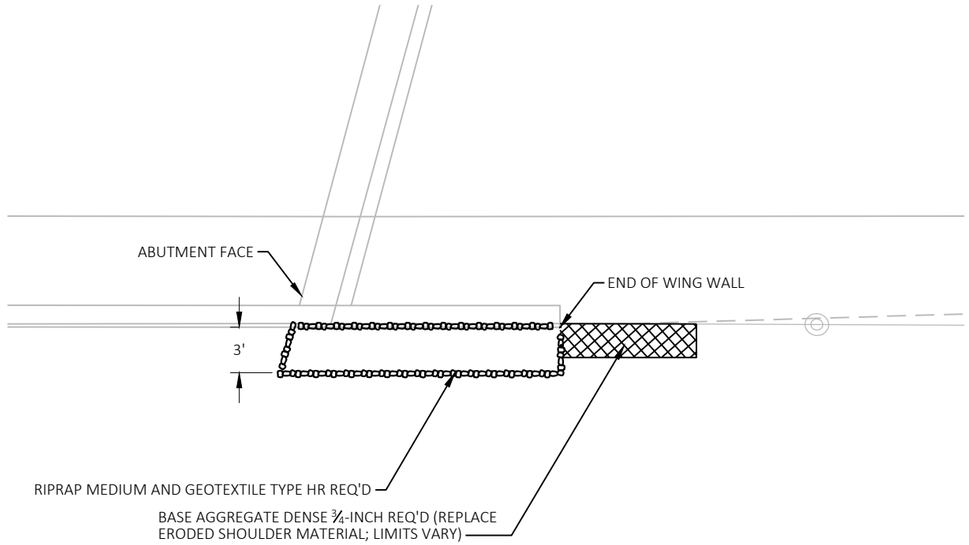
+/- STA. 117+50 EB, RT
+/- STA. 147+50 EB, RT
+/- STA. 167+50 EB, RT
+/- STA. 20+00 A, LT
+/- STA. 27+50 B, RT
(FINAL LOCATIONS TO BE DETERMINE BY FIELD ENGINEER)



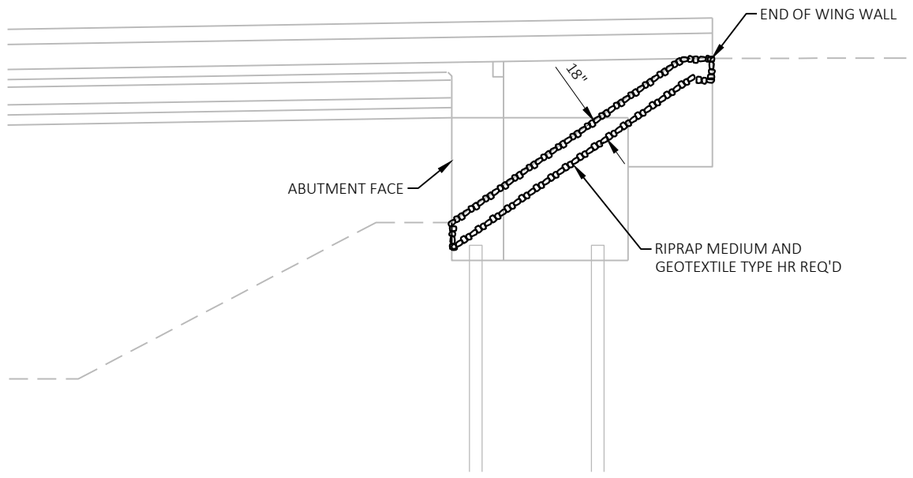
ROCK BAGS USED FOR SILT FENCE RELIEF

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CONSTRUCTION DETAILS	SHEET 18	E

2

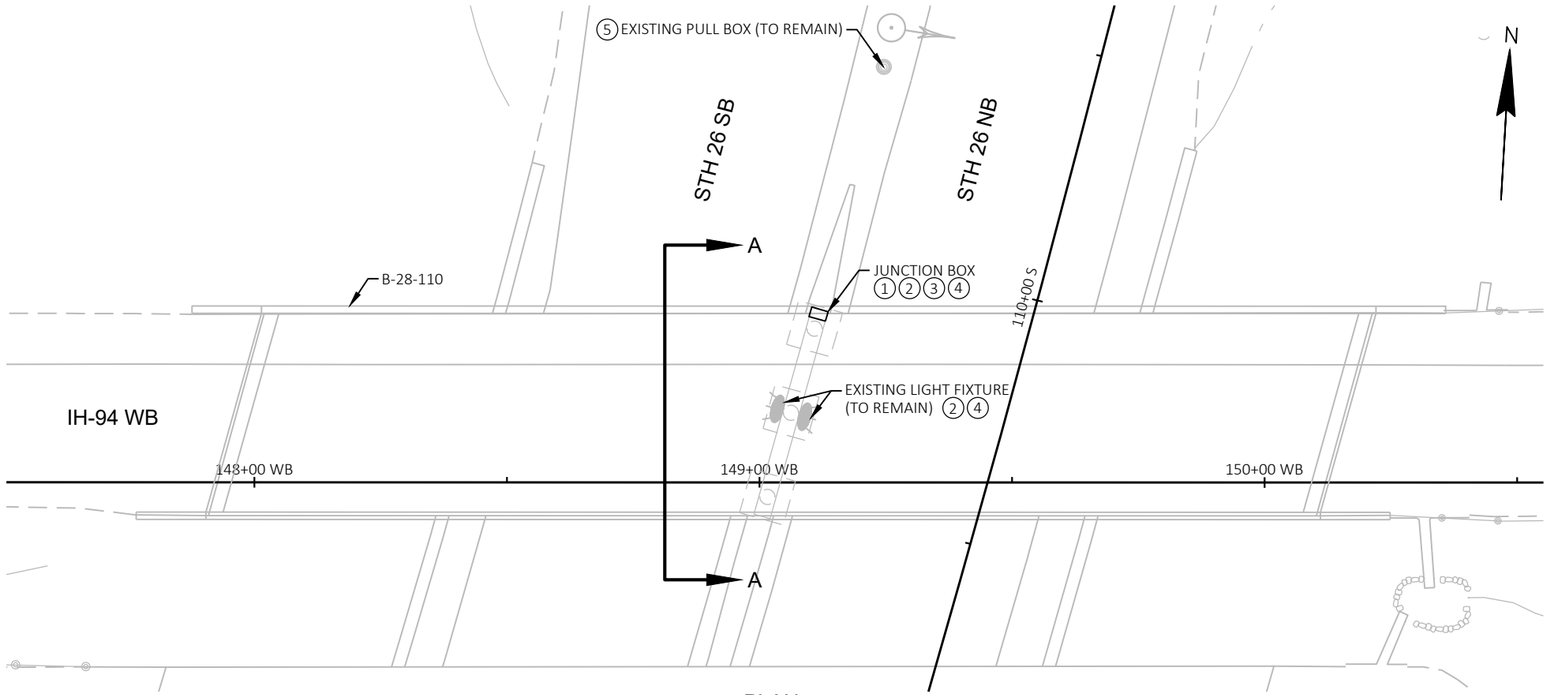


PLAN VIEW

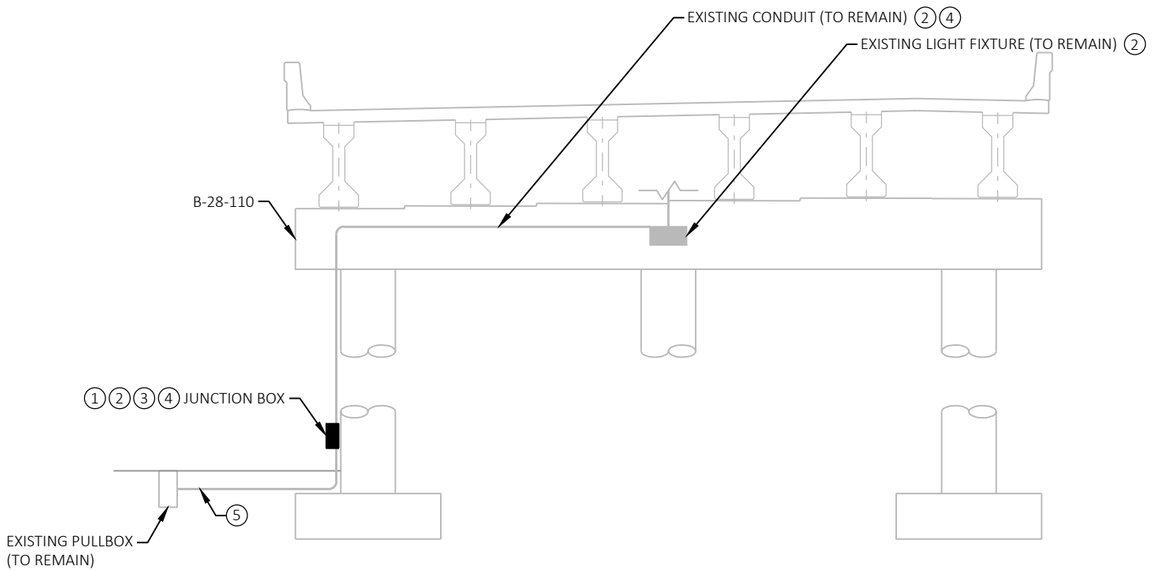


EROSION CONTROL ALONG STRUCTURE WING WALLS

B-28-109 (NW AND SW QUADRANTS)
B-28-110 (NW QUADRANT)
B-28-111 (ALL QUADRANTS)
B-28-112 (NW, NE, AND SW QUADRANTS)



PLAN



SECTION A-A

KEY NOTES:

1. REMOVE EXISTING JUNCTION BOX AND INLINE FUSE ASSEMBLIES WITHIN EXISTING JUNCTION BOX. (PAID FOR AS REMOVING PULL BOXES)
2. REMOVE EXISTING WIRING FROM JUNCTION BOX TO EACH LIGHT FIXTURE (TWO LIGHT FIXTURES TOTAL). CONDUIT SHALL REMAIN. (PAID FOR AS ELECTRICAL WIRE LIGHTING 10 AWG)
3. JUNCTION BOXES 8X8X8-INCH REQ'D (INSTALL IN SAME LOCATION AS EXISTING JUNCTION BOX TO BE REMOVED). JUNCTION BOX SHALL CONTAIN 15A INLINE FUSE ASSEMBLY FOR EACH CIRCUIT. (INLINE FUSE INCLUDED IN ELECTRICAL WIRE LIGHTING 10 AWG ITEM.)
4. ELECTRICAL WIRE LIGHTING 10 AWG REQ'D FROM NEW JUNCTION BOX TO EACH EXISTING LIGHT FIXTURE.
5. REMOVE EXISTING WIRING FROM NEW JUNCTION BOX TO EXISTING PULLBOX AND REPLACE WITH ELECTRICAL WIRE LIGHTING 10 AWG. (PAID FOR AS ELECTRICAL WIRE LIGHTING 10 AWG)

2

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CONSTRUCTION DETAIL - B-28-110 JUNCTION BOX REPLACEMENT	SHEET 20	E

2

LEGEND

B — PEDESTRIAN PUSH BUTTONS

CONCRETE BASES TYPE 1, PEDESTAL BASES, TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT

N

SB1
1 - CONCRETE BASES TYPE 1
1 - PEDESTAL BASES
1 - TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT
1 - PEDESTRIAN PUSH BUTTONS

WISDOT (TRAFFIC SIGNALS)

SB1
B

INSTALL CONDUIT INTO EXISTING ITEM

DETACH WIRE FROM EXISTING PEDESTRIAN PUSH BUTTON (EXSB1) AND COIL IN PULL BOX (EXPB1). PULL EXISTING WIRE TO NEW CONCRETE BASE (SB1) AND CONNECT THE NEW PEDESTRIAN PUSH BUTTON. WIRING OF THE PUSH BUTTON IS PAID FOR AS PART OF THE REMOVING PEDESTRIAN PUSH BUTTON BID ITEM.

EXPB1

EXSB1

WATERTOWN STREET

CR-7

RAMP A

2

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CONSTRUCTION DETAILS: RAMP A PEDESTRIAN PUSH BUTTONS	SHEET 21	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\021102_CD.DWG
LAYOUT NAME - 021102_1

PLOT DATE : 7/1/2025 10:44 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : ##########

2

LEGEND

B PEDESTRIAN PUSH BUTTONS

CONCRETE BASES TYPE 1, PEDESTAL BASES, TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT

N

RAMP B

CR-8

EXSB2

EXPB2

UT

INSTALL CONDUIT INTO EXISTING ITEM

B

SB2

DETACH WIRE FROM EXISTING PEDESTRIAN PUSH BUTTON (EXSB2) AND COIL IN PULL BOX (EXPB2). PULL EXISTING WIRE TO NEW CONCRETE BASE (SB2) AND CONNECT THE NEW PEDESTRIAN PUSH BUTTON. WIRING OF THE PUSH BUTTON IS PAID FOR AS PART OF THE REMOVING PEDESTRIAN PUSH BUTTON BID ITEM.

SB1
1 - CONCRETE BASES TYPE 1
1 - PEDESTAL BASES
1 - TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT
1 - PEDESTRIAN PUSH BUTTONS

WISDOT (TRAFFIC SIGNALS)

WATERTOWN STREET

LEGEND

B PEDESTRIAN PUSH BUTTONS

CONCRETE BASES TYPE 1, PEDESTAL BASES, TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT

N

SB1
1 - CONCRETE BASES TYPE 1
1 - PEDESTAL BASES
1 - TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT
1 - PEDESTRIAN PUSH BUTTONS

SB3

B

INSTALL CONDUIT INTO EXISTING ITEM

EXPB3

UT

WISDOT (TRAFFIC SIGNALS)

EXSB3

CR-9

DETACH WIRE FROM EXISTING PEDESTRIAN PUSH BUTTON (EXSB3) AND COIL IN PULL BOX (EXPB3). PULL EXISTING WIRE TO NEW CONCRETE BASE (SB3) AND CONNECT THE NEW PEDESTRIAN PUSH BUTTON. WIRING OF THE PUSH BUTTON IS PAID FOR AS PART OF THE REMOVING PEDESTRIAN PUSH BUTTON BID ITEM.

RAMP B

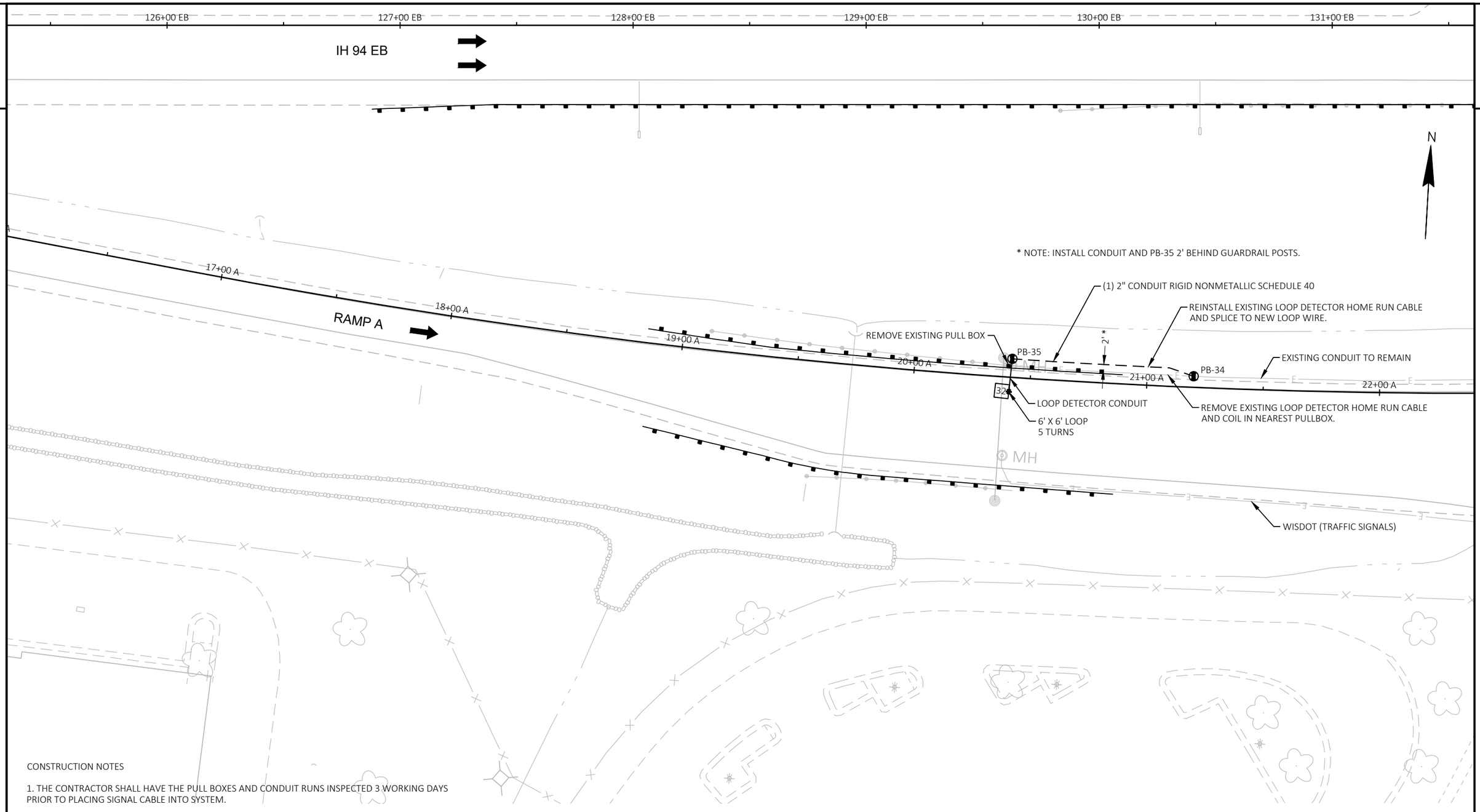
2

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CONSTRUCTION DETAILS: RAMP B PEDESTRIAN PUSH BUTTONS	SHEET 22	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\021102_CD.DWG
LAYOUT NAME - 021102_2

PLOT DATE : 7/1/2025 10:44 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42



CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 3 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM.

2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE.

3. THE ENGINEER SHALL ADJUST THE LOCATIONS OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.

4. THE CONTRACTOR MAY CHOOSE TO USE DIRECTIONAL BORING METHODS FOR NON-ROADWAY CROSSING SEGMENTS, BUT WILL BE PAID FOR UNDER STANDARD TRENCH BID ITEMS.

LEGEND

- PULL BOXES NON-CONDUCTIVE 24X42-INCH
- CONDUIT RIGID NONMETALLIC
- LOOP DETECTOR CONDUIT

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CONSTRUCTION DETAILS	SHEET 23	E

2

DETAIL A

NOT TO SCALE

EX PB-56

EXISTING CONDUIT TO REMAIN

INSTALL CONDUIT INTO EXISTING ITEM

INSTALL EXISTING LOOP DETECTOR HOME RUN CABLE AND SPLICE WITH EXISTING LOOPS.

(1) 2" CONDUIT RIGID NONMETALLIC SCHEDULE 40

PB-80

VILLAGE OF JOHNSON CREEK (WATER)

WISDOT (TRAFFIC SIGNALS)

RAMP A

38+00 A

39+00 A

40+00 A

101+00 S

102+00 S

103+00 S

104+00 S

105+00 S

106+00 S

107+00 S

CHURCH ST/STH 26

REMOVE EXISTING LOOP DETECTOR HOME RUN CABLE AND TRAFFIC SIGNAL INTERCONNECT CABLE. COIL IN EX PB-55.

INSTALL CONDUIT INTO EXISTING ITEM

WISDOT (TRAFFIC SIGNALS)

DETAIL A

EX PB-56

PB-81

PB-80

EX PB-55

(1) 2" CONDUIT RIGID NONMETALLIC SCHEDULE 40

REINSTALL TRAFFIC SIGNAL INTERCONNECT CABLE.

2'*

REINSTALL EXISTING LOOP DETECTOR HOME RUN CABLE AND TRAFFIC SIGNAL INTERCONNECT CABLE.

* NOTE: INSTALL CONDUIT AND PB-80 2' BEHIND GUARDRAIL POSTS.

TDS TELECOM (COMMUNICATIONS)

WIN, LLC (COMMUNICATIONS)

WINDSTREAM KDL, LLC (COMMUNICATIONS)

WISDOT (TRAFFIC SIGNALS)

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 3 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM.

2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE.

3. THE ENGINEER SHALL ADJUST THE LOCATIONS OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.

4. THE CONTRACTOR MAY CHOOSE TO USE DIRECTIONAL BORING METHODS FOR NON-ROADWAY CROSSING SEGMENTS, BUT WILL BE PAID FOR UNDER STANDARD TRENCH BID ITEMS.

5. LOOP DETECTOR SPLICES ARE INCIDENTAL TO THE REINSTALL CABLE BID ITEM.

6. TRAFFIC SIGNAL INTERCONNECT SPLICES ARE INCIDENTAL TO THE REINSTALL CABLE BID ITEM. IT IS ANTICIPATED THAT 12-FIBERS IN EACH CABLE WILL BE RESPLICED.

LEGEND

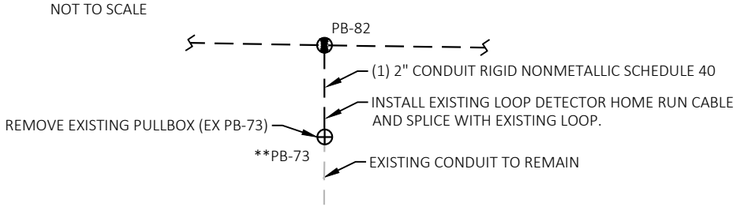
PULL BOXES NON-CONDUCTIVE 24X42-INCH

CONDUIT RIGID NONMETALLIC

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CONSTRUCTION DETAILS	SHEET 24	E

DETAIL A

NOT TO SCALE



**NOTE: PLACE PB-73 IN SAME LOCATION AS EX PB-73 TO ACCOMMODATE LOOP DETECTOR SPLICE.

N

VILLAGE OF JOHNSON CREEK (SEWER)
VILLAGE OF JOHNSON CREEK (WATER)
TDS TELECOM (COMMUNICATIONS)
* NOTE: INSTALL CONDUIT AND PB-82 2' BEHIND GUARDRAIL POSTS.
REINSTALL TRAFFIC SIGNAL INTERCONNECT CABLE.
WE ENERGIES (GAS)
(1) 2" CONDUIT RIGID NONMETALLIC SCHEDULE 40
EXISTING CONDUIT TO REMAIN
REINSTALL EXISTING LOOP DETECTOR HOME RUN CABLE AND TRAFFIC SIGNAL INTERCONNECT CABLE.
INSTALL CONDUIT INTO EXISTING ITEM
EX PB-72
WISDOT (TRAFFIC SIGNALS)
REMOVE EXISTING LOOP DETECTOR HOME RUN CABLE AND TRAFFIC SIGNAL INTERCONNECT CABLE. COIL IN EX PB-72.
2' *
DETAIL A
PB-82
PB-73
PB-83
CAUTION
RAMP B
41+00 B
42+00 B
43+00 B
111+00 S
112+00 S
113+00 S
114+00 S
115+00 S
116+00 S
STH 26

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 3 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM.

2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE.

3. THE ENGINEER SHALL ADJUST THE LOCATIONS OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.

4. THE CONTRACTOR MAY CHOOSE TO USE DIRECTIONAL BORING METHODS FOR NON-ROADWAY CROSSING SEGMENTS, BUT WILL BE PAID FOR UNDER STANDARD TRENCH BID ITEMS.

5. LOOP DETECTOR SPLICES ARE INCIDENTAL TO THE REINSTALL CABLE BID ITEM.

6. TRAFFIC SIGNAL INTERCONNECT SPLICES ARE INCIDENTAL TO THE REINSTALL CABLE BID ITEM. IT IS ANTICIPATED THAT 12-FIBERS IN EACH CABLE WILL BE RESPLICED.

LEGEND

- PULL BOXES NON-CONDUCTIVE 12X36-INCH
- PULL BOXES NON-CONDUCTIVE 24X42-INCH
- CONDUIT RIGID NONMETALLIC

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CONSTRUCTION DETAILS	SHEET 25	E

2

LEGEND

- EROSION MAT CLASS I TYPE A, SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, AND FERTILIZER TYPE B
- RIPRAP MEDIUM
- SILT FENCE
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- XXXXXX SAWING ASPHALT
- YYYYYY SAWING CONCRETE

FOR ADDITIONAL INFORMATION SEE STANDARD DETAIL DRAWINGS:
"MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL"
"MIDWEST GUARDRAIL SYSTEM (MGS) TERMINAL"
"MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION"
"MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL"

N

STA. 105+47 WB LT - STA. 105+61 WB LT, MGS GUARDRAIL TERMINAL TYPE 2
STA. 105+61 WB LT - STA. 109+74 WB LT, MGS GUARDRAIL 3
STA. 109+74 WB LT - STA. 109+82 WB LT, MGS THRIE BEAM TRANSITION

TYPE 2 END POST
105+52.06 WB
34.00' LT

REMOVING GUARDRAIL REQ'D (TYP.)

B-28-017
(SEE STRUCTURE PLANS)

10'

IH 94 WB

104+00 WB | 105+00 WB | 106+00 WB | 107+00 WB | 108+00 WB | 109+00 WB | 110+

SLOPE INTERCEPTS (TYP.)

BEGIN TAPER
107+78.67 EB
4.29' LT

4:1 TAPER

24'

104+00 EB | 105+00 EB | 106+00 EB | 107+00 EB | 108+00 EB | 109+00 EB | 110+

IH 94 EB

BEGIN TAPER GRADING
108+17.50 EB
14.00' LT

EAT POST #1
108+89.27 EB
26.00' LT

EAT POST #5
109+14.25 EB
25.06' LT

EAT POST #9
109+39.24 EB
24.12' LT

MATCH LINE 110+00 EB

EDGE OF TRAVEL LANE (TYP.)

10'

15:1 TAPER

BEGIN TAPER
104+31.90 EB
34.00' RT

EAT POST #1
105+49.98 EB
36.00' RT

EAT POST #5
105+74.96 EB
35.06' RT

EAT POST #9
105+99.94 EB
34.12' RT

WEATHER STATION

EXISTING STORM SEWER CROSSING TO REMAIN.

B-28-016
(SEE STRUCTURE PLANS)

STA. 108+89 EB LT - STA. 109+42 EB LT, MGS GUARDRAIL TERMINAL EAT
STA. 109+42 EB LT - STA. 109+82 EB LT, MGS THRIE BEAM TRANSITION

STA. 105+50 EB RT - STA. 106+03 EB RT, MGS GUARDRAIL TERMINAL EAT
STA. 106+03 EB RT - STA. 109+41 EB RT, MGS GUARDRAIL 3
STA. 109+41 EB RT - STA. 109+80 EB RT, MGS THRIE BEAM TRANSITION

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	GUARDRAIL LAYOUT DETAILS	SHEET 26	E

2

STA. 110+77 WB LT - STA. 111+17 WB LT, MGS THRIE BEAM TRANSITION
STA. 111+17 WB LT - STA. 113+92 WB LT, MGS GUARDRAIL 3
STA. 113+92 WB LT - STA. 114+45 WB LT, MGS GUARDRAIL TERMINAL EAT

STA. 110+75 WB RT - STA. 111+15 WB RT, MGS THRIE BEAM TRANSITION
STA. 111+15 WB RT - STA. 113+52 WB RT, MGS GUARDRAIL 3
STA. 113+52 WB RT - STA. 114+05 WB RT, MGS GUARDRAIL TERMINAL EAT

N

MH

6'

SLOPE INTERCEPTS (TYP.)

REMOVING SURFACE DRAINS REQ'D

B-28-017
(SEE STRUCTURE PLANS)

CONCRETE SURFACE DRAINS HES REQ'D (1)
STA. 111+22.69 WB; 35.16' LT
PERPENDICULAR FLUME

END CURB & GUTTER
STA. 111+38.76 WB; 32.48' LT

REMOVING GUARDRAIL REQ'D (TYP.)

EAT POST #9
113+95.00 WB
40.01' LT

EAT POST #5
114+20.00 WB
41.45' LT

EAT POST #1
114+45.00 WB
42.88' LT

BEGIN TAPER
115+64.26 WB
43.26' LT

15:1 TAPER

9'

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

ASPHALTIC SURFACE REQ'D

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

IH 94 WB

00 WB | 111+00 WB | 112+00 WB | 113+00 WB | 114+00 WB | 115+00 WB | 116

9'

REMOVING SURFACE DRAINS REQ'D

10'

END CURB & GUTTER
STA. 111+36.83 WB; 3.58' RT

CONCRETE SURFACE DRAINS HES REQ'D (1)
STA. 111+20.83 WB; 6.59' RT
ANGLED FLUME

REESTABLISH RIPRAP IN AREA
OF SURFACE DRAIN REMOVAL

EAT POST #9
113+55.28 WB
6.12' RT

EAT POST #5
113+80.26 WB
7.06' RT

EAT POST #1
114+05.23 WB
8.00' RT

BEGIN TAPER
115+24.28 WB
6.00' RT

15:1 TAPER

00 EB | 111+00 EB | 112+00 EB | 113+00 EB | 114+00 EB | 115+00 EB | 116+

MATCH LINE 110+00 EB

MATCH LINE 116+00 EB

ASPHALTIC SURFACE REQ'D

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

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

END CURB & GUTTER
STA. 111+04.34 EB; 31.67' RT

IH 94 EB

EDGE OF TRAVEL LANE (TYP.)

10'

B-28-016
(SEE STRUCTURE PLANS)

CONCRETE SURFACE DRAINS HES REQ'D (1)
STA. 110+88.35 EB; 34.67' RT
ANGLED FLUME

10'

10'

REMOVING SURFACE DRAINS REQ'D

EXISTING UNDERDRAIN TO REMAIN.
FIELD LOCATE. (2)

EXISTING UNDERDRAIN TO REMAIN.
FIELD LOCATE. (2)

STA. 110+74 EB RT - STA. 110+82 EB RT, MGS THRIE BEAM TRANSITION
STA. 110+82 EB RT - STA. 118+21 EB RT, MGS GUARDRAIL 3***
STA. 118+21 EB RT - STA. 118+60 EB RT, MGS THRIE BEAM TRANSITION

***NON-TYPICAL RAIL LENGTH REQ'D (FIELD CUT, PUNCH, AND GALVANIZE)

MCTH Y

(1) FINAL LOCATION OF CONCRETE SURFACE DRAIN SHALL MAINTAIN MINIMUM POST SEPARATION DISTANCES IN SDD "CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES".

(2) USE "POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION" IN SDD "MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL" IF NEEDED TO AVOID CONFLICT.

FOR ADDITIONAL INFORMATION SEE STANDARD DETAIL DRAWINGS:
"MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL"
"MIDWEST GUARDRAIL SYSTEM (MGS) TERMINAL"
"MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION"
"MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL"

LEGEND

- EROSION MAT CLASS I TYPE A, SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, AND FERTILIZER TYPE B
- RIPRAP MEDIUM
- SILT FENCE
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- XXXXXX SAWING ASPHALT
- YYYYYY SAWING CONCRETE

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	GUARDRAIL LAYOUT DETAILS	SHEET 27	E

2

STA. 120+38 WB LT - STA. 120+77 WB LT, MGS THRIE BEAM TRANSITION
STA. 120+77 WB LT - STA. 122+52 WB LT, MGS GUARDRAIL 3
STA. 122+52 WB LT - STA. 123+06 WB LT, MGS GUARDRAIL TERMINAL EAT

STA. 120+17 WB RT - STA. 120+56 WB RT, MGS THRIE BEAM TRANSITION
STA. 120+56 WB RT - STA. 122+56 WB RT, MGS GUARDRAIL 3
STA. 122+56 WB RT - STA. 123+09 WB RT, MGS GUARDRAIL TERMINAL EAT

N

UNION PACIFIC RAILROAD

B-28-019
(NO IMPROVEMENTS)

REMOVING SURFACE DRAINS REQ'D

CONCRETE SURFACE DRAINS HES REQ'D (1)
STA. 13+67.48 B; 23.67' LT
PERPENDICULAR FLUME

END CURB & GUTTER
STA. 13+83.49 B; 20.67' LT

6'

9'

RAMP B

11+00 B
12+00 B
13+00 B
14+00 B

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

ASPHALTIC SURFACE REQ'D

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

IH 94 WB

+00 WB
117+00 WB
118+00 WB
119+00 WB
120+00 WB
121+00 WB

REMOVING SURFACE DRAINS REQ'D

10'

END CURB & GUTTER
STA. 120+78.31 WB; 6.67' RT

CONCRETE SURFACE DRAINS HES REQ'D (1)
STA. 120+62.31 WB; 9.67' RT
ANGLED FLUME

REESTABLISH RIPRAP IN AREA
OF SURFACE DRAIN REMOVAL

BEGIN TAPER
116+30.97 EB
15.00' LT

4:1 TAPER

SLOPE INTERCEPTS (TYP.)

EXISTING STORM SEWER CROSSING TO REMAIN.

24'

MATCH LINE 116+00 EB

00 EB
117+00 EB
118+00 EB
119+00 EB
120+00 EB
121+00 EB
122+

MATCH LINE 122+00 EB

EAT POST #1
116+75.33 EB
24.00' LT

EAT POST #5
117+00.35 EB
24.00' LT

EAT POST #9
117+25.37 EB
24.00' LT

IH 94 EB

EDGE OF TRAVEL LANE (TYP.)

10'

REMOVING GUARDRAIL REQ'D (TYP.)

EXISTING STORM SEWER CROSSING TO REMAIN.

11+00 A
12+00 A

RAMP A

B-28-018
(NO IMPROVEMENTS)

STA. 116+75 EB LT - STA. 117+29 EB LT, MGS GUARDRAIL TERMINAL EAT
STA. 117+29 EB LT - STA. 118+41 EB LT, MGS GUARDRAIL 3
STA. 118+41 EB LT - STA. 118+81 EB LT, MGS THRIE BEAM TRANSITION

STA. 110+74 EB RT - STA. 110+82 EB RT, MGS THRIE BEAM TRANSITION
STA. 110+82 EB RT - STA. 118+21 EB RT, MGS GUARDRAIL 3***
STA. 118+21 EB RT - STA. 118+60 EB RT, MGS THRIE BEAM TRANSITION

***NON-TYPICAL RAIL LENGTH REQ'D (FIELD CUT, PUNCH, AND GALVANIZE)

(1) FINAL LOCATION OF CONCRETE SURFACE DRAIN SHALL MAINTAIN MINIMUM POST SEPARATION DISTANCES IN SDD "CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES".

FOR ADDITIONAL INFORMATION SEE STANDARD DETAIL DRAWINGS:
"MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL"
"MIDWEST GUARDRAIL SYSTEM (MGS) TERMINAL"
"MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION"
"MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL"

LEGEND

- EROSION MAT CLASS I TYPE A, SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, AND FERTILIZER TYPE B
- RIPRAP MEDIUM
- SILT FENCE
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- XXXXXX SAWING ASPHALT
- YYYYYY SAWING CONCRETE

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	GUARDRAIL LAYOUT DETAILS	SHEET 28	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\021006_CD.DWG
LAYOUT NAME - 021008-cd
PLOT DATE : 7/1/2025 10:45 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

STA. 120+38 WB LT - STA. 120+77 WB LT, MGS THRIE BEAM TRANSITION
STA. 120+77 WB LT - STA. 122+52 WB LT, MGS GUARDRAIL 3
STA. 122+52 WB LT - STA. 123+06 WB LT, MGS GUARDRAIL TERMINAL EAT

STA. 120+17 WB RT - STA. 120+56 WB RT, MGS THRIE BEAM TRANSITION
STA. 120+56 WB RT - STA. 122+56 WB RT, MGS GUARDRAIL 3
STA. 122+56 WB RT - STA. 123+09 WB RT, MGS GUARDRAIL TERMINAL EAT

EAT POST #9
122+55.61 B
58.22' LT

EAT POST #5
122+80.56 B
60.46' LT

EAT POST #1
123+05.50 B
62.92' LT

BEGIN TAPER
124+24.63 B
23.00' LT

15:1 TAPER

9'

RAMP B

15+00 B
16+00 B
17+00 B
18+00 B
19+00 B
20+00 B

N

IH 94 WB

+00 WB
123+00 WB
124+00 WB
125+00 WB
126+00 WB
127+00 WB
12

9'

15:1 TAPER

REMOVING
GUARDRAIL
REQ'D (TYP.)

EAT POST #9
122+59.23 WB
9.12' RT

EAT POST #5
122+84.21 WB
10.06' RT

EAT POST #1
123+09.18 WB
11.00' RT

BEGIN TAPER
124+28.21 WB
8.98' RT

STA. 126+88 EB RT - STA. 127+41 EB RT, MGS GUARDRAIL TERMINAL EAT
STA. 127+41 EB RT - STA. 131+91 EB RT, MGS GUARDRAIL 3
STA. 131+91 EB RT - STA. 132+30 EB RT, MGS THRIE BEAM TRANSITION

MATCH LINE 122+00 EB

00 EB
123+00 EB
124+00 EB
125+00 EB
126+00 EB
127+00 EB
128+

IH 94 EB

EDGE OF TRAVEL LANE (TYP.)

10'

MATCH LINE 128+00 EB

13+00 A
14+00 A
15+00 A
16+00 A
17+00 A
18+00 A

RAMP A

15:1 TAPER

BEGIN TAPER
125+68.82 EB
34.00' RT

SLOPE INTERCEPT (TYP.)

EAT POST #1
126+87.89 EB
36.00' RT

EAT POST #5
127+12.87 EB
35.06' RT

EAT POST #9
127+37.86 EB
34.12' RT

BEGIN TAPER
17+65.35 A
4.00' LT

15:1 TAPER

BEGIN TAPER
17+90.57 A
21.45' RT

15:1 TAPER

LEGEND

- EROSION MAT CLASS I TYPE A, SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, AND FERTILIZER TYPE B
- RIPRAP MEDIUM
- SILT FENCE
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- SAWING ASPHALT
- SAWING CONCRETE

FOR ADDITIONAL INFORMATION SEE STANDARD DETAIL DRAWINGS:
"MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL"
"MIDWEST GUARDRAIL SYSTEM (MGS) TERMINAL"
"MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION"
"MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL"

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	GUARDRAIL LAYOUT DETAILS	SHEET 29	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\021006_CD.DWG
LAYOUT NAME - 021009-cd
PLOT DATE : 7/1/2025 10:45 AM
PLOT BY : HASSETT, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- EROSION MAT CLASS I TYPE A, SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, AND FERTILIZER TYPE B
- RIPRAP MEDIUM
- SILT FENCE
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- XXXXXX SAWING ASPHALT
- YYYYYY SAWING CONCRETE

FOR ADDITIONAL INFORMATION SEE STANDARD DETAIL DRAWINGS:
"MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL"
"MIDWEST GUARDRAIL SYSTEM (MGS) TERMINAL"
"MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION"
"MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL"

(1) FINAL LOCATION OF CONCRETE SURFACE DRAIN SHALL MAINTAIN MINIMUM POST SEPARATION DISTANCES IN SDD "CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES".

(2) USE "POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION" IN SDD "MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL" IF NEEDED TO AVOID CONFLICT.

* RIPRAP MEDIUM AND GEOTEXTILE TYPE HR REQ'D (SEE CONSTRUCTION DETAIL "EROSION CONTROL ALONG STRUCTURE WING WALLS" FOR ADDITIONAL INFORMATION)

STA. 131+53 EB LT - STA. 132+06 EB LT, MGS GUARDRAIL TERMINAL EAT
STA. 132+06 EB LT - STA. 132+46 EB LT, MGS THRIE BEAM TRANSITION

STA. 126+88 EB RT - STA. 127+41 EB RT, MGS GUARDRAIL TERMINAL EAT
STA. 127+41 EB RT - STA. 131+91 EB RT, MGS GUARDRAIL 3
STA. 131+91 EB RT - STA. 132+30 EB RT, MGS THRIE BEAM TRANSITION

N

B-28-112 (SEE STRUCTURE PLANS)

IH 94 WB

128+00 WB | 129+00 WB | 130+00 WB | 131+00 WB | 132+00 WB | 133+00 WB

EAT POST #1 131+53.19 EB 26.00' LT
EAT POST #5 131+78.17 EB 25.06' LT
EAT POST #9 132+03.15 EB 24.12' LT

CONCRETE SURFACE DRAINS HES REQ'D (1) STA. 132+00.18 EB; 24.90' LT ANGLED FLUME

REESTABLISH RIPRAP IN AREA OF SURFACE DRAIN REMOVAL

REMOVING SURFACE DRAINS REQ'D

BEGIN TAPER 130+41.44 EB 4.00' LT

SLOPE INTERCEPTS (TYP.)

4:1 TAPER

END CONCRETE CURB & GUTTER STA. 131+84.08 EB; 22.50' LT

10'

24'

MATCH LINE 128+00 EB

MATCH LINE 134+00 EB

128+00 EB | 129+00 EB | 130+00 EB | 131+00 EB | 132+00 EB | 133+00 EB | 134+00 EB

IH 94 EB

EDGE OF TRAVEL LANE (TYP.)

10'

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

ASPHALTIC SURFACE REQ'D

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

113+00 W

112+00 W

EXISTING UNDERDRAIN TO REMAIN. FIELD LOCATE. (2)

REMOVING GUARDRAIL REQ'D (TYP.)

(2) EXISTING UNDERDRAIN TO REMAIN. FIELD LOCATE.

END CONCRETE CURB & GUTTER STA. 131+68.85 EB; 31.67' RT

(1) CONCRETE SURFACE DRAINS HES REQ'D STA. 131+89.85 EB; 34.65' RT PERPENDICULAR FLUME

6'

REMOVING SURFACE DRAINS REQ'D

B-28-111 (SEE STRUCTURE PLANS)

EAT POST #1 18+84.58 A 6.00' LT
EAT POST #5 19+09.61 A 5.06' LT
EAT POST #9 19+34.63 A 4.12' LT

EXISTING STORM SEWER CROSSING TO REMAIN. (2) FIELD LOCATE.

TYPE 2 END POST 20+84.84 A 4.00' LT

19+00 A | 20+00 A | 21+00 A | 22+00 A | 23+00 A | 24+00 A

STA. 18+85 A LT - STA. 19+38 A LT, MGS GUARDRAIL TERMINAL EAT
STA. 19+38 A LT - STA. 19+88 A LT, MGS GUARDRAIL 3
STA. 19+88 A LT - STA. 20+13 A LT, MGS GUARDRAIL 3 HS
STA. 20+13 A LT - STA. 20+38 A LT, MGS GUARDRAIL 3 QS
STA. 20+38 A LT - STA. 20+63 A LT, MGS GUARDRAIL 3 HS
STA. 20+63 A LT - STA. 20+75 A LT, MGS GUARDRAIL 3
STA. 20+75 A LT - STA. 20+89 A LT, MGS GUARDRAIL TERMINAL TYPE 2

WISDOT (TRAFFIC SIGNALS)

N. WATERTOWN ST

111+00 W

110+00 W

RAMP A

STA. 19+39.13 A; 42.57' RT MGS RADIUS

R=255'

EXISTING STORM SEWER CROSSING TO REMAIN.

STA. 19+88.15 A; 46.61' RT MGS RADIUS

EAT POST #1 18+87.12 A 35.82' RT
EAT POST #5 19+11.63 A 38.88' RT
EAT POST #9 19+36.08 A 42.15' RT

8'

TYPE 2 END POST 20+84 A 47.33' LT

WISDOT (TRAFFIC SIGNALS)

STA. 18+87 A RT - STA. 19+39 A RT, MGS GUARDRAIL TERMINAL EAT
STA. 19+39 A RT - STA. 20+13 A RT, MGS GUARDRAIL 3
STA. 20+13 A RT - STA. 20+37 A RT, MGS GUARDRAIL 3 HS
STA. 20+37 A RT - STA. 20+74 A RT, MGS GUARDRAIL 3
STA. 20+74 A RT - STA. 20+88 A RT, MGS GUARDRAIL TERMINAL TYPE 2

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	GUARDRAIL LAYOUT DETAILS	SHEET 30	E

2

STA. 134+55 WB LT - STA. 134+94 WB LT, MGS THRIE BEAM TRANSITION
STA. 134+94 WB LT - STA. 138+69 WB LT, MGS GUARDRAIL 3
STA. 138+69 WB LT - STA. 139+22 WB LT, MGS GUARDRAIL TERMINAL EAT

STA. 134+44 WB RT - STA. 134+84 WB RT, MGS THRIE BEAM TRANSITION
STA. 134+84 WB RT - STA. 137+21 WB RT, MGS GUARDRAIL 3
STA. 137+21 WB RT - STA. 137+74 WB RT, MGS GUARDRAIL TERMINAL EAT

N

EXISTING UNDERDRAIN TO REMAIN.
FIELD LOCATE AND REPLACE UNDERDRAIN AND
SALVAGE ASSOCIATED ENDWALL TO AVOID CONFLICT IF NEEDED
(PAID FOR AS PIPE UNDERDRAIN UPERFORATED 6-INCH).

EAT POST #9
138+72.36 WB
34.12' LT

EAT POST #5
138+97.34 WB
35.06' LT

EAT POST #1
139+22.33 WB
36.00' LT

B-28-112
(SEE STRUCTURE PLANS)

*

EXISTING UNDERDRAIN TO REMAIN.
FIELD LOCATE AND REPLACE UNDERDRAIN AND
SALVAGE ASSOCIATED ENDWALL TO AVOID CONFLICT IF NEEDED
(PAID FOR AS PIPE UNDERDRAIN UPERFORATED 6-INCH).

SLOPE INTERCEPTS (TYP.)

EXISTING UNDERDRAIN TO REMAIN. (2)
FIELD LOCATE.

REMOVING GUARDRAIL REQ'D (TYP.)

15:1 TAPER

10'

EDGE OF TRAVEL LANE (TYP.)

IH 94 WB

4+00 WB | 135+00 WB | 136+00 WB | 137+00 WB | 138+00 WB | 139+00 WB | 14

6'

15:1 TAPER

EAT POST #9
137+24.18 WB
6.12' RT

EAT POST #5
137+49.16 WB
7.06' RT

EAT POST #1
137+74.15 WB
8.00' RT

BEGIN TAPER
138+93.22 WB
6.00' RT

EXISTING CABLE
BARRIER TO REMAIN

*

MATCH LINE 134+00 EB

00 EB | 135+00 EB | 136+00 EB | 137+00 EB | 138+00 EB | 139+00 EB | 140+

MATCH LINE 140+00 EB

IH 94 EB

*

B-28-111
(SEE STRUCTURE PLANS)

15:1 TAPER

BEGIN TAPER
139+23.09 EB
34.00' RT

* RIPRAP MEDIUM AND GEOTEXTILE TYPE HR REQ'D (SEE CONSTRUCTION DETAIL "EROSION CONTROL ALONG STRUCTURE WING WALLS" FOR ADDITIONAL INFORMATION)

25+00 A | 26+00 A | 27+00 A | 28+00 A | 29+00 A | 30+00 A

RAMP A

(2) USE "POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION" IN SDD "MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL" IF NEEDED TO AVOID CONFLICT.

FOR ADDITIONAL INFORMATION SEE STANDARD DETAIL DRAWINGS:
"MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL"
"MIDWEST GUARDRAIL SYSTEM (MGS) TERMINAL"
"MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION"
"MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL"

LEGEND

- EROSION MAT CLASS I TYPE A, SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, AND FERTILIZER TYPE B
- RIPRAP MEDIUM
- SILT FENCE
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- XXXXXX SAWING ASPHALT
- YYYYYY SAWING CONCRETE

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	GUARDRAIL LAYOUT DETAILS	SHEET 31	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\021006_CD.DWG
LAYOUT NAME - 021011-cd
PLOT DATE : 10/17/2025 8:23 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

BEGIN TAPER
140+41.40 WB
34.00' LT

IH 94 WB

0+00 WB | 141+00 WB | 142+00 WB | 143+00 WB | 144+00 WB | 145+00 WB | 14

EXISTING CABLE
BARRIER TO REMAIN

BEGIN TAPER
145+71.58 EB
4.00' LT

MATCH LINE 140+00 EB

00 EB | 141+00 EB | 142+00 EB | 143+00 EB | 144+00 EB | 145+00 EB | 146+

MATCH LINE 146+00 EB

IH 94 EB

EXISTING UNDERDRAIN TO REMAIN. (2)
FIELD LOCATE.

EDGE OF TRAVEL LANE (TYP.)

10'

EXISTING UNDERDRAIN TO REMAIN. (2)
FIELD LOCATE.

EAT POST #1
140+42.17 EB
36.00' RT

EAT POST #5
140+67.15 EB
35.06' RT

EAT POST #9
140+92.13 EB
34.12' RT

REMOVING GUARDRAIL REQ'D (TYP.)

SLOPE INTERCEPT (TYP.)

STA. 140+42 EB RT - STA. 140+95 EB RT, MGS GUARDRAIL TERMINAL EAT
STA. 140+95 EB RT - STA. 147+20 EB RT, MGS GUARDRAIL 3
STA. 147+20 EB RT - STA. 147+60 EB RT, MGS THRIE BEAM TRANSITION

STA. 34+52 A LT - STA. 35+05 A LT, MGS GUARDRAIL TERMINAL EAT
STA. 35+05 A LT - STA. 35+30 A LT, MGS GUARDRAIL 3
STA. 35+30 A LT - STA. 35+55 A LT, MGS GUARDRAIL 3 HS
STA. 35+55 A LT - STA. 35+80 A LT, MGS GUARDRAIL 3 QS
STA. 35+80 A LT - STA. 36+05 A LT, MGS GUARDRAIL 3 HS
STA. 36+05 A LT - STA. 36+17 A LT, MGS GUARDRAIL 3
STA. 36+17 A LT - STA. 36+31 A LT, MGS GUARDRAIL TERMINAL TYPE 2

BEGIN TAPER
33+63.11 A
8.16' LT

EAT POST #1
34+52.22 A
17.00' LT

EAT POST #5
34+77.05 A
16.06' LT

EAT POST #9
35+01.88 A
15.12' LT

TYPE 2 END POST
36+26.84 A
15.00' LT

31+00 A | 32+00 A | 33+00 A | 34+00 A | 35+00 A | 36+00 A

15:1 TAPER

3'

RAMP A

STA. 34+52 A RT - STA. 35+06 A RT, MGS GUARDRAIL TERMINAL EAT
STA. 35+06 A RT - STA. 35+31 A RT, MGS GUARDRAIL 3
STA. 35+31 A RT - STA. 35+56 A RT, MGS GUARDRAIL 3 HS
STA. 35+56 A RT - STA. 35+81 A RT, MGS GUARDRAIL 3 QS
STA. 35+81 A RT - STA. 36+06 A RT, MGS GUARDRAIL 3 HS
STA. 36+06 A RT - STA. 36+18 A RT, MGS GUARDRAIL 3
STA. 36+18 A RT - STA. 36+32 A RT, MGS GUARDRAIL TERMINAL TYPE 2

BEGIN TAPER
33+89.73 A
29.73' RT

15:1 TAPER

EAT POST #1
34+52.02 A
34.31' RT

EAT POST #5
34+77.33 A
35.55' RT

EAT POST #9
35+02.66 A
36.54' RT

MH

MH

EXISTING UNDERDRAIN TO REMAIN.
FIELD LOCATE AND REPLACE UNDERDRAIN AND
SALVAGE ASSOCIATED ENDWALL TO AVOID CONFLICT IF NEEDED
(PAID FOR AS PIPE UNDERDRAIN UPERFORATED 6-INCH).

MH

3'

WISDOT (TRAFFIC SIGNALS)

TYPE 2
END POST
34+52.02 A
34.31' RT

LEGEND

- EROSION MAT CLASS I TYPE A, SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, AND FERTILIZER TYPE B
- RIPRAP MEDIUM
- SILT FENCE
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- XXXXXX SAWING ASPHALT
- YYYYYY SAWING CONCRETE

(2) USE "POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION" IN SDD "MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL" IF NEEDED TO AVOID CONFLICT.

FOR ADDITIONAL INFORMATION SEE STANDARD DETAIL DRAWINGS:
"MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL"
"MIDWEST GUARDRAIL SYSTEM (MGS) TERMINAL"
"MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION"
"MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL"

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	GUARDRAIL LAYOUT DETAILS	SHEET 32	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\021006_CD.DWG
LAYOUT NAME - 021012-cd
PLOT DATE : 10/17/2025 8:26 AM
PLOT BY : HASSETT, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

* RIPRAP MEDIUM AND GEOTEXTILE TYPE HR REQ'D (SEE CONSTRUCTION DETAIL "EROSION CONTROL ALONG STRUCTURE WING WALLS" FOR ADDITIONAL INFORMATION)

B-28-110
(SEE STRUCTURE PLANS)

IH 94 WB

IH 94 EB

N

1 CONCRETE SURFACE DRAINS HES REQ'D
STA. 150+78.48 WB; 34.67' LT
PERPENDICULAR FLUME

END CONCRETE CURB & GUTTER
STA. 150+94.48 WB; 31.67' LT

SLOPE INTERCEPTS (TYP.)

REMOVING SURFACE DRAINS REQ'D

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

ASPHALTIC SURFACE REQ'D

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

REMOVING SURFACE DRAINS REQ'D

REESTABLISH RIPRAP IN AREA
OF SURFACE DRAIN REMOVAL

END CONCRETE CURB & GUTTER
STA. 150+83.98 WB; 3.67' RT

1 CONCRETE SURFACE DRAINS HES REQ'D
STA. 150+67.98 WB; 6.67' RT
ANGLED FLUME

EXISTING CABLE
BARRIER TO REMAIN

EXISTING CABLE
BARRIER TO REMAIN

REMOVING GUARDRAIL REQ'D (TYP.)

4:1 TAPER

24'

6'

10'

6'

10'

EAT POST #1
146+83.34
26.00' LT

EAT POST #5
147+08.32 EB
25.06' LT

EAT POST #9
147+33.30 EB
24.12' LT

EDGE OF TRAVEL LANE (TYP.)

10'

B-28-109
(SEE STRUCTURE PLANS)

STA. 146+83 EB LT - STA. 147+36 EB LT, MGS GUARDRAIL TERMINAL EAT
STA. 147+36 EB LT - STA. 147+76 EB LT, MGS THRIE BEAM TRANSITION

STA. 140+42 EB RT - STA. 140+95 EB RT, MGS GUARDRAIL TERMINAL EAT
STA. 140+95 EB RT - STA. 147+20 EB RT, MGS GUARDRAIL 3
STA. 147+20 EB RT - STA. 147+60 EB RT, MGS THRIE BEAM TRANSITION

STA. 150+33 WB LT - STA. 150+72 WB LT, MGS THRIE BEAM TRANSITION
STA. 150+72 WB LT - STA. 154+47 WB LT, MGS GUARDRAIL 3
STA. 154+47 WB LT - STA. 155+00 WB LT, MGS GUARDRAIL TERMINAL EAT

STA. 150+22 WB RT - STA. 150+62 WB RT, MGS THRIE BEAM TRANSITION
STA. 150+62 WB RT - STA. 152+99 WB RT, MGS GUARDRAIL 3
STA. 152+99 WB RT - STA. 153+52 WB RT, MGS GUARDRAIL TERMINAL EAT

CHURCH ST/STH 26

VILLAGE OF JOHNSON CREEK (WATER)

WISDOT (TRAFFIC SIGNALS)

RAMP A

1 FINAL LOCATION OF CONCRETE SURFACE DRAIN SHALL MAINTAIN MINIMUM POST SEPARATION DISTANCES IN SDD "CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES".

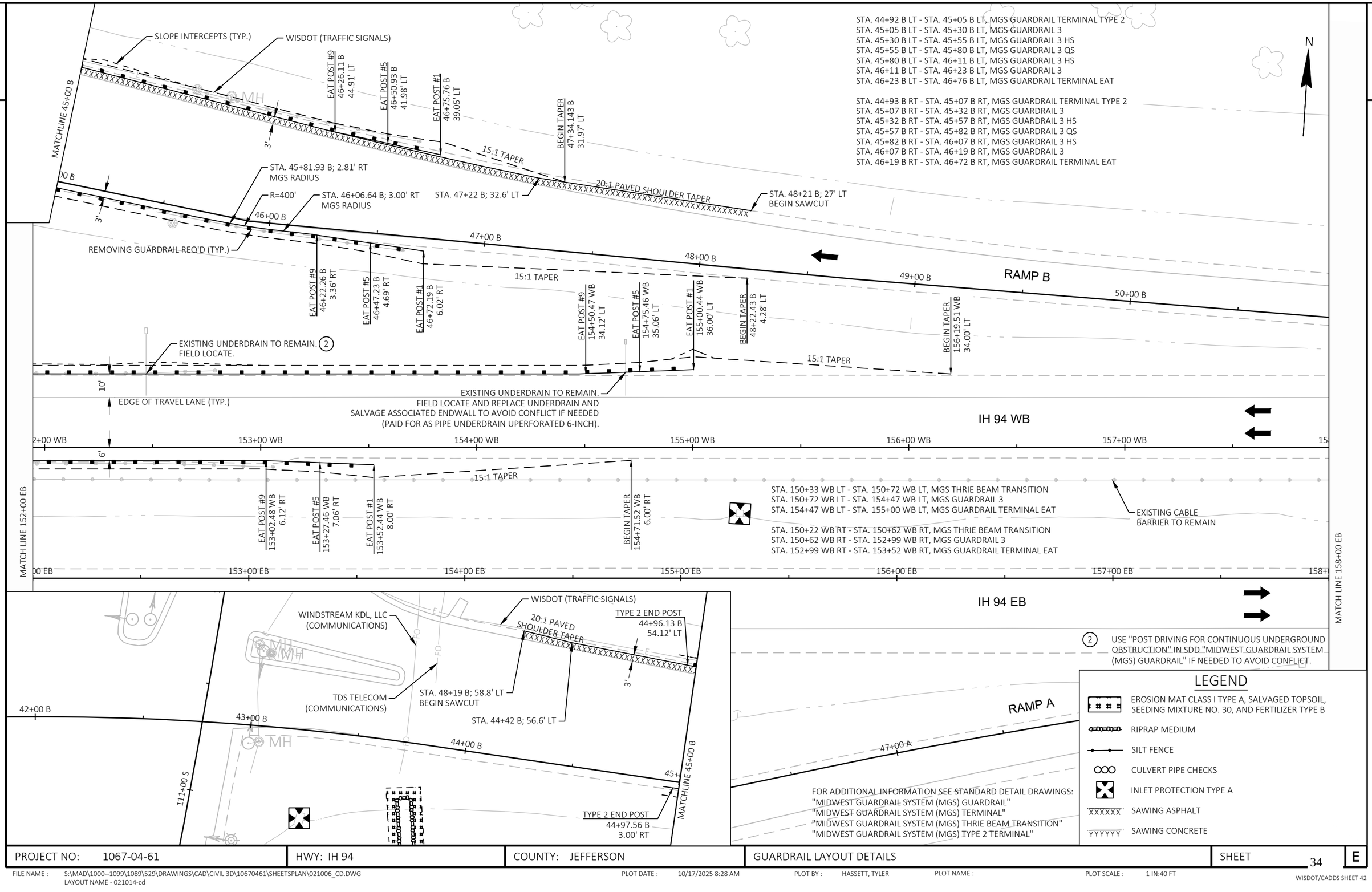
FOR ADDITIONAL INFORMATION SEE STANDARD DETAIL DRAWINGS:
"MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL"
"MIDWEST GUARDRAIL SYSTEM (MGS) TERMINAL"
"MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION"
"MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL"

LEGEND

- EROSION MAT CLASS I TYPE A, SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, AND FERTILIZER TYPE B
- RIPRAP MEDIUM
- SILT FENCE
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- XXXXXX SAWING ASPHALT
- YYYYYY SAWING CONCRETE

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	GUARDRAIL LAYOUT DETAILS	SHEET 33	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\021006_CD.DWG
LAYOUT NAME - 021013-cd
PLOT DATE : 7/1/2025 10:45 AM
PLOT BY : HASSETT, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



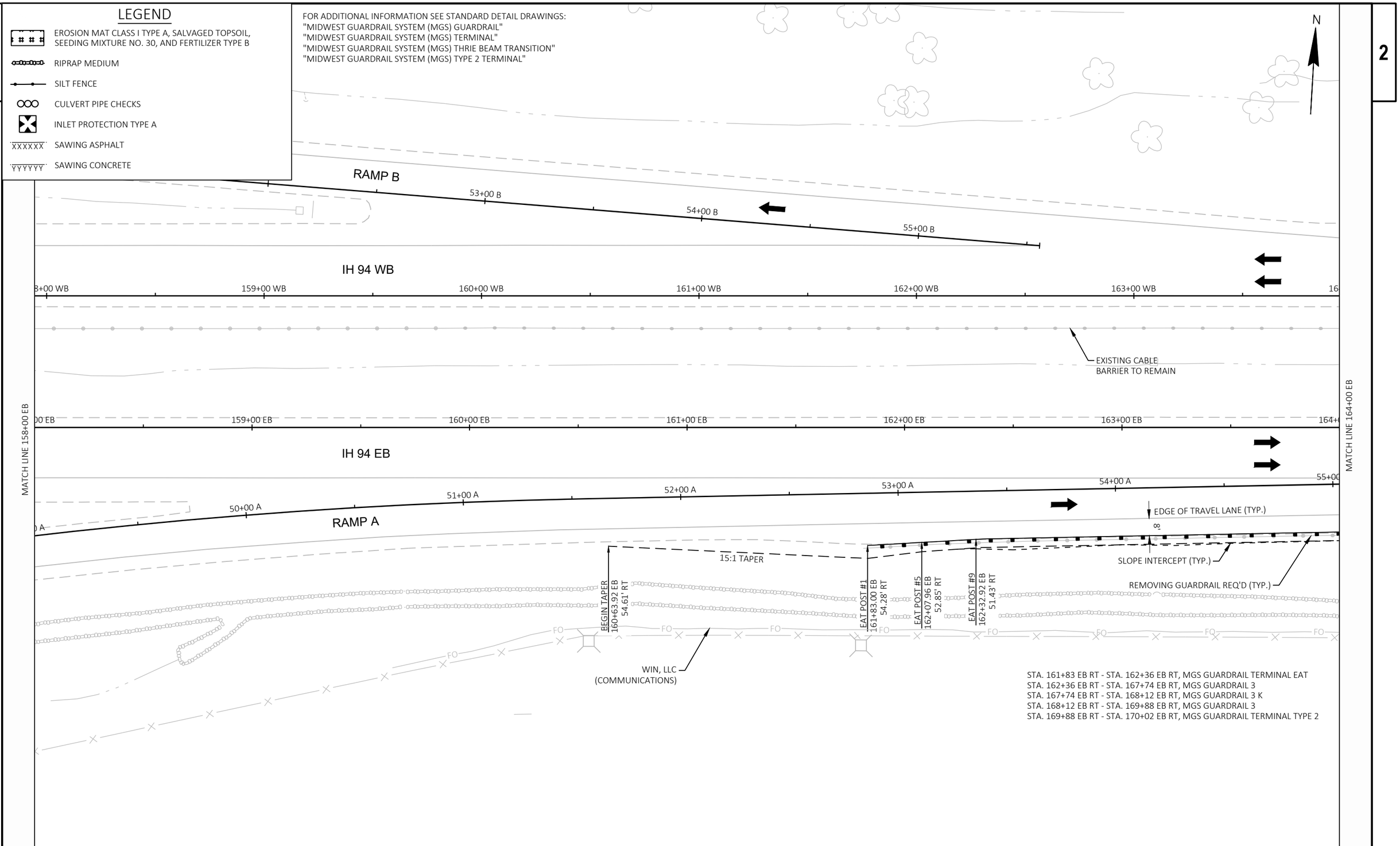
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	GUARDRAIL LAYOUT DETAILS	SHEET 34	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\021006_CD.DWG
LAYOUT NAME - 021014-cd
PLOT DATE : 10/17/2025 8:28 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- EROSION MAT CLASS I TYPE A, SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, AND FERTILIZER TYPE B
- RIPRAP MEDIUM
- SILT FENCE
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- XXXXXX SAWING ASPHALT
- YYYYYY SAWING CONCRETE

FOR ADDITIONAL INFORMATION SEE STANDARD DETAIL DRAWINGS:
"MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL"
"MIDWEST GUARDRAIL SYSTEM (MGS) TERMINAL"
"MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION"
"MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL"



STA. 161+83 EB RT - STA. 162+36 EB RT, MGS GUARDRAIL TERMINAL EAT
STA. 162+36 EB RT - STA. 167+74 EB RT, MGS GUARDRAIL 3
STA. 167+74 EB RT - STA. 168+12 EB RT, MGS GUARDRAIL 3 K
STA. 168+12 EB RT - STA. 169+88 EB RT, MGS GUARDRAIL 3
STA. 169+88 EB RT - STA. 170+02 EB RT, MGS GUARDRAIL TERMINAL TYPE 2

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	GUARDRAIL LAYOUT DETAILS	SHEET 35	E

LEGEND

- EROSION MAT CLASS I TYPE A, SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, AND FERTILIZER TYPE B
- RIPRAP MEDIUM
- SILT FENCE
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- XXXXXX SAWING ASPHALT
- YYYYYY SAWING CONCRETE

FOR ADDITIONAL INFORMATION SEE STANDARD DETAIL DRAWINGS:
"MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL"
"MIDWEST GUARDRAIL SYSTEM (MGS) TERMINAL"
"MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION"
"MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL"

STA. 167+30 WB LT - STA. 167+44 WB LT, MGS GUARDRAIL TERMINAL TYPE 2
STA. 167+44 WB LT - STA. 172+05 WB LT, MGS GUARDRAIL 3
STA. 172+05 WB LT - STA. 172+58 WB LT, MGS GUARDRAIL TERMINAL EAT

N

C-28-012
(NO IMPROVEMENTS)

WE ENERGIES (GAS)

TYPE 2 END POST
167+34.55 WB
34.00' LT

10'

EDGE OF TRAVEL LANE (TYP.)

IH 94 WB

4+00 WB | 165+00 WB | 166+00 WB | 167+00 WB | 168+00 WB | 169+00 WB | 170+

EXISTING CABLE
BARRIER TO REMAIN

MATCH LINE 164+00 EB

00 EB | 165+00 EB | 166+00 EB | 167+00 EB | 168+00 EB | 169+00 EB | 170+

MATCH LINE 170+00 EB

IH 94 EB

A | 56+00 A

8'

CAUTION

REMOVING GUARDRAIL REQ'D (TYP.)

SLOPE INTERCEPT (TYP.)

STA. 161+83 EB RT - STA. 162+36 EB RT, MGS GUARDRAIL TERMINAL EAT
STA. 162+36 EB RT - STA. 167+74 EB RT, MGS GUARDRAIL 3
STA. 167+74 EB RT - STA. 168+12 EB RT, MGS GUARDRAIL 3 K
STA. 168+12 EB RT - STA. 169+88 EB RT, MGS GUARDRAIL 3
STA. 169+88 EB RT - STA. 170+02 EB RT, MGS GUARDRAIL TERMINAL TYPE 2

TYPE 2 END POST
169+97.08 WB
37.57' RT

FO

WIN, LLC
(COMMUNICATIONS)

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	GUARDRAIL LAYOUT DETAILS	SHEET 36	E

2

2

N

STA. 167+30 WB LT - STA. 167+44 WB LT, MGS GUARDRAIL TERMINAL TYPE 2
STA. 167+44 WB LT - STA. 172+05 WB LT, MGS GUARDRAIL 3
STA. 172+05 WB LT - STA. 172+58 WB LT, MGS GUARDRAIL TERMINAL EAT

REMOVING GUARDRAIL REQ'D (TYP.)

EAT POST #9
172+08.21 WB
34.12' LT

EAT POST #5
172+33.12 WB
35.06' LT

EAT POST #1
172+58.03 WB
36.00' LT

BEGIN TAPER
173+76.76 WB
34.00' LT

15:1 TAPER

10'

EDGE OF TRAVEL LANE (TYP.)

IH 94 WB

+00 WB 171+00 WB 172+00 WB 173+00 WB 174+00 WB 175+00 WB 176+00 WB

EXISTING CABLE
BARRIER TO REMAIN

MATCH LINE 170+00 EB

00 EB 171+00 EB 172+00 EB 173+00 EB 174+00 EB 175+00 EB 176+00 EB

IH 94 EB

FOR ADDITIONAL INFORMATION SEE STANDARD DETAIL DRAWINGS:
"MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL"
"MIDWEST GUARDRAIL SYSTEM (MGS) TERMINAL"
"MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION"
"MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL"

LEGEND

- EROSION MAT CLASS I TYPE A, SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, AND FERTILIZER TYPE B
- RIPRAP MEDIUM
- SILT FENCE
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- XXXXXX SAWING ASPHALT
- YYYYYY SAWING CONCRETE

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	GUARDRAIL LAYOUT DETAILS	SHEET 37	E

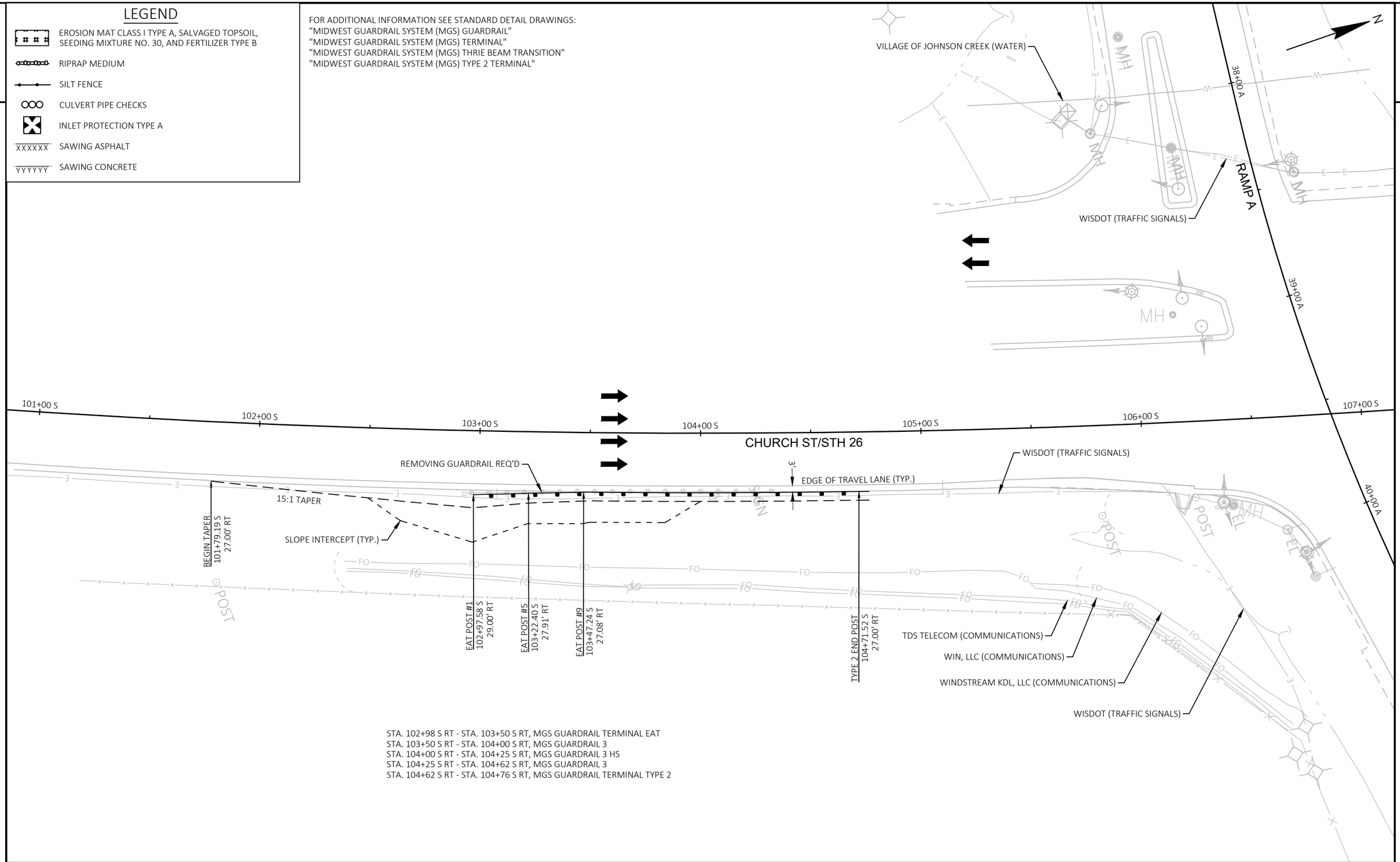
FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\021006_CD.DWG
LAYOUT NAME - 021017-cd
PLOT DATE : 7/1/2025 10:46 AM
PLOT BY : HASSETT, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

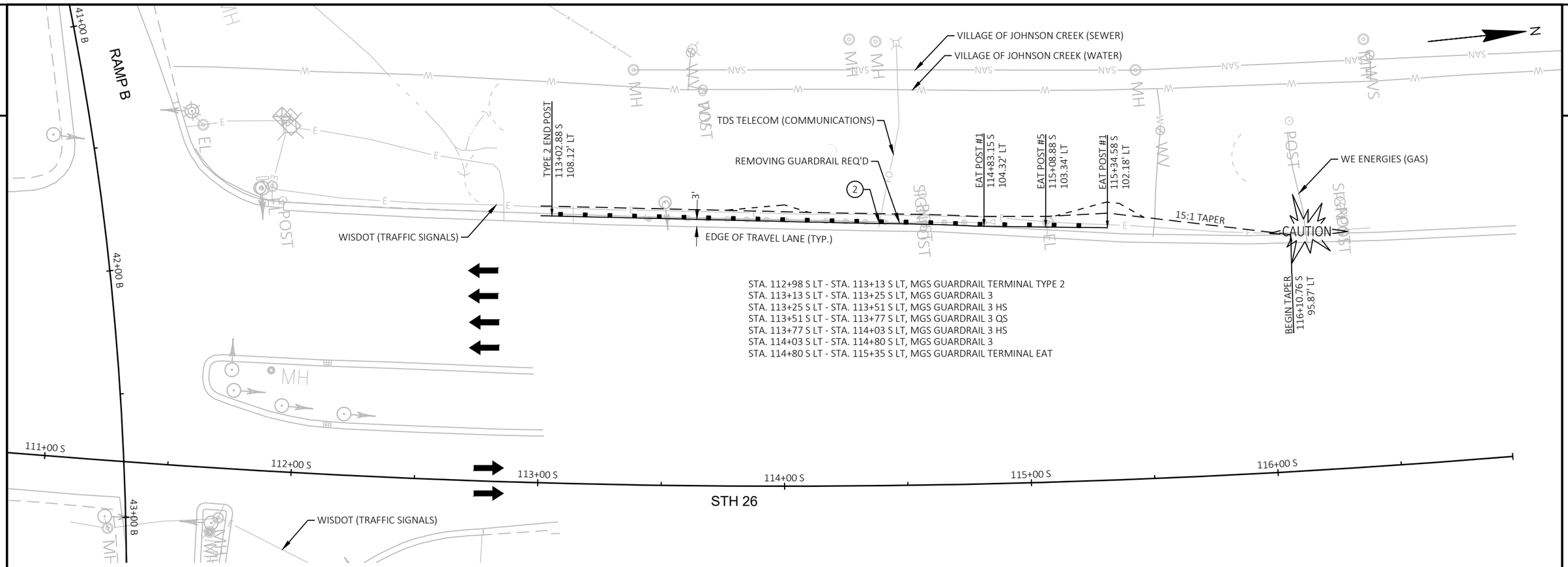
- EROSION MAT CLASS I TYPE A, SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, AND FERTILIZER TYPE B
- RIPRAP MEDIUM
- SILT FENCE
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- XXXXXX SAWING ASPHALT
- YYYYYY SAWING CONCRETE

FOR ADDITIONAL INFORMATION SEE STANDARD DETAIL DRAWINGS:
"MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL"
"MIDWEST GUARDRAIL SYSTEM (MGS) TERMINAL"
"MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION"
"MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL"



STA. 102+98 S RT - STA. 103+50 S RT, MGS GUARDRAIL TERMINAL EAT
STA. 103+50 S RT - STA. 104+00 S RT, MGS GUARDRAIL 3
STA. 104+00 S RT - STA. 104+25 S RT, MGS GUARDRAIL 3 HS
STA. 104+25 S RT - STA. 104+62 S RT, MGS GUARDRAIL 3
STA. 104+62 S RT - STA. 104+76 S RT, MGS GUARDRAIL TERMINAL TYPE 2

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	GUARDRAIL LAYOUT DETAILS	SHEET 38	E



(2) USE "POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION" IN SDD "MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL" IF NEEDED TO AVOID CONFLICT.

FOR ADDITIONAL INFORMATION SEE STANDARD DETAIL DRAWINGS:
"MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL"
"MIDWEST GUARDRAIL SYSTEM (MGS) TERMINAL"
"MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION"
"MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL"

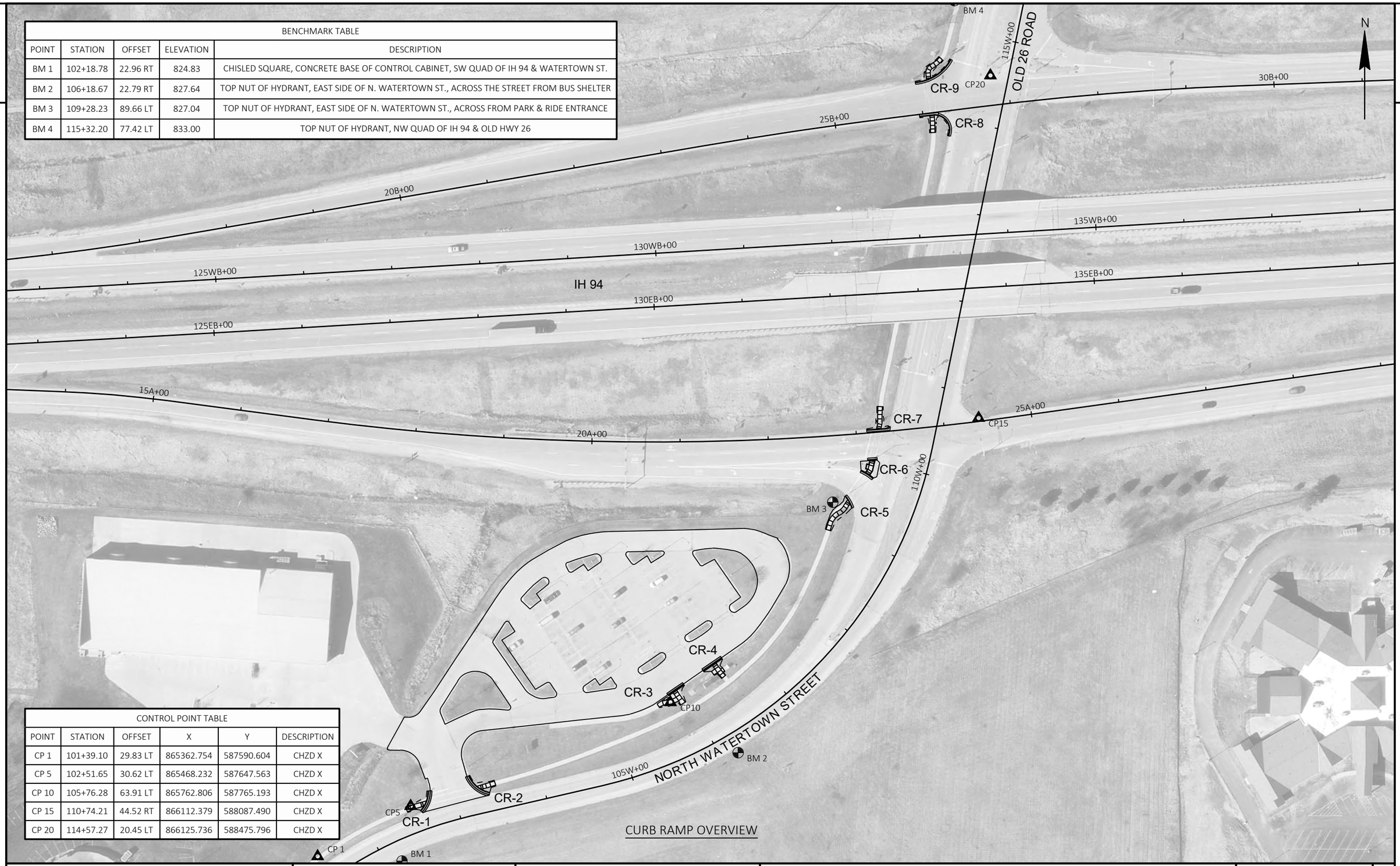
LEGEND

- EROSION MAT CLASS I TYPE A, SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, AND FERTILIZER TYPE B
- RIPRAP MEDIUM
- SILT FENCE
- CULVERT PIPE CHECKS
- INLET PROTECTION TYPE A
- XXXXXX SAWING ASPHALT
- YYYYYY SAWING CONCRETE

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	GUARDRAIL LAYOUT DETAILS	SHEET 39	E

BENCHMARK TABLE				
POINT	STATION	OFFSET	ELEVATION	DESCRIPTION
BM 1	102+18.78	22.96 RT	824.83	CHISLED SQUARE, CONCRETE BASE OF CONTROL CABINET, SW QUAD OF IH 94 & WATERTOWN ST.
BM 2	106+18.67	22.79 RT	827.64	TOP NUT OF HYDRANT, EAST SIDE OF N. WATERTOWN ST., ACROSS THE STREET FROM BUS SHELTER
BM 3	109+28.23	89.66 LT	827.04	TOP NUT OF HYDRANT, EAST SIDE OF N. WATERTOWN ST., ACROSS FROM PARK & RIDE ENTRANCE
BM 4	115+32.20	77.42 LT	833.00	TOP NUT OF HYDRANT, NW QUAD OF IH 94 & OLD HWY 26

CONTROL POINT TABLE					
POINT	STATION	OFFSET	X	Y	DESCRIPTION
CP 1	101+39.10	29.83 LT	865362.754	587590.604	CHZD X
CP 5	102+51.65	30.62 LT	865468.232	587647.563	CHZD X
CP 10	105+76.28	63.91 LT	865762.806	587765.193	CHZD X
CP 15	110+74.21	44.52 RT	866112.379	588087.490	CHZD X
CP 20	114+57.27	20.45 LT	866125.736	588475.796	CHZD X



CURB RAMP OVERVIEW

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CURB RAMPS (INCLUDING BENCHMARK AND CONTROL POINT INFORMATION)	SHEET 40	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\021101_CD.DWG
LAYOUT NAME - 021101_cd
PLOT DATE : 7/18/2025 8:13 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

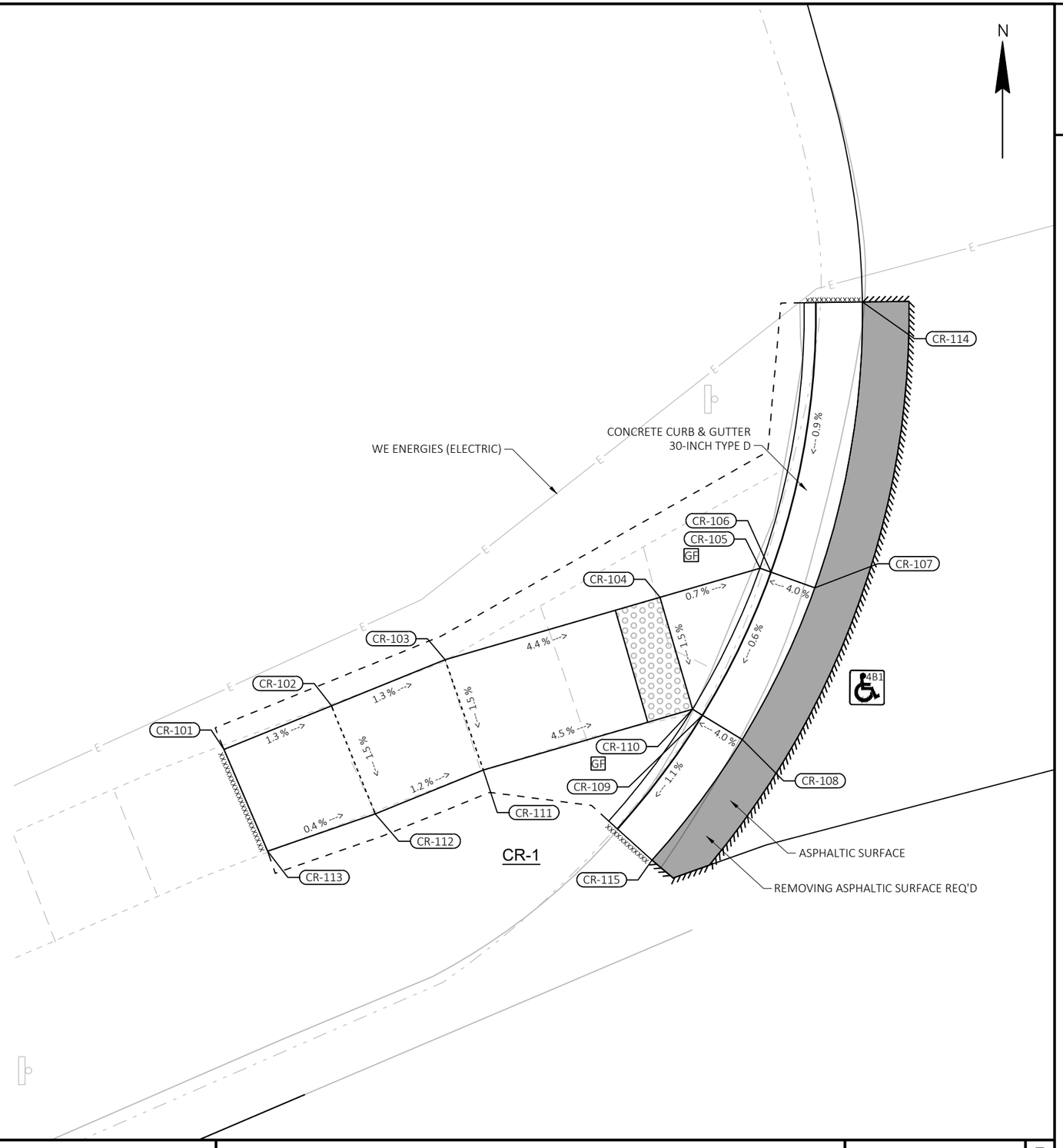
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-101	102+46.3 W	30.8' LT	587645.66	865462.80	MATCH
CR-102	102+50.9 W	30.9' LT	587647.53	865467.42	822.95
CR-103	102+55.8 W	31.0' LT	587649.51	865472.29	822.88
CR-104	102+64.8 W	30.4' LT	587652.19	865481.52	822.46
CR-105	102+69.0 W	30.2' LT	587653.44	865485.81	822.43
CR-106	102+69.4 W	29.9' LT	587653.27	865486.29	822.42
CR-107	102+70.8 W	28.7' LT	587652.59	865488.17	822.50
CR-108	102+66.1 W	23.5' LT	587646.08	865485.05	822.46
CR-109	102+64.9 W	25.1' LT	587647.13	865483.34	822.38
CR-110	102+64.6 W	25.5' LT	587647.39	865482.92	822.39
CR-111	102+55.8 W	26.0' LT	587644.78	865473.94	822.81
CR-112	102+51.0 W	25.9' LT	587642.90	865469.30	822.87
CR-113	102+46.4 W	26.0' LT	587641.29	865464.68	MATCH
CR-114	102+76.2 W	39.7' LT	587664.86	865490.21	MATCH
CR-115	102+61.0 W	19.9' LT	587640.91	865481.17	MATCH

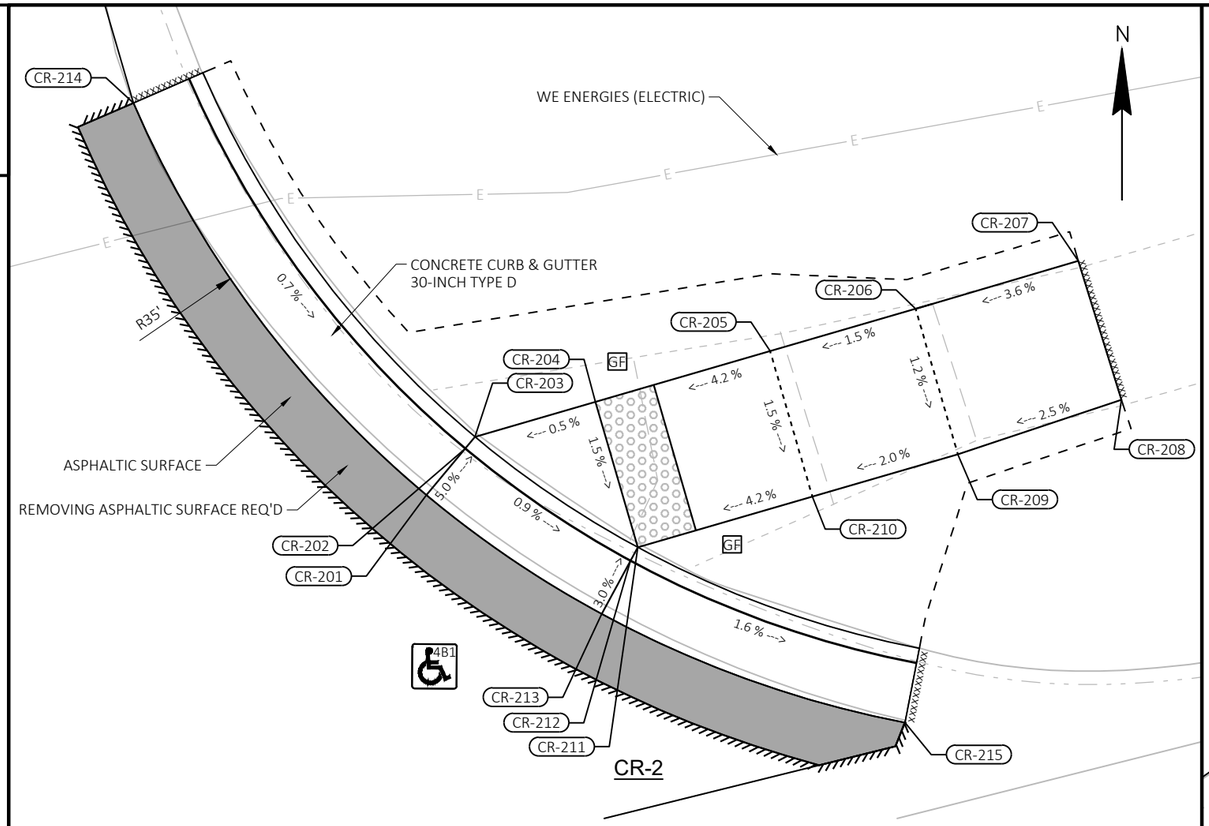
CURB RAMP LEGEND

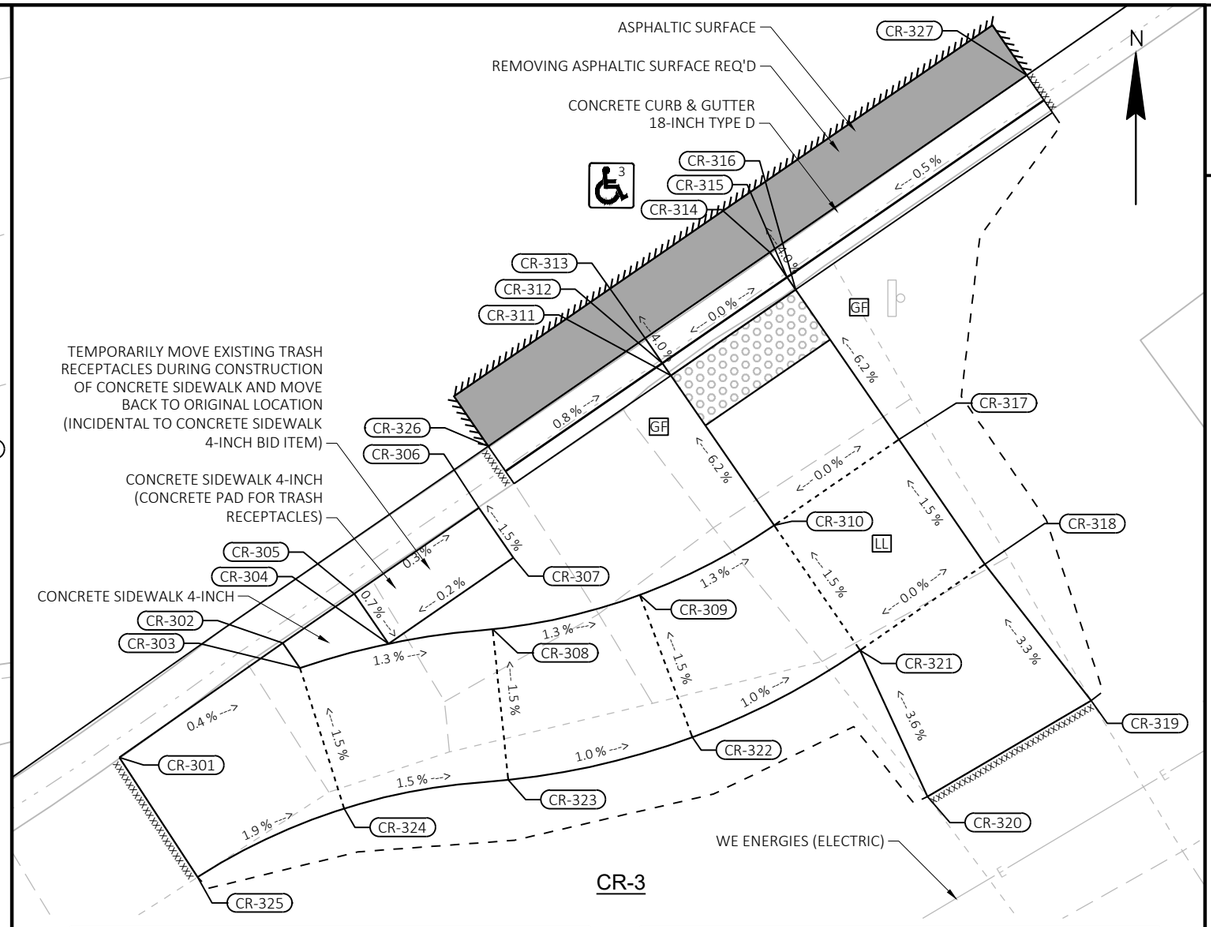
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- CF — CONCRETE FLARE, 10:1 TRAVERSABLE
- L — LANDING
- X — CURB RAMP, TYPE X
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA/CURB RAMP DETECTABLE WARNING FIELD RADIAL NATURAL PATINA
- XXXX — SAWING CONCRETE
- ////// — SAWING ASPHALT
- – – – – SLOPE INTERCEPTS

NOTES:
ALL SIDEWALK SHOWN IS CONCRETE SIDEWALK 4-INCH UNLESS OTHERWISE NOTED.

RESTORE DISTURBED AREAS WITH SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A.







STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-201	103+24.0 W	29.9' LT	587668.24	865541.76	822.68
CR-202	103+25.6 W	31.1' LT	587669.77	865543.04	822.58
CR-203	103+26.0 W	31.4' LT	587670.15	865543.36	822.59
CR-204	103+30.1 W	31.6' LT	587671.31	865547.34	822.61
CR-205	103+36.1 W	32.0' LT	587672.98	865553.10	822.86
CR-206	103+41.1 W	32.2' LT	587674.38	865557.90	822.94
CR-207	103+46.7 W	32.6' LT	587675.96	865563.27	MATCH
CR-208	103+47.0 W	27.8' LT	587671.38	865564.69	MATCH
CR-209	103+41.4 W	27.2' LT	587669.58	865559.30	822.88
CR-210	103+36.4 W	27.0' LT	587668.18	865554.50	822.78
CR-211	103+30.4 W	26.6' LT	587666.51	865548.74	822.53
CR-212	103+30.1 W	26.3' LT	587666.07	865548.50	822.52
CR-213	103+28.8 W	24.8' LT	587664.31	865547.55	822.58
CR-214	103+17.5 W	44.7' LT	587681.17	865532.09	MATCH
CR-215	103+37.7 W	19.0' LT	587660.73	865557.55	MATCH

CURB RAMP LEGEND

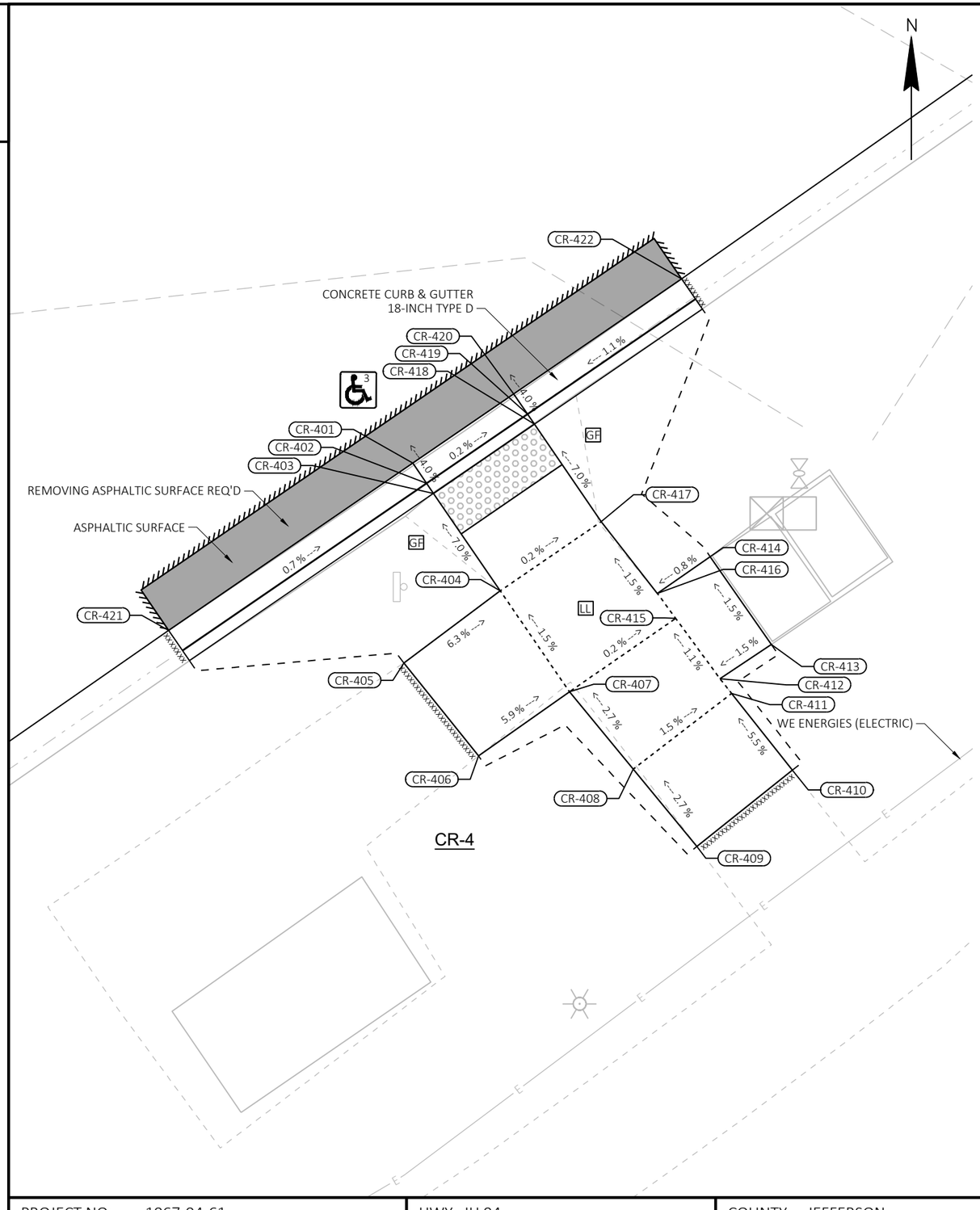
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NOTES:
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RESTORE DISTURBED AREAS WITH SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A.

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-301	105+59.7 W	68.7' LT	587763.49	865747.76	MATCH
CR-302	105+67.2 W	69.9' LT	587767.26	865753.15	824.61
CR-303	105+67.4 W	68.9' LT	587766.44	865753.72	824.63
CR-304	105+70.9 W	68.4' LT	587767.24	865756.64	824.59
CR-305	105+70.5 W	70.4' LT	587768.88	865755.51	824.60
CR-306	105+76.2 W	71.2' LT	587771.72	865759.62	824.57
CR-307	105+76.6 W	69.2' LT	587770.07	865760.76	824.60
CR-308	105+74.7 W	67.4' LT	587767.72	865760.07	824.55
CR-309	105+80.3 W	66.3' LT	587768.84	865764.93	824.48
CR-310	105+86.1 W	66.3' LT	587771.14	865769.36	824.42
CR-311	105+85.1 W	72.3' LT	587776.08	865765.95	824.05
CR-312	105+85.1 W	72.8' LT	587776.49	865765.67	824.04
CR-313	105+84.9 W	73.8' LT	587777.32	865765.10	824.00
CR-314	105+90.7 W	74.4' LT	587780.15	865769.22	824.00

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-315	105+90.9 W	73.4' LT	587779.33	865769.79	824.04
CR-316	105+91.0 W	72.9' LT	587778.92	865770.07	824.05
CR-317	105+91.8 W	67.0' LT	587773.98	865773.47	824.42
CR-318	105+92.5 W	62.0' LT	587769.86	865776.31	824.49
CR-319	105+93.6 W	56.4' LT	587765.36	865779.81	MATCH
CR-320	105+86.6 W	56.1' LT	587762.19	865774.42	MATCH
CR-321	105+86.8 W	61.4' LT	587767.02	865772.19	824.49
CR-322	105+79.7 W	61.3' LT	587764.15	865766.66	824.55
CR-323	105+72.8 W	62.7' LT	587762.74	865760.59	824.62
CR-324	105+66.7 W	64.1' LT	587761.80	865755.17	824.70
CR-325	105+60.6 W	64.0' LT	587759.54	865750.34	MATCH
CR-326	105+77.6 W	72.9' LT	587773.75	865759.93	MATCH
CR-327	106+02.8 W	75.5' LT	587785.99	865777.69	MATCH



CURB RAMP LEGEND

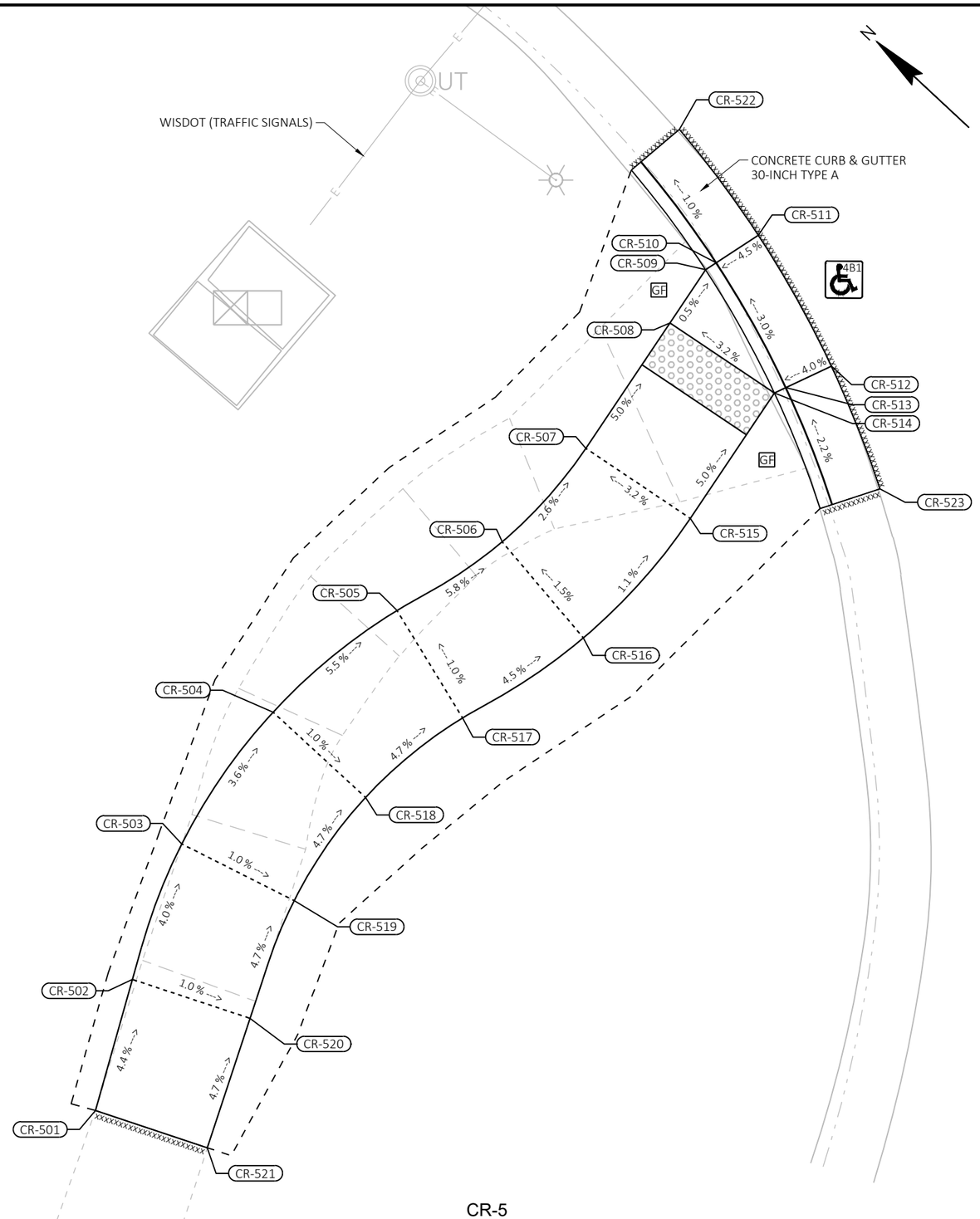
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- SLOPE INTERCEPTS

NOTES:
ALL SIDEWALK SHOWN IS CONCRETE SIDEWALK 4-INCH UNLESS OTHERWISE NOTED.

RESTORE DISTURBED AREAS WITH SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A.

STATION & OFFSET TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-401	106+48.9 W	77.7' LT	587808.20	865809.78	824.00
CR-402	106+48.9 W	76.7' LT	587807.37	865810.35	824.04
CR-403	106+48.9 W	76.2' LT	587806.96	865810.63	824.05
CR-404	106+48.9 W	71.4' LT	587802.98	865813.35	824.39
CR-405	106+43.2 W	71.1' LT	587800.04	865809.42	MATCH
CR-406	106+43.7 W	66.3' LT	587796.24	865812.47	MATCH
CR-407	106+49.0 W	66.4' LT	587798.86	865816.18	824.47
CR-408	106+49.4 W	62.3' LT	587795.70	865818.78	824.58
CR-409	106+49.8 W	58.2' LT	587792.54	865821.39	MATCH
CR-410	106+55.4 W	58.6' LT	587795.66	865825.28	MATCH
CR-411	106+55.2 W	62.6' LT	587798.79	865822.80	824.50
CR-412	106+55.1 W	63.3' LT	587799.40	865822.33	824.49
CR-413	106+58.0 W	63.3' LT	587800.79	865824.43	824.53
CR-414	106+58.0 W	67.6' LT	587804.37	865821.93	824.46
CR-415	106+55.0 W	66.4' LT	587801.85	865820.52	824.46
CR-416	106+55.0 W	67.6' LT	587802.88	865819.77	824.44
CR-417	106+54.8 W	71.4' LT	587805.81	865817.48	824.38
CR-418	106+54.8 W	76.2' LT	587809.79	865814.75	824.04
CR-419	106+54.8 W	76.7' LT	587810.20	865814.47	824.03
CR-420	106+54.8 W	77.7' LT	587811.03	865813.90	823.99
CR-421	106+34.6 W	77.5' LT	587801.37	865799.81	MATCH
CR-422	106+64.7 W	77.5' LT	587815.72	865820.76	MATCH



CR-5

CURB RAMP LEGEND

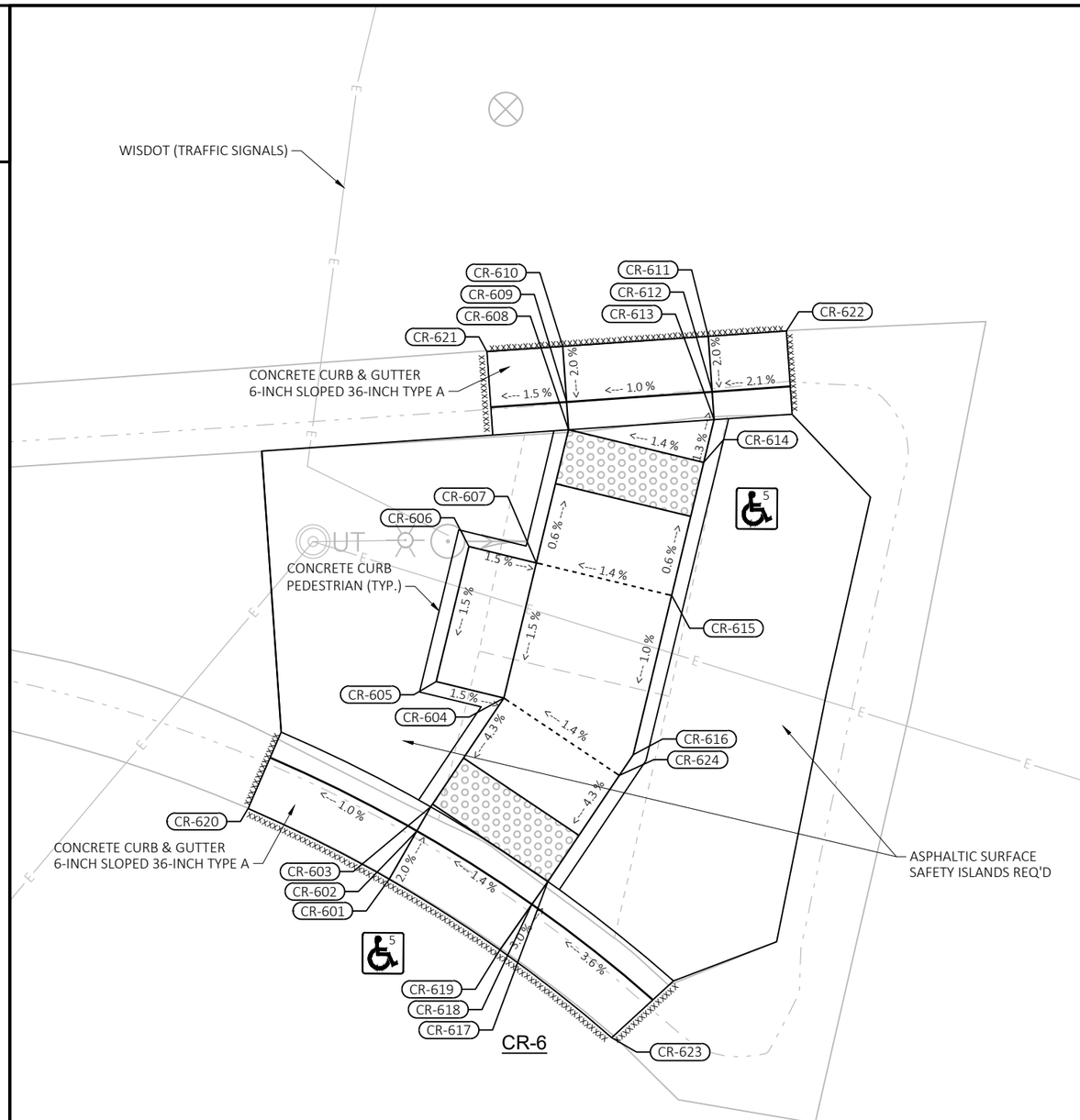
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NOTES:
ALL SIDEWALK SHOWN IS CONCRETE SIDEWALK 4-INCH UNLESS OTHERWISE NOTED.

RESTORE DISTURBED AREAS WITH SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A.

STATION & OFFSET TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-501	108+90.9 W	83.2' LT	587961.35	865939.50	MATCH
CR-502	108+97.2 W	84.3' LT	587966.56	865940.97	826.96
CR-503	109+04.1 W	84.9' LT	587971.94	865942.93	826.73
CR-504	109+11.7 W	83.9' LT	587977.18	865946.56	826.50
CR-505	109+18.6 W	81.2' LT	587981.22	865951.48	826.15
CR-506	109+23.6 W	78.5' LT	587983.94	865955.66	825.86
CR-507	109+29.2 W	76.9' LT	587987.66	865958.98	825.73
CR-508	109+36.2 W	75.8' LT	587992.64	865962.32	825.43
CR-509	109+39.1 W	75.3' LT	587994.76	865963.74	825.42
CR-510	109+39.6 W	75.0' LT	587995.03	865964.16	825.41
CR-511	109+41.5 W	73.9' LT	587996.12	865965.83	MATCH
CR-512	109+37.2 W	69.2' LT	587990.92	865968.74	MATCH
CR-513	109+35.5 W	70.6' LT	587990.07	865966.93	825.58
CR-514	109+35.0 W	70.9' LT	587989.86	865966.47	825.59
CR-515	109+28.1 W	72.0' LT	587984.87	865963.13	825.89
CR-516	109+21.0 W	74.0' LT	587980.13	865958.89	825.94
CR-517	109+15.3 W	77.0' LT	587976.95	865954.08	826.20
CR-518	109+09.9 W	79.2' LT	587973.79	865950.23	826.45
CR-519	109+04.0 W	79.9' LT	587969.69	865947.39	826.68
CR-520	108+98.1 W	79.4' LT	587965.01	865945.64	826.91
CR-521	108+91.8 W	78.5' LT	587959.87	865943.94	MATCH
CR-522	109+44.8 W	78.3' LT	588000.33	865962.70	MATCH
CR-523	109+32.8 W	65.5' LT	587986.04	865970.67	MATCH



CURB RAMP LEGEND

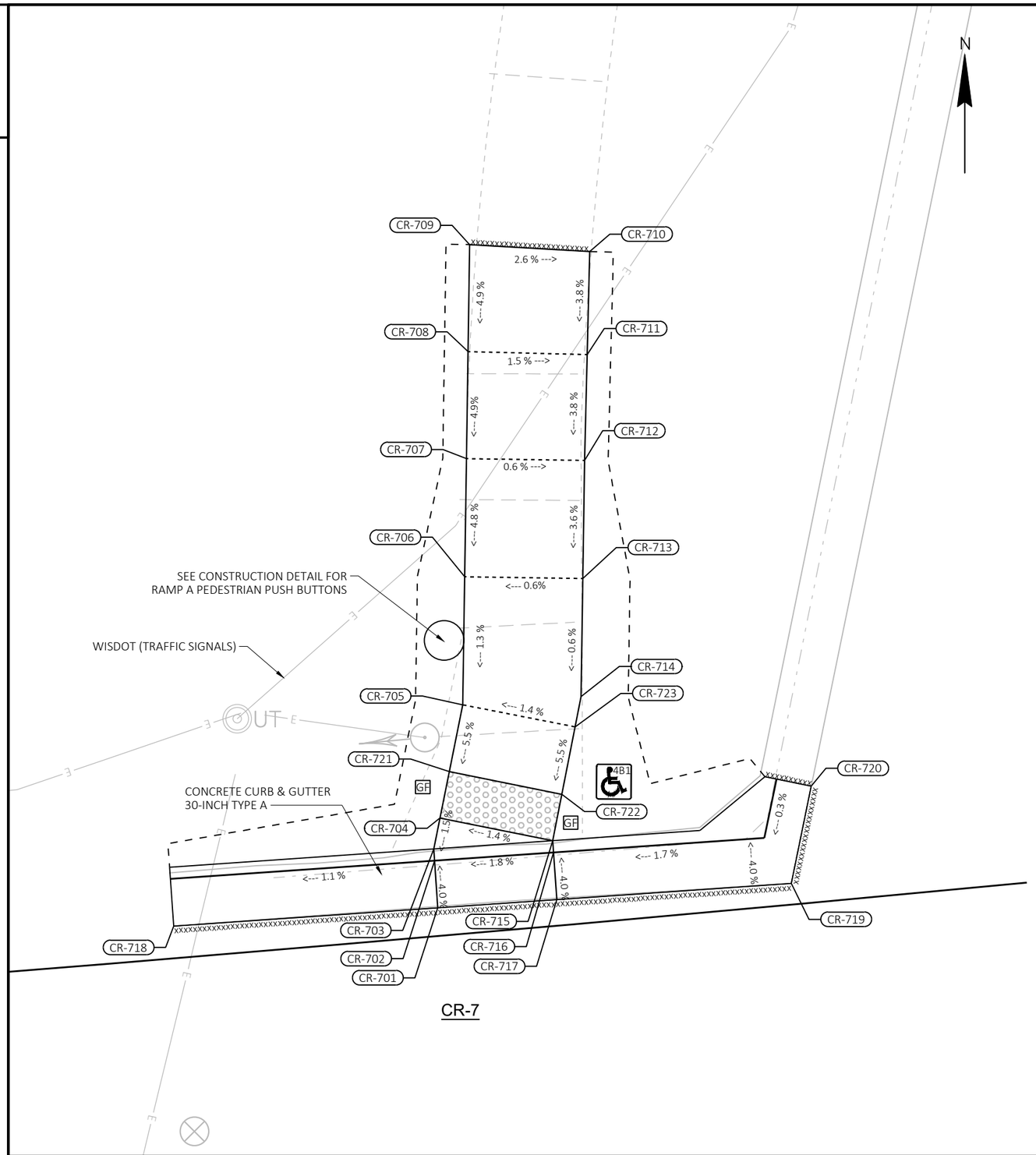
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- – – – – SLOPE INTERCEPTS

NOTES:
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RESTORE DISTURBED AREAS WITH SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A.

STATION & OFFSET TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-601	109+77.8 W	66.9' LT	588023.04	865982.97	MATCH
CR-602	109+80.1 W	66.4' LT	588024.78	865983.96	825.95
CR-603	109+81.2 W	66.2' LT	588025.65	865984.46	825.96
CR-604	109+86.4 W	64.9' LT	588029.56	865987.09	826.16
CR-605	109+86.3 W	67.3' LT	588030.15	865984.66	826.20
CR-606	109+92.0 W	67.6' LT	588035.01	865985.83	826.27
CR-607	109+92.2 W	65.1' LT	588034.42	865988.26	826.23
CR-608	109+97.8 W	65.3' LT	588039.21	865989.42	826.20
CR-609	109+98.9 W	65.6' LT	588040.21	865989.35	826.19
CR-610	110+01.1 W	66.3' LT	588042.20	865989.21	MATCH
CR-611	110+03.1 W	61.3' LT	588042.56	865994.44	MATCH
CR-612	110+00.9 W	60.7' LT	588040.57	865994.58	826.24
CR-613	109+99.8 W	60.3' LT	588039.57	865994.65	826.25
CR-614	109+98.0 W	60.3' LT	588038.03	865994.28	826.27
CR-615	109+92.4 W	60.1' LT	588033.25	865993.12	826.30
CR-616	109+85.7 W	59.8' LT	588027.52	865991.74	826.24
CR-617	109+79.7 W	61.4' LT	588022.96	865988.68	826.03
CR-618	109+78.6 W	61.7' LT	588022.14	865988.10	826.02
CR-619	109+76.5 W	62.3' LT	588020.51	865986.95	MATCH
CR-620	109+78.9 W	72.5' LT	588025.58	865977.89	MATCH
CR-621	110+00.1 W	68.8' LT	588042.01	865986.49	MATCH
CR-622	110+04.1 W	58.6' LT	588042.76	865997.25	MATCH
CR-623	109+74.4 W	57.5' LT	588017.34	865990.97	MATCH
CR-624	109+84.8 W	60.1' LT	588026.77	865991.24	826.23



CR-7

CURB RAMP LEGEND

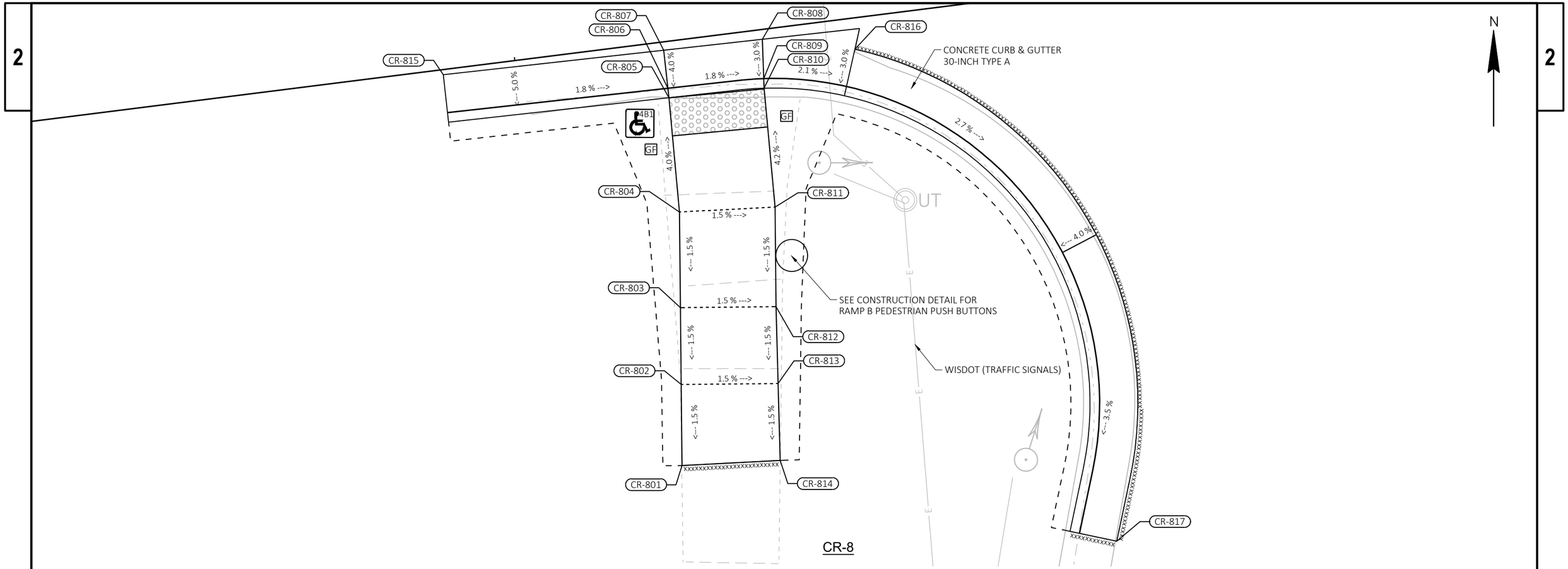
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L	LANDING
X	CURB RAMP, TYPE X
	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA/CURB RAMP DETECTABLE WARNING FIELD RADIAL NATURAL PATINA
XXXX	SAWING CONCRETE
//////	SAWING ASPHALT
- - - -	SLOPE INTERCEPTS

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RESTORE DISTURBED AREAS WITH SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A.

STATION & OFFSET TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-701	110+36.3 W	65.7' LT	588072.53	865996.81	MATCH
CR-702	110+38.2 W	66.2' LT	588074.53	865996.67	826.04
CR-703	110+38.7 W	66.4' LT	588075.03	865996.64	826.05
CR-704	110+40.1 W	66.4' LT	588076.34	865996.90	826.07
CR-705	110+45.0 W	66.4' LT	588081.13	865997.87	826.36
CR-706	110+50.3 W	67.4' LT	588086.55	865997.95	826.43
CR-707	110+55.2 W	68.3' LT	588091.55	865998.02	826.67
CR-708	110+59.6 W	69.2' LT	588096.08	865998.09	826.89
CR-709	110+64.1 W	70.0' LT	588100.61	865998.16	MATCH
CR-710	110+64.8 W	65.0' LT	588100.32	866003.24	MATCH
CR-711	110+60.5 W	64.2' LT	588095.95	866003.13	826.81
CR-712	110+56.1 W	63.4' LT	588091.47	866003.02	826.64
CR-713	110+51.2 W	62.5' LT	588086.47	866002.94	826.46
CR-714	110+46.3 W	61.5' LT	588081.47	866002.87	826.43
CR-715	110+40.1 W	61.5' LT	588075.38	866001.67	826.14
CR-716	110+39.6 W	61.4' LT	588074.88	866001.71	826.13
CR-717	110+37.7 W	60.8' LT	588072.88	866001.85	MATCH
CR-718	110+33.3 W	76.5' LT	588071.76	865985.63	MATCH
CR-719	110+40.3 W	51.2' LT	588073.57	866011.77	MATCH
CR-720	110+44.5 W	51.2' LT	588077.68	866012.62	MATCH
CR-721	110+42.1 W	66.4' LT	588078.30	865997.30	826.19
CR-722	110+42.1 W	61.5' LT	588077.34	866002.06	826.26
CR-723	110+45.0 W	61.5' LT	588080.19	866002.62	826.42



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-801	113+80.1 W	74.0' LT	588410.94	866057.81	MATCH
CR-802	113+84.2 W	74.8' LT	588415.18	866057.77	829.66
CR-803	113+88.2 W	75.7' LT	588419.20	866057.73	829.72
CR-804	113+93.0 W	76.7' LT	588424.20	866057.68	829.79
CR-805	113+98.8 W	78.5' LT	588430.18	866057.13	829.55
CR-806	113+99.3 W	78.6' LT	588430.67	866057.07	829.54
CR-807	114+01.2 W	79.3' LT	588432.66	866056.85	MATCH
CR-808	114+02.8 W	74.3' LT	588433.23	866062.02	MATCH
CR-809	114+00.8 W	73.8' LT	588431.18	866062.09	829.45

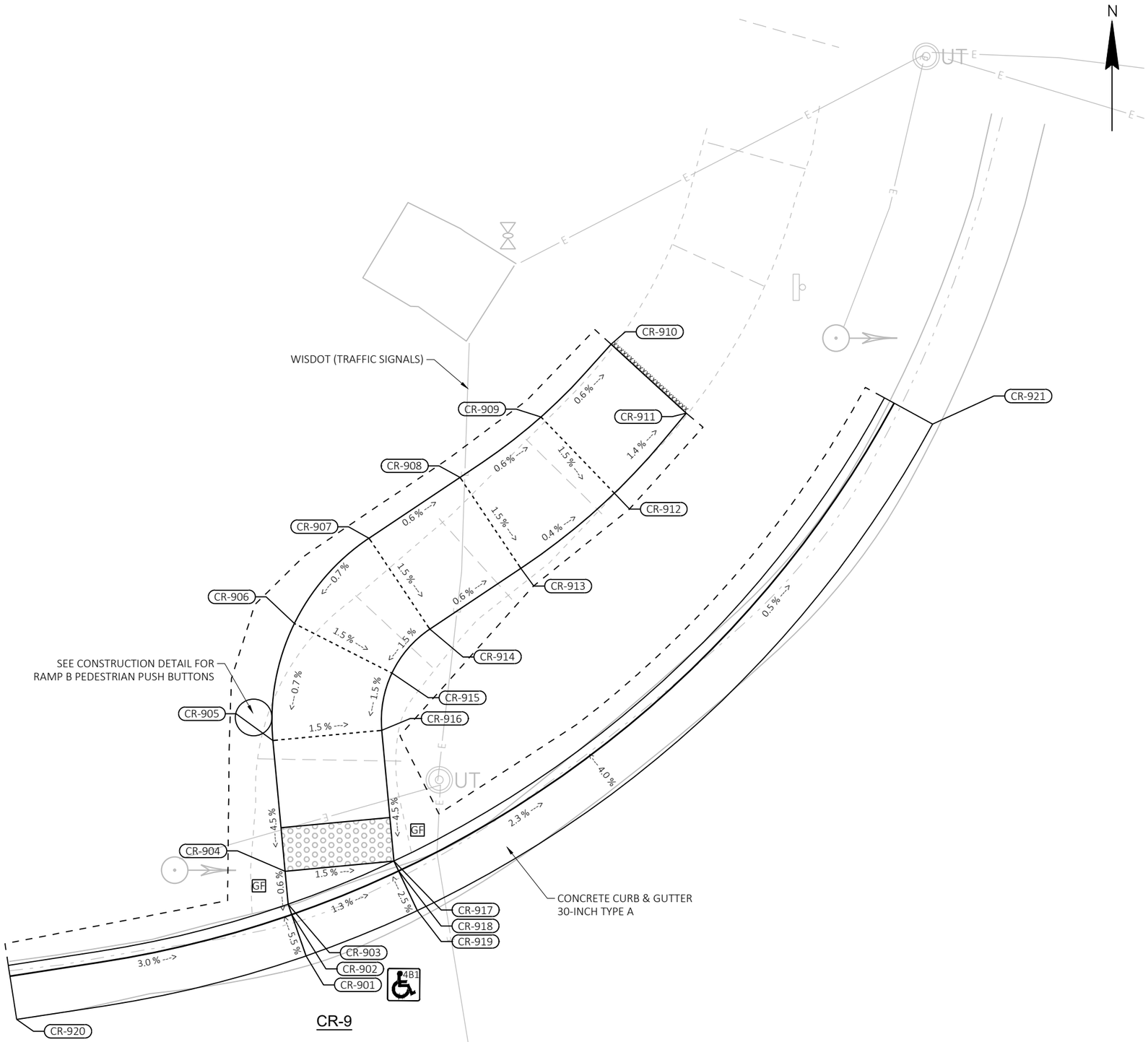
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-810	114+00.3 W	73.7' LT	588430.68	866062.10	829.46
CR-811	113+94.3 W	71.9' LT	588424.46	866062.68	829.72
CR-812	113+89.2 W	70.8' LT	588419.25	866062.73	829.65
CR-813	113+85.3 W	69.9' LT	588415.23	866062.84	829.59
CR-814	113+81.4 W	69.0' LT	588411.22	866062.94	MATCH
CR-815	113+97.6 W	90.3' LT	588431.38	866045.33	MATCH
CR-816	114+03.2 W	69.5' LT	588432.72	866066.86	MATCH
CR-817	113+80.8 W	50.9' LT	588406.99	866080.55	MATCH

CURB RAMP LEGEND

- GF — GRASS FLARE, 6:1 NON-TRAVERSABLE
- CF — CONCRETE FLARE, 10:1 TRAVERSABLE
- L — LANDING
- X — CURB RAMP, TYPE X
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA/CURB RAMP DETECTABLE WARNING FIELD RADIAL NATURAL PATINA
- XXXX — SAWING CONCRETE
- ./////// — SAWING ASPHALT
- – – – – SLOPE INTERCEPTS

NOTES:
ALL SIDEWALK SHOWN IS CONCRETE SIDEWALK 4-INCH UNLESS OTHERWISE NOTED.

RESTORE DISTURBED AREAS WITH SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A.



CURB RAMP LEGEND

GF	GRASS FLARE, 6:1 NON-TRAVERSABLE
CF	CONCRETE FLARE, 10:1 TRAVERSABLE
L	LANDING
X	CURB RAMP, TYPE X
	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA/CURB RAMP DETECTABLE WARNING FIELD RADIAL NATURAL PATINA
XXXX	SAWING CONCRETE
//////	SAWING ASPHALT
- - - -	SLOPE INTERCEPTS

NOTES:
ALL SIDEWALK SHOWN IS CONCRETE SIDEWALK 4-INCH UNLESS OTHERWISE NOTED.

RESTORE DISTURBED AREAS WITH SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A.

STATION & OFFSET TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-901	114+35.8 W	89.1' LT	588468.60	866054.14	MATCH
CR-902	114+37.6 W	90.2' LT	588470.49	866053.49	829.45
CR-903	114+38.0 W	90.4' LT	588470.96	866053.32	829.46
CR-904	114+39.4 W	90.9' LT	588472.47	866053.18	829.47
CR-905	114+45.2 W	92.6' LT	588478.45	866052.63	829.74
CR-906	114+50.6 W	92.7' LT	588483.79	866053.61	829.78
CR-907	114+55.1 W	90.2' LT	588487.69	866057.02	829.82
CR-908	114+58.7 W	86.6' LT	588490.47	866061.18	829.79
CR-909	114+62.1 W	83.6' LT	588493.22	866064.88	829.76
CR-910	114+66.0 W	81.1' LT	588496.54	866068.08	MATCH
CR-911	114+63.6 W	77.1' LT	588493.40	866071.52	MATCH
CR-912	114+59.4 W	79.6' LT	588489.74	866068.24	829.68
CR-913	114+55.2 W	83.1' LT	588486.31	866063.96	829.71
CR-914	114+51.6 W	86.6' LT	588483.53	866059.80	829.74
CR-915	114+49.3 W	87.9' LT	588481.52	866058.07	829.70
CR-916	114+46.6 W	87.8' LT	588478.91	866057.60	829.66
CR-917	114+40.9 W	86.1' LT	588472.94	866058.16	829.39
CR-918	114+40.5 W	85.8' LT	588472.48	866058.37	829.38
CR-919	114+38.9 W	84.6' LT	588470.67	866059.23	MATCH
CR-920	114+30.3 W	101.5' LT	588465.70	866040.92	MATCH
CR-921	114+65.4 W	64.0' LT	588492.90	866082.78	MATCH

2

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY CURB RAMP
- TEMPORARY AUDIBLE MESSAGE DEVICES
- * CLOSE SIDEWALK IN ACCORDANCE WITH STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PEDESTRIAN ACCOMODATION" WHERE SIDEWALK ENDS DURING CONSTRUCTION OF CR-5, CR-6, CR-7, CR-8, AND CR-9.

2

N

* SIDEWALK ENDS 500' TO NORTH

CR-9

115+00 W

OLD 26 ROAD

30+00 B

25+00 B

CR-8

20+00 B

135+00 WB

130+00 WB

125+00 WB

IH 94

135+00 EB

130+00 EB

125+00 EB

CLOSE SIDEWALK TO NORTH DURING CONSTRUCTION OF CR-5, CR-6, CR-7, CR-8, AND CR-9

STAGE CONSTRUCTION OF CR-3 AND CR-4 SO ONE REMAINS OPEN AT ALL TIMES.

SIDEWALK CLOSED R9-9 24"X12"

CR-7

15+00 A

25+00 A

CR-4

CR-3

CR-6

110+00 W

CR-5

ROUTE PEDESTRIANS AROUND WORK ZONE.
SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL INFORMATION.

TEMPORARY MARKING STOP LINE PAINT 18-INCH REQ'D.

STOP R1-1 30"X30"

5' MIN.

6' MIN.

5' MIN.

CR-2

CR-1

M4-60R 30"X24"

6' MIN.

M4-60L 30"X24"

TEMPORARY MARKING CROSSWALK PAINT 6-INCH REQ'D.

MARKING REMOVAL LINE 6-INCH REQ'D.

MARKING REMOVAL LINE WIDE REQ'D.

CR-4

CR-3

CR-2

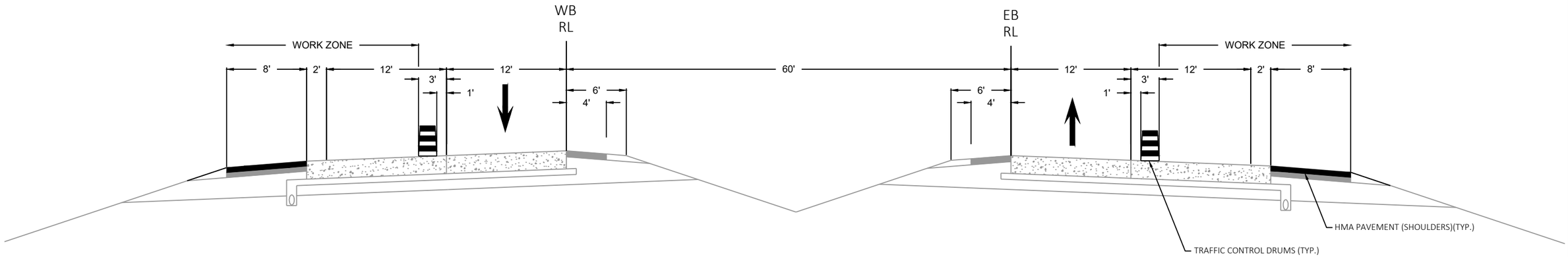
CR-1

105+00 W

NORTH WATERTOWN STREET

PEDESTRIAN ROUTING

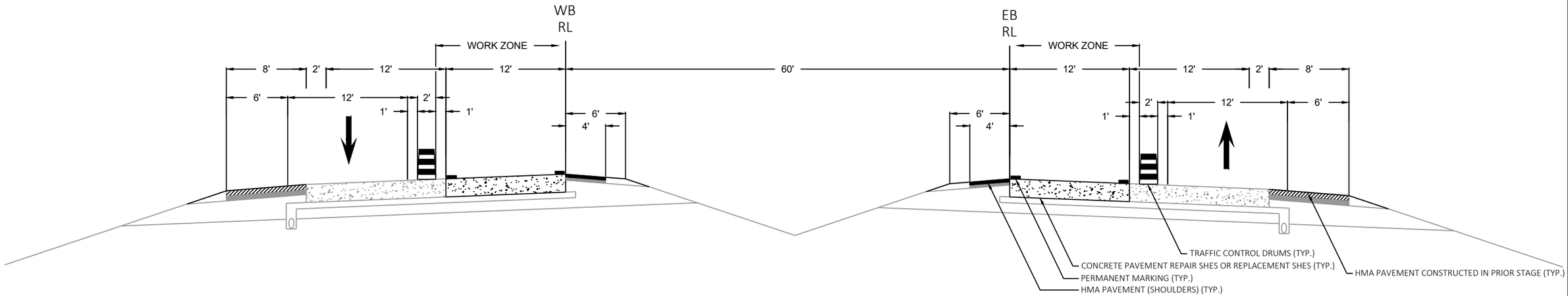
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	PEDESTRIAN ROUTING	SHEET 49	E



* CONSTRUCTION STAGE 1 TYPICAL SECTION

IH 94
EB STA. 106+06 EB- 172+50 EB
WB STA. 109+15 WB - 172+54 WB

* USE STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM", "TRAFFIC CONTROL, LANE CLOSURE, DIGITAL SPEED REDUCTION SYSTEM", AND "TRAFFIC CONTROL, RAMP WITHIN LANE CLOSURE".

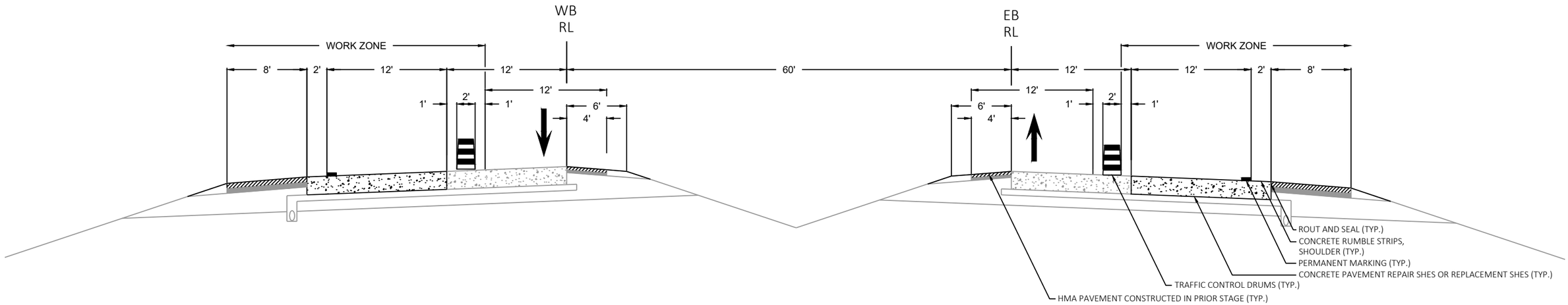


** CONSTRUCTION STAGE 2 TYPICAL SECTION

IH 94
EB STA. 106+06 EB- 172+50 EB
WB STA. 109+15 WB - 172+54 WB

** USE STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM", "TRAFFIC CONTROL, LANE CLOSURE, DIGITAL SPEED REDUCTION SYSTEM", AND "TRAFFIC CONTROL, RAMP WITHIN LANE CLOSURE".

ADJACENT TO AN ACTIVE WORK ZONE, USE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER".

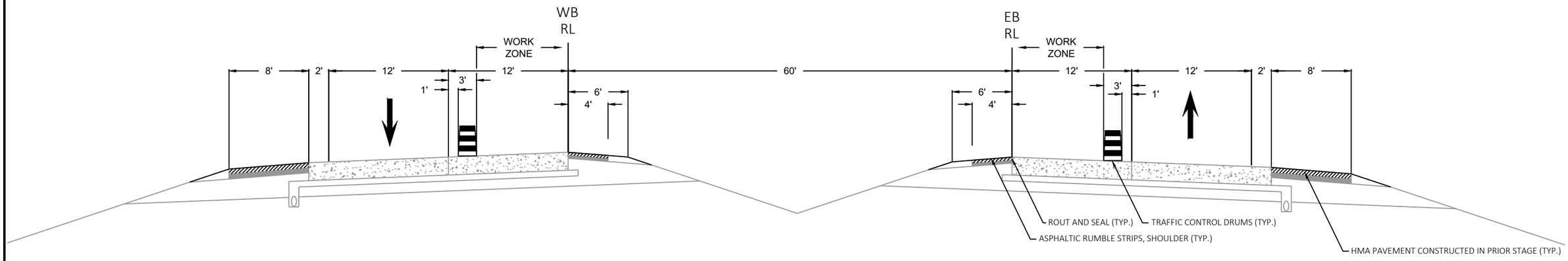


* CONSTRUCTION STAGE 3 TYPICAL SECTION

IH 94
EB STA. 106+06 EB- 172+50 EB
WB STA. 109+15 WB - 172+54 WB

* USE STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM", "TRAFFIC CONTROL, LANE CLOSURE, DIGITAL SPEED REDUCTION SYSTEM", AND "TRAFFIC CONTROL, RAMP WITHIN LANE CLOSURE".

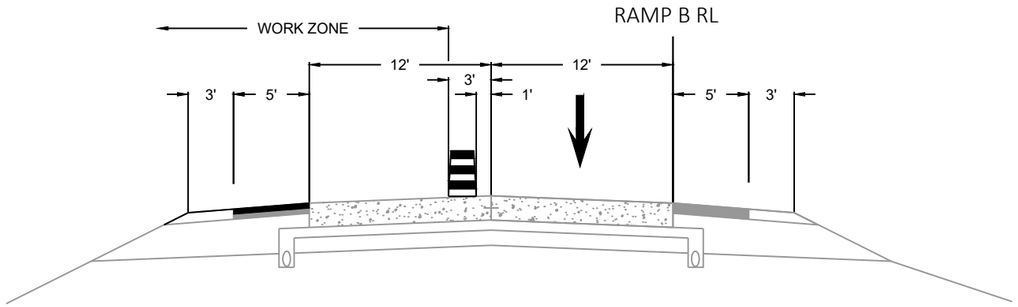
ADJACENT TO AN ACTIVE WORK ZONE, USE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER".



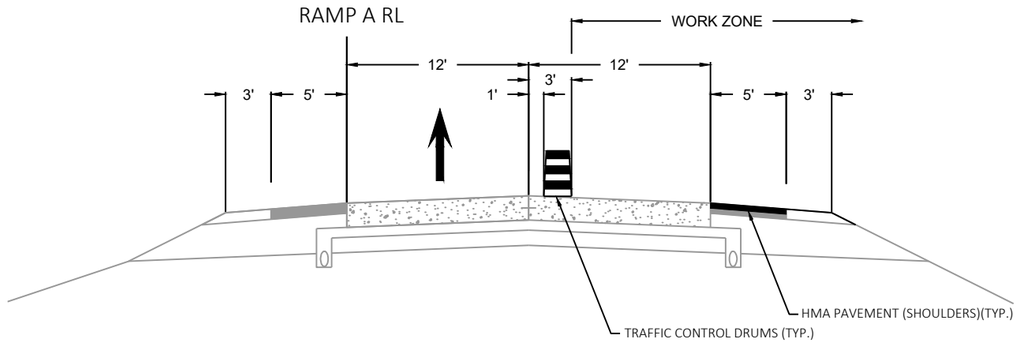
** CONSTRUCTION STAGE 4 TYPICAL SECTION

IH 94
EB STA. 106+06 EB- 172+50 EB
WB STA. 109+15 WB - 172+54 WB

** USE STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM", "TRAFFIC CONTROL, LANE CLOSURE, DIGITAL SPEED REDUCTION SYSTEM", AND "TRAFFIC CONTROL, RAMP WITHIN LANE CLOSURE".



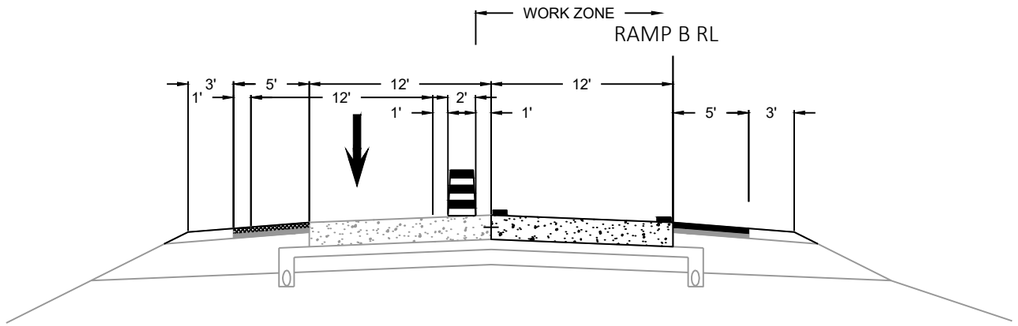
RAMP B CONNECTOR ROADWAY



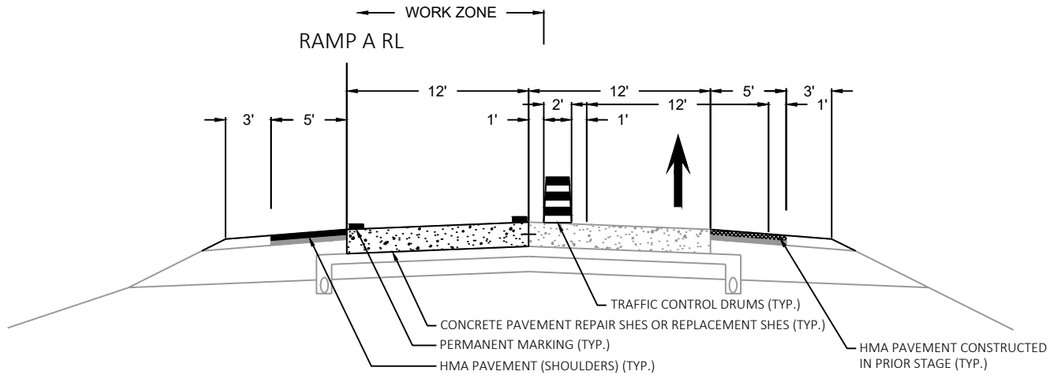
RAMP A CONNECTOR ROADWAY

* RAMP CONNECTOR ROADWAY CONSTRUCTION STAGE 1 TYPICAL SECTION

* USE STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY".



RAMP B CONNECTOR ROADWAY

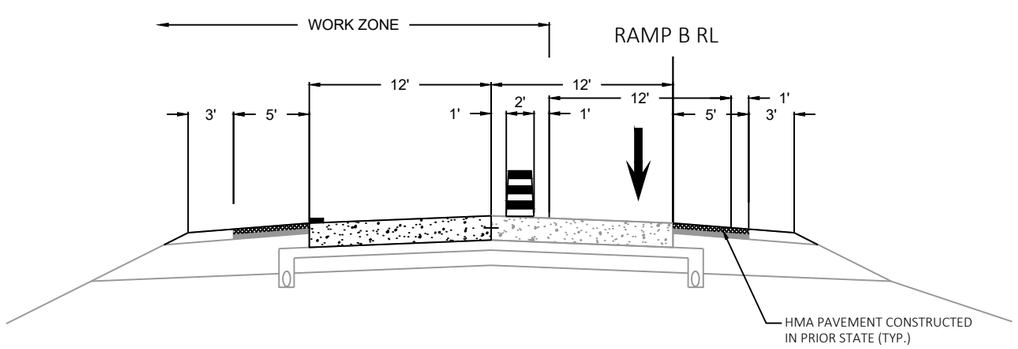


RAMP A CONNECTOR ROADWAY

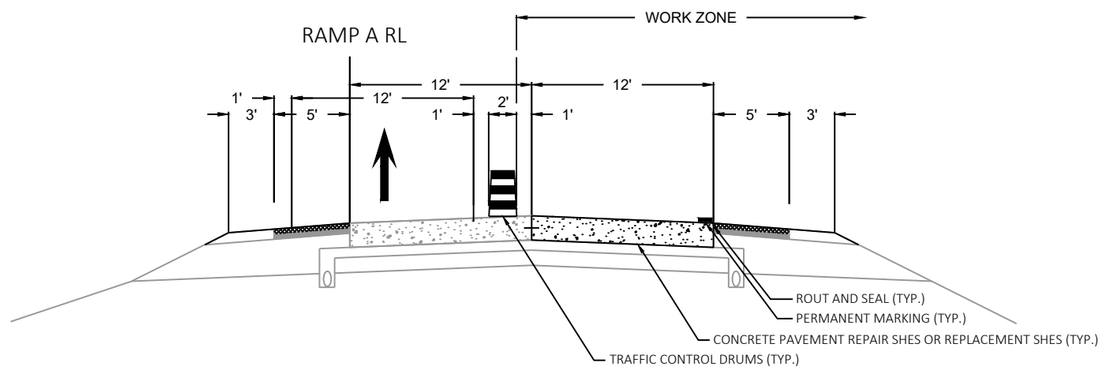
** RAMP CONNECTOR ROADWAY CONSTRUCTION STAGE 2 TYPICAL SECTION

** USE STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY".

ADJACENT TO AN ACTIVE WORK ZONE, USE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PARTIAL LANE SHIFT NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER".



RAMP B CONNECTOR ROADWAY



RAMP A CONNECTOR ROADWAY

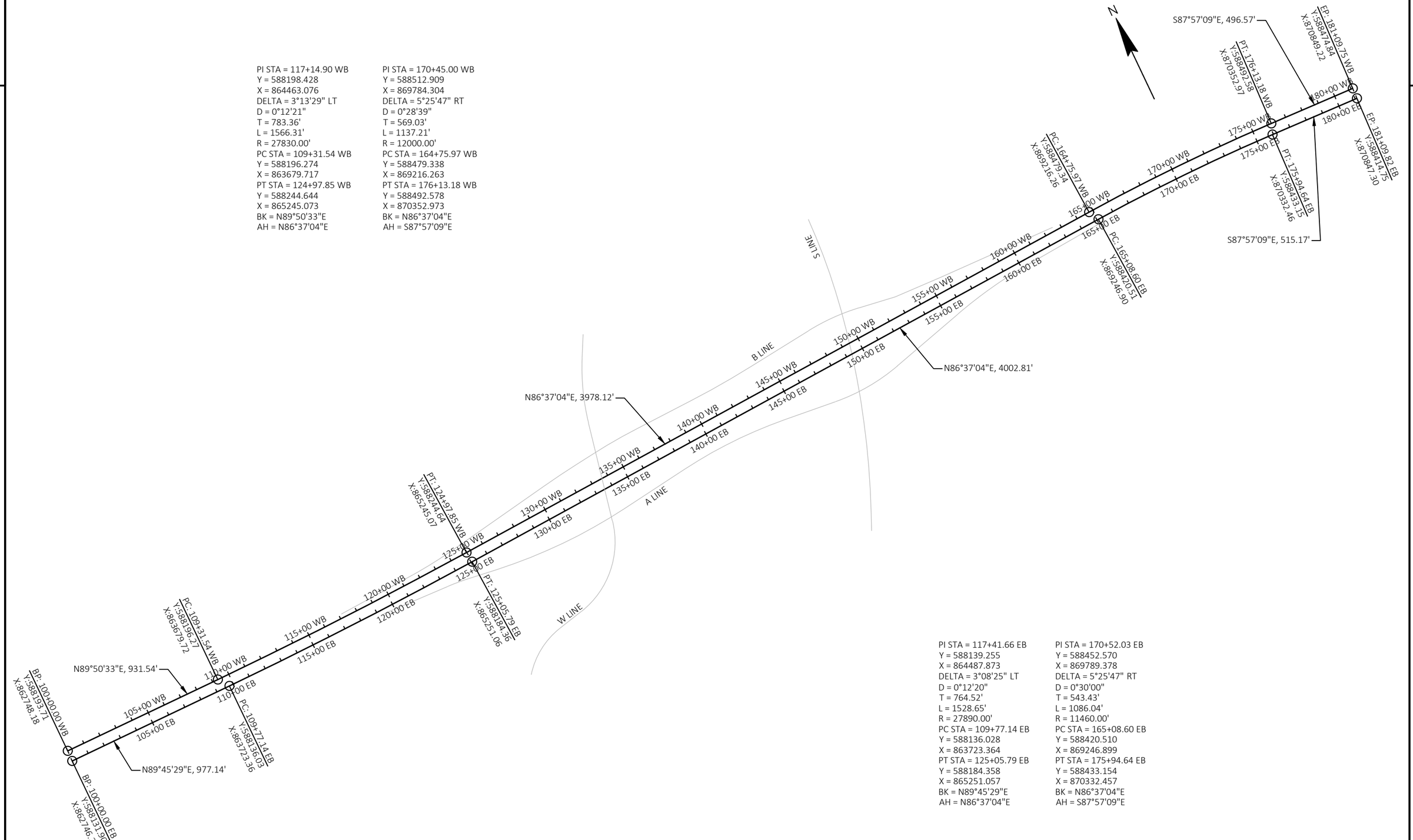
* RAMP CONNECTOR ROADWAY CONSTRUCTION STAGE 3 TYPICAL SECTION

* USE STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY".

ADJACENT TO AN ACTIVE WORK ZONE, USE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PARTIAL LANE SHIFT NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER".

PI STA = 117+14.90 WB
Y = 588198.428
X = 864463.076
DELTA = 3°13'29" LT
D = 0°12'21"
T = 783.36'
L = 1566.31'
R = 27830.00'
PC STA = 109+31.54 WB
Y = 588196.274
X = 863679.717
PT STA = 124+97.85 WB
Y = 588244.644
X = 865245.073
BK = N89°50'33"E
AH = N86°37'04"E

PI STA = 170+45.00 WB
Y = 588512.909
X = 869784.304
DELTA = 5°25'47" RT
D = 0°28'39"
T = 569.03'
L = 1137.21'
R = 12000.00'
PC STA = 164+75.97 WB
Y = 588479.338
X = 869216.263
PT STA = 176+13.18 WB
Y = 588492.578
X = 870352.973
BK = N86°37'04"E
AH = S87°57'09"E

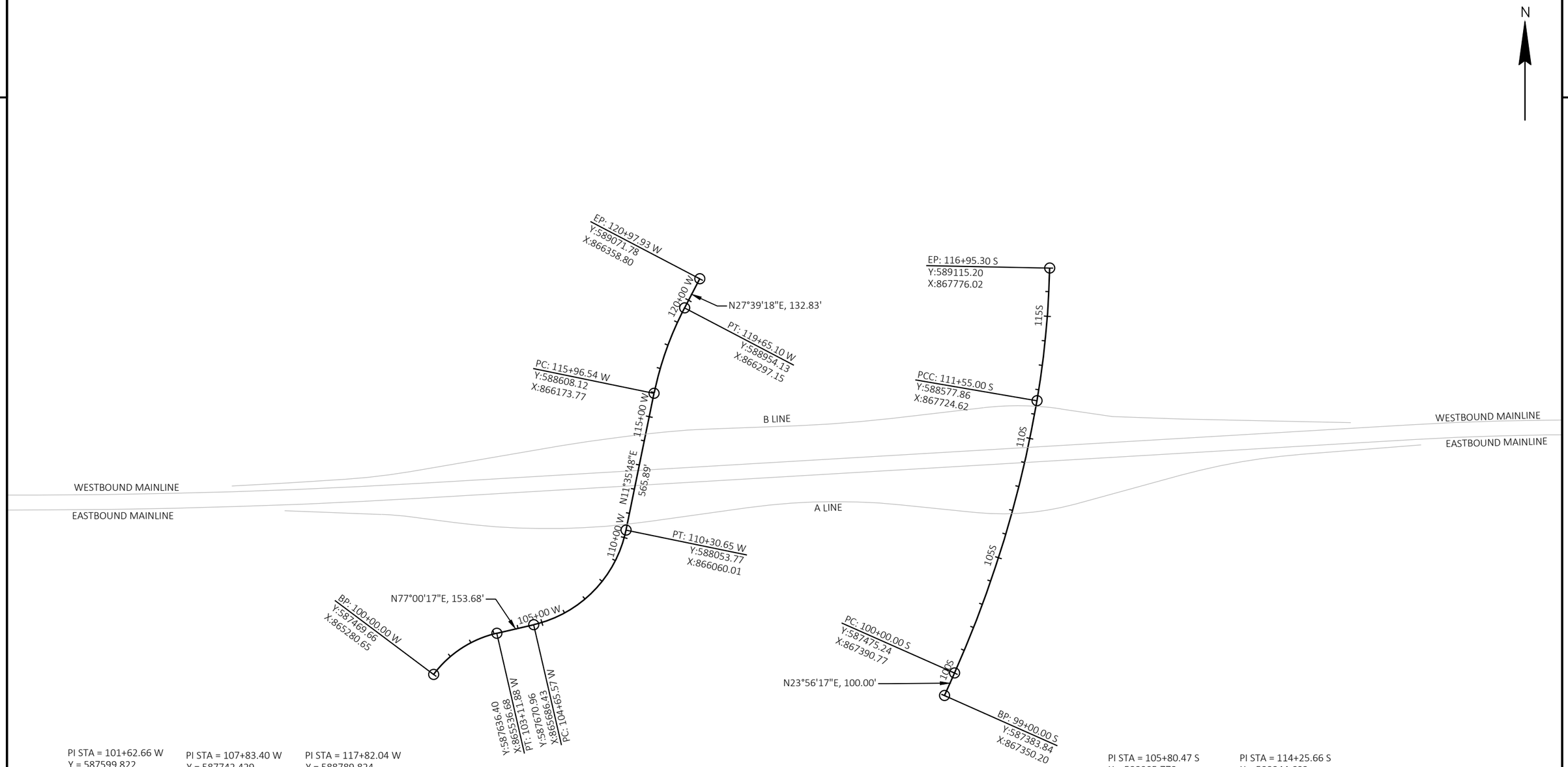


PI STA = 117+41.66 EB
Y = 588139.255
X = 864487.873
DELTA = 3°08'25" LT
D = 0°12'20"
T = 764.52'
L = 1528.65'
R = 27890.00'
PC STA = 109+77.14 EB
Y = 588136.028
X = 863723.364
PT STA = 125+05.79 EB
Y = 588184.358
X = 865251.057
BK = N89°45'29"E
AH = N86°37'04"E

PI STA = 170+52.03 EB
Y = 588452.570
X = 869789.378
DELTA = 5°25'47" RT
D = 0°30'00"
T = 543.43'
L = 1086.04'
R = 11460.00'
PC STA = 165+08.60 EB
Y = 588420.510
X = 869246.899
PT STA = 175+94.64 EB
Y = 588433.154
X = 870332.457
BK = N86°37'04"E
AH = S87°57'09"E

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	ALIGNMENT DETAILS	SHEET 54	E

2



PI STA = 101+62.66 W
Y = 587599.822
X = 865378.191
DELTA = 40°09'23" RT
D = 12°52'32"
T = 162.66'
L = 311.88'
R = 445.00'
PC STA = 100+00.00 W
Y = 587469.661
X = 865280.647
PT STA = 103+11.88 W
Y = 587636.398
X = 865536.681
BK = N36°50'54"E
AH = N77°00'17"E

PI STA = 107+83.40 W
Y = 587742.429
X = 865996.120
DELTA = 65°24'29" LT
D = 11°34'30"
T = 317.83'
L = 565.09'
R = 495.00'
PC STA = 104+65.57 W
Y = 587670.957
X = 865686.426
PT STA = 110+30.65 W
Y = 588053.774
X = 866060.011
BK = N77°00'17"E
AH = N11°35'48"E

PI STA = 117+82.04 W
Y = 588789.824
X = 866211.054
DELTA = 16°03'30" RT
D = 4°21'26"
T = 185.49'
L = 368.56'
R = 1315.00'
PC STA = 115+96.54 W
Y = 588608.116
X = 866173.766
PT STA = 119+65.10 W
Y = 588954.127
X = 866297.151
BK = N11°35'48"E
AH = N27°39'18"E

PI STA = 105+80.47 S
Y = 588005.778
X = 867626.295
DELTA = 14°11'09" LT
D = 1°13'42"
T = 580.47'
L = 1155.00'
R = 4665.00'
PC STA = 100+00.00 S
Y = 587475.239
X = 867390.772
PCC STA = 111+55.00 S
Y = 588577.858
X = 867724.620
BK = N23°56'17"E
AH = N09°45'08"E

PI STA = 114+25.66 S
Y = 588844.603
X = 867770.466
DELTA = 8°34'31" LT
D = 1°35'14"
T = 270.66'
L = 540.30'
R = 3610.00'
PCC STA = 111+55.00 S
Y = 588577.858
X = 867724.620
PT STA = 116+95.30 S
Y = 589115.201
X = 867776.025
BK = N09°45'08"E
AH = N01°10'37"E

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	ALIGNMENT DETAILS	SHEET 55	E

2

PI STA = 12+29.51 B
Y = 588244.395
X = 864692.566
DELTA = 0°56'47" LT
D = 0°12'22"
T = 229.51'
L = 459.00'
R = 27792.00'
PC STA = 10+00.00 B
Y = 588232.740
X = 864463.357
PCC STA = 14+59.00 B
Y = 588259.833
X = 864921.551
BK = N87°05'21"E
AH = N86°08'34"E

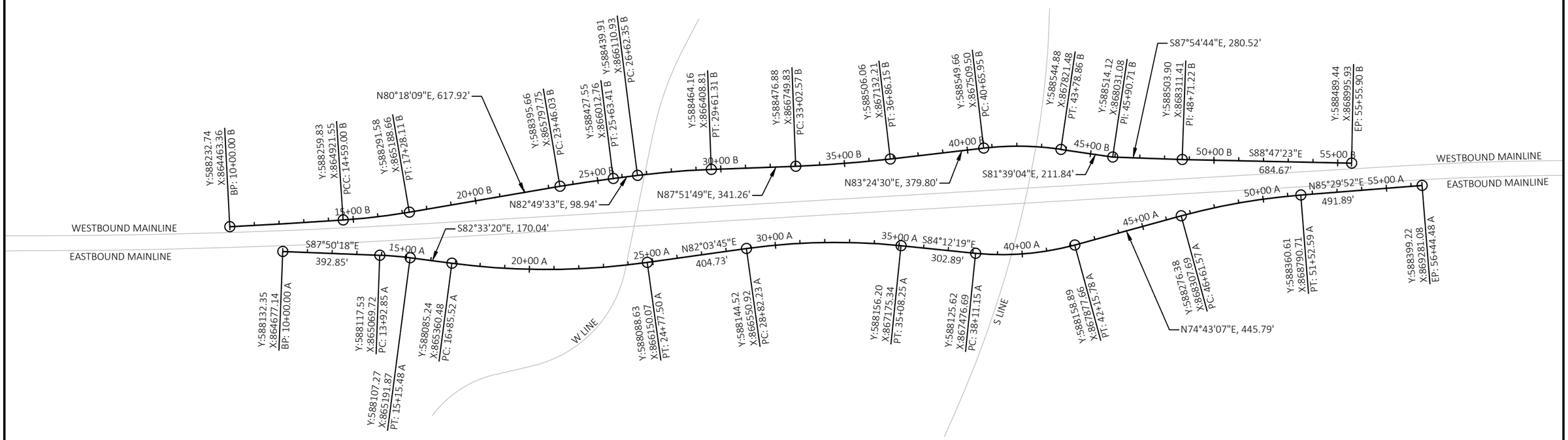
PI STA = 15+93.67 B
Y = 588268.892
X = 865055.917
DELTA = 5°50'26" LT
D = 2°10'13"
T = 134.67'
L = 269.11'
R = 2640.00'
PCC STA = 14+59.00 B
Y = 588259.833
X = 864921.551
PT STA = 17+28.11 B
Y = 588291.577
X = 865188.663
BK = N86°08'34"E
AH = N80°18'09"E

PI STA = 24+54.73 B
Y = 588413.975
X = 865904.907
DELTA = 2°31'24" RT
D = 1°09'39"
T = 108.71'
L = 217.38'
R = 4936.00'
PC STA = 23+46.03 B
Y = 588395.664
X = 865797.752
PT STA = 25+63.41 B
Y = 588427.552
X = 866012.765
BK = N80°18'09"E
AH = N82°49'33"E

PI STA = 28+11.93 B
Y = 588458.588
X = 866259.336
DELTA = 5°02'17" RT
D = 1°41'07"
T = 149.58'
L = 298.96'
R = 3400.00'
PC STA = 26+62.35 B
Y = 588439.908
X = 866110.931
PT STA = 29+61.31 B
Y = 588464.164
X = 866408.807
BK = N82°49'33"E
AH = N87°51'49"E

PI STA = 34+94.46 B
Y = 588484.037
X = 866941.585
DELTA = 4°27'19" LT
D = 1°09'41"
T = 191.89'
L = 383.59'
R = 4933.00'
PC STA = 33+02.57 B
Y = 588476.884
X = 866749.827
PT STA = 36+86.15 B
Y = 588506.065
X = 867132.208
BK = N87°51'49"E
AH = N83°24'30"E

PI STA = 42+23.30 B
Y = 588567.724
X = 867665.803
DELTA = 14°56'25" RT
D = 4°46'29"
T = 157.35'
L = 312.91'
R = 1200.00'
PC STA = 40+65.95 B
Y = 588549.662
X = 867509.496
PT STA = 43+78.86 B
Y = 588544.878
X = 867821.483
BK = N83°24'30"E
AH = S81°39'04"E



PI STA = 14+54.21 A
Y = 588115.219
X = 865131.030
DELTA = 5°16'58" RT
D = 4°18'29"
T = 61.36'
L = 122.63'
R = 1330.00'
PC STA = 13+92.85 A
Y = 588117.533
X = 865069.716
PT STA = 15+15.48 A
Y = 588107.269
X = 865191.871
BK = S87°50'18"E
AH = S82°33'20"E

PI STA = 20+83.91 A
Y = 588033.620
X = 865755.504
DELTA = 15°22'55" LT
D = 1°56'32"
T = 398.38'
L = 791.98'
R = 2950.00'
PC STA = 16+85.52 A
Y = 588085.237
X = 865360.478
PT STA = 24+77.50 A
Y = 588088.633
X = 866150.071
BK = S82°33'20"E
AH = N82°03'45"E

PI STA = 31+96.75 A
Y = 588187.955
X = 866862.428
DELTA = 13°43'56" RT
D = 2°11'37"
T = 314.52'
L = 626.03'
R = 2612.00'
PC STA = 28+82.23 A
Y = 588144.523
X = 866550.921
PT STA = 35+08.25 A
Y = 588156.199
X = 867175.341
BK = N82°03'45"E
AH = S84°12'19"E

PI STA = 40+15.78 A
Y = 588104.956
X = 867680.270
DELTA = 21°04'34" LT
D = 5°12'31"
T = 204.63'
L = 404.63'
R = 1100.00'
PC STA = 38+11.15 A
Y = 588125.617
X = 867476.687
PT STA = 42+15.78 A
Y = 588158.888
X = 867877.664
BK = S84°12'19"E
AH = N74°43'07"E

PI STA = 49+07.81 A
Y = 588341.278
X = 868545.225
DELTA = 10°46'45" RT
D = 2°11'43"
T = 246.24'
L = 491.03'
R = 2610.00'
PC STA = 46+61.57 A
Y = 588276.379
X = 868307.691
PT STA = 51+52.59 A
Y = 588360.607
X = 868790.705
BK = N74°43'07"E
AH = N85°29'52"E

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	ALIGNMENT DETAILS	SHEET 56	E

Estimate Of Quantities

1067-04-61

Line	Item	Item Description	Unit	Total	Qty
0002	204.0110	Removing Asphaltic Surface	SY	7,204.000	7,204.000
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	208.000	208.000
0006	204.0120	Removing Asphaltic Surface Milling	SY	34,100.000	34,100.000
0008	204.0150	Removing Curb & Gutter	LF	653.000	653.000
0010	204.0155	Removing Concrete Sidewalk	SY	150.000	150.000
0012	204.0165	Removing Guardrail	LF	7,100.000	7,100.000
0014	204.0190	Removing Surface Drains	EACH	9.000	9.000
0016	204.9060.S	Removing (item description) 01. Pedestrian Push Button	EACH	3.000	3.000
0018	205.0100	Excavation Common	CY	97.000	97.000
0020	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 1067-04-61	EACH	1.000	1.000
0022	213.0100	Finishing Roadway (project) 01. 1067-04-61	EACH	1.000	1.000
0024	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,404.000	1,404.000
0026	305.0500	Shaping Shoulders	STA	398.000	398.000
0028	311.0110	Breaker Run	TON	134.000	134.000
0030	312.0110	Select Crushed Material	TON	30.000	30.000
0032	415.6000.S	Rout and Seal	LF	39,700.000	39,700.000
0034	416.0610	Drilled Tie Bars	EACH	1,275.000	1,275.000
0036	416.0620	Drilled Dowel Bars	EACH	2,710.000	2,710.000
0038	416.0623.S	Pavement Dowel Bars Retrofit Warranted	EACH	856.000	856.000
0040	416.1715	Concrete Pavement Repair SHES	SY	1,300.000	1,300.000
0042	416.1725	Concrete Pavement Replacement SHES	SY	3,530.000	3,530.000
0044	420.1000	Continuous Diamond Grinding Concrete Pavement	SY	47,900.000	47,900.000
0046	455.0605	Tack Coat	GAL	2,970.000	2,970.000
0048	460.2000	Incentive Density HMA Pavement	DOL	3,290.000	3,290.000
0050	460.6224	HMA Pavement 4 MT 58-28 S	TON	5,130.000	5,130.000
0052	465.0105	Asphaltic Surface	TON	799.000	799.000
0054	465.0110	Asphaltic Surface Patching	TON	209.000	209.000
0056	465.0305	Asphaltic Surface Safety Islands	TON	3.000	3.000
0058	465.0510	Asphaltic Rumble Strips, Shoulder Divided Roadway	LF	12,500.000	12,500.000
0060	509.0301	Preparation Decks Type 1	SY	112.000	112.000
0062	509.0302	Preparation Decks Type 2	SY	45.000	45.000
0064	509.0310.S	Sawing Pavement Deck Preparation Areas	LF	1,120.000	1,120.000
0066	509.1500	Concrete Surface Repair	SF	76.000	76.000
0068	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	47.000	47.000
0070	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	161.000	161.000
0072	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	57.000	57.000
0074	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	207.000	207.000
0076	601.0588	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	LF	323.000	323.000
0078	601.0590	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF	185.000	185.000
0080	601.0600	Concrete Curb Pedestrian	LF	37.000	37.000
0082	602.0405	Concrete Sidewalk 4-Inch	SF	1,200.000	1,200.000
0084	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	100.000	100.000
0086	602.3015	Concrete Surface Drains HES	CY	13.500	13.500
0088	602.3210	Concrete Rumble Strips, Shoulder Divided Roadway	LF	7,700.000	7,700.000
0090	604.9010.S	Slope Paving Repair Crushed Aggregate	CY	65.000	65.000
0092	604.9015.S	Reseal Crushed Aggregate Slope Paving	SY	1,833.000	1,833.000
0094	606.0200	Riprap Medium	CY	239.000	239.000
0096	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000
0098	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	85.000	85.000

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Line	Item	Item Description	Unit	Total	Qty
0100	614.2300	MGS Guardrail 3	LF	6,618.400	6,618.400
0102	614.2310	MGS Guardrail 3 HS	LF	350.000	350.000
0104	614.2320	MGS Guardrail 3 QS	LF	150.000	150.000
0106	614.2330	MGS Guardrail 3 K	LF	37.500	37.500
0108	614.2500	MGS Thrie Beam Transition	LF	646.600	646.600
0110	614.2610	MGS Guardrail Terminal EAT	EACH	25.000	25.000
0112	614.2620	MGS Guardrail Terminal Type 2	EACH	11.000	11.000
0114	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1067-04-61	EACH	1.000	1.000
0116	619.1000	Mobilization	EACH	1.000	1.000
0118	624.0100	Water	MGAL	28.100	28.100
0120	625.0500	Salvaged Topsoil	SY	992.000	992.000
0122	628.1504	Silt Fence	LF	750.000	750.000
0124	628.1520	Silt Fence Maintenance	LF	1,500.000	1,500.000
0126	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0128	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0130	628.2006	Erosion Mat Urban Class I Type A	SY	992.000	992.000
0132	628.7005	Inlet Protection Type A	EACH	5.000	5.000
0134	628.7555	Culvert Pipe Checks	EACH	3.000	3.000
0136	628.7570	Rock Bags	EACH	90.000	90.000
0138	629.0210	Fertilizer Type B	CWT	3.100	3.100
0140	630.0130	Seeding Mixture No. 30	LB	70.000	70.000
0142	630.0300	Seeding Borrow Pit	LB	5.000	5.000
0144	630.0500	Seed Water	MGAL	22.000	22.000
0146	634.0812	Posts Tubular Steel 2x2-Inch X 12-FT	EACH	2.000	2.000
0148	638.2102	Moving Signs Type II	EACH	6.000	6.000
0150	638.3000	Removing Small Sign Supports	EACH	2.000	2.000
0152	642.5201	Field Office Type C	EACH	1.000	1.000
0154	643.0300	Traffic Control Drums	DAY	14,607.000	14,607.000
0156	643.0370.S	Digital Speed Reduction System (DSRS)	DAY	86.000	86.000
0158	643.0420	Traffic Control Barricades Type III	DAY	1,299.000	1,299.000
0160	643.0705	Traffic Control Warning Lights Type A	DAY	2,388.000	2,388.000
0162	643.0715	Traffic Control Warning Lights Type C	DAY	2,099.000	2,099.000
0164	643.0810	Traffic Control Connected Arrow Boards	DAY	137.000	137.000
0166	643.0900	Traffic Control Signs	DAY	7,251.000	7,251.000
0168	643.0910	Traffic Control Covering Signs Type I	EACH	16.000	16.000
0170	643.0920	Traffic Control Covering Signs Type II	EACH	43.000	43.000
0172	643.1050	Traffic Control Signs PCMS	DAY	79.000	79.000
0174	643.1055.S	Truck or Trailer Mounted Attenuator	DAY	48.000	48.000
0176	643.1205.S	Basic Traffic Queue Warning System	DAY	86.000	86.000
0178	643.1220	Traffic Control Connected Work Zone Start and End Location Markers	DAY	137.000	137.000
0180	643.3165	Temporary Marking Line Paint 6-Inch	LF	1,435.000	1,435.000
0182	643.3265	Temporary Marking Line Paint 10-Inch	LF	210.000	210.000
0184	643.3305	Temporary Marking Crosswalk Paint 6-inch	LF	90.000	90.000
0186	643.3805	Temporary Marking Stop Line Paint 18-Inch	LF	26.000	26.000
0188	643.3820	Temporary Marking Stop Line Epoxy 18-Inch	LF	20.000	20.000
0190	643.5000	Traffic Control	EACH	1.000	1.000
0192	644.1440	Temporary Pedestrian Surface Matting	SF	250.000	250.000
0194	644.1601	Temporary Pedestrian Curb Ramp	DAY	14.000	14.000
0196	644.1810	Temporary Pedestrian Barricade	LF	220.000	220.000

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Line	Item	Item Description	Unit	Total	Qty
0198	644.1900.S	Temporary Audible Message Devices	DAY	28.000	28.000
0200	645.0120	Geotextile Type HR	SY	566.000	566.000
0202	645.0140	Geotextile Type SAS	SY	40.000	40.000
0204	646.1020	Marking Line Epoxy 4-Inch	LF	400.000	400.000
0206	646.2025	Marking Line Grooved Black Epoxy 6-Inch	LF	4,270.000	4,270.000
0208	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	48,230.000	48,230.000
0210	646.2050	Marking Line Grooved Permanent Tape 6-Inch	LF	3,330.000	3,330.000
0212	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	6,540.000	6,540.000
0214	646.4050	Marking Line Grooved Permanent Tape 10-Inch	LF	2,200.000	2,200.000
0216	646.5020	Marking Arrow Epoxy	EACH	45.000	45.000
0218	646.5120	Marking Word Epoxy	EACH	44.000	44.000
0220	646.5220	Marking Symbol Epoxy	EACH	9.000	9.000
0222	646.6120	Marking Stop Line Epoxy 18-Inch	LF	680.000	680.000
0224	646.7220	Marking Chevron Epoxy 24-Inch	LF	490.000	490.000
0226	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	320.000	320.000
0228	646.8320	Marking Parking Stall Epoxy	LF	1,870.000	1,870.000
0230	646.9000	Marking Removal Line 4-Inch	LF	1,030.000	1,030.000
0232	646.9002	Marking Removal Line 6-Inch	LF	300.000	300.000
0234	646.9200	Marking Removal Line Wide	LF	82.000	82.000
0236	646.9400	Marking Removal Plowable Raised Pavement Markers	EACH	177.000	177.000
0238	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	427.000	427.000
0240	650.8000	Construction Staking Resurfacing Reference	LF	12,900.000	12,900.000
0242	650.8501	Construction Staking Electrical Installations (project) 01. 1067-04-61	EACH	1.000	1.000
0244	650.9000	Construction Staking Curb Ramps	EACH	9.000	9.000
0246	650.9500	Construction Staking Sidewalk (project) 01. 1067-04-61	EACH	1.000	1.000
0248	650.9911	Construction Staking Supplemental Control (project) 01. 1067-04-61	EACH	1.000	1.000
0250	650.9920	Construction Staking Slope Stakes	LF	11,850.000	11,850.000
0252	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	716.000	716.000
0254	652.0700.S	Install Conduit into Existing Item	EACH	6.000	6.000
0256	652.0800	Conduit Loop Detector	LF	54.000	54.000
0258	653.0115	Pull Boxes Steel 12x36-Inch	EACH	1.000	1.000
0260	653.0140	Pull Boxes Steel 24x42-Inch	EACH	6.000	6.000
0262	653.0208	Junction Boxes 8x8x8-Inch	EACH	1.000	1.000
0264	653.0900	Adjusting Pull Boxes	EACH	7.000	7.000
0266	653.0905	Removing Pull Boxes	EACH	3.000	3.000
0268	654.0101	Concrete Bases Type 1	EACH	3.000	3.000
0270	655.0615	Electrical Wire Lighting 10 AWG	LF	715.000	715.000
0272	655.0800	Loop Detector Wire	LF	270.000	270.000
0274	657.0100	Pedestal Bases	EACH	3.000	3.000
0276	657.0405	Traffic Signal Standards Aluminum 3.5-FT	EACH	3.000	3.000
0278	658.0500	Pedestrian Push Buttons	EACH	3.000	3.000
0280	674.0300	Remove Cable	LF	1,470.000	1,470.000
0282	674.0400	Reinstall Cable	LF	1,500.000	1,500.000
0284	690.0150	Sawing Asphalt	LF	1,481.000	1,481.000
0286	690.0250	Sawing Concrete	LF	9,713.000	9,713.000
0288	740.0440	Incentive IRI Ride	DOL	9,207.000	9,207.000
0290	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,400.000	2,400.000
0292	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,160.000	2,160.000
0294	SPV.0035	Special 01. Rapid Set Deck Repair	CY	15.000	15.000

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Line	Item	Item Description	Unit	Total	Qty
0296	SPV.0085	Special 01. Foam-Jacking	LB	50.000	50.000
0298	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	1,750.000	1,750.000
0300	SPV.0180	Special 02. Methacrylate Flood Seal	SY	5,210.000	5,210.000

EXCAVATION COMMON

	LOCATION	STATION	-	STATION	205.0100 EXCAVATION COMMON CY	311.0110 BREAKER RUN TON
CATEGORY 0010						
STAGE 2*	EB IH 94	106+06	-	172+50 EB	5	9
	WB IH 94	109+15	-	172+54 WB	1	2
	STAGE 2 SUBTOTAL				6	11
STAGE 3*	EB IH 94	106+06	-	172+50 EB	21	38
	WB IH 94	109+15	-	172+54 WB	8	14
	STAGE 3 SUBTOTAL				29	52
N. WATERTOWN ST*	N. WATERTOWN ST	109+05	-	115+65 W	8	14
	N. WATERTOWN ST SUBTOTAL				8	14
STH 26*	STH 26	99+75	-	116+30 S	13	23
	STH 26 SUBTOTAL				13	23
RAMP A*	EXIT RAMP	10+00	-	24+00 A	2	4
	CONNECTOR	24+00	-	39+00 A	2	4
	ENTRANCE RAMP	39+00	-	56+44.48 A	7	13
	RAMP A SUBTOTAL				11	21
RAMP B*	ENTRANCE RAMP	10+00	-	27+00 B	5	9
	CONNECTOR	27+00	-	42+00 B	1	2
	EXIT RAMP	39+00	-	55+55.90 B	1	2
	RAMP B SUBTOTAL				7	13
WEEP LOCATIONS	VARIES (SEE PLAN SHEET FOR LOCATIONS)				23	---
	WEEP SUBTOTALS				23	0
	TOTALS				97	134

* FOR EBS AT PAVEMENT REPAIR/REPLACEMENT AREAS

REMOVING GUARDRAIL

	LOCATION	STATION	-	STATION	OFFSET	204.0165 LF
CATEGORY 0010						
	EB IH 94	107+32	-	109+78 EB	RT	250
	EB IH 94	108+96	-	109+79 EB	LT	80
	EB IH 94	110+77	-	118+58 EB	RT	780
	EB IH 94	117+21	-	118+79 EB	LT	160
	EB IH 94	129+82	-	132+28 EB	RT	250
	EB IH 94	131+59	-	132+43 EB	LT	80
	EB IH 94	142+87	-	147+57 EB	RT	470
	EB IH 94	146+90	-	147+73 EB	LT	80
	EB IH 94	161+81	-	169+74 EB	RT	790
	WB IH 94	105+85	-	109+80 WB	LT	400
	WB IH 94	110+78	-	113+62 WB	RT	280
	WB IH 94	110+80	-	113+63 WB	LT	280
	WB IH 94	120+40	-	123+03 WB	RT	260
	WB IH 94	120+40	-	122+99 WB	LT	250
	WB IH 94	134+47	-	137+28 WB	RT	280
	WB IH 94	134+57	-	138+27 WB	LT	370
	WB IH 94	150+25	-	153+07 WB	RT	280
	WB IH 94	150+35	-	152+80 WB	LT	250
	WB IH 94	167+34	-	172+11 WB	LT	480
	RAMP A	19+11	-	20+52 A	LT	140
	RAMP A	19+57	-	20+46 A	RT	90
	RAMP A	34+48	-	35+88 A	RT	140
	RAMP A	34+48	-	35+88 A	LT	140
	RAMP B	45+46	-	46+66 B	LT	120
	RAMP B	45+47	-	46+64 B	RT	120
	STH 26	102+95	-	104+32 S	RT	140
	STH 26	113+44	-	114+86 S	LT	140
	TOTALS					7,100

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REMOVAL ITEMS

	LOCATION	STATION	-	STATION	* 204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	SPV.0180.01 REMOVING DISTRESSED PAVEMENT MILLING SY	* 204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY	* 690.0150 SAWING ASPHALT LF	* 690.0250 SAWING CONCRETE LF
CATEGORY 0010												
STAGE 1	EB IH 94	106+06	-	172+50 EB	1,220	20	4,900	250	---	---	---	---
	WB IH 94	109+15	-	172+54 WB	1,520	19	6,100	310	---	---	---	---
	STAGE 1 SUBTOTALS				2,740	39	11,000	560	0	0	0	0
STAGE 2	EB IH 94	106+06	-	172+50 EB	1,110	44	4,500	230	---	---	---	---
	WB IH 94	109+15	-	172+54 WB	700	14	2,800	140	---	---	---	---
	STAGE 2 SUBTOTALS				1,810	58	7,300	370	0	0	0	0
N. WATERTOWN ST	N. WATERTOWN ST	109+05	-	115+65 W	20	---	---	---	190	80	10	40
	N. WATERTOWN ST SUBTOTALS				20	0	0	0	190	80	10	40
STH 26	STH 26	99+75	-	116+30 S	390	8	1,600	80	180	---	---	---
	STH 26 SUBTOTALS				390	8	1,600	80	180	0	0	0
RAMP A	EXIT RAMP	10+00	-	24+00 A	280	4	1,100	60	---	---	---	---
	CONNECTOR	24+00	-	39+00 A	320	4	1,300	70	---	---	---	---
	ENTRANCE RAMP	39+00	-	56+44.48 A	480	2	1,900	100	---	---	---	---
	RAMP A SUBTOTALS				1,080	10	4,300	230	0	0	0	0
RAMP B	ENTRANCE RAMP	10+00	-	27+00 B	210	4	800	40	---	---	---	---
	CONNECTOR	27+00	-	42+00 B	340	6	1,300	70	---	---	---	---
	EXIT RAMP	39+00	-	55+55.90 B	260	2	1,100	60	---	---	---	---
	RAMP B SUBTOTALS				810	12	3,200	170	0	0	0	0
	CATEGORY 0010 SUBTOTALS				6,850	127	27,400	1,410	370	80	10	40
CATEGORY 0070												
PARK & RIDE	PARK & RIDE	102+00	-	108+50 W	30	81	6,700	340	100	70	170	50
	PARK & RIDE SUBTOTALS				30	81	6,700	340	100	70	170	50
	CATEGORY 0070 SUBTOTALS				30	81	6,700	340	100	70	170	50
	TOTALS				6,880	208	34,100	1,750	470	150	180	90

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

SURFACE DRAIN SUMMARY

	LOCATION	STATION	OFFSET	* 204.0110 REMOVING ASPHALTIC SURFACE SY	* 204.0150 REMOVING CURB & GUTTER LF	204.0190 REMOVING SURFACE DRAINS EACH	* 416.0610 DRILLED TIE BARS EACH	* 465.0105 ASPHALTIC SURFACE TON	602.3015 CONCRETE SURFACE DRAINS HES CY	CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH 601.0588 TYPE TBT LF	CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH 601.0590 TYPE TBTT LF	* 650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	* 690.0150 SAWING ASPHALT LF	* 690.0250 SAWING CONCRETE LF
CATEGORY 0010	EB IH 94	110+88.35 EB	RT	9	18	1	6	2	1.5	10	19	10	18	10
	EB IH 94	131+84.85 EB	RT	23	13	1	3	3	1.5	48	12	48	56	48
	EB IH 94	132+00.18 EB	LT	42	15	1	4	7	1.5	46	14	46	51	46
	WB IH 94	111+20.83 WB	RT	27	19	1	8	4	1.5	41	19	41	47	41
	WB IH 94	111+22.69 WB	LT	37	17	1	5	6	1.5	42	18	42	50	42
	WB IH 94	120+62.31 WB	RT	13	46	1	14	3	1.5	13	45	13	22	13
	WB IH 94	150+67.98 WB	RT	28	16	1	5	4	1.5	43	17	43	49	43
	WB IH 94	150+78.48 WB	LT	46	13	1	4	8	1.5	46	14	46	55	46
	RAMP B	13+67.48 B	LT	34	26	1	8	6	1.5	34	27	34	43	34
		TOTALS		259	183	9	57	43	13.5	323	185	323	391	323

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

REMOVING PEDESTRIAN PUSH BUTTONS

LOCATION	204.9060.S.01 REMOVING PEDESTRIAN PUSH BUTTON EACH
CATEGORY 0010	
CR-7	1
CR-8	1
CR-9	1
TOTAL	3

PREPARE FOUNDATION FOR ASPHALTIC PAVING

CATEGORY	PROJECT	211.0101.01 EACH
0010	1067-04-61	1

SHAPING SHOULDERS

	LOCATION	STATION	-	STATION	305.0500 STA
CATEGORY 0010					
STAGE 1	EB IH 94	106+06	-	172+50 EB	47
	WB IH 94	109+15	-	172+54 WB	53
	STAGE 1 SUBTOTAL				100
STAGE 2	EB IH 94	106+06	-	172+50 EB	58
	WB IH 94	109+15	-	172+54 WB	55
	STAGE 2 SUBTOTAL				113
STH 26	STH 26	99+75	-	116+30 S	28
	STH 26 SUBTOTAL				28
RAMP A	EXIT RAMP	10+00	-	24+00 A	26
	CONNECTOR	24+00	-	39+00 A	26
	ENTRANCE RAMP	39+00	-	56+44.48 A	32
	RAMP A SUBTOTAL				84
RAMP B	ENTRANCE RAMP	10+00	-	27+00 B	24
	CONNECTOR	27+00	-	42+00 B	25
	EXIT RAMP	39+00	-	55+55.90 B	23
	RAMP B SUBTOTAL				72
	TOTAL				398

BASE AGGREGATE DENSE

	LOCATION	STATION	-	STATION	* 305.0110 3/4-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON	* 624.0100 WATER MGAL
CATEGORY 0010							
STAGE 1	EB IH 94	106+06	-	172+50 EB	30	---	0.6
	WB IH 94	109+15	-	172+54 WB	30	---	0.6
	STAGE 1 SUBTOTALS				60	0	1.2
STAGE 2	EB IH 94	106+06	-	172+50 EB	190	---	3.8
	WB IH 94	109+15	-	172+54 WB	180	---	3.6
	STAGE 2 SUBTOTALS				370	0	7.4
STH 26	STH 26	99+75	-	116+30 S	80	---	1.6
	STH 26 SUBTOTALS				80	0	1.6
RAMP A	EXIT RAMP	10+00	-	24+00 A	80	---	1.6
	CONNECTOR	24+00	-	39+00 A	80	---	1.6
	ENTRANCE RAMP	39+00	-	56+44.48 A	100	---	2.0
	RAMP A SUBTOTALS				260	0	5.2
RAMP B	ENTRANCE RAMP	10+00	-	27+00 B	70	---	1.4
	CONNECTOR	27+00	-	42+00 B	110	---	2.2
	EXIT RAMP	39+00	-	55+55.90 B	70	---	1.4
	RAMP B SUBTOTALS				250	0	5.0
WEEP LOCATIONS	VARIES (SEE PLAN SHEET FOR LOCATIONS)				20	30	0.4
	WEEP SUBTOTALS				20	30	0.4
	TOTALS				1,040	30	20.8

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

ROUT AND SEAL

	LOCATION	STATION	-	STATION	415.6000.S LF
CATEGORY 0010					
STAGE 3	EB IH 94	106+06	-	172+50 EB	4,700
	WB IH 94	109+15	-	172+54 WB	5,300
	STAGE 3 SUBTOTAL				10,000
STAGE 4	EB IH 94	106+06	-	172+50 EB	5,800
	WB IH 94	109+15	-	172+54 WB	5,500
	STAGE 4 SUBTOTAL				11,300
STH 26	STH 26	99+75	-	116+30 S	2,800
	STH 26 SUBTOTAL				2,800
RAMP A	EXIT RAMP	10+00	-	24+00 A	2,600
	CONNECTOR	24+00	-	39+00 A	2,600
	ENTRANCE RAMP	39+00	-	56+44.48 A	3,200
	RAMP A SUBTOTAL				8,400
RAMP B	ENTRANCE RAMP	10+00	-	27+00 B	2,400
	CONNECTOR	27+00	-	42+00 B	2,500
	EXIT RAMP	39+00	-	55+55.90 B	2,300
	RAMP B SUBTOTAL				7,200
	TOTAL				39,700

3

CONCRETE PAVEMENT REHABILITAITON SUMMARY

	LOCATION	STATION		STATION	* 416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	** 416.0623.S PAVEMENT DOWEL BARS RETROFIT WARRANTED EACH	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	* 690.0250 SAWING CONCRETE LF
CATEGORY 0010										
STAGE 2	EB IH 94	106+06	-	172+50 EB	40	220	42	110	170	550
	WB IH 94	109+15	-	172+54 WB	10	50	---	10	50	120
	STAGE 2 SUBTOTALS				50	270	42	120	220	670
STAGE 3	EB IH 94	106+06	-	172+50 EB	320	530	54	270	1,000	2,110
	WB IH 94	109+15	-	172+54 WB	110	220	12	80	400	800
	STAGE 3 SUBTOTALS				430	750	66	350	1,400	2,910
N. WATERTOWN ST	N. WATERTOWN ST	109+05	-	115+65 W	150	320	24	140	340	1,370
	N. WATERTOWN ST SUBTOTALS				150	320	24	140	340	1,370
STH 26	STH 26	99+75	-	116+30 S	200	550	104	240	520	1,830
	STH 26 SUBTOTALS				200	550	104	240	520	1,830
RAMP A	EXIT RAMP	10+00	-	24+00 A	20	100	18	100	20	330
	CONNECTOR	24+00	-	39+00 A	10	110	174	70	30	240
	ENTRANCE RAMP	39+00	-	56+44.48 A	50	160	12	70	370	480
	RAMP A SUBTOTALS				80	370	204	240	420	1,050
RAMP B	ENTRANCE RAMP	10+00	-	27+00 B	40	60	6	---	270	240
	CONNECTOR	27+00	-	42+00 B	---	110	312	70	---	260
	EXIT RAMP	39+00	-	55+55.90 B	20	30	18	20	40	120
	RAMP B SUBTOTALS				60	200	336	90	310	620
	UNDISTRIBUTED				100	250	80	120	320	850
	TOTALS				1,070	2,710	856	1,300	3,530	9,300

*ADDITIONAL QUANTITIES LISTED ELSEWHERE
**TO BE USED AT TIGHT, TRANSVERSE CRACKS

3

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CONTINUOUS DIAMOND GRINDING CONCRETE PAVEMENT

	LOCATION	STATION	-	STATION	420.1000 SY
CATEGORY 0010					
STAGE 2	EB IH 94	106+06	-	172+50 EB	8,000
	WB IH 94	109+15	-	172+54 WB	7,600
	STAGE 2 SUBTOTAL				15,600
STAGE 3	EB IH 94	106+06	-	172+50 EB	9,800
	WB IH 94	109+15	-	172+54 WB	9,500
	STAGE 3 SUBTOTAL				19,300
RAMP A	EXIT RAMP	10+00	-	22+57.60 A	3,000
	ENTRANCE RAMP	40+21.20	-	56+44.48 A	3,700
	RAMP A SUBTOTAL				6,700
RAMP B	ENTRANCE RAMP	10+00	-	25+96.10 B	2,800
	EXIT RAMP	43+67.50	-	55+55.90 B	3,500
	RAMP B SUBTOTAL				6,300
				TOTAL	47,900

ASPHALT PAVEMENT ITEMS

	LOCATION	STATION	-	STATION	455.0605 TACK COAT GAL	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	* 465.0105 ASPHALTIC SURFACE TON	*** 465.0110 ASPHALTIC SURFACE PATCHING TON	465.0305 ASPHALTIC SURFACE SAFETY ISLANDS TON	* ** 690.0150 SAWING ASPHALT LF
CATEGORY 0010										
STAGE 1	EB IH 94	106+06	-	172+50 EB	440	930	---	29	---	90
	WB IH 94	109+15	-	172+54 WB	550	1,160	---	36	---	110
	STAGE 1 SUBTOTALS				990	2,090	0	65	0	200
STAGE 2	EB IH 94	106+06	-	172+50 EB	410	850	---	27	---	60
	WB IH 94	109+15	-	172+54 WB	260	540	---	16	---	60
	STAGE 2 SUBTOTALS				670	1,390	0	43	0	120
N. WATERTOWN ST	N. WATERTOWN ST	109+05	-	115+65 W	---	---	---	0	3	---
	N. WATERTOWN ST SUBTOTAL				0	0	0	0	3	0
STH 26	STH 26	99+75	-	116+30 S	120	210	---	9	---	---
	STH 26 SUBTOTALS				120	210	0	9	0	0
RAMP A	EXIT RAMP	10+00	-	24+00 A	100	210	---	7	---	30
	CONNECTOR	24+00	-	39+00 A	120	250	---	8	---	30
	ENTRANCE RAMP	39+00	-	56+44.48 A	170	360	2	12	---	40
	RAMP A SUBTOTALS				390	820	2	27	0	100
RAMP B	ENTRANCE RAMP	10+00	-	27+00 B	80	160	---	5	---	30
	CONNECTOR	27+00	-	42+00 B	120	260	---	8	---	30
	EXIT RAMP	39+00	-	55+55.90 B	100	200	---	7	---	30
	RAMP B SUBTOTALS				300	620	0	20	0	90
	CATEGORY 0010 SUBTOTALS				2,470	5,130	2	164	3	510
CATEGORY 0070										
PARK & RIDE	PARK & RIDE	102+00	-	108+50 W	500	---	754	45	---	---
	PARK & RIDE SUBTOTALS				500	0	754	45	0	0
	CATEGORY 0070 SUBTOTALS				500	0	754	45	0	0
	TOTALS				2,970	5,130	756	209	3	510

* ADDITIONAL QUANTITIES LISTED ELSEWHERE
** SAWING ASPHALT FOR AREAS OF FULL SHOULDER REPLACEMENT
*** FOR USE AT DISTRESSED PAVEMENT MILLING LOCATIONS AND CONCRETE CURB & GUTTER SPOT REPLACEMENTS

3

RUMBLE STRIPS

	LOCATION	STATION - STATION	465.0510 ASPHALTIC RUMBLE STRIPS, SHOULDER DIVIDED ROADWAY LF	602.3210 CONCRETE RUMBLE STRIPS, SHOULDER DIVIDED ROADWAY LF
CATEGORY 0010				
STAGE 3	EB IH 94	106+06 - 172+50 EB	---	4,100
	WB IH 94	109+15 - 172+54 WB	---	3,600
	STAGE 3 SUBTOTALS		0	7,700
STAGE 4	EB IH 94	106+06 - 172+50 EB	5,800	---
	WB IH 94	109+15 - 172+54 WB	5,500	---
	STAGE 4 SUBTOTALS		11,300	0
RAMP A	EXIT RAMP	10+00 - 24+00 A	---	---
	CONNECTOR	24+00 - 39+00 A	---	---
	ENTRANCE RAMP	39+00 - 56+44.48 A	600	---
	RAMP A SUBTOTALS		600	0
RAMP B	ENTRANCE RAMP	10+00 - 27+00 B	---	---
	CONNECTOR	27+00 - 42+00 B	---	---
	EXIT RAMP	39+00 - 55+55.90 B	600	---
	RAMP B SUBTOTALS		600	0
	TOTALS		12,500	7,700

CONCRETE SIDEWALK

	LOCATION	STATION - STATION	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF
CATEGORY 0010				
N. WATERTOWN ST	N. WATERTOWN ST	109+05 - 115+65 W	670	60
	N. WATERTOWN ST SUBTOTALS		670	60
	CATEGORY 0010 SUBTOTALS		670	60
CATEGORY 0070				
PARK & RIDE	PARK & RIDE	102+00 - 108+50 W	530	40
	PARK & RIDE SUBTOTALS		530	40
	CATEGORY 0070 SUBTOTALS		530	40
	TOTALS		1,200	100

CONCRETE CURB & GUTTER

	LOCATION	STATION - STATION	* 416.0610 DRILLED TIE BARS EACH	601.0407 18-INCH TYPE D LF	601.0409 30-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	601.0555 6-INCH SLOPED 36-INCH TYPE A LF	601.0600 CONCRETE CURB PEDESTRIAN LF	* 650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF
CATEGORY 0010									
N. WATERTOWN ST	N. WATERTOWN ST	109+05 - 115+65 W	76	---	161	---	27	37	---
	N. WATERTOWN ST SUBTOTALS		76	0	161	0	27	37	0
STH 26	STH 26	99+75 - 116+30 S	72	---	---	---	180	---	---
	STH 26 SUBTOTALS		72	0	0	0	180	0	0
	CATEGORY 0010 SUBTOTALS		148	0	161	0	207	37	0
CATEGORY 0070									
PARK & RIDE	PARK & RIDE	102+00 - 108+50 W	---	47	---	57	---	---	104
	PARK & RIDE SUBTOTALS		0	47	0	57	0	0	104
	CATEGORY 0070 SUBTOTALS		0	47	0	57	0	0	104
	TOTALS		148	47	161	57	207	37	104

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

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3

ADJUSTING MANHOLE COVERS

	LOCATION	STATION	OFFSET	611.8110 EACH
CATEGORY 0010				
RAMP A	CONNECTOR	37+68 A	45.3' RT	1

GUARDRAIL SUMMARY

	LOCATION	STATION	-	STATION	OFFSET	* 204.0110 REMOVING ASPHALTIC SURFACE SY	* 305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	* 624.0100 WATER MGAL	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	614.2300 MGS GUADRAIL 3 LF	614.2310 MGS GUADRAIL 3 HS LF	614.2320 MGS GUADRAIL 3 QS LF	614.2330 MGS GUADRAIL 3 K LF	614.2500 THRIE BEAM TRANSITION LF	614.2610 GUADRAIL TERMINAL EAT EACH	614.2620 GUADRAIL TERMINAL TYPE 2 EACH	* 690.0150 SAWING ASPHALT LF
CATEGORY 0010																	
	EB IH 94	105+49.98	-	109+79.96 EB	RT	---	1	0.0	---	337.5	---	---	---	39.4	1	---	---
	EB IH 94	108+89.27	-	109+81.76 EB	LT	---	42	0.8	---	---	---	---	---	39.4	1	---	---
	EB IH 94	110+74.10	-	118+59.78 EB	RT	---	9	0.2	---	739.4	---	---	---	47.5	---	---	---
	EB IH 94	116+75.33	-	118+80.53 EB	LT	---	16	0.3	---	112.5	---	---	---	39.4	1	---	---
	EB IH 94	126+87.89	-	132+30.37 EB	RT	---	24	0.5	---	450.0	---	---	---	39.4	1	---	---
	EB IH 94	131+53.19	-	132+45.67 EB	LT	---	24	0.5	---	---	---	---	---	39.4	1	---	---
	EB IH 94	140+42.17	-	147+59.65 EB	RT	---	34	0.7	---	625.0	---	---	---	39.4	1	---	---
	EB IH 94	146+83.34	-	147+75.82 EB	LT	---	---	---	---	---	---	---	---	39.4	1	---	---
	EB IH 94	161+83.00	-	170+01.72 EB	RT	---	16	0.3	---	726.5	---	---	37.5	---	1	1	---
	WB IH 94	105+47.44	-	109+82.15 WB	LT	---	---	---	---	426.5	---	---	---	8.1	---	1	---
	WB IH 94	110+75.32	-	114+05.23 WB	RT	---	---	---	---	237.5	---	---	---	39.4	1	---	---
	WB IH 94	110+77.13	-	114+45.00 WB	LT	---	44	0.9	---	275.0	---	---	---	39.4	1	---	---
	WB IH 94	120+16.79	-	123+09.18 WB	RT	---	---	---	---	200.0	---	---	---	39.4	1	---	---
	WB IH 94	120+37.74	-	123+05.50 WB	LT	---	19	0.4	---	175.0	---	---	---	39.4	1	---	---
	WB IH 94	134+44.16	-	137+74.15 WB	RT	---	---	---	---	237.5	---	---	---	39.4	1	---	---
	WB IH 94	134+54.84	-	139+22.33 WB	LT	---	19	0.4	45	375.0	---	---	---	39.4	1	---	---
	WB IH 94	150+22.46	-	153+52.44 WB	RT	---	---	---	---	237.5	---	---	---	39.4	1	---	---
	WB IH 94	150+32.95	-	155+00.44 WB	LT	---	23	0.5	25	375.0	---	---	---	39.4	1	---	---
	WB IH 94	167+29.94	-	172+58.03 WB	LT	---	---	---	---	476.5	---	---	---	---	1	1	---
	RAMP A	18+84.58	-	20+89.47 A	LT	---	2	0.0	---	76.5	50	25	---	---	1	1	---
	RAMP A	18+87.12	-	20+88.05 A	RT	---	---	---	---	126.5	25	---	---	---	1	1	---
	RAMP A	34+52.02	-	36+32.05 A	RT	---	16	0.3	15	51.5	50	25	---	---	1	1	---
	RAMP A	34+52.22	-	36+31.47 A	LT	---	3	0.1	---	51.5	50	25	---	---	1	1	---
	RAMP B	44+91.51	-	46+75.76 B	LT	65	21	0.4	---	51.5	50	25	---	---	1	1	400
	RAMP B	44+92.93	-	46+72.19 B	RT	---	---	---	---	51.5	50	25	---	---	1	1	---
	STH 26	102+97.58	-	104+76.12 S	RT	---	45	0.9	---	101.5	25	---	---	---	1	1	---
	STH 26	112+98.11	-	115+34.58 S	LT	---	6	0.1	---	101.5	50	25	---	---	1	1	---
	TOTALS					65	364	7.3	85	6,618.4	350	150	37.5	646.6	25	11	400

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

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MOBILIZATIONS EROSION CONTROL

CATEGORY	PROJECT	628.1905 EACH
0010	1067-04-61	6

MOBILIZATIONS EMERGENCY EROSION CONTROL

CATEGORY	PROJECT	628.1910 EACH
0010	1067-04-61	4

FINISHING ITEMS

	LOCATION	STATION	-	STATION	606.0200 RIPRAP MEDIUM CY	625.0500 SALVAGED TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0300 SEEDING BORROW PIT LB	630.0500 SEED WATER MGAL	645.0120 GEOTEXTILE TYPE HR SY	645.0120 GEOTEXTILE TYPE SAS SY
CATEGORY 0010													
GUARDRAIL LOCATIONS	VARIES (SEE GUARDRAIL LAYOUT DETAILS)				151	534	534	2.20	61	---	12	301	---
	GUARDRAIL LOCATION SUBTOTALS				151	534	534	2.20	61	0	12	301	0
N. WATERTOWN ST	N. WATERTOWN ST	109+05	-	115+65 W	---	70	70	0.10	1	---	1	---	---
	N. WATERTOWN ST SUBTOTALS				0	70	70	0.10	1	0	1	0	0
STH 26	STH 26	99+75	-	116+30 S	---	30	30	0.10	1	---	1	---	---
	STH 26 SUBTOTALS				0	30	30	0.10	1	0	1	0	0
RIPRAP AT STRUCTURE WING WALLS	I-94	VARIES (SEE CONSTRUCITON DETAILS)			38	80	80	0.10	2	---	2	155	---
	WING WALL RIPRAP SUBTOTALS				38	80	80	0.10	2	0	2	155	0
WEEP LOCATIONS	VARIES (SEE PLAN SHEET FOR LOCATIONS)				---	35	35	0.10	1	---	1	---	40
	WEEP LOCATIONS SUBTOTALS				0	35	35	0.10	1	0	1	0	40
	WASTE SITE				---	---	---	0.20	---	5	---	---	---
	UNDISTRIBUTED				50	180	180	0.20	3	0	4	110	0
	CATEGORY 0010 SUBTOTALS				239	929	929	3.00	69	5	21	566	40
CATEGORY 0070													
PARK & RIDE	PARK & RIDE	102+00	-	108+50 W	---	50	50	0.10	1	---	1	---	---
	PARK & RIDE SUBTOTALS				0	50	50	0.10	1	0	1	0	0
	UNDISTRIBUTED				0	13	13	0	0	0	0	0	0
	CATEGORY 0070 SUBTOTALS				0	63	63	0.10	1	0	1	0	0
	TOTALS				239	992	992	3.10	70	5	22	566	40

EROSION CONTROL ITEMS

	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.7005 INLET PROTECTION TYPE A EACH	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH
CATEGORY 0010						
	GUARDRAIL LOCATIONS	450	900	5	3	---
	WEEP LOCATIONS	200	400	---	---	90
	UNDISTRIBUTED	100	200	---	---	---
	TOTALS	750	1,500	5	3	90

PERMANENT SIGNAGE SUMMARY

	LOCATION	SIGN NO.	SIGN CODE	SIZE L X H (IN. X IN.)	634.0812 POSTS TUBULAR STEEL 2X2-INCH X 12-FT EACH	638.2102 MOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
CATEGORY 0070							
	PARK & RIDE	1-1	R7-8A	12 X 18	1	1	1
		1-2	R7-8A	12 X 18	---	1	---
		1-3	R7-8A	12 X 18	1	1	1
		1-4	R7-8A	12 X 18	---	1	---
		1-5	R7-8V	12 X 6	---	1	---
		1-6	R7-8V	12 X 6	---	1	---
		TOTALS			2	6	2

TRAFFIC CONTROL SIGNS - MISCELLANEOUS

	CLOSURE LOCATION	SIGN LOCATION	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I NUMBER OF CYLCES	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I NUMBER OF SIGNS	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II NUMBER OF CYLCES	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II NUMBER OF SIGNS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	REMARKS
CATEGORY 0010									
	RAMP A (EXIT)	IH 94 EB	4	2	8	4	1	4	SEE SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE"
	RAMP B (EXIT)	IH 94 WB	4	2	8	4	1	4	SEE SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE"
	N. WATERTOWN ST.	RAMP A (EXIT)	---	---	---	5	3	15	THRU LEFT* (ON OSS), RIGHT ONLY (ON OSS), THRU LEFT*/RIGHT ONLY (ON POST)
		RAMP B (CONNECTOR)	---	---	---	5	4	20	THRU LEFT* (ON OSS), LEFT TO STH 26/IH 94, LEFT AHEAD TO STH 26, LEFT AHEAD TO IH 94
		TOTALS			16			43	

*COVER WITH R3-5A

TRAFFIC CONTROL SUMMARY

	LOCATION	STATION - STATION	DURATION (DAYS)	643.0300 TRAFFIC CONTROL DRUMS QTY	643.0300 DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III QTY	643.0420 DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A QTY	643.0705 DAY	643.0715 TYPE C QTY	643.0715 DAY	643.0810 TRAFFIC CONTROL CONNECTED ARROW BOARDS QTY	643.0810 DAY	643.0900 TRAFFIC CONTROL SIGNS QTY	643.0900 DAY	643.1050 SIGNS PCMS QTY	643.1050 DAY	643.1055.S TRUCK OR TRAILER-MOUNTED ATTENUATOR QTY	643.1055.S DAY	643.1220 TRAFFIC CONTROL CONNECTED WORK ZONE START AND END LOCATION MARKERS QTY	643.1220 DAY
CATEGORY 0010																					
STAGE 1	EB IH 94	106+06 - 172+50 EB	8	123	984	11	88	22	176	24	192	1	8	46	368	1	7	1	8	1	8
	WB IH 94	109+15 - 172+54 WB	8	120	960	11	88	22	176	24	192	1	8	46	368	1	7			1	8
	STAGE 1 SUBTOTALS				1,944		176		352		384		16		736		14		8		16
STAGE 2	EB IH 94	106+06 - 172+50 EB	13	118	1,534	9	117	18	234	14	182	1	13	29	377	---	---	1	13	1	13
	WB IH 94	109+15 - 172+54 WB	13	115	1,495	9	117	18	234	14	182	1	13	29	377	---	---			1	13
	STAGE 2 SUBTOTALS				3,029		234		468		364		26		754		0		13		26
STAGE 3	EB IH 94	106+06 - 172+50 EB	15	179	2,685	11	165	22	330	24	360	1	15	50	750	---	---	1	15	1	15
	WB IH 94	109+15 - 172+54 WB	15	176	2,640	11	165	22	330	24	360	1	15	50	750	---	---			1	15
	STAGE 3 SUBTOTALS				5,325		330		660		720		30		1,500		0		15		30
STAGE 4	EB IH 94	106+06 - 172+50 EB	2	103	206	9	18	18	36	14	28	1	2	24	48	---	---	1	2	1	2
	WB IH 94	109+15 - 172+54 WB	2	100	200	9	18	18	36	14	28	1	2	24	48	---	---			1	2
	STAGE 4 SUBTOTALS				406		36		72		56		4		96		0		2		4
N. WATERTOWN ST	N. WATERTOWN ST	109+05 - 115+65 W	10	20	200	14	140	20	200	---	---	---	---	26	260	---	---	---	---	---	---
	N. WATERTOWN ST SUBTOTALS				200		140		200		0		0		260		0		0		0
STH 26	STH 26	99+75 - 116+30 S	14	56	784	6	84	12	168	10	140	2	28	26	364	---	---	---	---	2	28
	STH 26 SUBTOTALS				784		84		168		140		28		364		0		0		28
RAMP A	EXIT RAMP	10+00 - 24+00 A	5	37	185	4	20	4	20	---	---	---	---	40	200	1	12	---	---	---	---
	CONNECTOR	24+00 - 39+00 A	7	29	203	1	7	2	14	5	35	1	7	29	203	---	---	---	---	1	7
	ENTRANCE RAMP	39+00 - 56+44.48 A	5	36	180	6	30	6	30	12	60	---	---	68	340	1	12	---	---	---	---
	RAMP A SUBTOTALS				568		57		64		95		7		743		24		0		7
RAMP B	ENTRANCE RAMP	10+00 - 27+00 B	5	20	100	6	30	6	30	8	40	---	---	68	340	1	12	---	---	---	---
	CONNECTOR	27+00 - 42+00 B	6	21	126	1	6	2	12	5	30	1	6	27	162	---	---	---	---	1	6
	EXIT RAMP	39+00 - 55+55.90 B	5	35	175	4	20	4	20	---	---	---	---	40	200	1	12	---	---	---	---
	RAMP B SUBTOTALS				401		56		62		70		6		702		24		0		6
	WIDTH RESTRICTION SIGNING		57	---	0	---	0	---	0	---	0	---	0	20	1,140	---	0	---	0	---	0
	UNDISTRIBUTED				1,900		170		310		270		20		940		10		10		20
	CATEGORY 0010 SUBTOTALS				14,557		1,283		2,356		2,099		137		7,235		72		48		137
CATEGORY 0070																					
PARK & RIDE	PARK & RIDE	102+00 - 108+50 W	4	10	40	4	16	8	32	---	---	---	---	4	16	1	7	---	---	---	---
	PARK & RIDE SUBTOTALS				40		16		32		0		0		16		7		0		0
	UNDISTRIBUTED				10		0		0		0		0		0		0		0		0
	CATEGORY 0070 SUBTOTALS				50		16		32		0		0		16		7		0		0
	TOTALS				14,607		1,299		2,388		2,099		137		7,251		79		48		137

DIGITAL SPEED REDUCTION SYSTEM (DSRS)

	LOCATION	DURATION (DAYS)	DIGITAL SPEED LIMIT TRAILERS (DSLT)	643.0370.S QTY	643.0370.S DAY
CATEGORY 0010					
STAGE 1	EB IH 94	8	2	1	8
	WB IH 94	8	2	1	8
	STAGE 1 SUBTOTALS				16
STAGE 2	EB IH 94	13	2	1	13
	WB IH 94	13	2	1	13
	STAGE 2 SUBTOTALS				26
STAGE 3	EB IH 94	15	2	1	15
	WB IH 94	15	2	1	15
	STAGE 3 SUBTOTALS				30
STAGE 4	EB IH 94	2	2	1	2
	WB IH 94	2	2	1	2
	STAGE 4 SUBTOTALS				4
	UNDISTRIBUTED				10
	TOTAL				86

BASIC TRAFFIC QUEUE WARNING SYSTEM

	LOCATION	DURATION (DAYS)	FLASHING BEACON SIGNS (FBS)	PORTABLE BEACON SENSORS (PBS)	643.1205.S QTY	643.1205.S DAY
CATEGORY 0010						
STAGE 1	EB IH 94	8	3	3	1	8
	WB IH 94	8	3	3	1	8
	STAGE 1 SUBTOTALS					16
STAGE 2	EB IH 94	13	3	3	1	13
	WB IH 94	13	3	3	1	13
	STAGE 2 SUBTOTALS					26
STAGE 3	EB IH 94	15	3	3	1	15
	WB IH 94	15	3	3	1	15
	STAGE 3 SUBTOTALS					30
STAGE 4	EB IH 94	2	3	3	1	2
	WB IH 94	2	3	3	1	2
	STAGE 4 SUBTOTALS					4
	UNDISTRIBUTED					10
	TOTAL					86

TEMPORARY MARKING (FOR MARKINGS IMPACTED BY PAVEMENT REPAIRS)

	LOCATION	STATION - STATION	643.3165 LINE PAINT 6-INCH (YELLOW) LF	643.3165 LINE PAINT 6-INCH (WHITE) LF	643.3165 LINE PAINT 6-INCH (12.5' SEG., 37.5' GAP) (WHITE) LF	643.3165 LINE PAINT 6-INCH (3' SEG., 9' GAP) (WHITE) LF	643.3265 LINE PAINT 10-INCH (WHITE) LF	643.3805 STOP LINE PAINT 18-INCH (WHITE) LF
CATEGORY 0010								
STAGE 2	EB IH 94	106+06 - 172+50 EB	215	---	175	---	---	---
	WB IH 94	109+15 - 172+54 WB	45	---	25	---	---	---
	STAGE 2 SUBTOTALS		260	0	200	0	0	0
STAGE 3	EB IH 94	106+06 - 172+50 EB	---	275	---	24	170	---
	WB IH 94	109+15 - 172+54 WB	---	185	----	16	----	---
	STAGE 3 SUBTOTALS		0	460	0	40	170	0
STH 26	STH 26	99+75 - 116+30 S	75	135	100	21	20	---
	STH 26 SUBTOTALS		75	135	100	21	20	0
RAMP A	EXIT RAMP	10+00 - 24+00 A	---	---	---	---	---	---
	CONNECTOR	24+00 - 39+00 A	25	45	25	---	20	---
	ENTRANCE RAMP	39+00 - 56+44.48 A	---	---	---	---	---	---
	RAMP A SUBTOTALS		25	45	25	0	20	0
RAMP B	ENTRANCE RAMP	10+00 - 27+00 B	---	---	---	---	---	---
	CONNECTOR	27+00 - 42+00 B	15	9	25	---	---	26
	EXIT RAMP	39+00 - 55+55.90 B	---	---	---	---	---	---
	RAMP B SUBTOTALS		15	9	25	0	0	26
	CAT 0010 SUBTOTALS				1,435		210	26
CATEGORY 0070								
PARK & RIDE	ENTRANCE	102+50 - 103+50 W	---	---	---	---	---	20
	PARK & RIDE SUBTOTALS				0		0	20
	CAT 0070 SUBTOTALS				0		0	20
	ITEM TOTALS				1,435		210	46

PEDESTRIAN ROUTING

LOCATION	643.3305 TEMPORARY MARKING CROSSWALK PAINT 6-INCH LF	644.1440 TEMPORARY PEDESTRIAN SURFACE MATTING SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF	644.1900.S TEMPORARY AUDIBLE MESSAGE DEVICES DAY
CATEGORY 0010					
PARK AND RIDE ENTRANCE: CR-1 & CR-2	90	250	14	184	14
PARK AND RIDE: CR-3 & CR-4	---	---	---	36	14
TOTALS	90	250	14	220	28

TRAFFIC CONTROL

CATEGORY	PROJECT	643.5000 EACH
0010	1067-04-61	1

MARKING REMOVAL

	LOCATION	STATION - STATION	646.9000 LINE 4-INCH LF	646.9002 LINE 6-INCH LF	646.9200 LINE WIDE LF	646.9400 PLOWABLE RAISED PAVEMENT MARKERS EACH	REMARKS
CATEGORY 0010							
STAGE 2	EB IH 94	106+06 - 172+50 EB	---	---	---	10	
	WB IH 94	109+15 - 172+54 WB	---	---	---	15	
	STAGE 2 SUBTOTALS		0	0	0	25	
STAGE 3	EB IH 94	106+06 - 172+50 EB	---	---	---	65	
	WB IH 94	109+15 - 172+54 WB	---	---	----	63	
	STAGE 3 SUBTOTALS		0	0	0	128	
STH 26	STH 26	99+75 - 116+30 S	1,030	---	---	---	LANE LINE SKIPS
	STH 26 SUBTOTALS		1,030	0	0	0	
RAMP A	EXIT RAMP	10+00 - 24+00 A	---	130	60	10	CROSSWALKS, STOP BAR
	CONNECTOR	24+00 - 39+00 A	---	---	---	---	
	ENTRANCE RAMP	39+00 - 56+44.48 A	---	---	---	---	
	RAMP A SUBTOTALS		0	130	60	10	
RAMP B	ENTRANCE RAMP	10+00 - 27+00 B	---	70	---	---	CROSSWALKS
	CONNECTOR	27+00 - 42+00 B	---	---	---	---	
	EXIT RAMP	39+00 - 55+55.90 B	---	---	---	14	
	RAMP B SUBTOTALS		0	70	0	14	
	CAT 0010 SUBTOTALS		1,030	200	60	177	
CATEGORY 0070							
PARK & RIDE	PARK & RIDE	102+50 - 103+50 W	---	100	22	---	
	PARK & RIDE SUBTOTAL		0	100	22	0	
	CAT 0070 SUBTOTALS		0	100	22	0	
	TOTALS		1,030	300	82	177	

PAVEMENT MARKING ITEMS

	LOCATION	STATION - STATION	646.1020 MARKING LINE EPOXY 4-INCH (YELLOW) LF	646.1020 MARKING LINE EPOXY 4-INCH (10' SEG., 30' GAP) (YELLOW) LF	* 646.5220 MARKING SYMBOL EPOXY (WHITE) EACH	* 646.6120 MARKING STOP LINE EPOXY 18-INCH (WHITE) LF	* 646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) LF	646.8320 MARKING PARKING STALL EPOXY (WHITE) LF
CATEGORY 0070								
	PARK & RIDE	102+00 - 108+50 W	200	200	4	40	120	1,870
	ITEM TOTALS		400		4	40	120	1,870

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

PAVEMENT MARKING ITEMS

	LOCATION	STATION		STATION	646.2025 MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' SEG., 37.5' GAP) (BLACK) LF	646.2040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (WHITE) LF	(YELLOW) LF	(12.5' SEG., 37.5' GAP) (WHITE) LF	(3' SEG., 9' GAP) (WHITE) LF	646.2050 MARKING LINE GROOVED PERMANENT TAPE 6-INCH (12.5' SEG., 37.5' GAP) (WHITE) LF
CATEGORY 0010										
STAGE 2	EB IH 94	106+06	-	172+50 EB	1,660	---	6,640	---	---	1,660
	WB IH 94	109+15	-	172+54 WB	1,580	---	6,340	---	---	1,580
	STAGE 2 SUBTOTALS				3,240	0	12,980	0	0	3,240
STAGE 3	EB IH 94	106+06	-	172+50 EB	---	5,370	---	---	---	40
	WB IH 94	109+15	-	172+54 WB	---	5,060	---	---	---	50
	STAGE 3 SUBTOTALS				0	10,430	0	0	0	90
N. WATERTOWN ST	N. WATERTOWN ST	109+05	-	115+65 W	60	820	940	60	80	---
	N. WATERTOWN ST SUBTOTALS				60	820	940	60	80	0
STH 26	STH 26	99+75	-	116+30 S	1,030	2,720	2,710	1,030	170	---
	STH 26 SUBTOTALS				1,030	2,720	2,710	1,030	170	0
RAMP A	EXIT RAMP	10+00	-	24+00 A	---	1,460	960	120	---	---
	CONNECTOR	24+00	-	39+00 A	380	1,340	1,430	380	---	---
	ENTRANCE RAMP	39+00	-	56+44.48 A	---	1,640	910	---	---	---
	RAMP A SUBTOTALS				380	4,440	3,300	500	0	0
RAMP B	ENTRANCE RAMP	10+00	-	27+00 B	---	1,600	920	170	---	---
	CONNECTOR	27+00	-	42+00 B	350	1,200	1,430	350	---	---
	EXIT RAMP	39+00	-	55+55.90 B	---	1,350	890	140	---	---
	RAMP B SUBTOTALS				350	4,150	3,240	660	0	0
	SUBTOTALS				5,060	22,560	23,170	2,250	250	3,330
	ITEM TOTALS				4,270			48,230		3,330

PAVEMENT MARKING ITEMS

	LOCATION	STATION	-	STATION	646.4040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (3' SEG., 9' GAP) (WHITE) LF	646.4040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (3' SEG., 9' GAP) (WHITE) 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	646.7420 * MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) LF
CATEGORY 0010													
STAGE 2	EB IH 94	106+06	-	172+50 EB	---	---	---	---	---	---	---	260	---
	WB IH 94	109+15	-	172+54 WB	---	---	---	---	---	---	---	230	---
	STAGE 2 SUBTOTALS				0	0	0	0	0	0	0	490	0
STAGE 3	EB IH 94	106+06	-	172+50 EB	---	---	1,110	---	---	---	---	---	---
	WB IH 94	109+15	-	172+54 WB	----	---	1,090	---	---	---	---	---	---
	STAGE 3 SUBTOTALS				0	0	2,200	0	0	0	0	0	0
N. WATERTOWN ST	N. WATERTOWN ST	109+05	-	115+65 W	460	10	---	11	16	5	130	---	---
	N. WATERTOWN ST SUBTOTALS				460	10	0	11	16	5	130	0	0
STH 26	STH 26	99+75	-	116+30 S	1,640	90	---	12	12	---	240	---	---
	STH 26 SUBTOTALS				1,640	90	0	12	12	0	240	0	0
RAMP A	EXIT RAMP	10+00	-	24+00 A	800	---	---	6	3	---	60	---	130
	CONNECTOR	24+00	-	39+00 A	850	---	---	6	6	---	70	---	---
	ENTRANCE RAMP	39+00	-	56+44.48 A	720	---	---	---	---	---	---	---	---
	RAMP A SUBTOTALS				2,370	0	0	12	9	0	130	0	130
RAMP B	ENTRANCE RAMP	10+00	-	27+00 B	700	---	---	---	---	---	---	---	70
	CONNECTOR	27+00	-	42+00 B	230	---	---	2	1	---	60	---	---
	EXIT RAMP	39+00	-	55+55.90 B	1,040	---	---	8	6	---	80	---	---
	RAMP B SUBTOTALS				1,970	0	0	10	7	0	140	0	70
	SUBTOTALS				6,440	100	2,200	45	44	5	640	490	200
	ITEM TOTALS				6,540		2,200	45	44	5	640	490	200

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

CONSTRUCTION STAKING SIDEWALK

CATEGORY	PROJECT	650.9500 EACH
0010	1067-04-61	1

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL

CATEGORY	PROJECT	650.9911 EACH
0010	1067-04-61	1

CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS

CATEGORY	PROJECT	650.8501 EACH
0010	1067-04-61	1

CONSTRUCTION STAKING

	LOCATION	STATION	-	STATION	650.8000 RESURFACING REFERENCE LF	650.9000 CURB RAMPS EACH	650.9920 SLOPE STAKES LF
CATEGORY 0010							
IH 94	EB IH 94	106+06	-	172+50 EB	2,000	---	4,630
	WB IH 94	109+15	-	172+54 WB	1,800	---	4,490
	IH 94 SUBTOTALS				3,800	0	9,120
N. WATERTOWN ST	N. WATERTOWN ST	109+05	-	115+65 W	700	5	---
	N. WATERTOWN ST SUBTOTALS				700	5	0
STH 26	STH 26	99+75	-	116+30 S	1,000	---	620
	STH 26 SUBTOTALS				1,000	0	620
RAMP A	EXIT RAMP	10+00	-	24+00 A	800	---	630
	CONNECTOR	24+00	-	39+00 A	1,000	---	510
	ENTRANCE RAMP	39+00	-	56+44.48 A	1,700	---	---
	RAMP A SUBTOTALS				3,500	0	1,140
RAMP B	ENTRANCE RAMP	10+00	-	27+00 B	1,300	---	390
	CONNECTOR	27+00	-	42+00 B	1,500	---	---
	EXIT RAMP	39+00	-	55+55.90 B	1,100	---	580
	RAMP B SUBTOTALS				3,900	0	970
	CATEGORY 0010 SUBTOTALS				12,900	5	11,850
CATEGORY 0070							
PARK & RIDE	PARK & RIDE	102+00	-	108+50 W	---	4	---
	PARK & RIDE SUBTOTALS				0	4	0
	CATEGORY 0070 SUBTOTALS				0	4	0
	TOTALS				12,900	9	11,850

3

TRAFFIC SIGNAL CONDUIT SUMMARY

	FROM	TO	* 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF
CATEGORY 0010			
	EXPB1	SB1	10
	EXPB2	SB2	7
	EXPB3	SB3	9
	TOTAL		26

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

INSTALL CONDUIT INTO EXISTING ITEM

	LOCATION	* 652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH
CATEGORY 0010		
	EXPB1	1
	EXPB2	1
	EXPB3	1
	TOTAL	3

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

ADJUSTING PULL BOXES

	LOCATION	STATION	OFFSET	653.0900 EACH
CATEGORY 0010				
	N. WATERTOWN ST	112+71 W	4.5' LT	1
		112+71 W	7.5' RT	1
	N. WATERTOWN ST SUBTOTAL			2
	STH 26	113+16 S	87.2' LT	1
	STH 26 SUBTOTAL			1
	RAMP A	48+03 A	7.3' RT	1
	RAMP A SUBTOTAL			1
	RAMP B	18+38 B	6.7' LT	1
		27+20 B	6.8' LT	1
		27+24 B	19.0' LT	1
	RAMP B SUBTOTAL			3
	TOTAL			7

B-28-110 JUNCTION BOX REPLACEMENT SUMMARY

	LOCATION	STATION	OFFSET	653.0208 JUNCTION BOXES 8X8X8-INCH EACH	** 653.0905 REMOVING PULL BOXES EACH	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	* 15A INLINE FUSE ASSEMBLIES EACH
CATEGORY 0010							
	B-28-110	109+87	41' LT	1	1	715	2

*FOR INFORMATION ONLY. INCLUDED IN THE ELECTRICAL WIRE LGIHTING 10 AWG ITEM.
**ADDITIONAL QUANTITIES LISTED ELSEWHERE

CONCRETE BASES

	SIGNAL BASE NO.	STATION	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH
CATEGORY 0010				
	SB1	23+24.6 A	12.4' LT	1
	SB2	26+13.1 B	11.9' RT	1
	SB3	26+08.6 B	46.7' RT	1
		TOTAL		3

TRAFFIC SIGNAL BASES, POLES, AND PUSH BUTTONS

	SIGNAL BASE NO.	657.0100 PEDESTAL BASES EACH	657.0405 TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH
CATEGORY 0010				
	SB1	1	1	1
	SB2	1	1	1
	SB3	1	1	1
	TOTALS	3	3	3

TRAFFIC SIGNAL CONDUIT, WIRE, AND CABLE SUMMARY (GUARDRAIL)

	FROM	TO	* 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0800 CONDUIT LOOP DETECTOR LF	655.0800 LOOP DETECTOR WIRE LF	674.0300 REMOVE CABLE LF	674.0400 REINSTALL CABLE LF
CATEGORY 0010							
	PB-34	PB-35	77	--	--	280	280
	PB-35	LOOP 32	--	54	270	--	--
	EXPB-55	PB-80	200	--	--	600	600
	EXPB-56	PB-80	10	--	--	--	20
	PB-80	PB-81	110	--	--	110	110
	EXPB-72	PB-82	190	--	--	385	385
	PB-73	PB-82	8	--	--	--	10
	PB-82	PB-83	95	--	--	95	95
	TOTAL		690	54	270	1,470	1,500

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

TRAFFIC SIGNAL PULL BOX SUMMARY (GUARDRAIL)

	PULL BOX NO.	* 652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH	653.0115 PULL BOXES STEEL 12X36-INCH EACH	653.0140 PULL BOXES STEEL 24X42-INCH EACH	* 653.0905 REMOVING PULL BOXES EACH
CATEGORY 0010					
	PB-34	--	--	1	--
	PB-35	--	--	1	1
	PB-55	1	--	--	--
	PB-56	1	--	--	--
	PB-80	--	--	1	--
	PB-81	--	--	1	--
	PB-72	1	--	--	--
	PB-73	--	1	--	1
	PB-82	--	--	1	--
	PB-83	--	--	1	--
	TOTALS	3	1	6	2

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

FOAM-JACKING

CATEGORY	STRUCTURE	LOCATION	SPV.0085.01 LB
0010	B-28-110	WEST APPROACH	50

LEGEND

* CONCRETE PAVEMENT REPAIR SHES REQ'D
* CONCRETE PAVEMENT REPLACEMENT SHES REQ'D
* PAVEMENT DOWEL BARS RETROFIT WARRANTED REQ'D
* SEE MISCELLANEOUS QUANTITIES FOR ADDITIONAL INFORMATION.

NOTE:
SEE GUARDRAIL LAYOUT AND CURB RAMP DETAILS FOR UTILITY INFORMATION.

N

CTH Y

UNION PACIFIC RAILROAD

B-28-017
(SEE STRUCTURE PLANS)

B-28-019
(NO IMPROVEMENTS)

BEGIN CONSTRUCTION
STA. 105+47.44 WB

BEGIN PROJECT
STA. 106+06.00 EB

BEGIN CONSTRUCTION
STA. 105+49.98 EB

105+00 WB
105+00 EB
110+00 WB
110+00 EB
IH 94
115+00 WB
115+00 EB
120+00 WB
120+00 EB

RAMP B
15+00 B

RAMP A
15+00 A

RELIEF TRENCH REQ'D.

B-28-016
(SEE STRUCTURE PLANS)

MGS GUARDRAIL REQ'D (TYP.).
SEE GUARDRAIL LAYOUT DETAILS
FOR ADDITIONAL INFORMATION.

B-28-018
(NO IMPROVEMENTS)

MATCH LINE 125+00 EB

N. WATERTOWN ST

5

5

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	PLAN SHEETS	SHEET 81	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050201-pn
PLOT DATE : 7/1/2025 10:47 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

NOTE:
SEE GUARDRAIL LAYOUT AND CURB RAMP DETAILS FOR UTILITY INFORMATION.

* LIMIT OF CONTINUOUS DIAMOND GRINDING CONCRETE PAVEMENT

END CONSTRUCTION
STA. 115+65.00 W

SEE CURB RAMP DETAILS (TYP.)

* STA. 25+96.1 B

ADJUSTING PULL BOXES REQ'D

20+00 B

25+00 B

B-28-112
(SEE STRUCTURE PLANS)

ADJUSTING PULL BOXES REQ'D

RELIEF TRENCH REQ'D.

ADJUSTING PULL BOXES REQ'D

RAMP B

30+00 B

35+00 B

40+00 B

45+00 B

* STA. 43+67.5 B

ADJUSTING PULL BOXES REQ'D

END CONSTRUCTION
STA. 116+30.00 S

STH 26

115+00 S

110+00 S

B-28-110
(SEE STRUCTURE PLANS)

FOAM-JACKING REQ'D

OLD 26 RD

120+00 W

115+00 W

110+00 W

105+00 W

130+00 WB
130+00 EB

135+00 WB
135+00 EB

140+00 WB
140+00 EB

IH 94

145+00 WB
145+00 EB

150+00 WB
150+00 EB

MATCH LINE 125+00 EB

MATCH LINE 155+00 EB

RELIEF TRENCH REQ'D.

B-28-111
(SEE STRUCTURE PLANS)

20+00 A

25+00 A

30+00 A

RAMP A

35+00 A

40+00 A

45+00 A

RELIEF TRENCH REQ'D.

B-28-109
(SEE STRUCTURE PLANS)

MGS GUARDRAIL REQ'D (TYP.).
SEE GUARDRAIL LAYOUT DETAILS
FOR ADDITIONAL INFORMATION.

SEE JOHNSON CREEK
PARK & ROAD DETAIL

* STA. 22+57.6 A

* STA. 40+21.2 A

ASPHALTIC SURFACE
REQ'D (FILL GAP IN
LONGITUDINAL JOINT)

ADJUSTING MANHOLE COVERS REQ'D
(VILLAGE OF JOHNSON CREEK
SANITARY SEWER MANHOLE)

N. WATERTOWN ST

105+00 S

CHURCH ST/STH 26

100+00 S

WRIGHT RD

BEGIN CONSTRUCTION
STA. 102+45.00 W

BEGIN CONSTRUCTION
STA. 99+75.00 S

LEGEND

* CONCRETE PAVEMENT REPAIR SHES REQ'D

* CONCRETE PAVEMENT REPLACEMENT SHES REQ'D

* PAVEMENT DOWEL BARS RETROFIT WARRANTED REQ'D

* SEE MISCELLANEOUS QUANTITIES FOR ADDITIONAL INFORMATION.

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	PLAN SHEETS	SHEET 82	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050202-pn
PLOT DATE : 7/18/2025 8:14 AM
PLOT BY : HASSETT, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

LEGEND

* CONCRETE PAVEMENT REPAIR SHES REQ'D
* CONCRETE PAVEMENT REPLACEMENT SHES REQ'D
* PAVEMENT DOWEL BARS RETROFIT WARRANTED REQ'D
* SEE MISCELLANEOUS QUANTITIES FOR ADDITIONAL INFORMATION.

NOTE:
SEE GUARDRAIL LAYOUT AND CURB RAMP DETAILS FOR UTILITY INFORMATION.

N

MGS GUARDRAIL REQ'D (TYP.).
SEE GUARDRAIL LAYOUT DETAILS FOR ADDITIONAL INFORMATION.

END CONSTRUCTION
STA. 172+58.03 WB

RAMP B
50+00 B
55+00 B

IH 94

160+00 WB
160+00 EB
165+00 WB
165+00 EB
170+00 WB
170+00 EB
175+00 WB
175+00 EB
180+00 WB
180+00 EB

MATCH LINE 155+00 EB

RAMP A
50+00 A
55+00 A

RELIEF TRENCH REQ'D.

END PROJECT
STA. 172+50.00 EB

ADJUSTING PULL BOXES REQ'D

C-28-012
(NO IMPROVEMENTS)

WRIGHT RD

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	PLAN SHEETS	SHEET 83	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050203-pn
PLOT DATE : 7/1/2025 10:47 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:200 FT

Standard Detail Drawing List

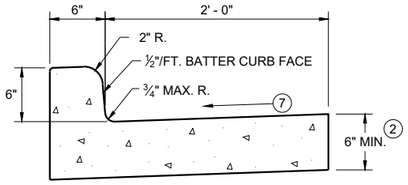
08D01-24A	CONCRETE CURB & GUTTER
08D01-24B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-08A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D05-22A	CURB RAMPS TYPES 1 AND 1-A
08D05-22B	CURB RAMPS TYPES 2 AND 3
08D05-22C	CURB RAMPS TYPES 4A AND 4A1
08D05-22D	CURB RAMPS TYPE 4B AND 4B1
08D05-22E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-22F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-22G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D15-05A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
09B02-10	CONDUIT
09B04-13	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09E07-06	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
13A05-06A	SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY
13A05-06B	SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-17A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-17B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-17C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C10-03	RETROFIT DOWEL BARS
13C18-08A	CONCRETE PAVEMENT JOINTING
13C18-08B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-08C	CONCRETE PAVEMENT JOINT TYPES
13C18-08D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-08F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
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)
14B45-05F	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
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09D	ON RAMP LANE CLOSURE
15C02-09E	OFF RAMP LANE CLOSURE
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C02-09G	TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-16A	PAVEMENT MARKING SYMBOLS
15C07-16B	PAVEMENT MARKING WORDS
15C07-16C	PAVEMENT MARKING ARROWS
15C07-16E	PAVEMENT MARKING FOR BIKE LANES
15C08-24A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-24B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-24C	PAVEMENT MARKING (TURN LANES)
15C08-24D	PAVEMENT MARKING (TURN LANES)

6

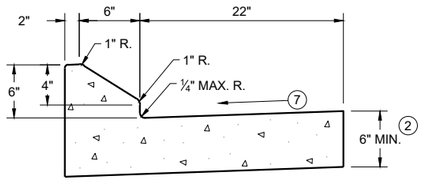
Standard Detail Drawing List

15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-09A	MEDIAN ISLAND PAVEMENT MARKINGS
15C18-09B	PAVEMENT MARKINGS, MEDIAN ISLAND NOSE
15C29-08A	BICYCLE LANE MARKING
15C31-08A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-08C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C36-01	PARKING STALL MARKING
15D12-15D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D12-15G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
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
15D16-06	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-10A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D27-04	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D30-11A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D40-06C	TRAFFIC CONTROL, PARTIAL LANE SHIFT NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D40-06D	TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

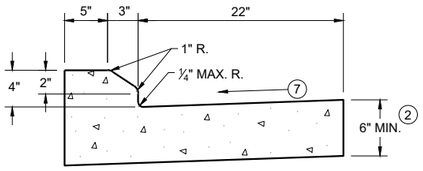
6



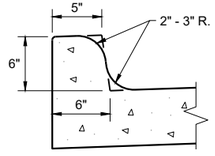
TYPES A (1) & D



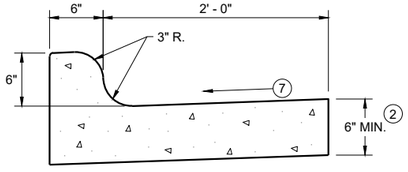
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

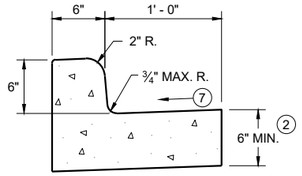


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



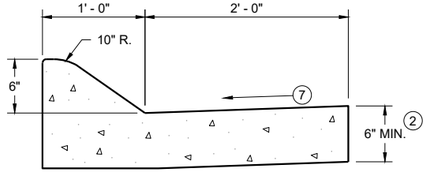
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

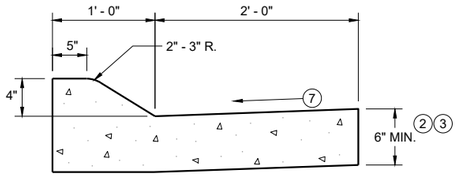


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

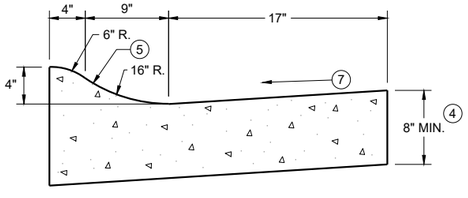


6" SLOPED CURB TYPES A (1) & D



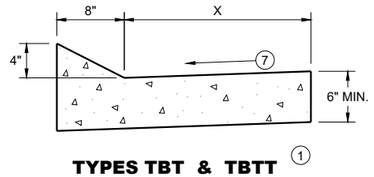
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T
CONCRETE CURB AND GUTTER 30"

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

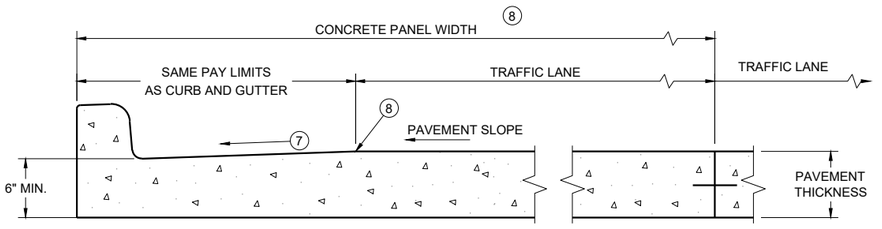


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

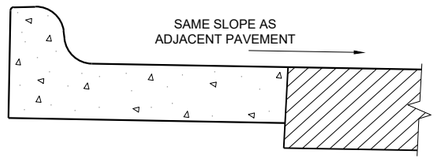
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

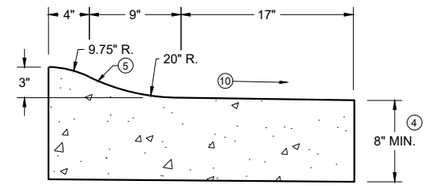
(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(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.

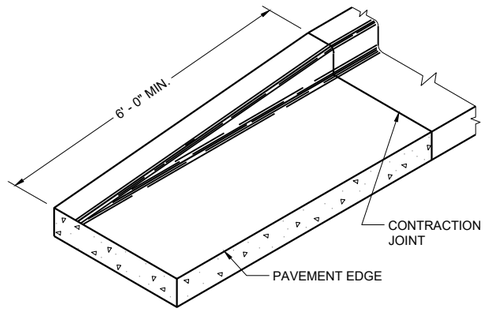
(9) SLOPE TO BE REVERSE SLOPE MATCHING THE SLOPE OF THE PAVEMENT AND THE CIRCULATORY ROADWAY



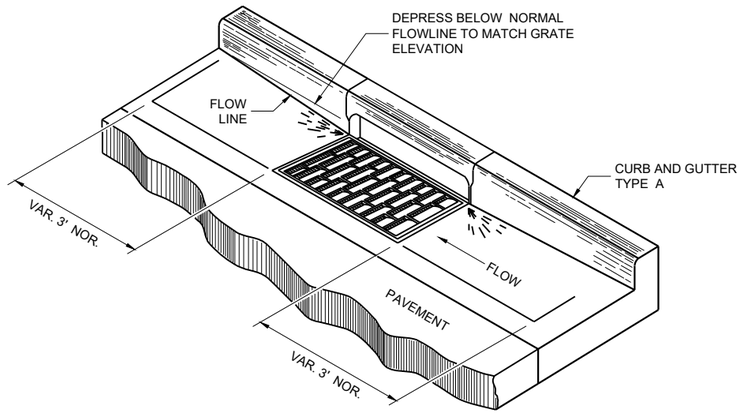
3" SLOPED CURB TYPES R (1) & T

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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.

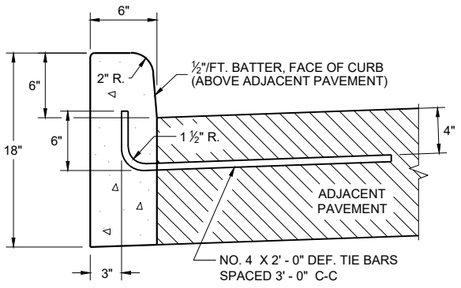
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

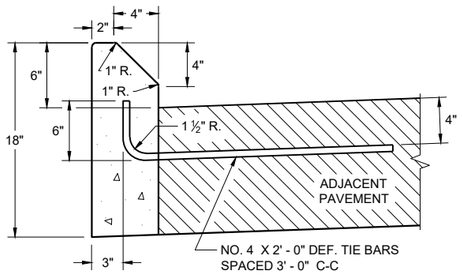
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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.

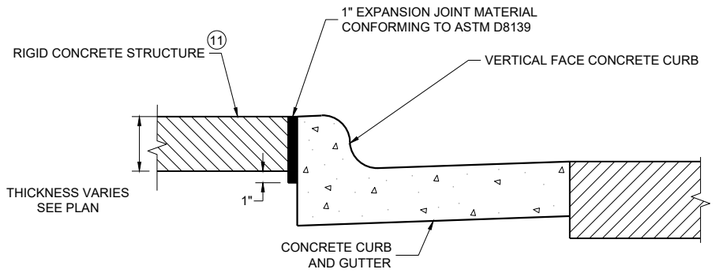


TYPES A (1) & D

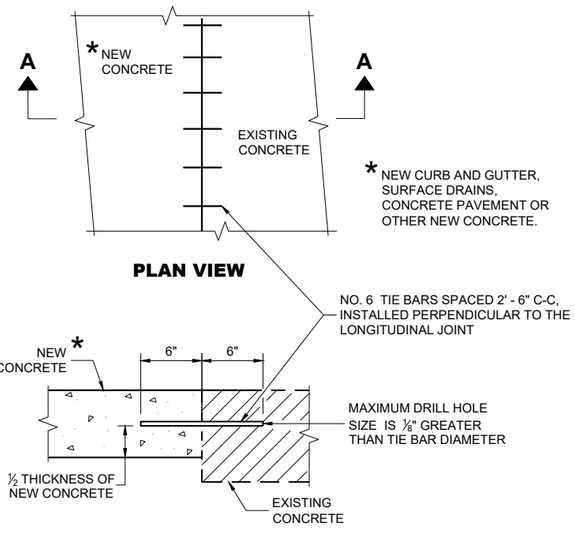


TYPES G (1) & J

CONCRETE CURB



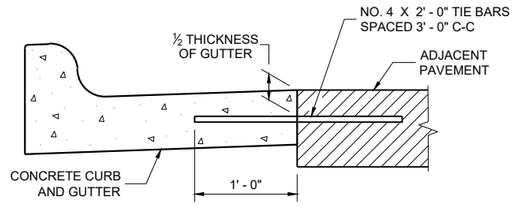
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



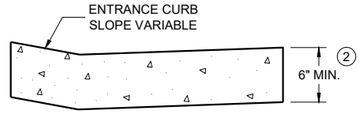
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
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)

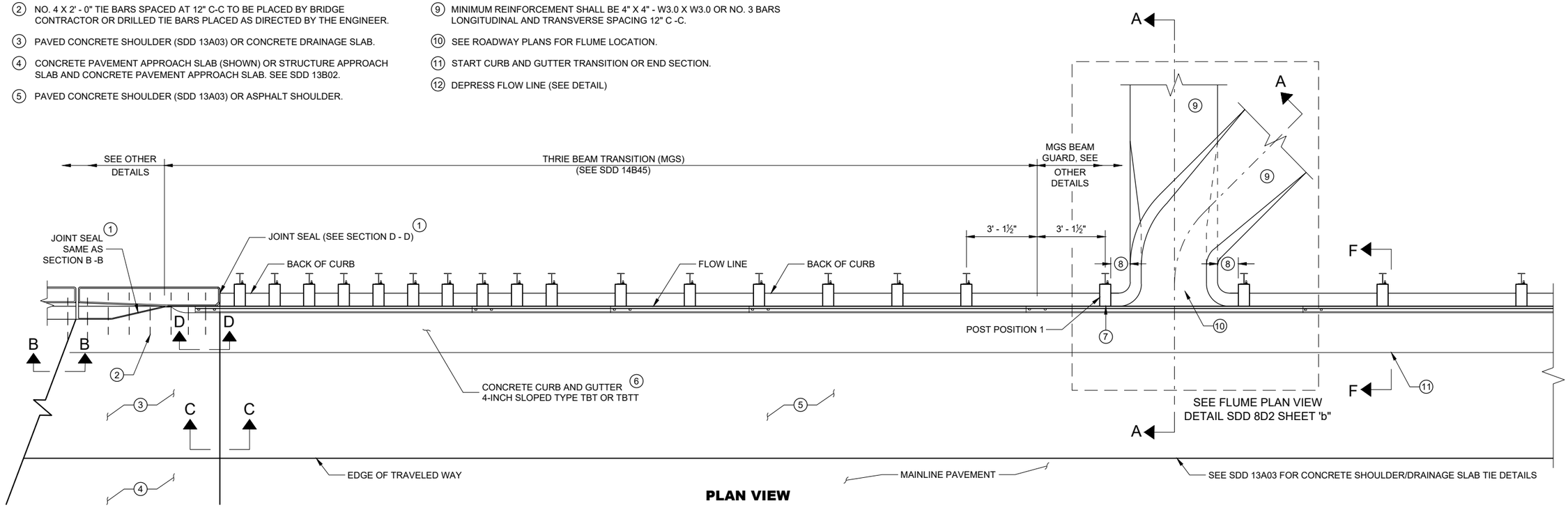
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

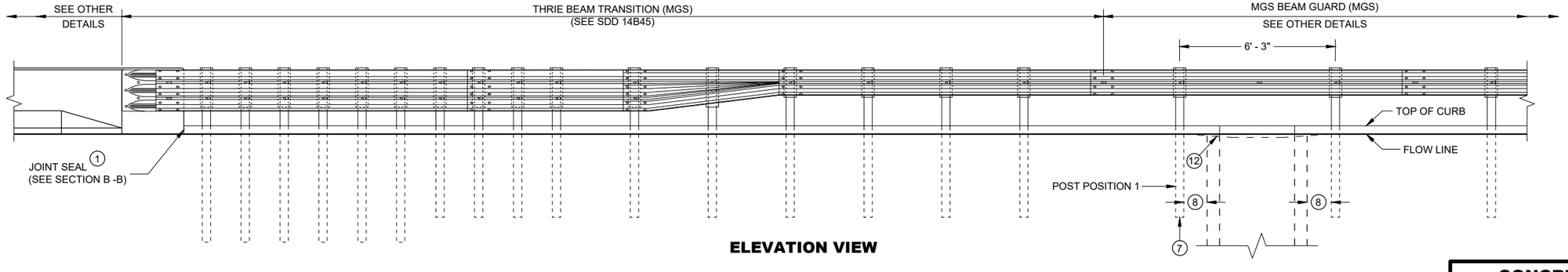
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



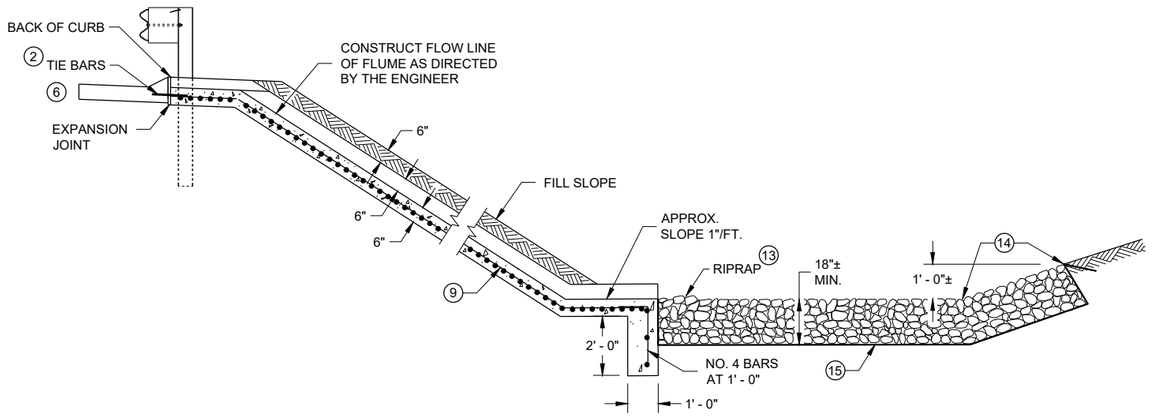
ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

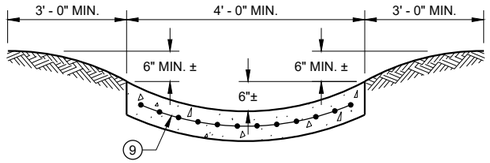
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

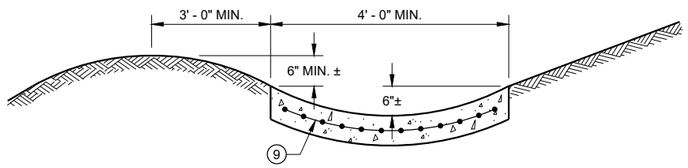
SDD 08D02 - 08a



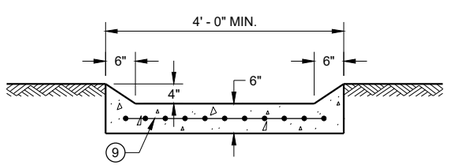
SECTION A - A



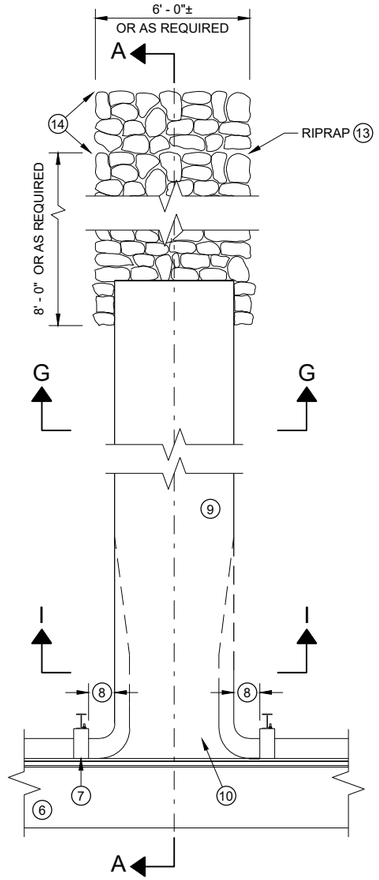
SECTION G - G



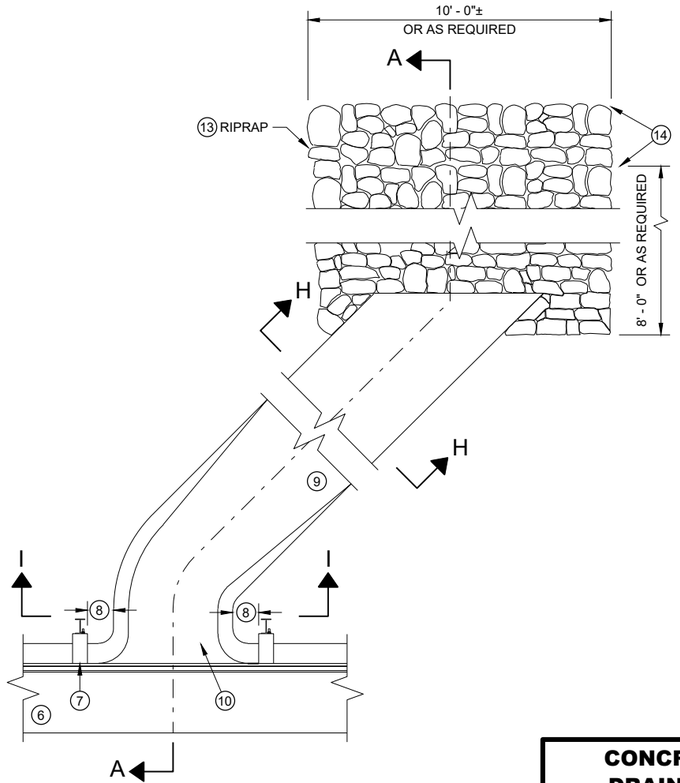
SECTION H - H



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.

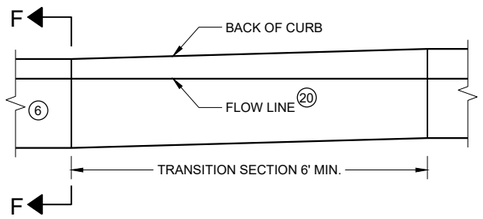
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5. PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.
6. CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.
7. PLACE 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.

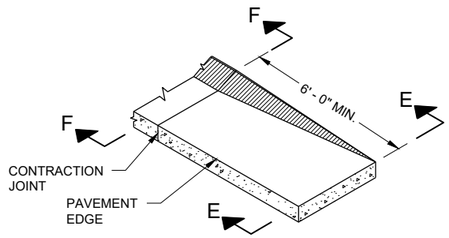
CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

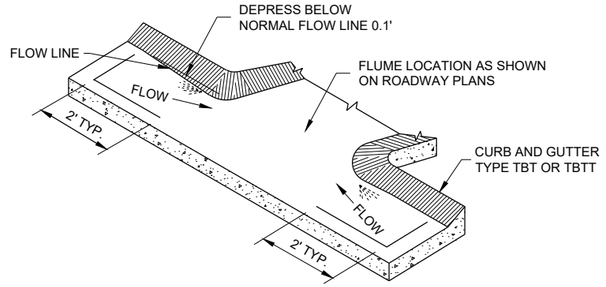
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SDD 08D02 - 08b



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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(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.

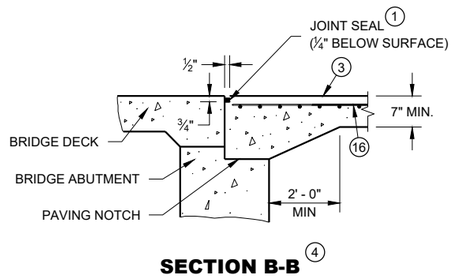
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(18) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

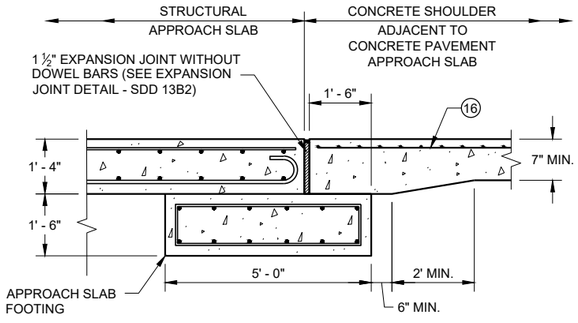
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

(20) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

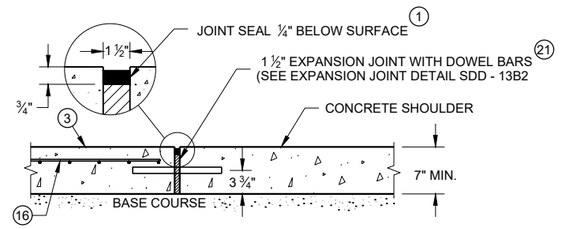
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



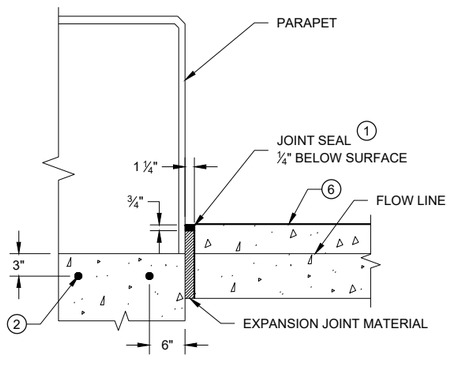
SECTION B-B (4)



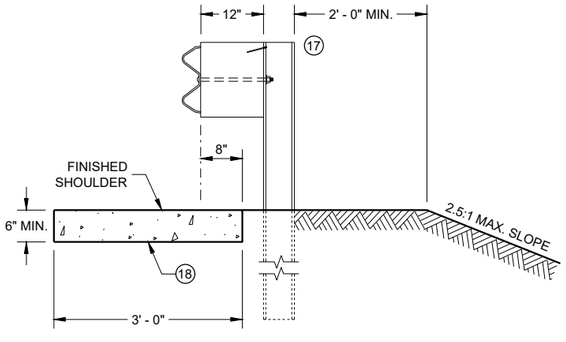
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



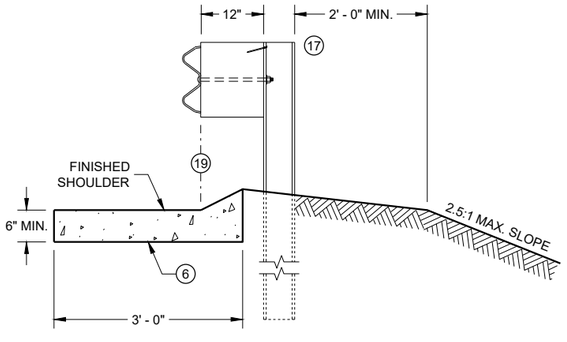
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

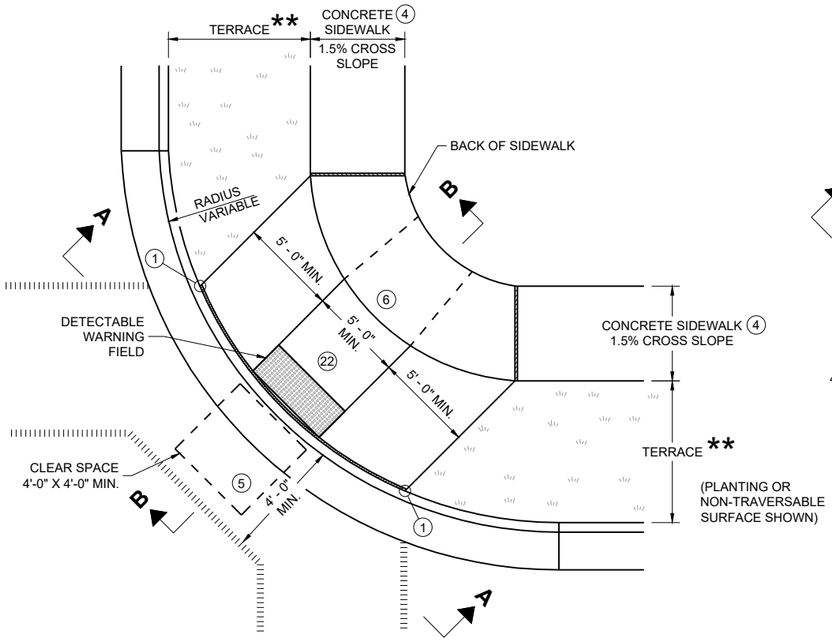
CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

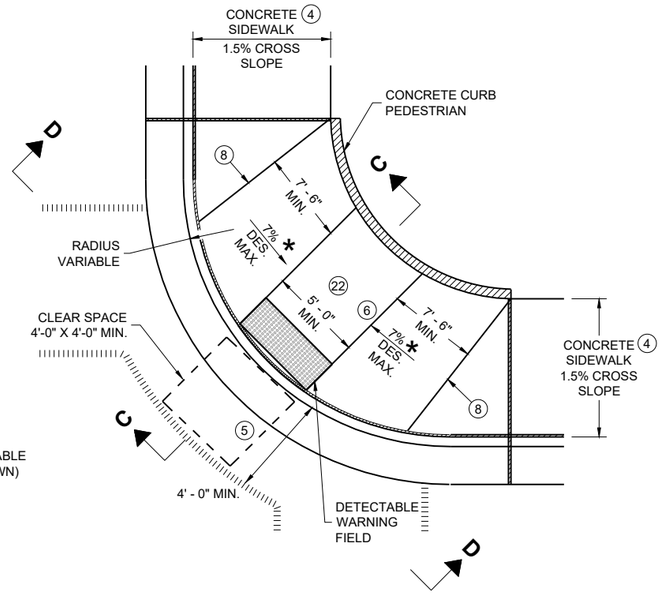
6
SDD 08D02 - 08c



PLAN VIEW

CURB RAMP TYPE 1

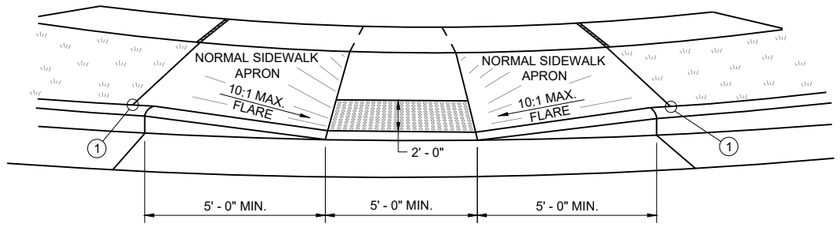
(CENTER OF CORNER RADIUS)



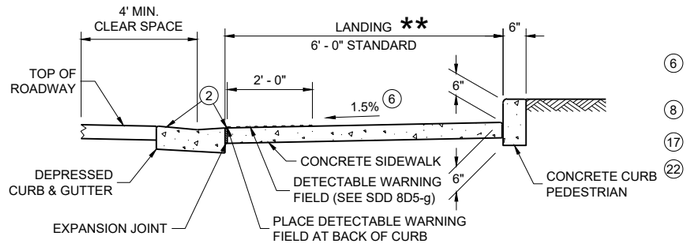
PLAN VIEW

CURB RAMP TYPE 1 - A

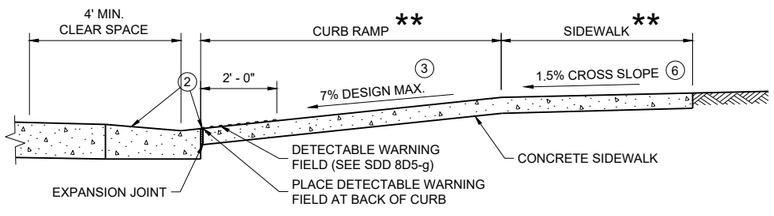
(NO TERRACE)



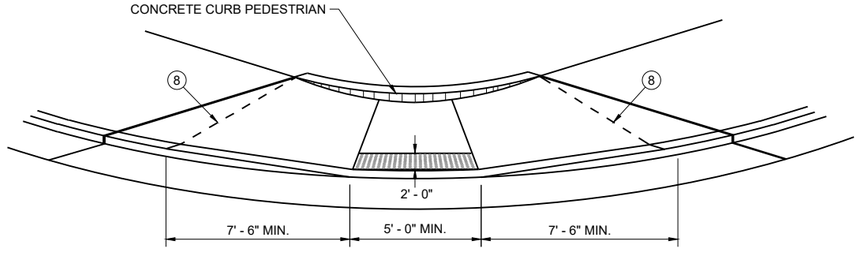
VIEW A - A FOR TYPE 1



SECTION C - C FOR TYPE 1 - A



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE CURB RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF CURB RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE CURB RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A CLEAR SPACE IN THE STREET AND GUTTER AREA. WHEN THE GUTTER CROSS SLOPE EXCEEDS 2.1%, CONSTRUCT THE CLEAR SPACE IN THE STREET AREA AND THE 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE. FOR RECONSTRUCTION AND MODERNIZATION PROJECTS THE CLEAR SPACE SLOPE PARALLEL TO THE CURBLINE SHOULD BE 2.1% MAX FOR CROSSINGS THAT ARE STOP AND YIELD CONTROLLED, AND 5% MAX FOR THOSE THAT ARE SIGNAL CONTROLLED. FOR PERPETUATION AND REHABILITATION PROJECTS THE SLOPE OF THE CLEAR SPACE PARALLEL TO THE CURBLINE WILL MATCH THE ROADWAY LONGITUDINAL SLOPE. THE SLOPE OF THE CLEAR SPACE PERPENDICULAR TO THE CURBLINE WILL MATCH THE ROADWAY CROSS SLOPE BUT SHOULD NOT EXCEED 5% UNLESS THE ROADWAY IS SUPERELEVATED (WHEN SUPERELEVATED THE ROADWAY CROSS SLOPE SHOULD MATCH THE SUPERELEVATION).

(6) PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

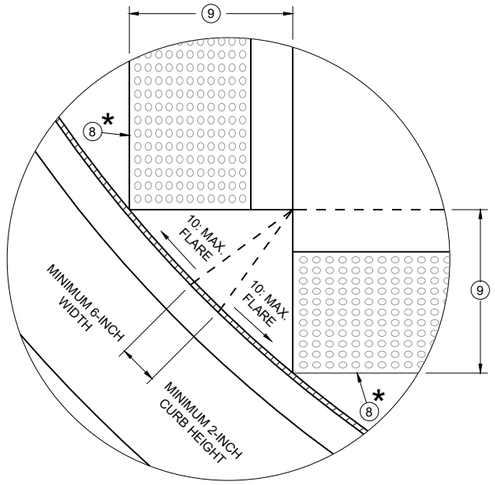
(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

LEGEND

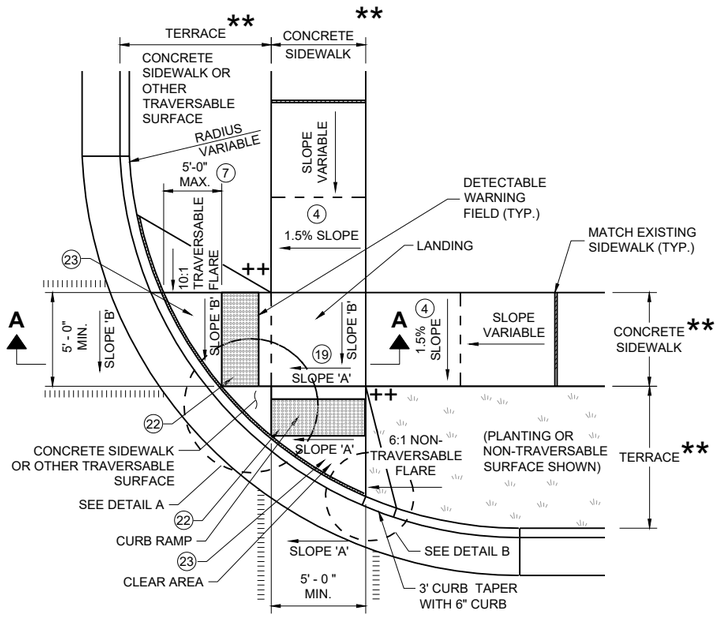
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- * MAXIMUM 8.3%
- ** WIDTH SHOWN ELSEWHERE IN THE PLANS

CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



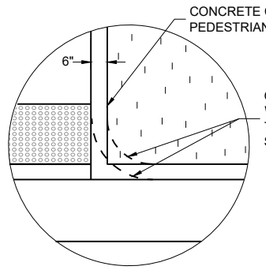
DETAIL A



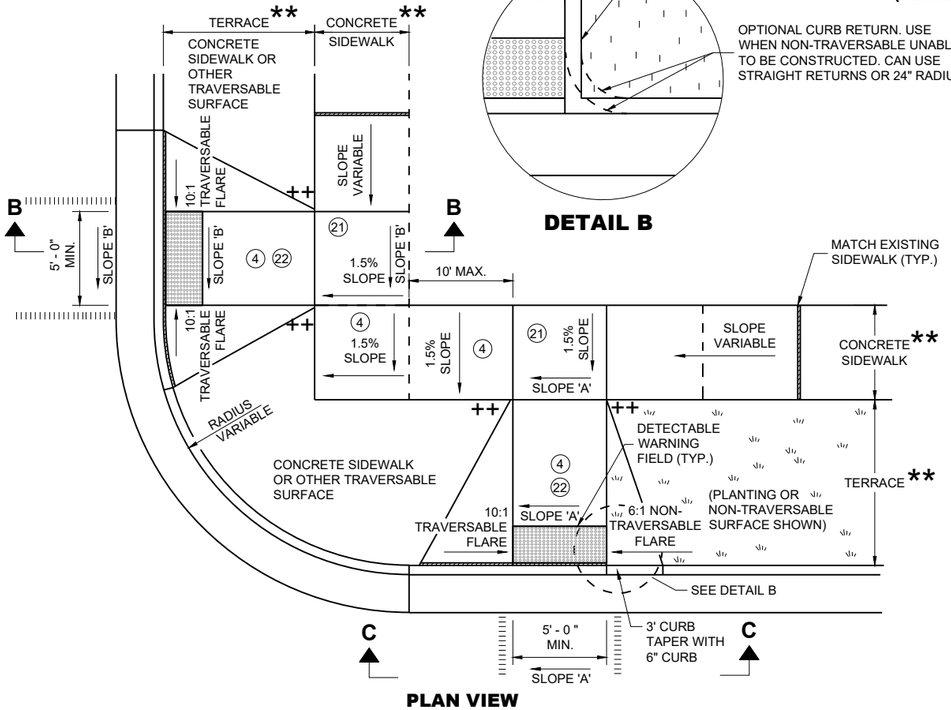
PLAN VIEW

CURB RAMP TYPE 2

(CENTER OF CORNER RADIUS)



DETAIL B



PLAN VIEW

CURB RAMP TYPE 3

(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% DESIGN MAXIMUM SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% DESIGN MAXIMUM SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

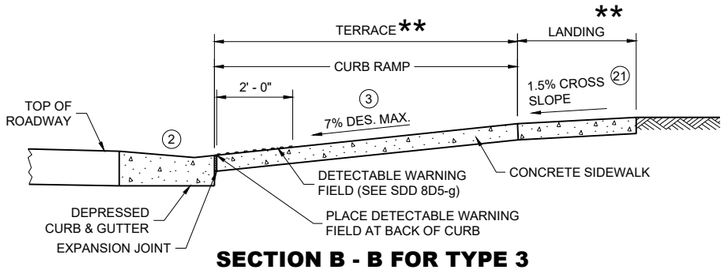
(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

(19) WHERE A LANDING SERVES TWO CURB RAMPS, THE LANDING SLOPE SHALL NOT EXCEED THE CROSS SLOPE AT THE BOTTOM OF THE RAMP OR WITHIN THE CROSSWALK PARALLEL TO THE DIRECTION OF TRAVEL.

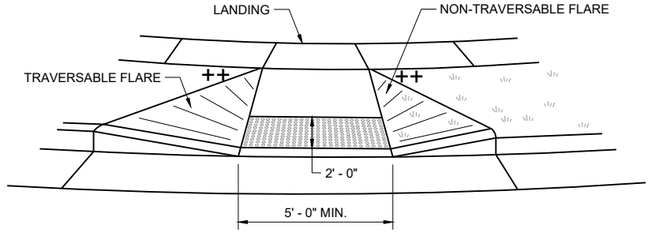
(21) PROVIDE A LANDING WITH A SLOPE PARALLEL TO ROADWAY THAT MATCHES SLOPE AT THE BOTTOM OF THE ADJACENT RAMP. SLOPE PERPENDICULAR TO ROADWAY SHALL BE 2.1% MAXIMUM. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

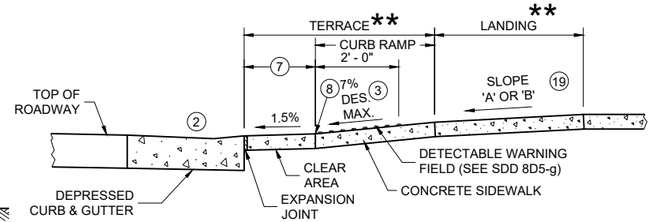
(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3



SECTION A - A FOR TYPE 2

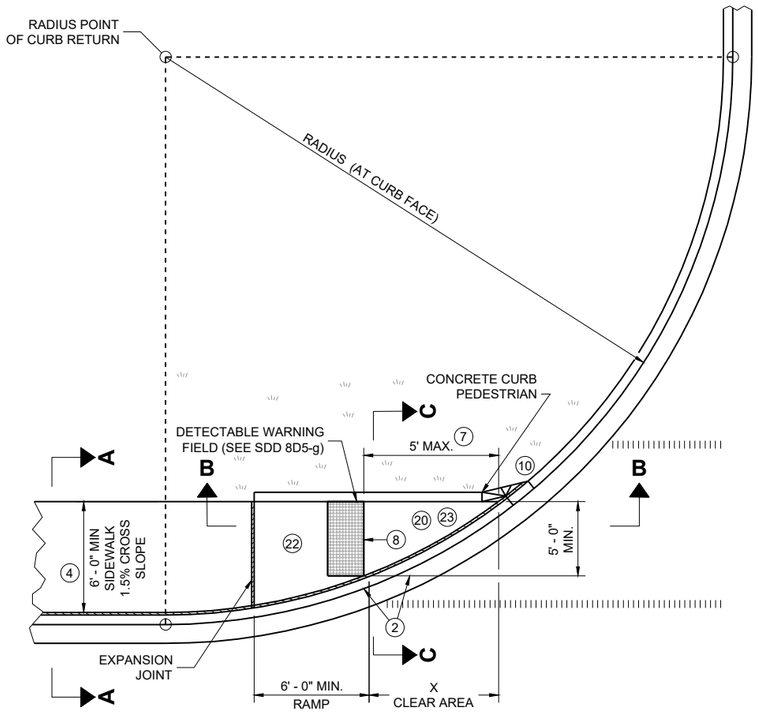
LEGEND

▨	½" EXPANSION JOINT SIDEWALK
- - - -	CONTRACTION JOINT SIDEWALK
ıllıllıllıllıl	PAVEMENT MARKING CROSSWALK (WHITE)
*	MAXIMUM 2.1% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK
**	WIDTH SHOWN ELSEWHERE IN THE PLANS
++	CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

CURB RAMPS TYPE 2 AND 3

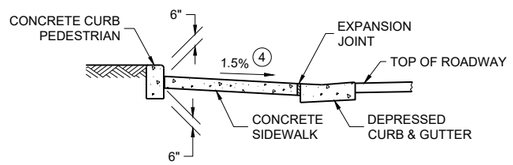
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D05-22b

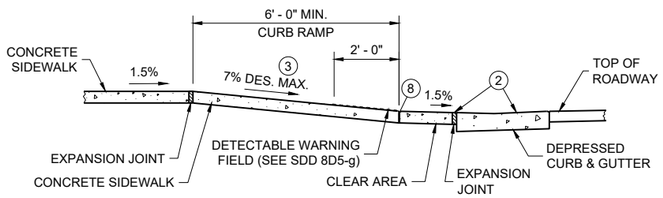


PLAN VIEW

CURB RAMP TYPE 4A



SECTION C - C FOR TYPE 4A



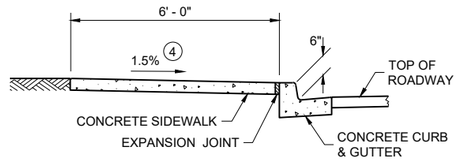
SECTION B - B FOR TYPE 4A AND TYPE 4A1

LEGEND

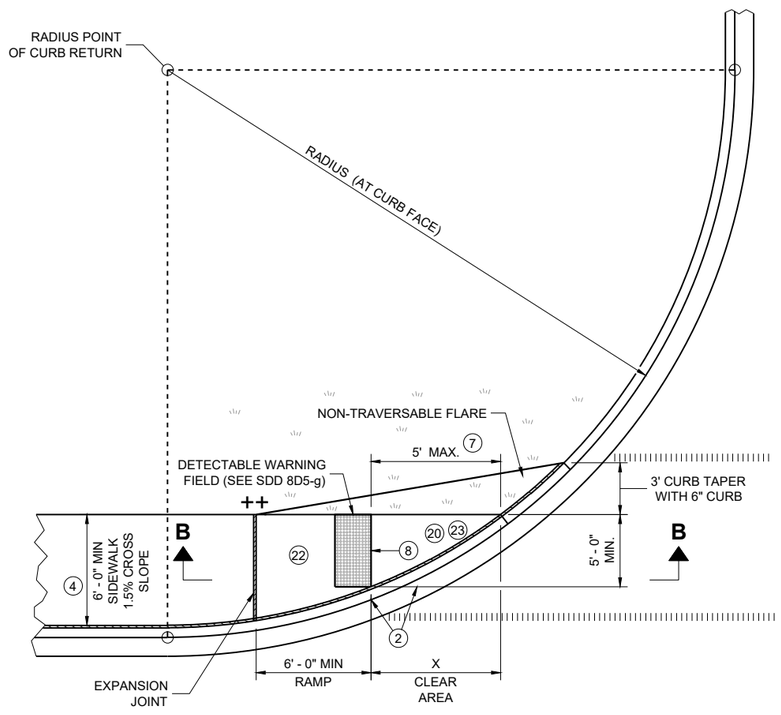
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)
- ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A



PLAN VIEW

CURB RAMP TYPE 4A1

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

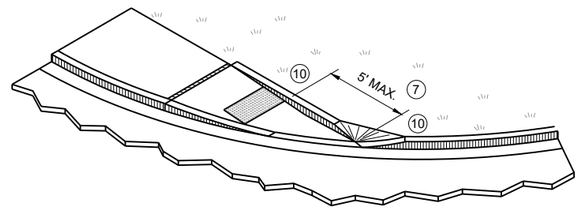
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

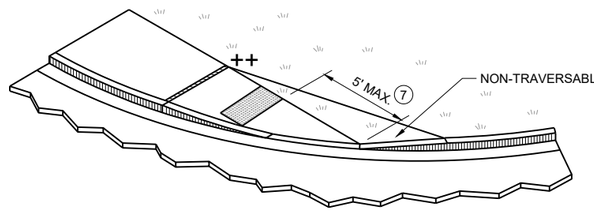
(20) MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.



ISOMETRIC VIEW FOR TYPE 4A



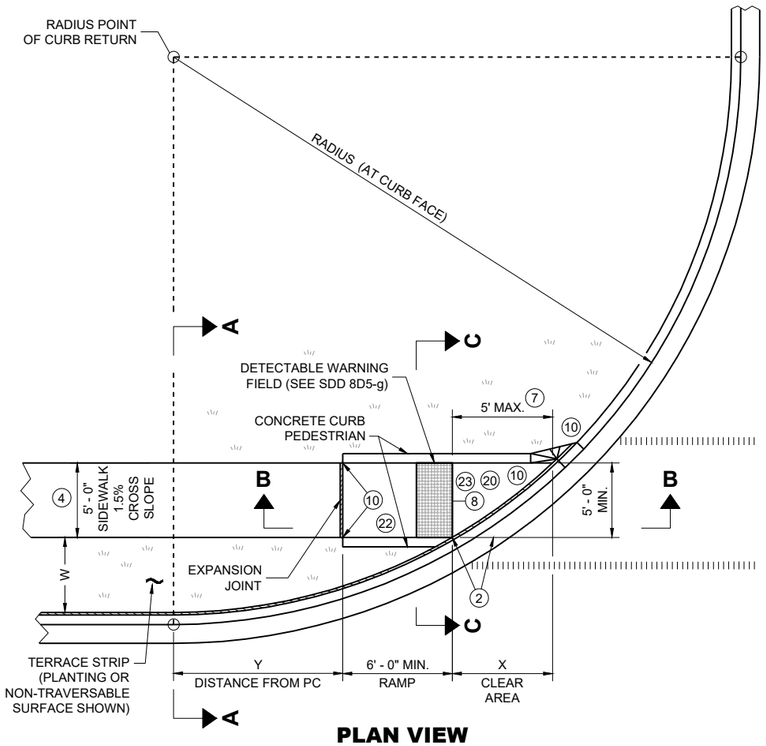
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

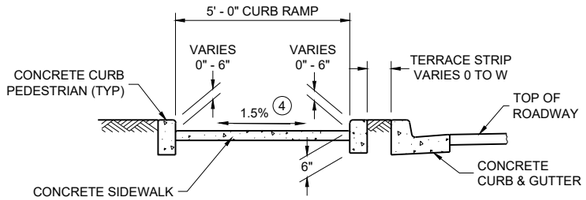
SDD 08D05-22c



PLAN VIEW
CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET			4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET									4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET															4' - 10 ¾"	19' - 8 ¼"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C - C FOR TYPE 4B

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)
- * MAXIMUM 2.1% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK
- ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

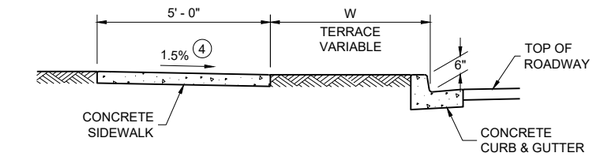
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

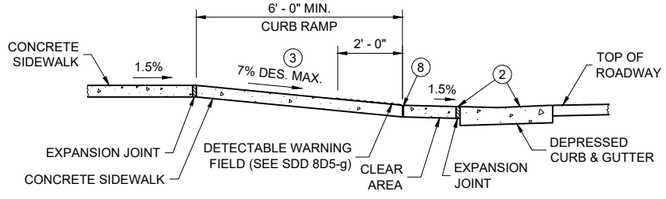
(20) MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

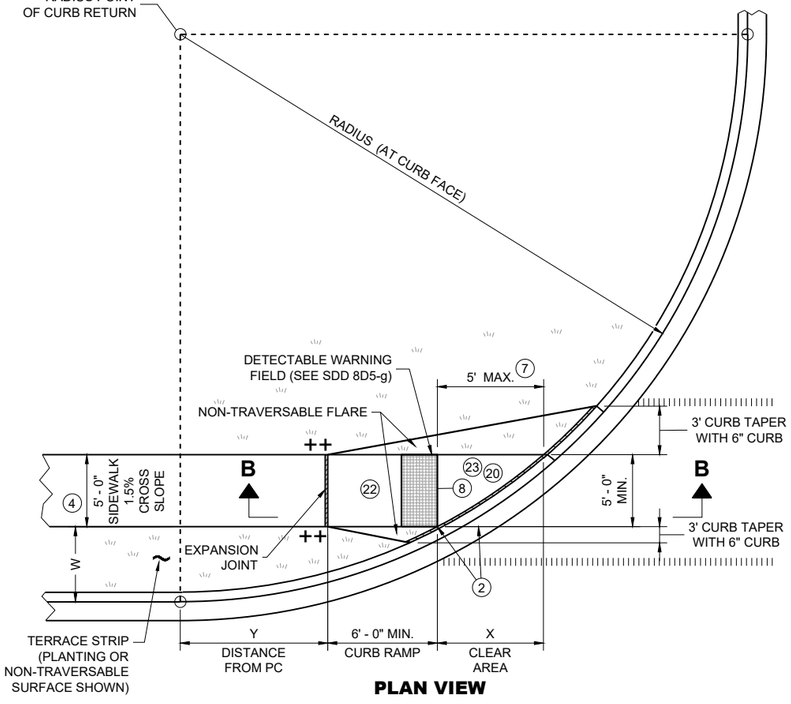
(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.



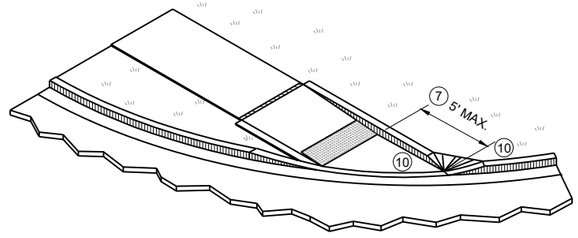
SECTION A - A FOR TYPE 4B



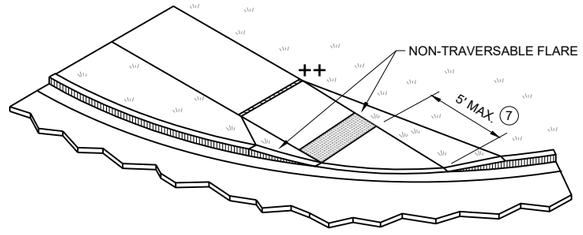
SECTION B - B FOR TYPE 4B AND TYPE 4B1



PLAN VIEW
CURB RAMP TYPE 4B1



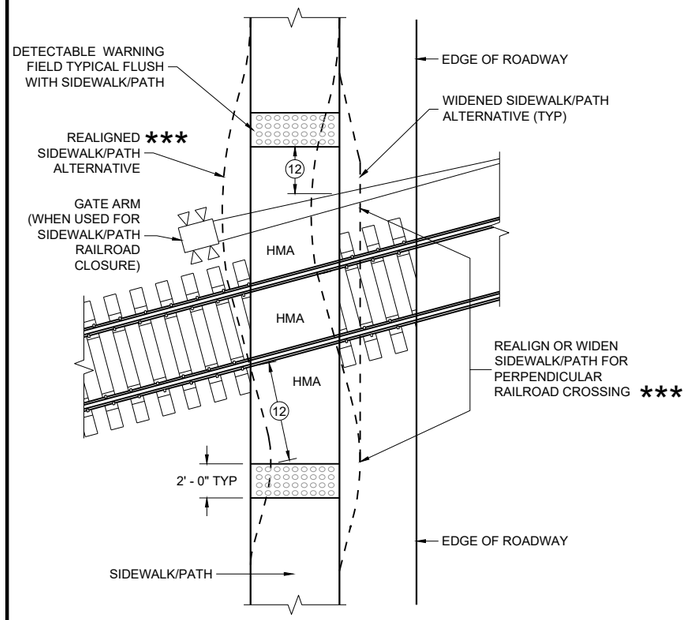
ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

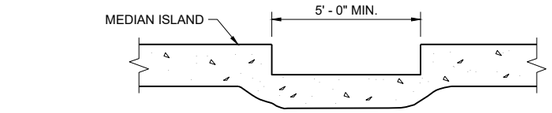
CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

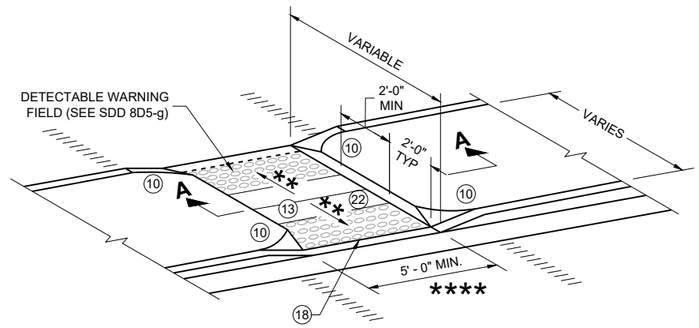


CURB RAMP TYPE 8

DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

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.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

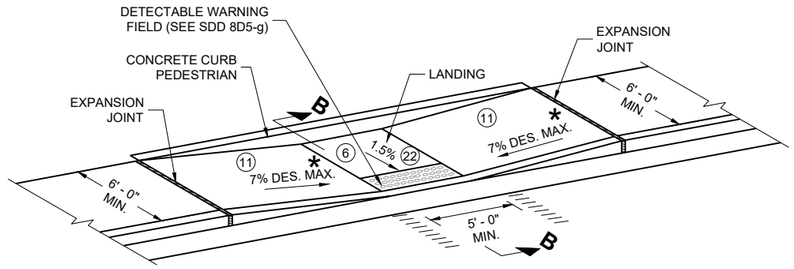
(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH, WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

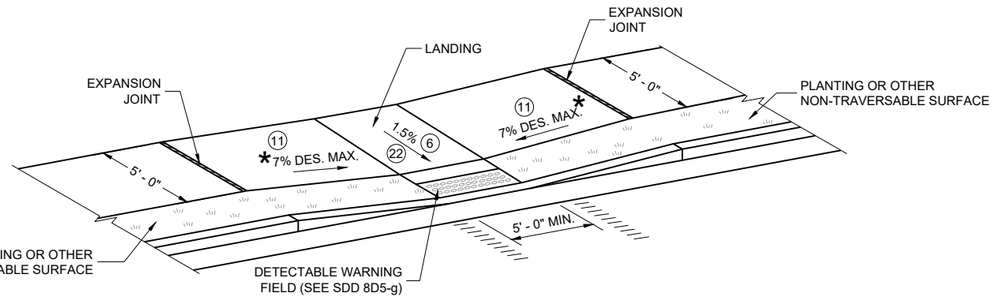
(18) WHEN THE DISTANCE BETWEEN THE BACK OF CURBS IS LESS THAN 6 FEET BUT THE FACE OF CURB TO FACE OF CURB DISTANCE IS 6 FEET OR GREATER THEN THE DETECTABLE WARNING FIELDS MAY BE MOVED SO THAT THE EDGE OF THE WARNING FIELD IS PLACED AT THE GUTTER FLOWLINE. MAINTAIN A MINIMUM OF TWO FEET BETWEEN DETECTABLE WARNING FIELD PANELS.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.



CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS

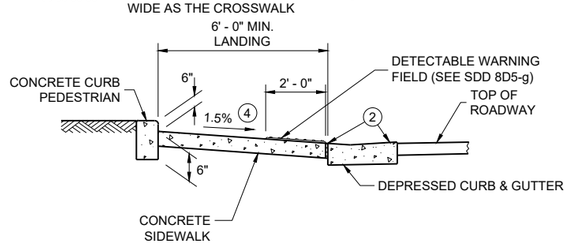


CURB RAMP TYPE 7B

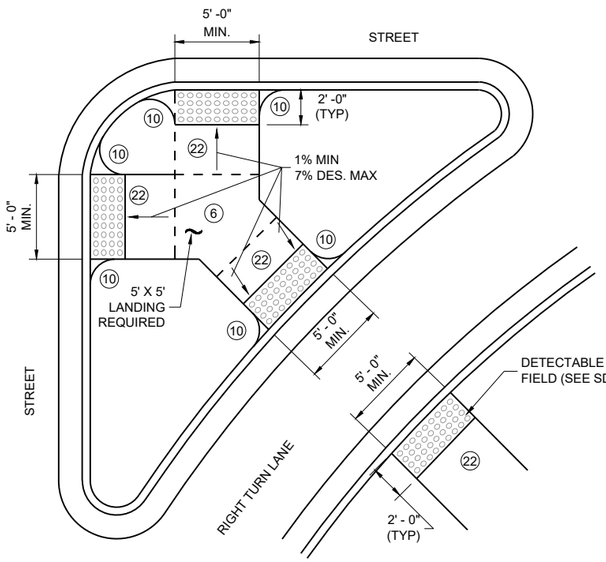
FOR INTERSECTIONS AND MID BLOCK CROSSINGS

LEGEND

═══	½" EXPANSION JOINT SIDEWALK
– – – –	CONTRACTION JOINT FIELD LOCATED
ıı ıı ıı ıı	PAVEMENT MARKING CROSSWALK (WHITE)
*	MAXIMUM 8.3%
**	1% MINIMUM (PROVIDE DRAINAGE)
***	DETAILS TO BE DETERMINED BY ENGINEER
****	FOR SHARED USE PATHS, WIDTH MUST BE AS WIDE AS THE CROSSWALK



SECTION B - B FOR TYPE 7A



CURB RAMP TYPE 6

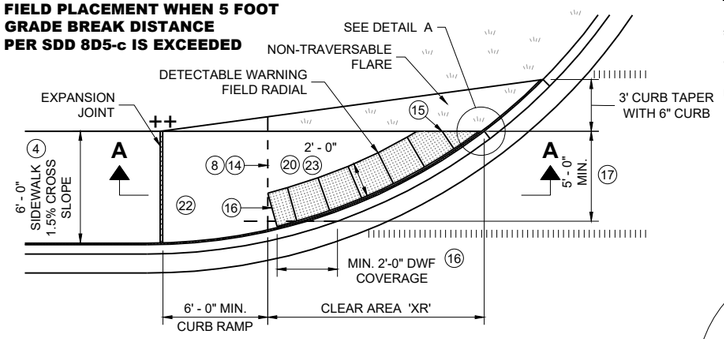
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS

CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

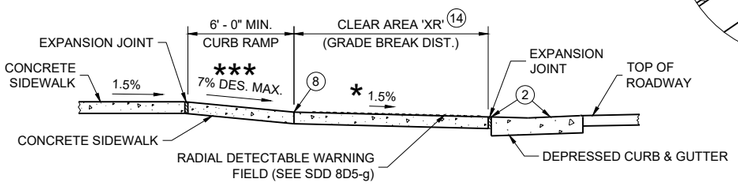
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



PLAN VIEW

CURB RAMP TYPE 4A1

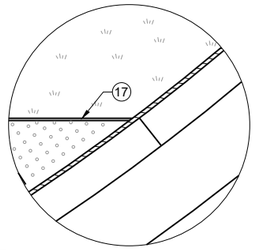
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



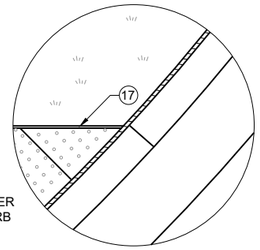
SECTION A - A FOR TYPE 4A1

LEGEND

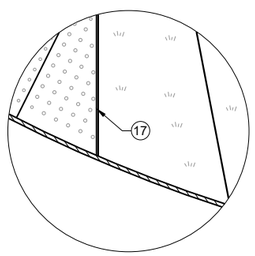
═══	½" EXPANSION JOINT SIDEWALK
– – – –	CONTRACTION JOINT SIDEWALK
ıı ıı ıı ıı	PAVEMENT MARKING CROSSWALK (WHITE)
**	WIDTH SHOWN ELSEWHERE IN THE PLANS
***	MAXIMUM 8.3%
++	CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



DETAIL A



DETAIL B



DETAIL C

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

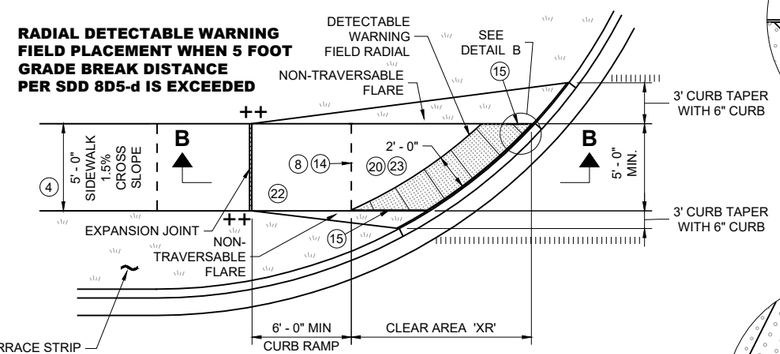
(19) WHERE A LANDING SERVES TWO CURB RAMPS, THE LANDING SLOPE SHALL NOT EXCEED THE CROSS SLOPE AT THE BOTTOM OF THE RAMP OR WITHIN THE CROSSWALK PARALLEL TO THE DIRECTION OF TRAVEL.

(20) MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.

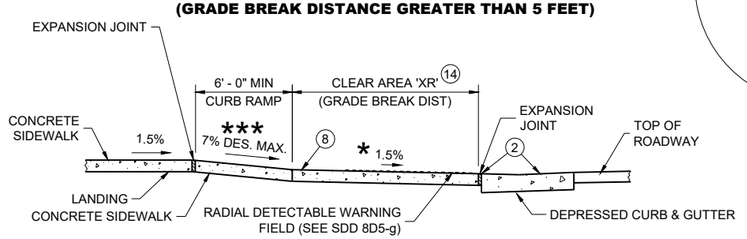
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



PLAN VIEW

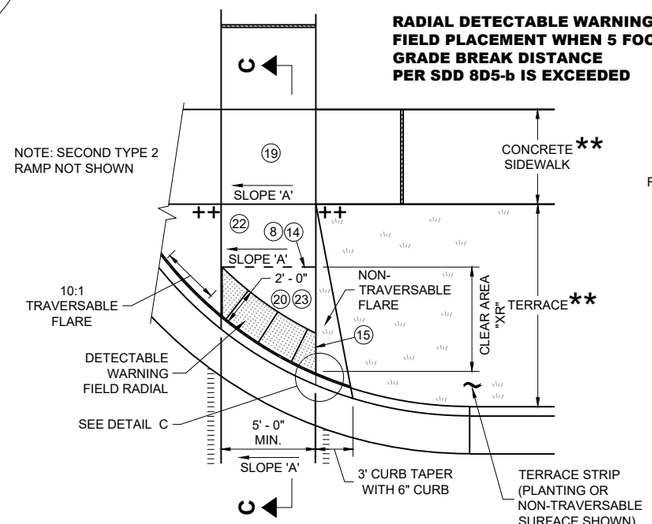
CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



SECTION B - B FOR TYPE 4B1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

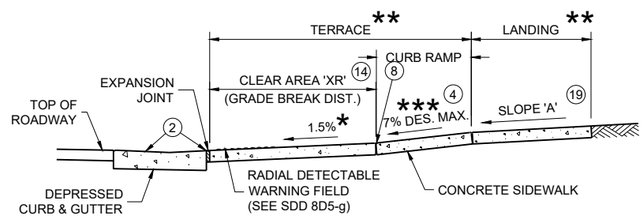


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)



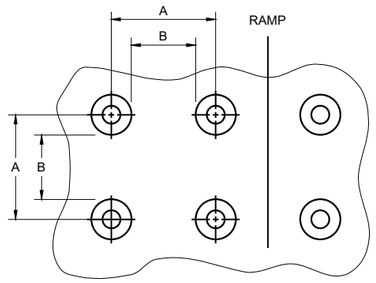
SECTION C - C FOR TYPE 2

CURB RAMPS
RADIAL DETECTABLE WARNING

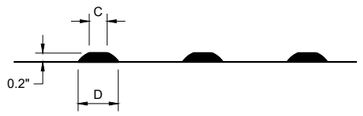
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	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

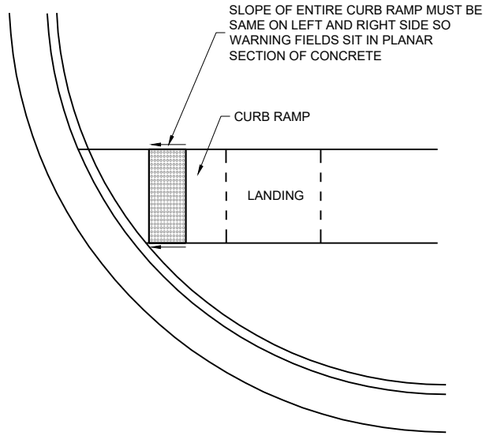
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

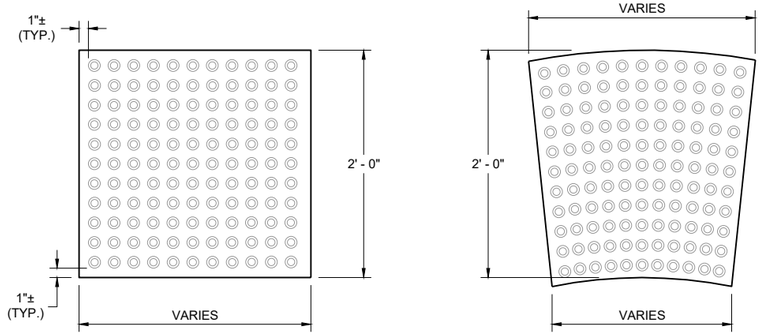
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

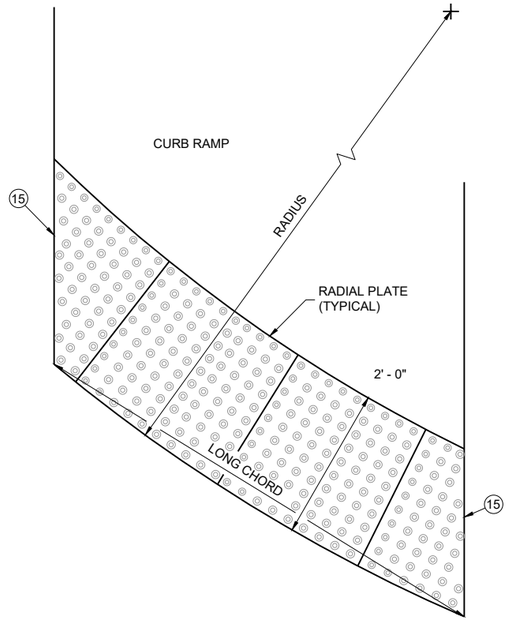
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



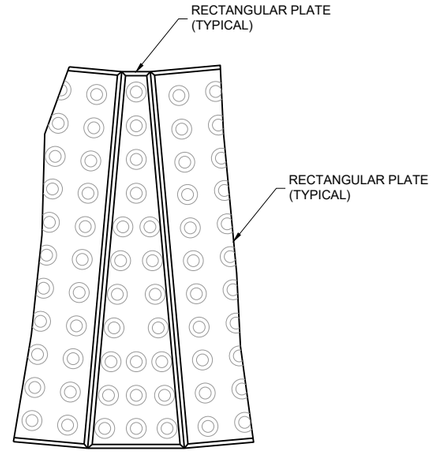
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

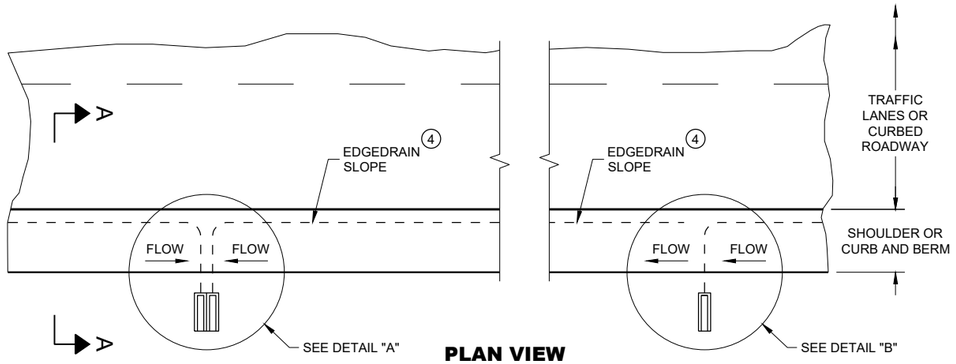
CURB RAMPS
RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Rodney Taylor — <position>

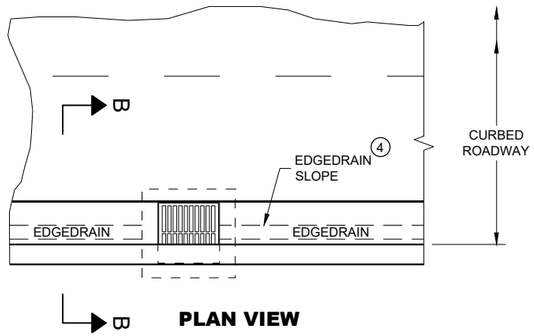
FHWA

6
SDD 08D05-22g



PLAN VIEW

ROADWAY WITH SHOULDERS OR CURBS
(EDGEDRAIN CONNECTS TO ROADSIDE) (2)



PLAN VIEW

ROADWAY WITH CURBS
(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)

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) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

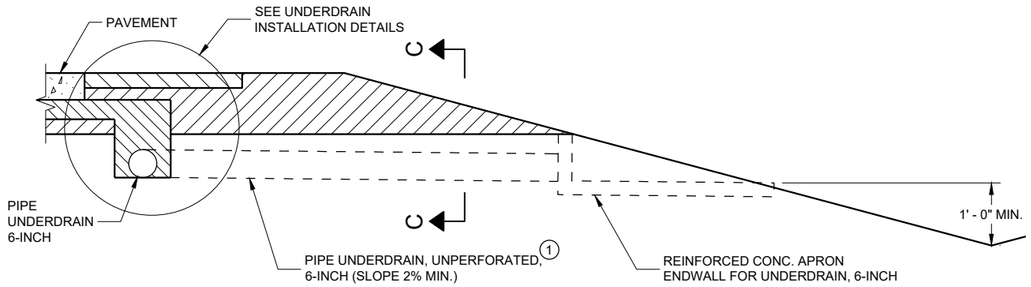
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

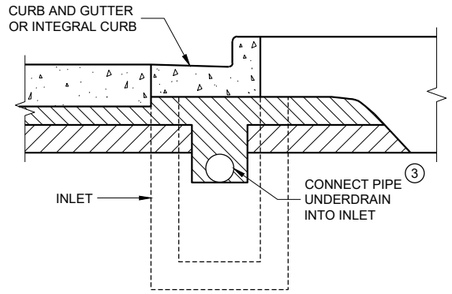
(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



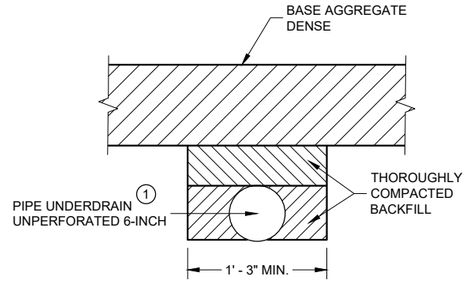
SECTION A - A

RURAL CROSS SECTION



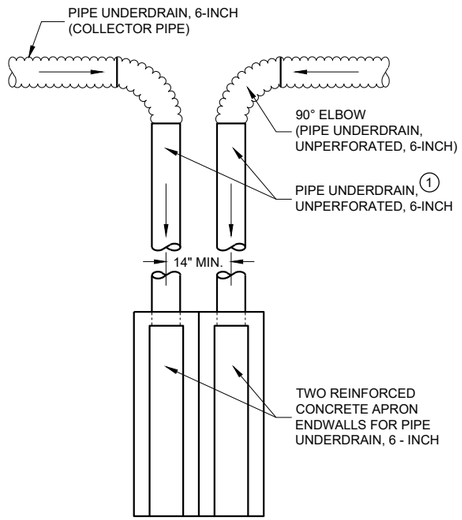
SECTION B - B

URBAN CROSS SECTION

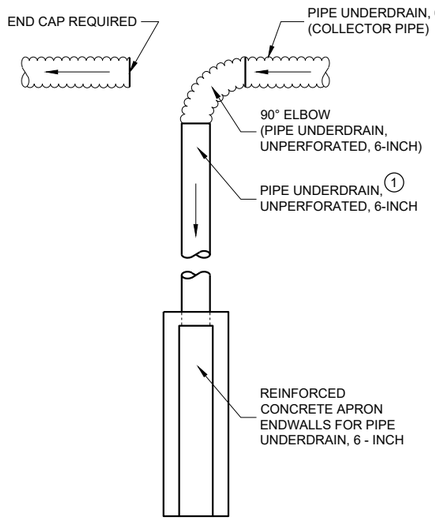


SECTION C - C

TRENCH FOR OUTFALL PIPE

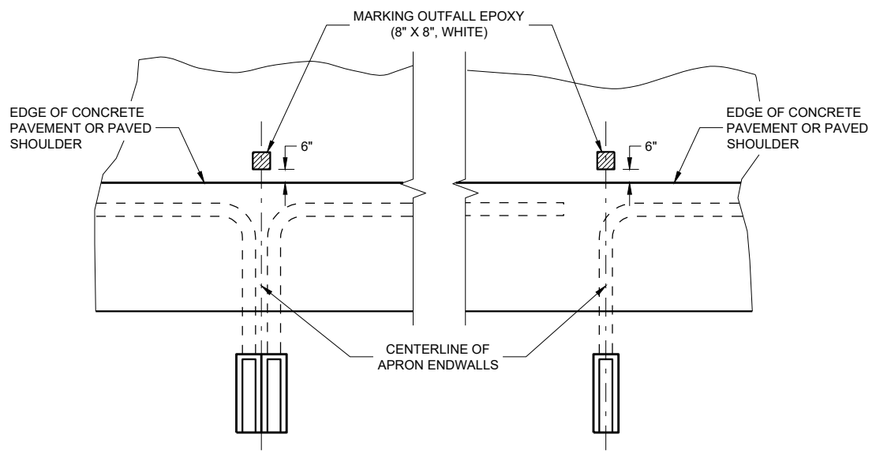


DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS



DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



LOW POINT LOCATIONS — INTERMEDIATE LOCATIONS

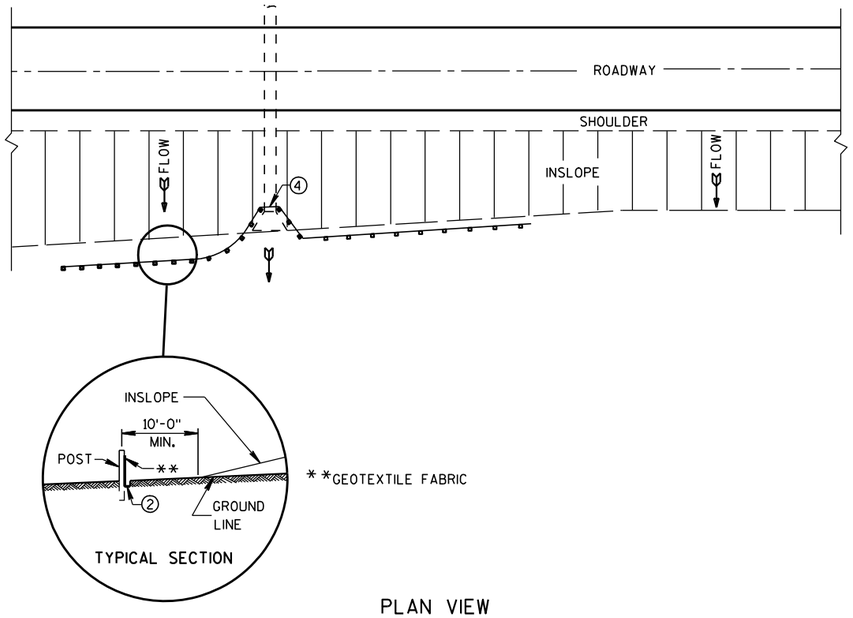
PAVEMENT MARKINGS FOR OUTFALL MARKERS

EDGEDRAIN OUTLET AND OUTFALL MARKERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

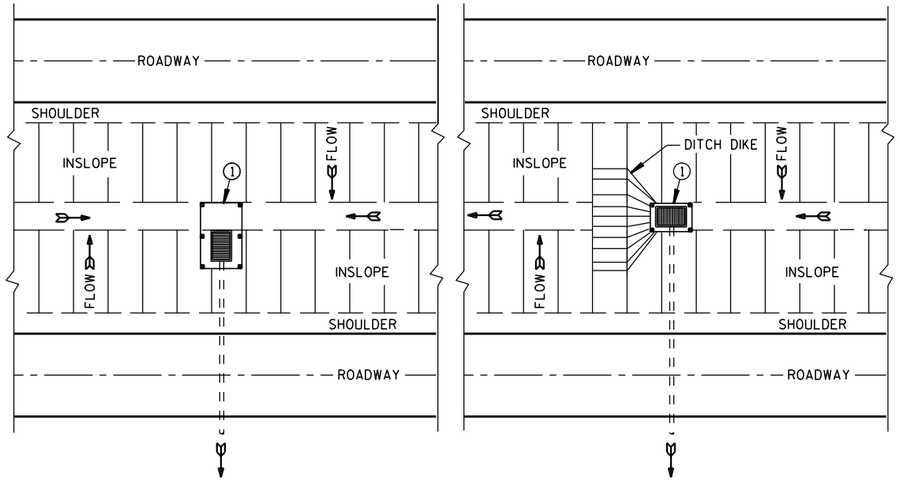
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PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



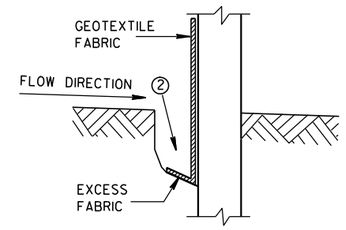
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

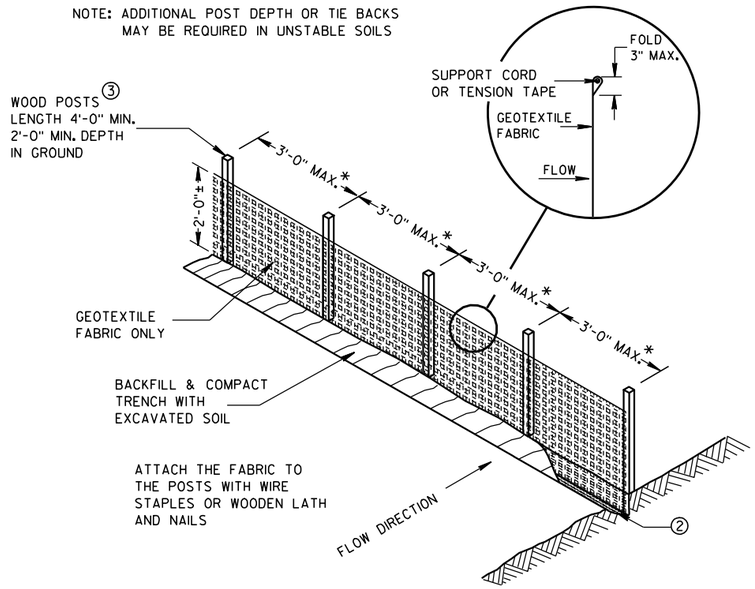
GENERAL NOTES

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

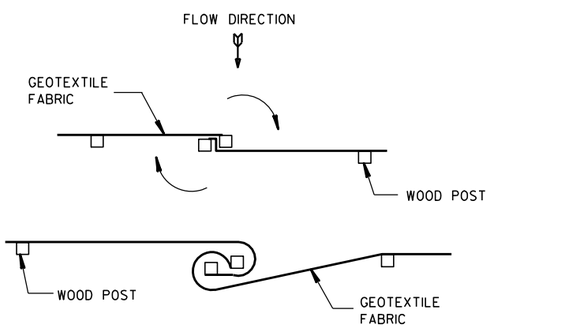
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL 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.



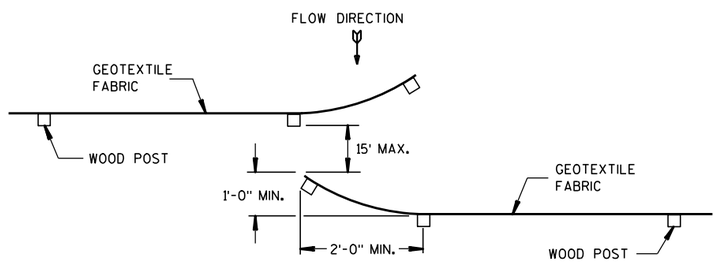
TRENCH DETAIL



SILT FENCE

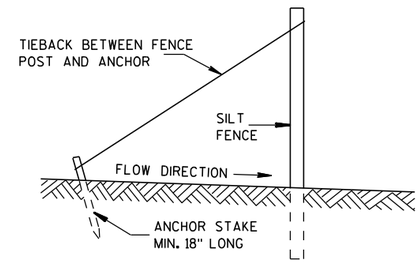


TWIST METHOD



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

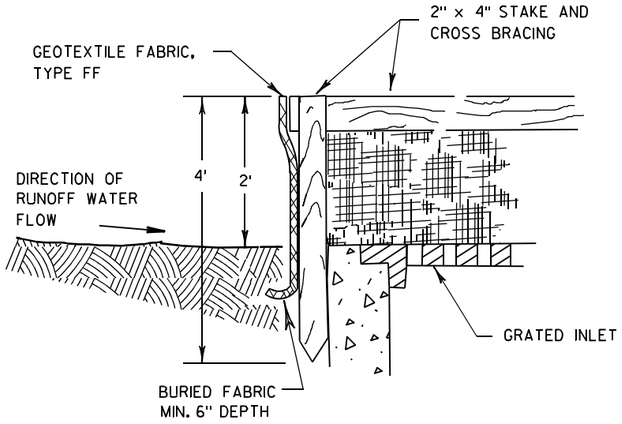
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

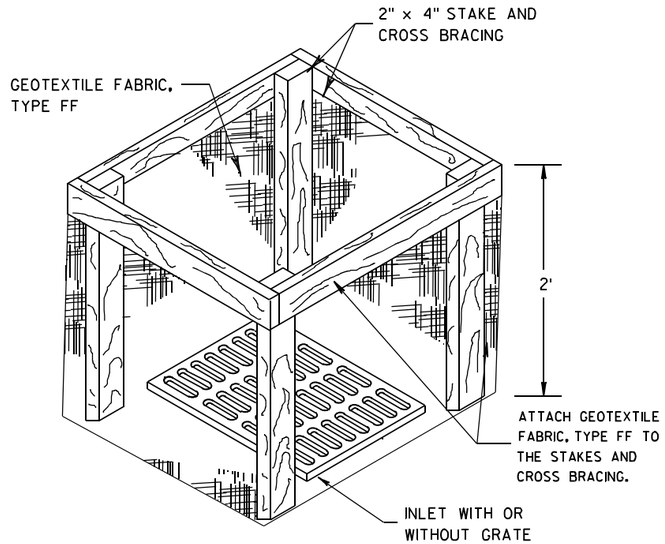
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S.D.D. 8 E 9-6

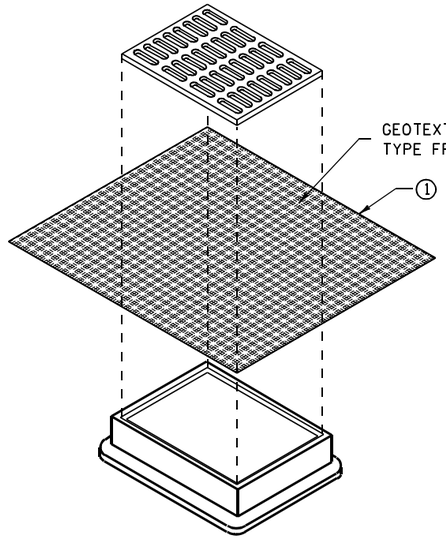
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S.D.D. 8 E 9-6



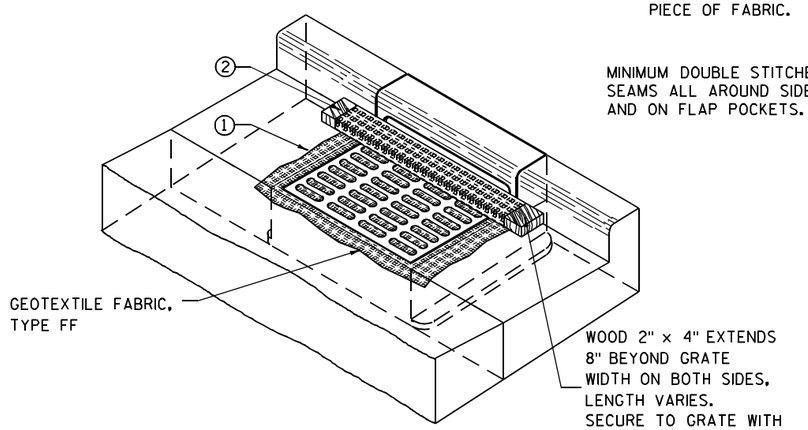


INLET PROTECTION, TYPE A

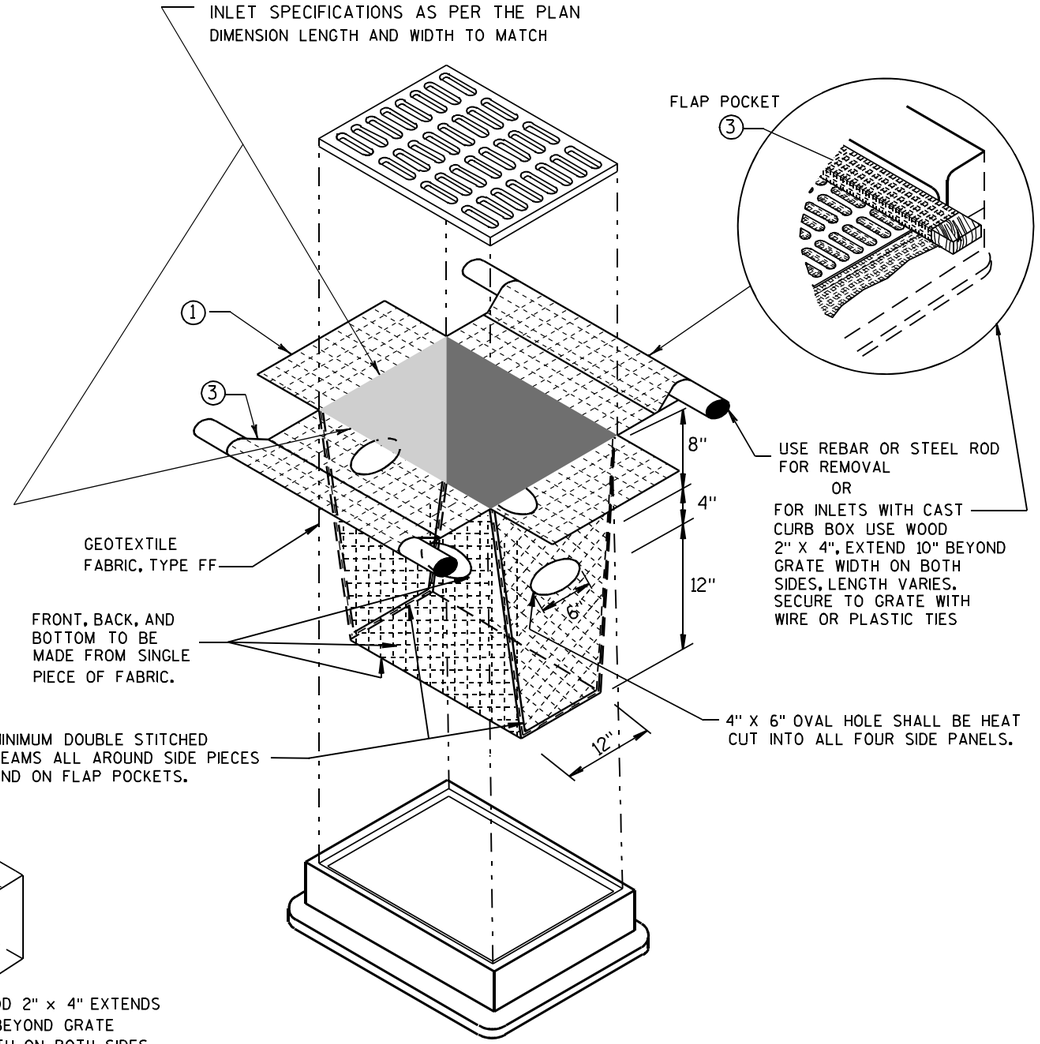


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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.

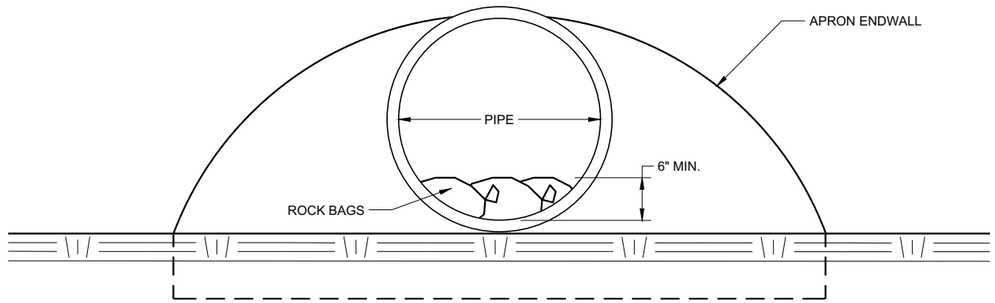
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

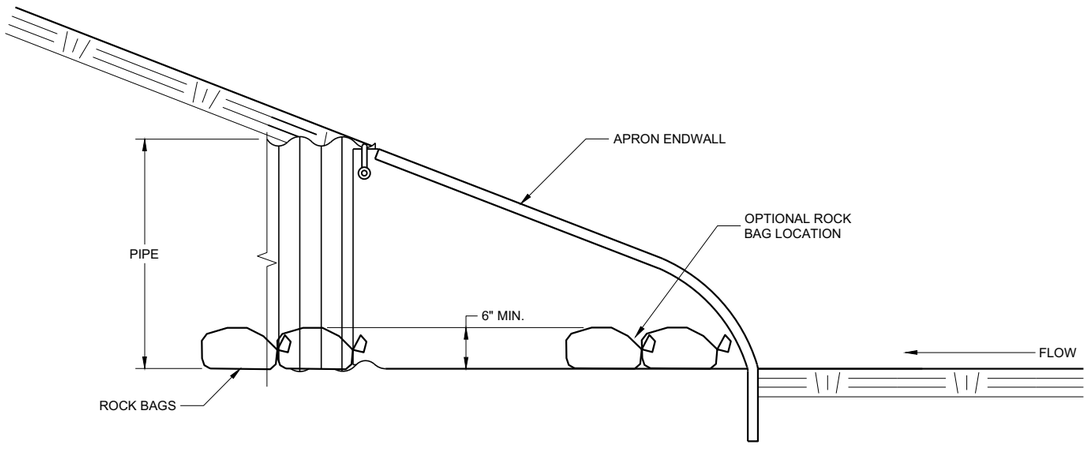
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

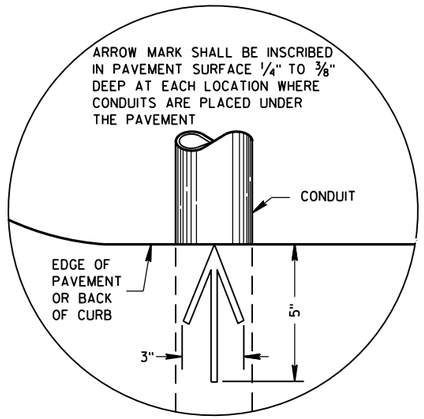
CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI
FHWA	101

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SDD 08E15 - 01

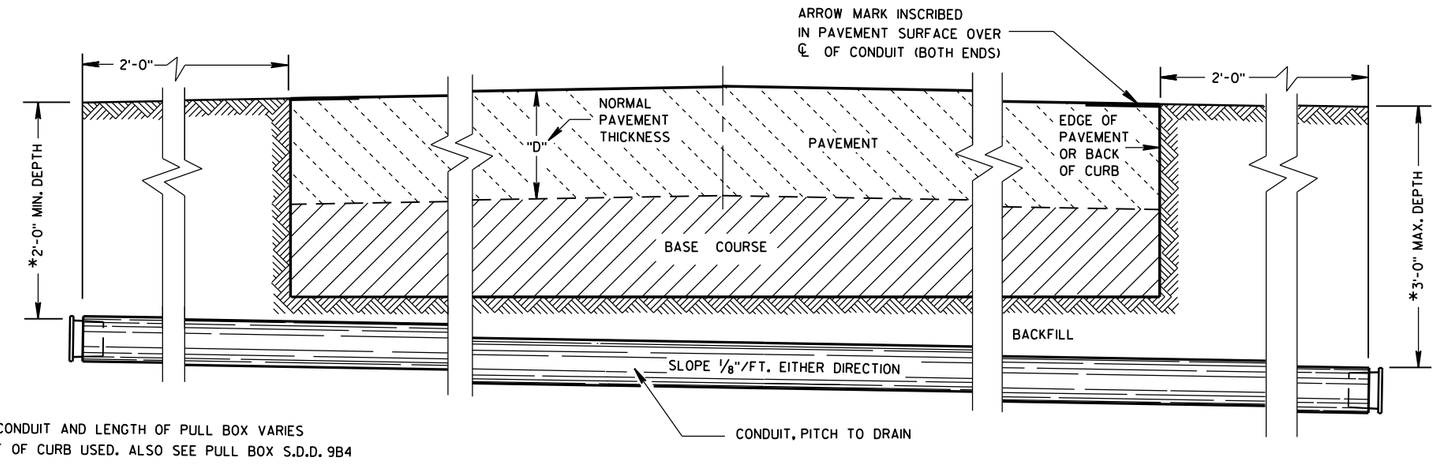
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SDD 08E15 - 01



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

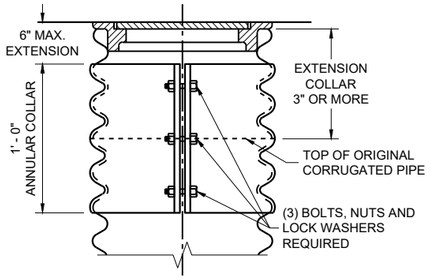
CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

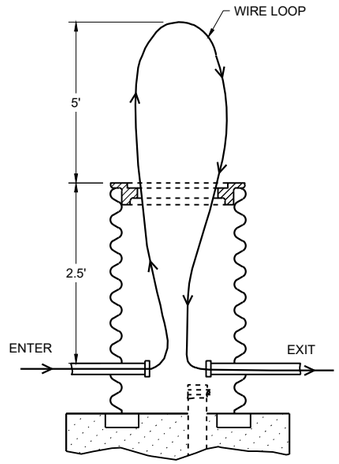
APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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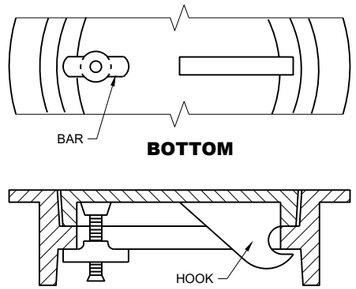
S.D.D. 9 B 2-10



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.

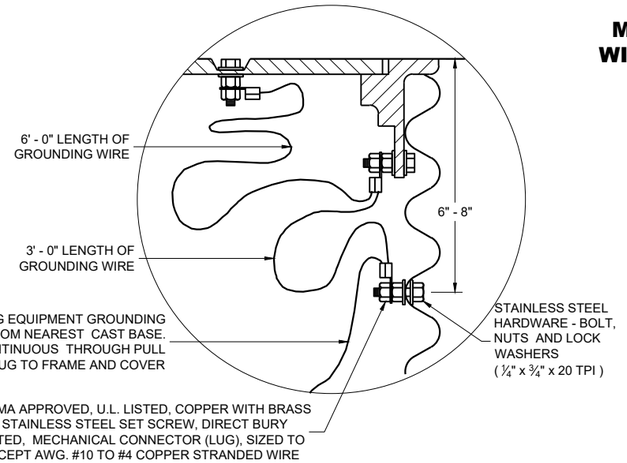
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

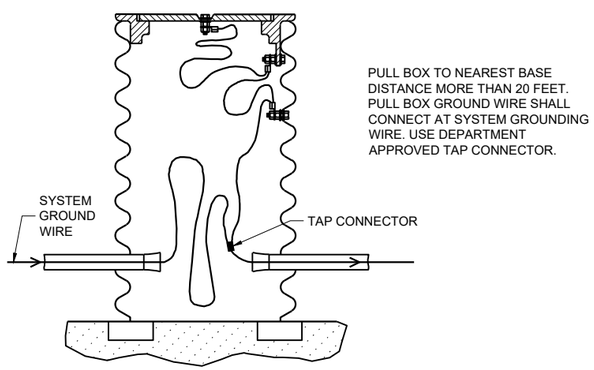
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

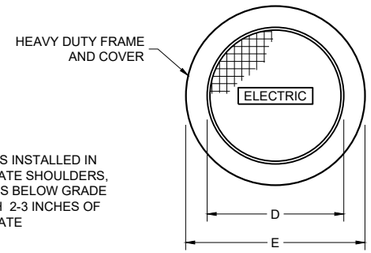
WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



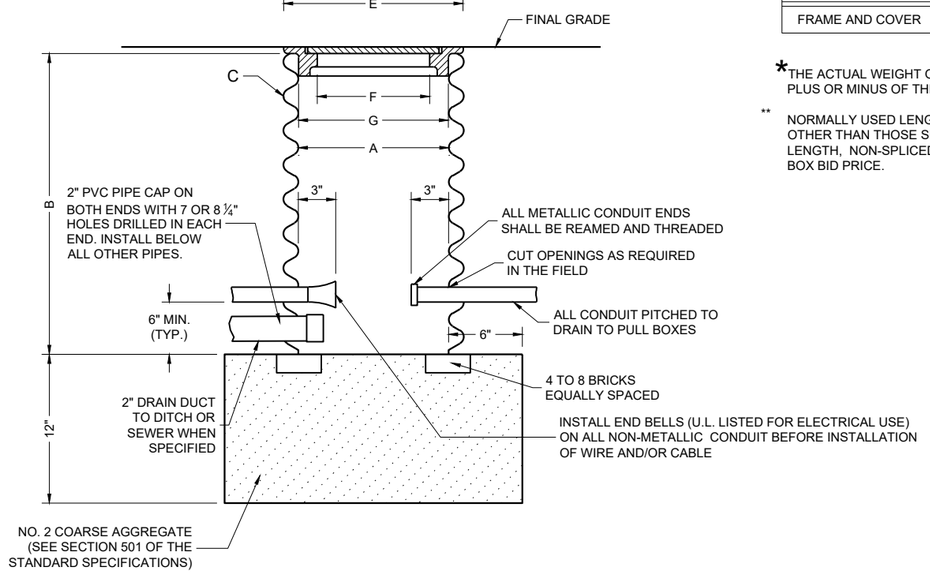
EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



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

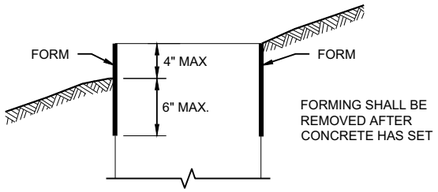
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

FHWA

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SDD 09B04-13

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWINGSHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

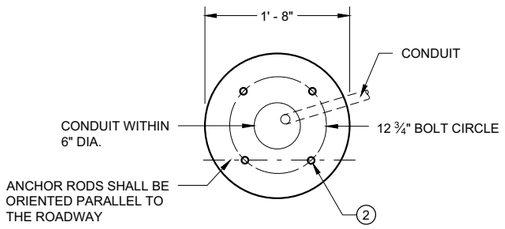
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

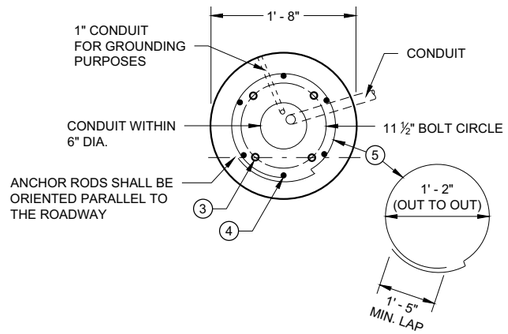
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

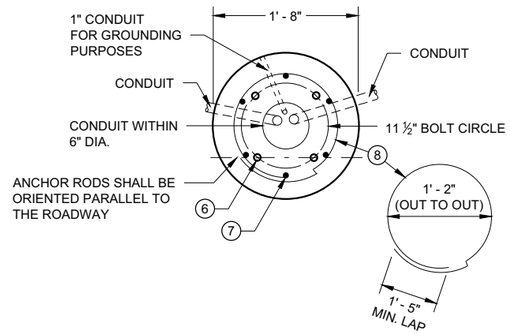
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).







1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

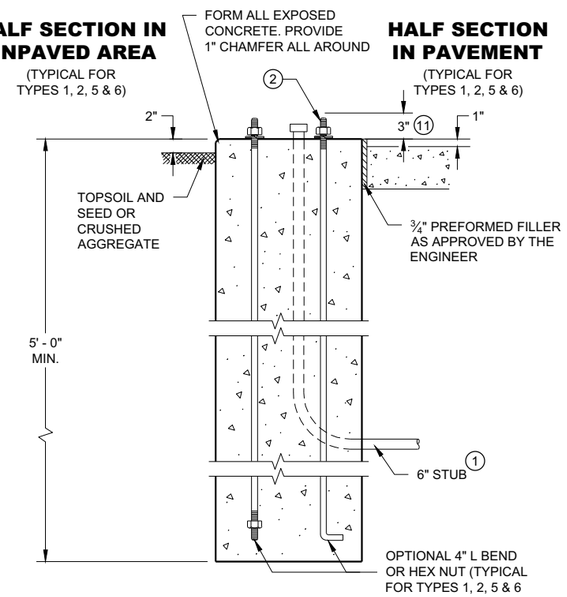
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

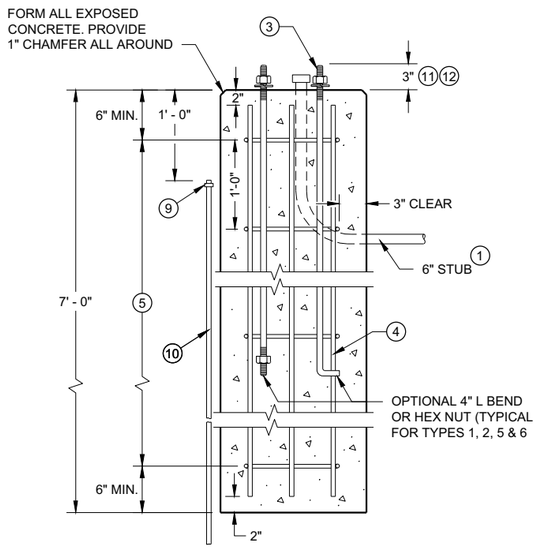
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

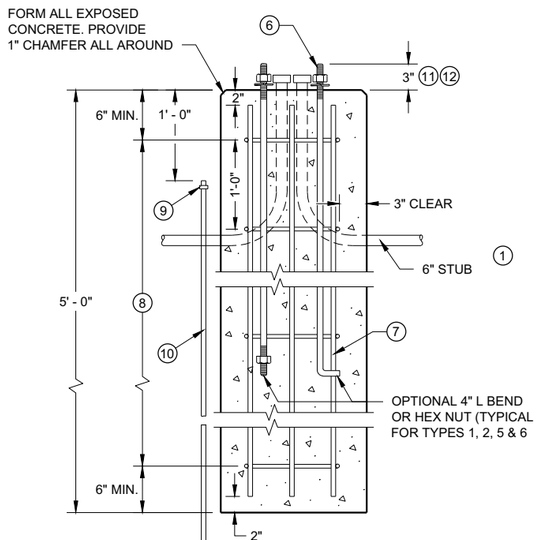
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

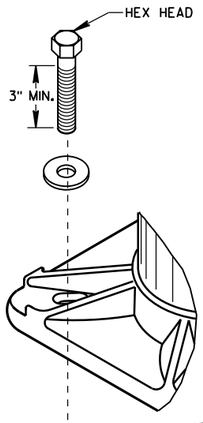
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

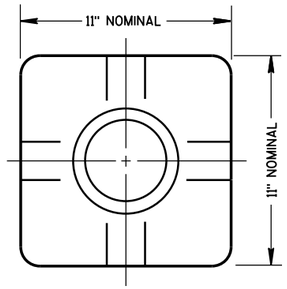
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

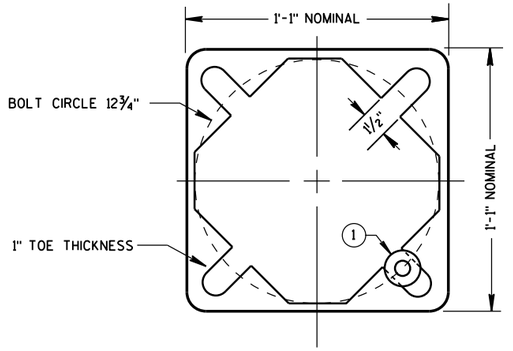
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

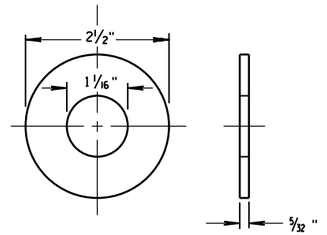




TOP VIEW
(PEDESTAL BASE)

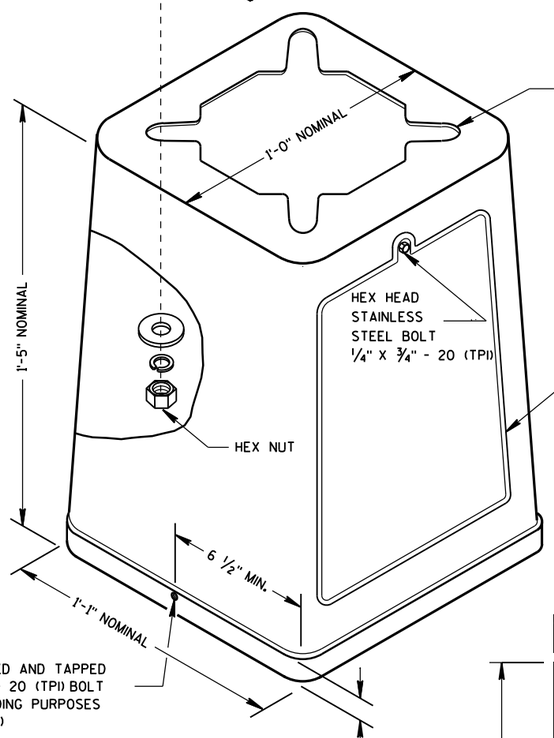


BOTTOM VIEW
(PEDESTAL BASE)

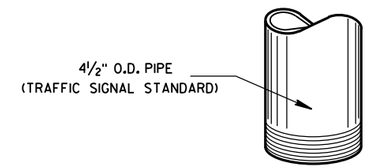


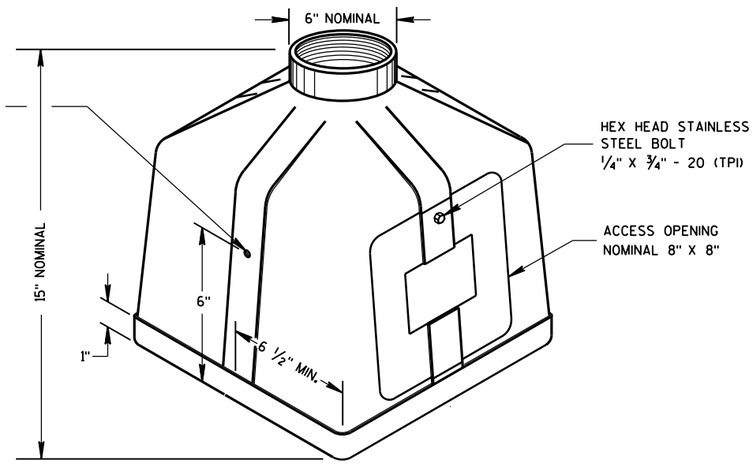
ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)



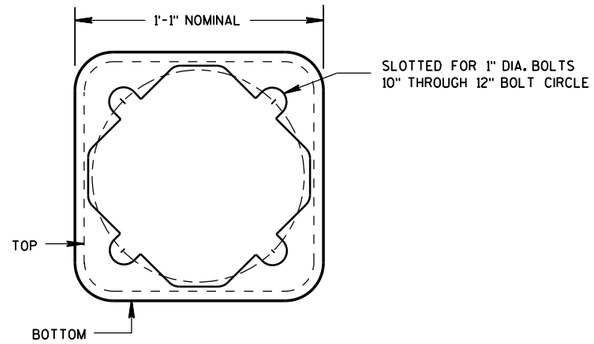
ISOMETRIC VIEW



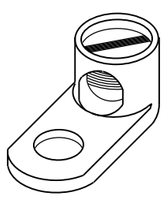


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

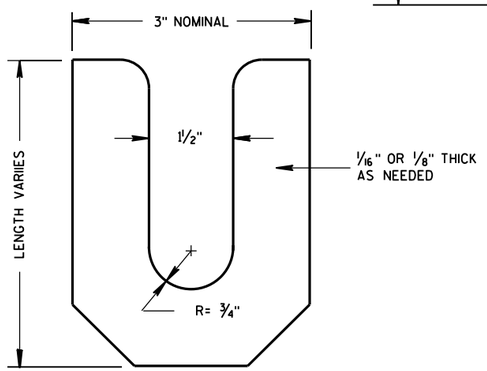


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

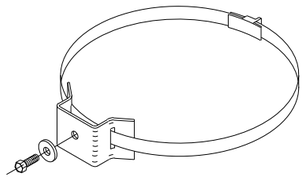
TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

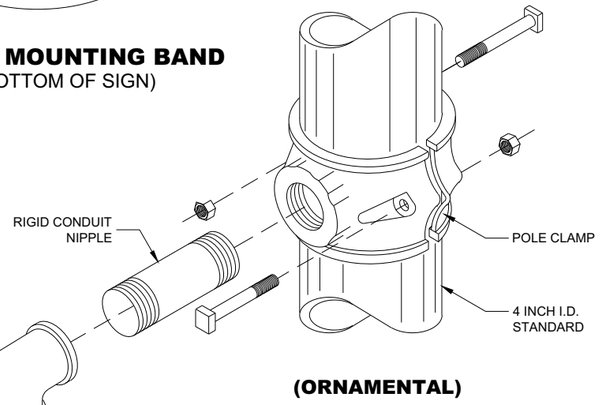
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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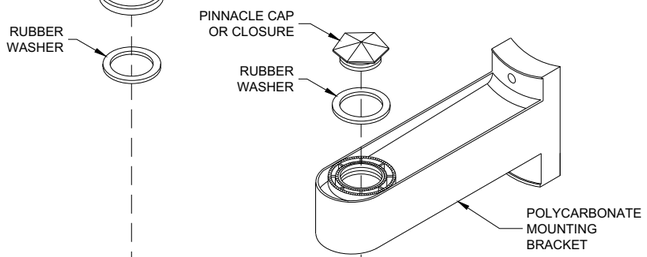
S.D.D. 9 C 3-4



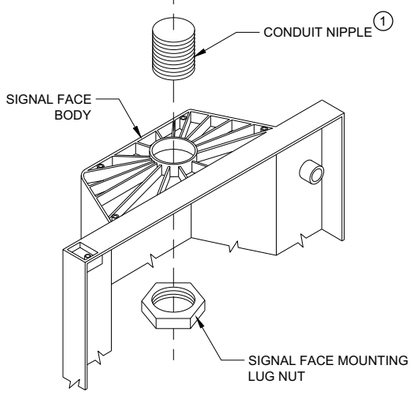
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



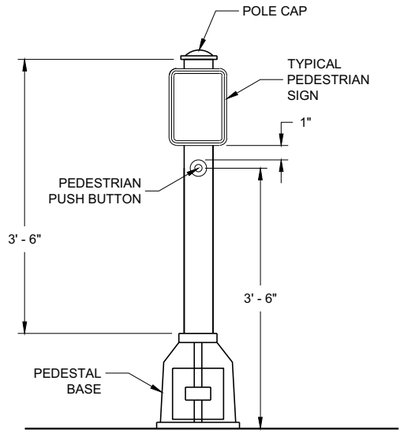
(ORNAMENTAL)



(BANDED)



SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

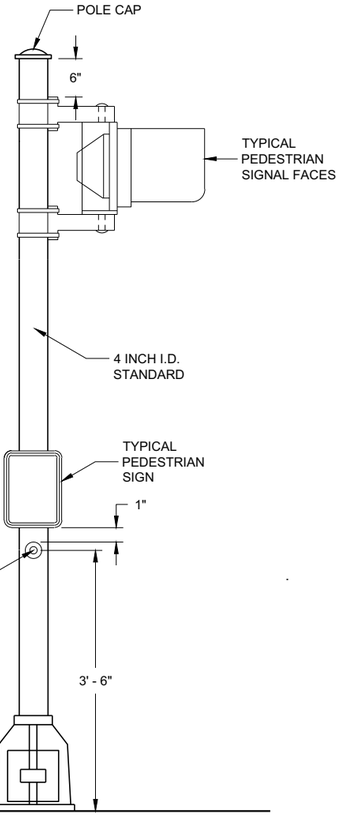
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

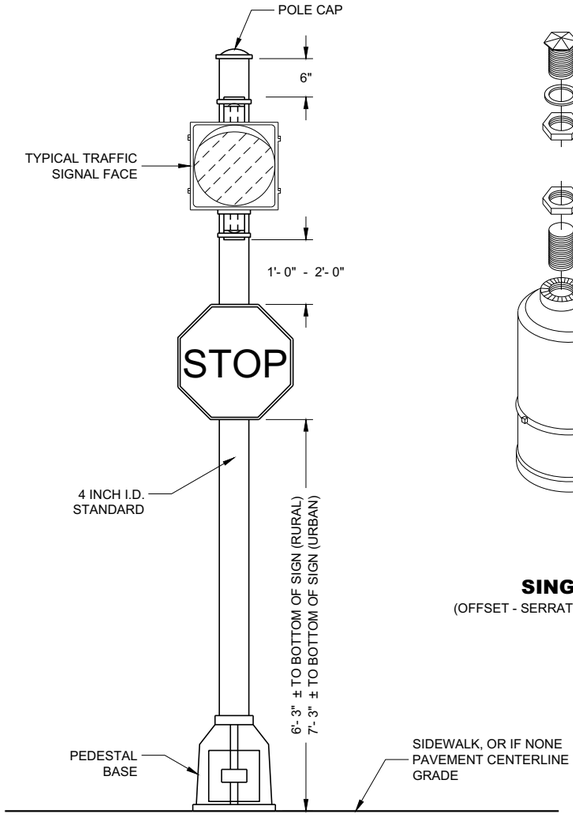
PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

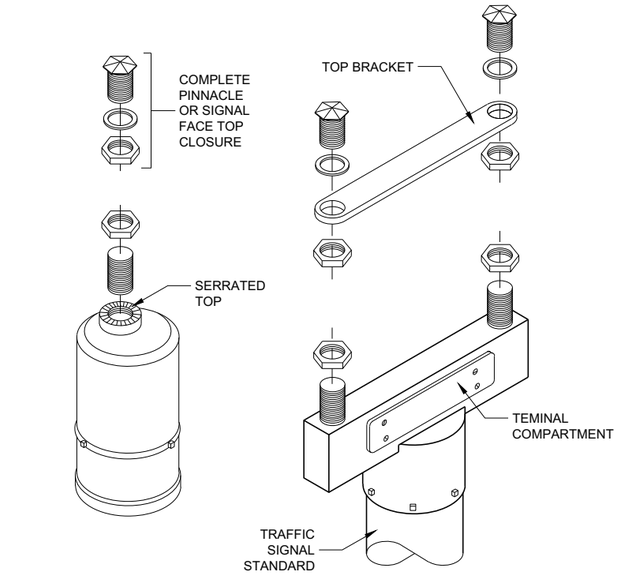
(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACESAND BRACKET ENDS.



PEDESTRIAN FACE STANDARD - 10 FT.
(WALK - DON'T WALK)



STANDARD FLASHER
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET - SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD
PEDESTRIAN AND FLASHER
TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

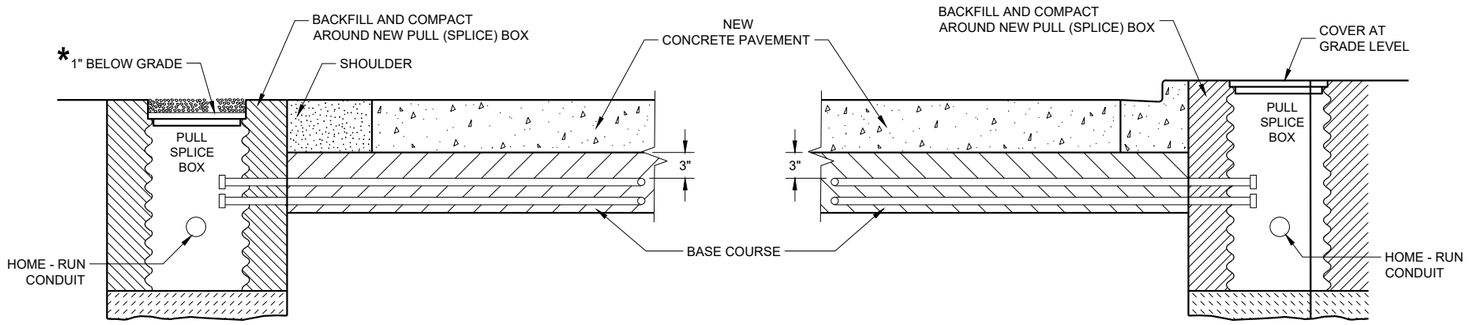
APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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SDD 09E07 - 06

SDD 09E07 - 06



SECTION A - A
NO CURB AND GUTTER

SECTION B - B
CURB AND GUTTER

* RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READING TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

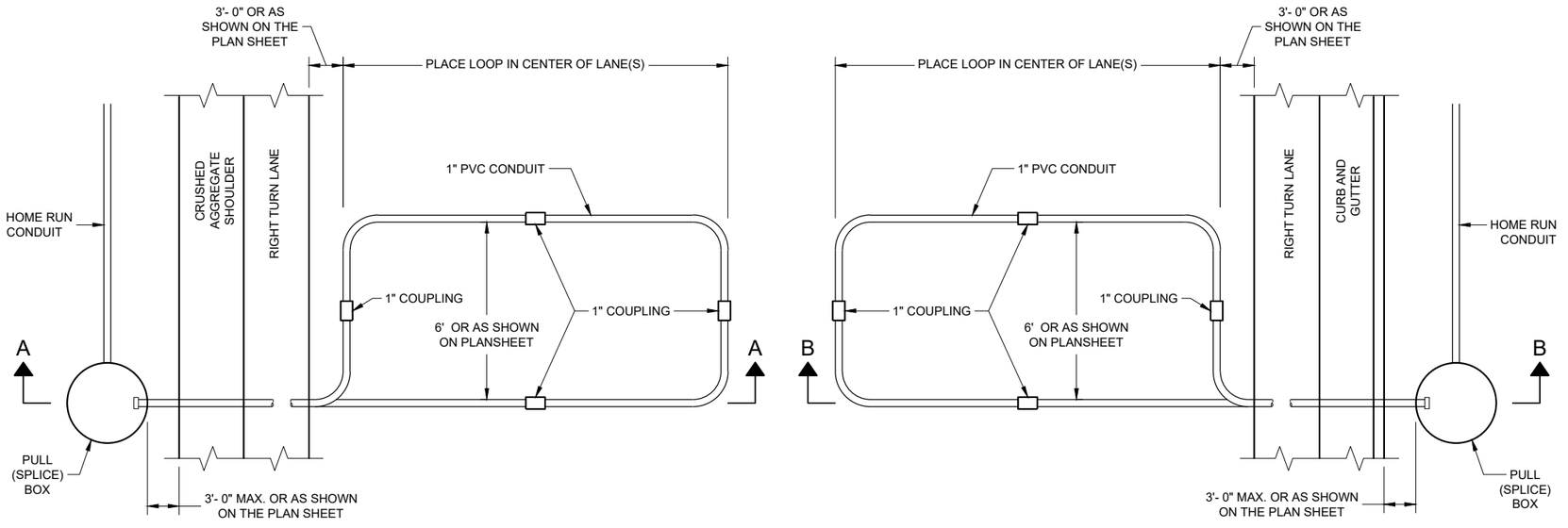
THE #12 AWG LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

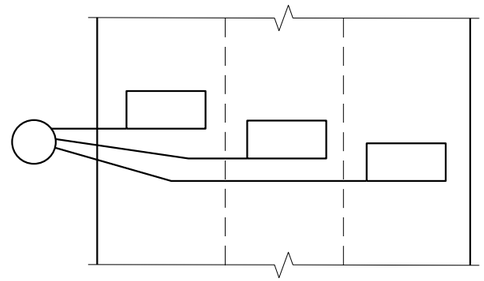
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN LOOP DETECTOR
WITH 24" PULL (SPLICE) BOX



MULTI-LANE
INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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SDD 09F15 - 04b

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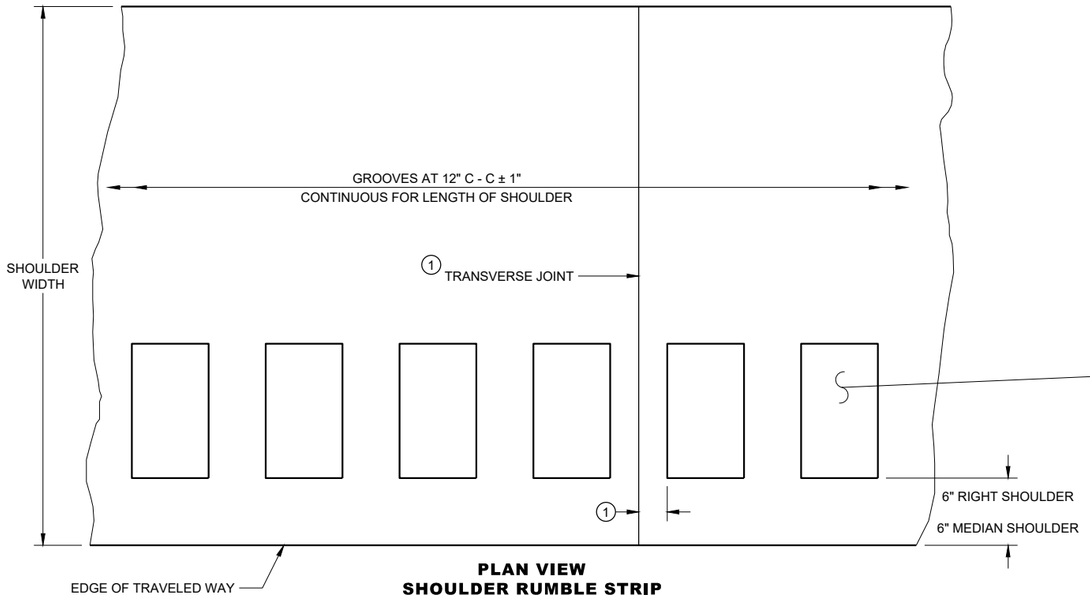
SDD 09F15 - 04b

GENERAL NOTES

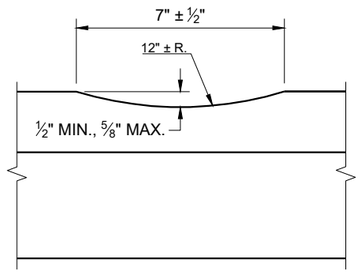
SDD 13A5, SHEET "b" SHOWS THE LOCATION OF THE RUMBLE STRIPS AT RAMP AND GORE LOCATIONS.

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.

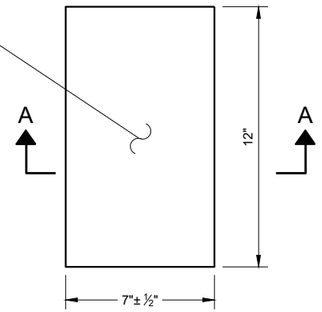
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6 INCHES AWAY FROM TRANSVERSE JOINTS.



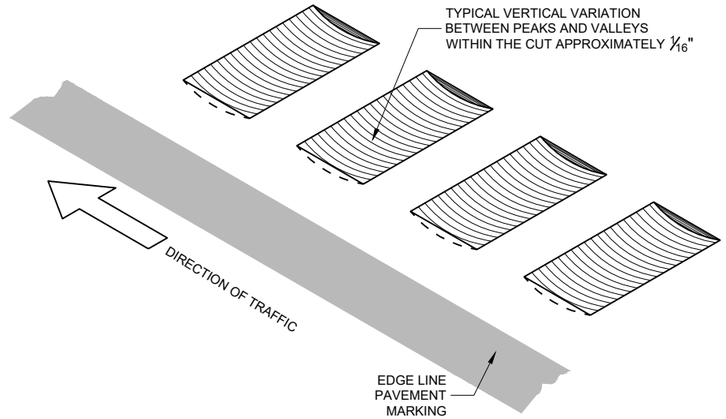
PLAN VIEW
SHOULDER RUMBLE STRIP



SECTION A - A

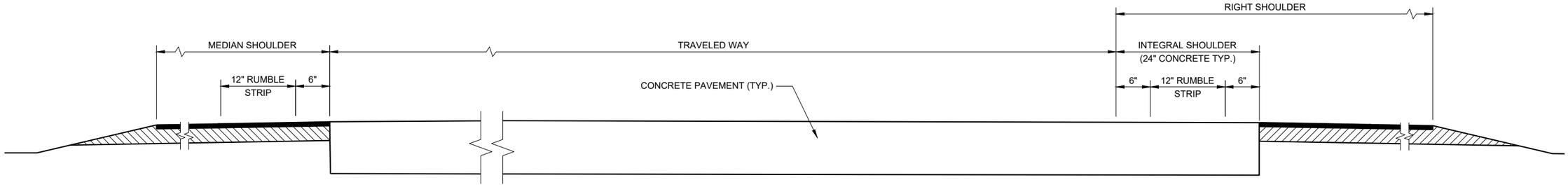


PLAN VIEW
(SINGLE GROOVE)



ISOMETRIC

PLACEMENT DETAIL FOR RUMBLE STRIP



SECTION VIEW

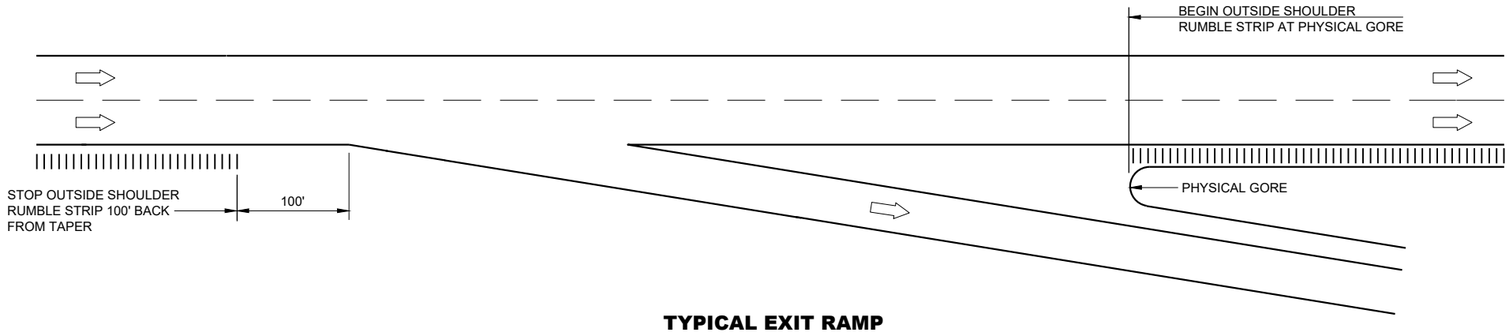
TYPICAL SHOULDER RUMBLE STRIPS
(ONE ROADWAY IS SHOWN)

SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 13A05-06a



TYPICAL EXIT RAMP

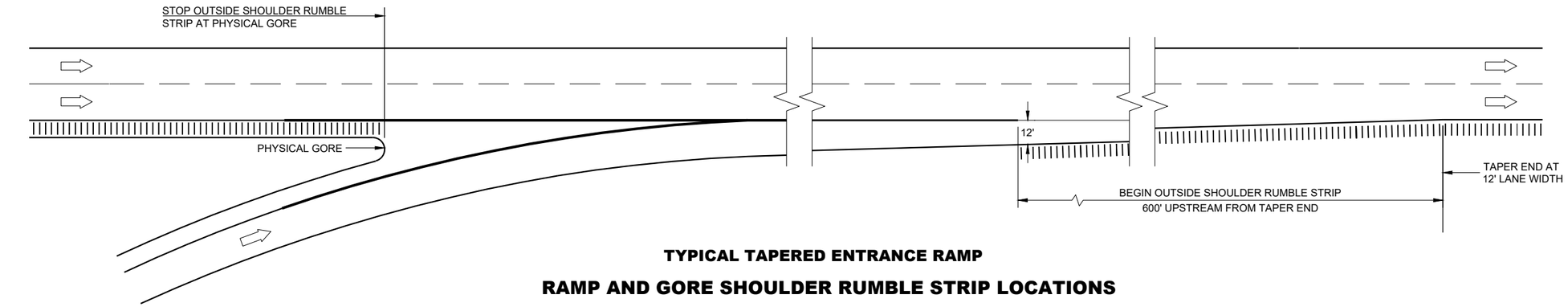
GENERAL NOTES

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.

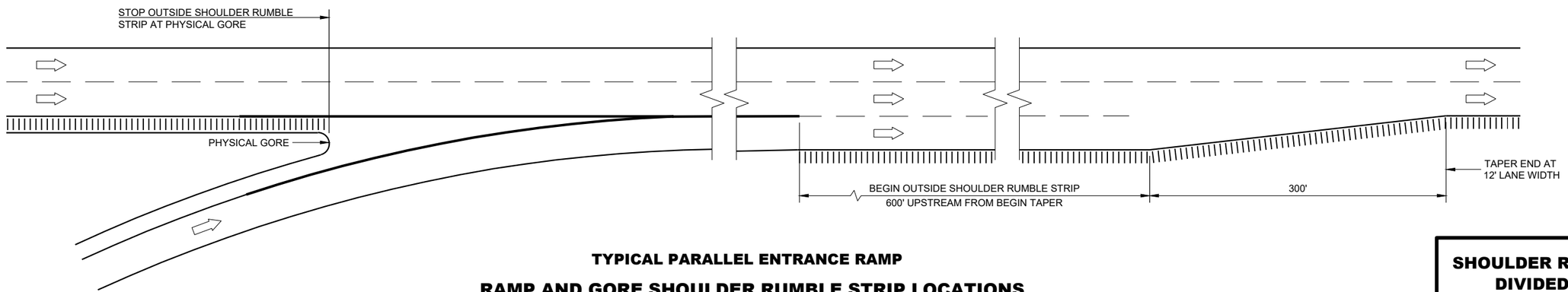
LEGEND

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

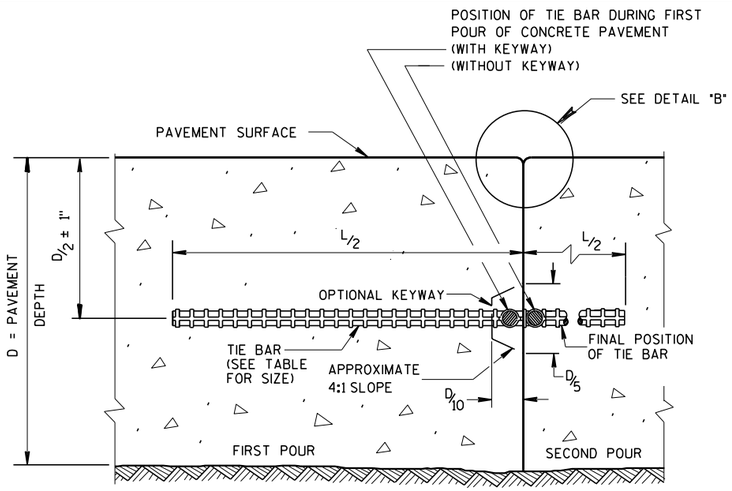
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

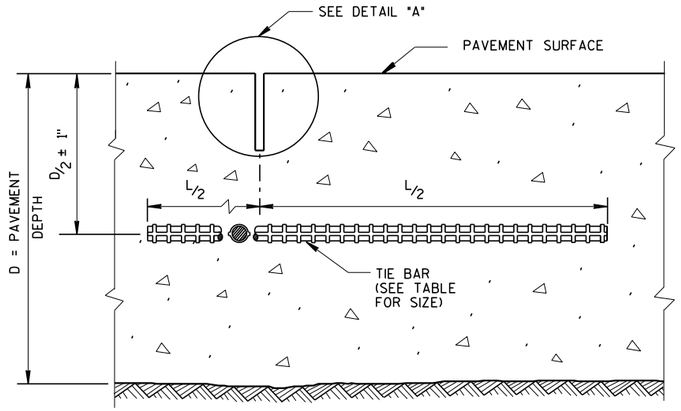
/S/ Rodney Taylor
ROADWAY DESIGN STANDARDS
UNIT SUPERVISOR

FHWA

6
SDD 13A05-06b



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

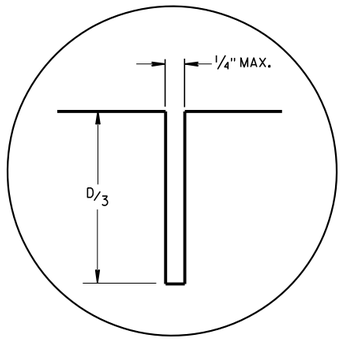
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

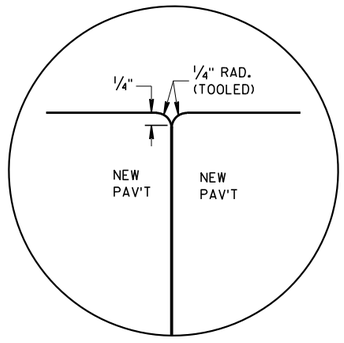
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

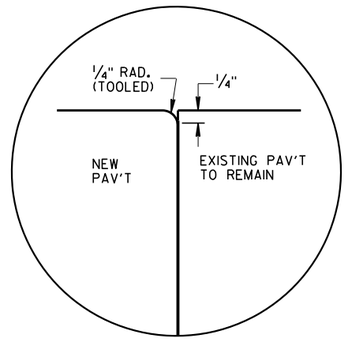
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



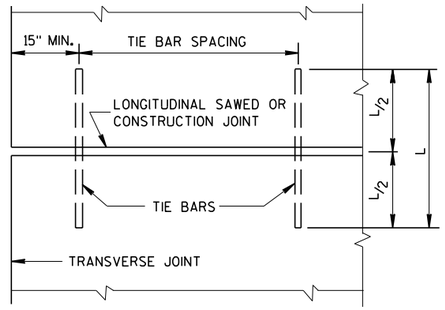
DETAIL "C"

TIE BAR TABLE

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

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

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



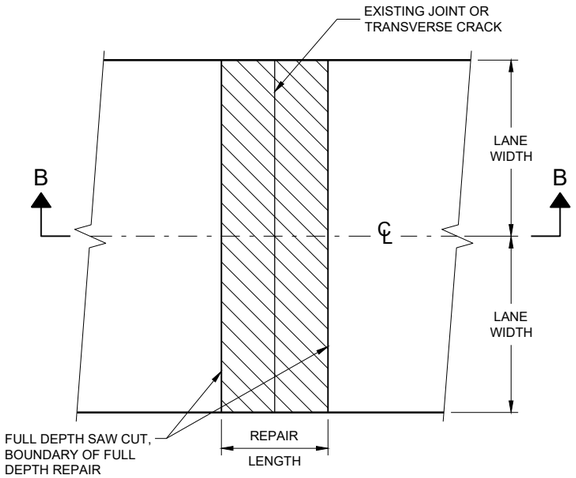
PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

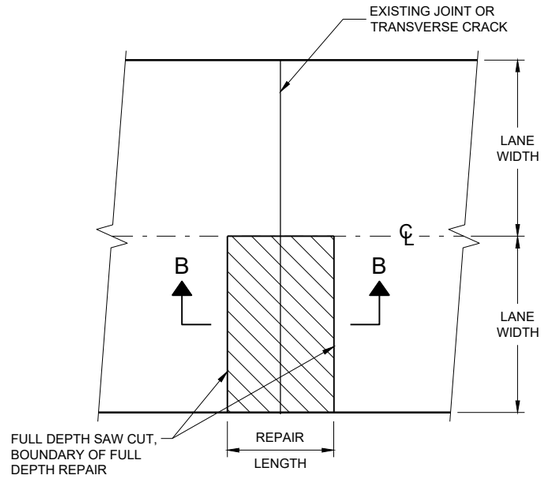
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp PE — PAVEMENT SUPE
FHWA

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S.D.D. 13 C 1-19



PLAN VIEW
(DOUBLE LANE REPAIR)



PLAN VIEW
(SINGLE LANE REPAIR)

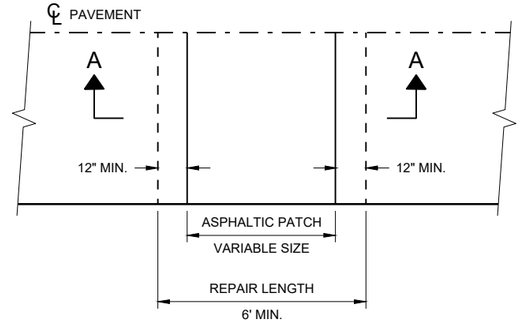
GENERAL NOTES

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.

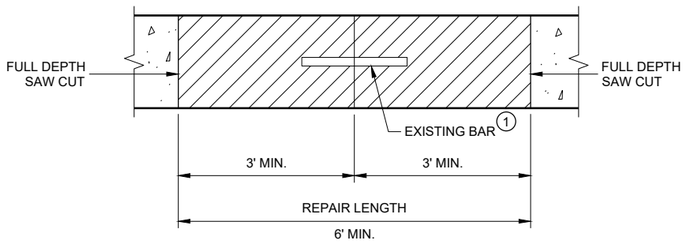
THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NON-DOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

(1) DOWEL BARS MAY NOT BE PRESENT.



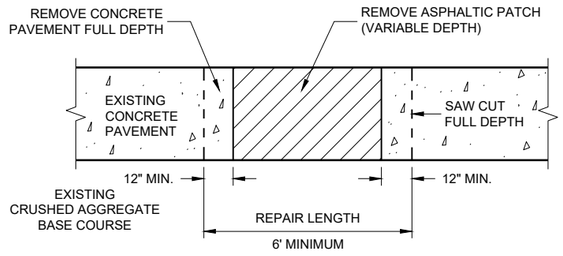
PLAN VIEW

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION B - B

CONCRETE REMOVAL



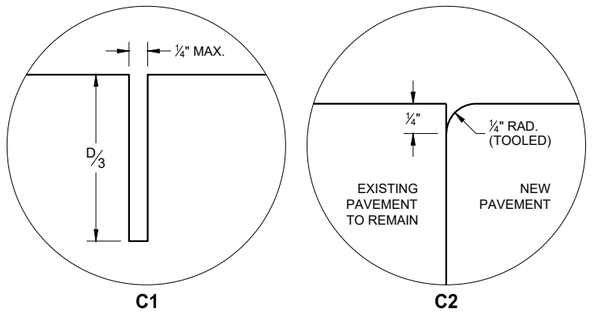
SECTION A - A

HMA PATCH REMOVAL

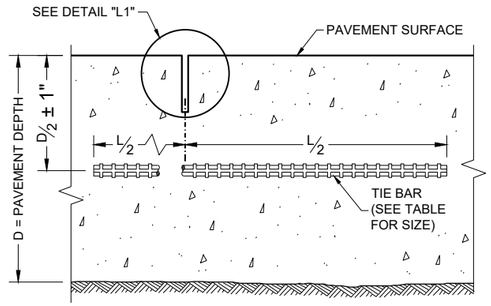
CONCRETE PAVEMENT REPAIR AND REPLACEMENT

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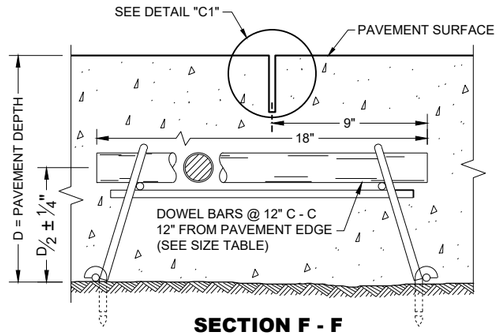


TRANSVERSE JOINTS



SECTION C - C

SAWED LONGITUDINAL JOINT



SECTION F - F

DOWELED CONTRACTION JOINT

GENERAL NOTES

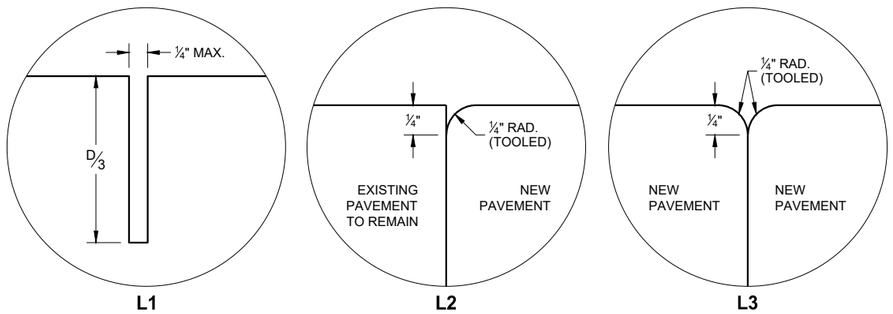
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

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

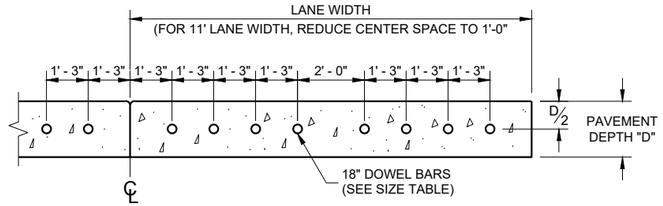
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

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.

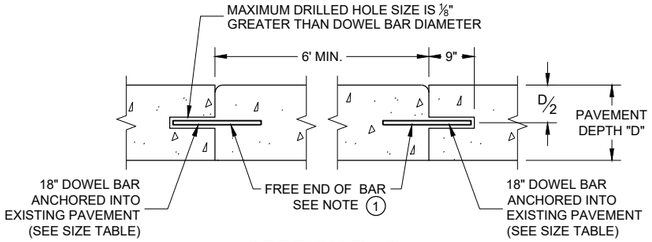


LONGITUDINAL JOINTS



SECTION E - E

DRILLED DOWEL BAR CONSTRUCTION JOINT



SECTION D - D

TIE BAR TABLE

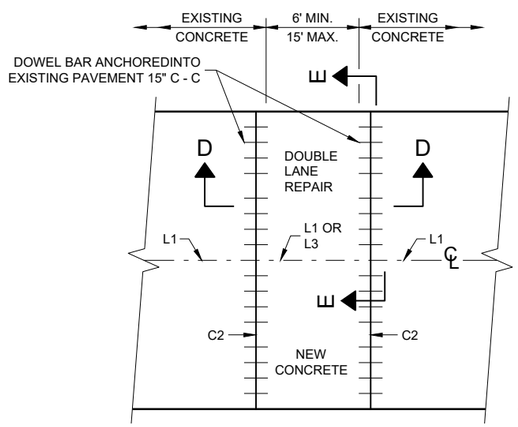
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* 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.

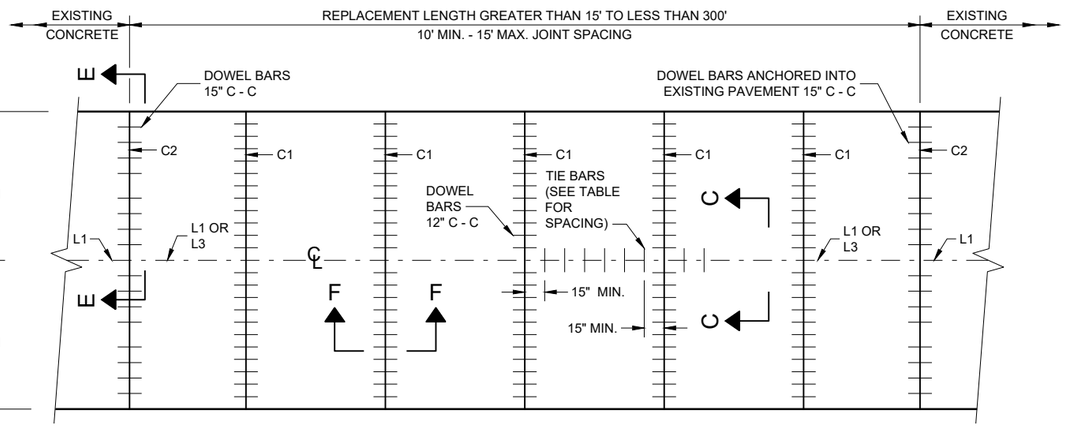
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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

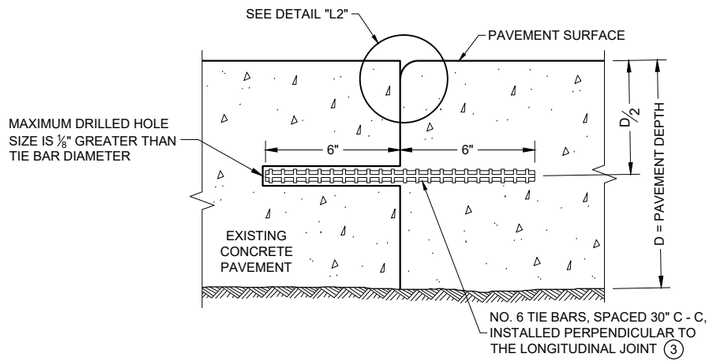
MULTILANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 13C09 - 17b

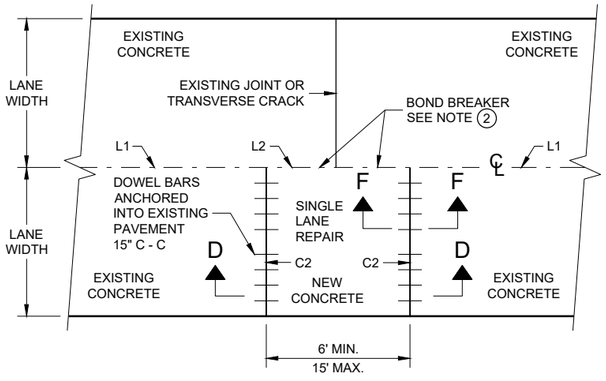


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT

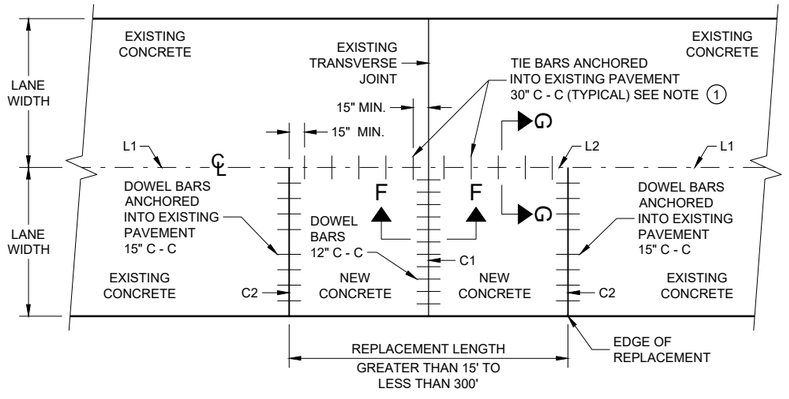
GENERAL NOTES

1. WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.
2. USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
3. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE REPAIR AND REPLACEMENT

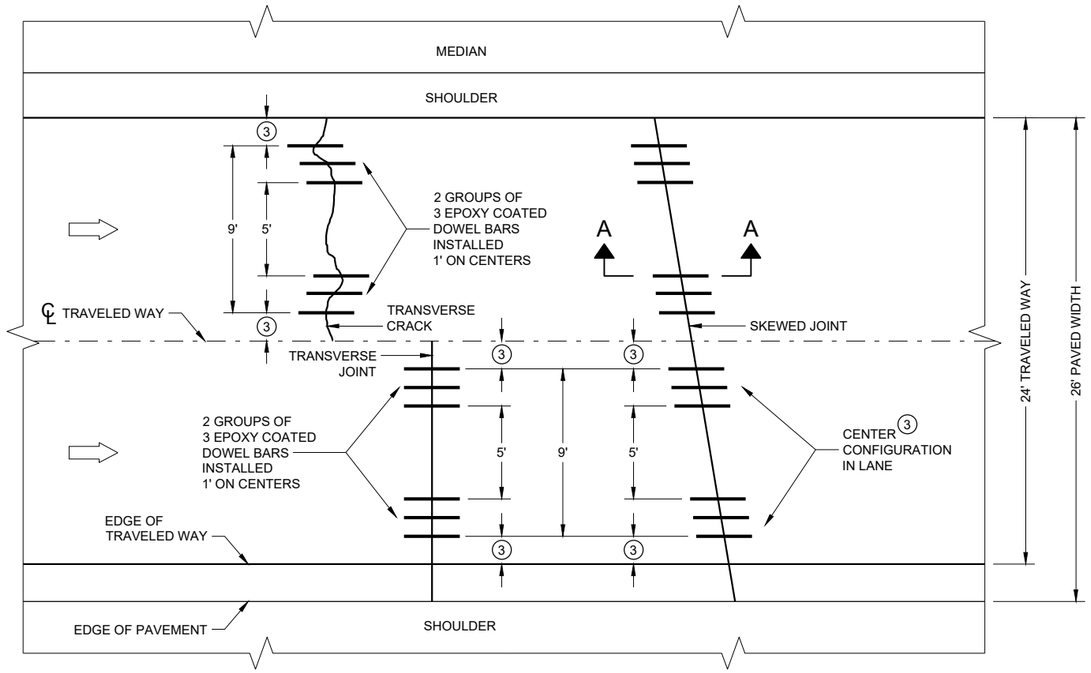
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

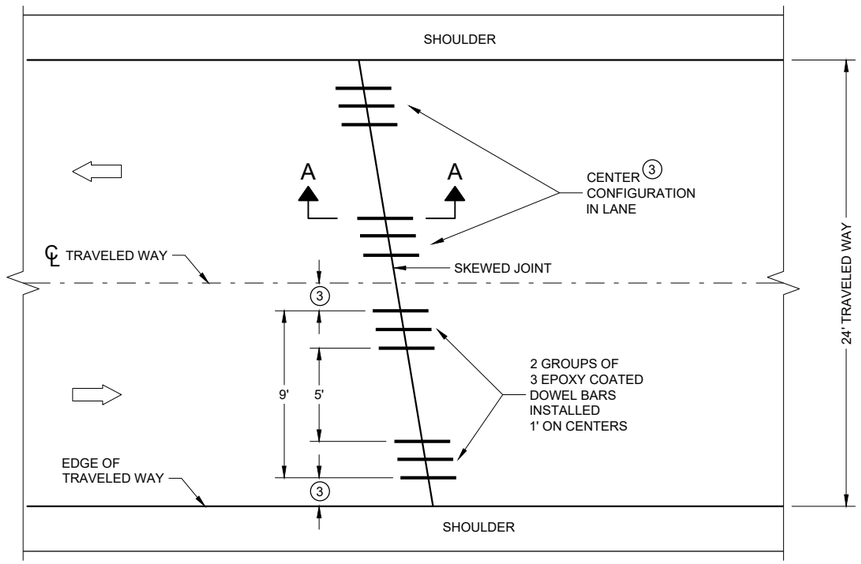
FHWA

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RETROFIT DOWEL BAR SPACING
DIVIDED HIGHWAY



RETROFIT DOWEL BAR SPACING
TWO-LANE TWO-WAY HIGHWAY

DOWEL BAR SIZE TABLE

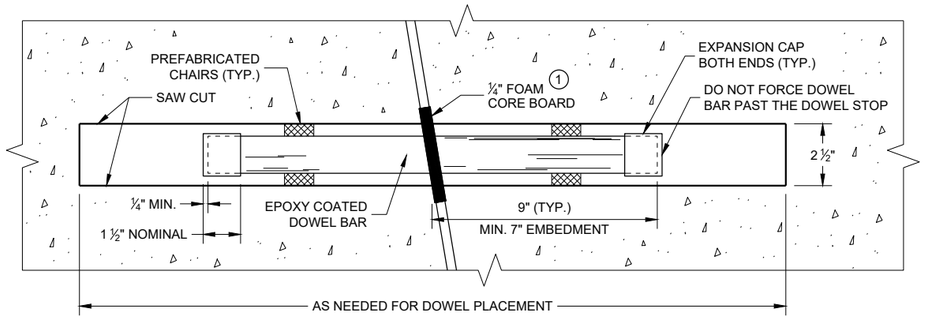
PAVEMENT DEPTH	DOWEL BAR SIZE
9" OR LESS	1 ¼" X 18"
MORE THAN 9"	1 ¼" X 18"

GENERAL NOTES

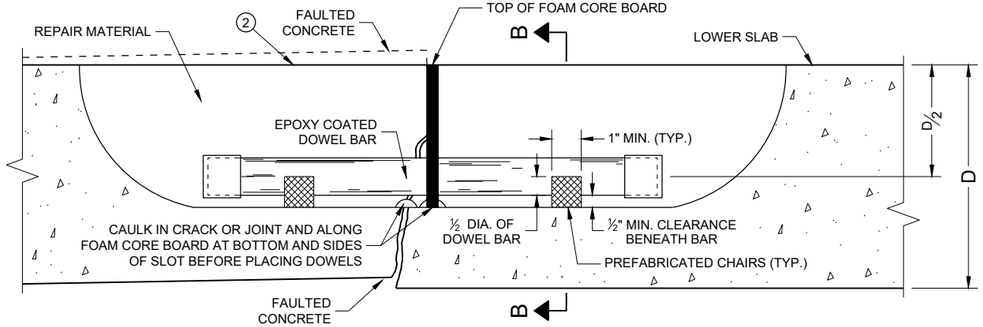
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

1. FOAM CORE BOARD IS TO BE SIZED AND SHAPED TO FIT INTO THE JOINT OR CRACK, EXTEND TO OR BEYOND THE TOP SURFACE OF THE LOWER SLAB, AND FIT TIGHTLY AROUND THE DOWEL.
2. FINISHED ELEVATION AFTER CONTINUOUS DIAMOND GRINDING, WHEN REQUIRED.
3. SAW THE SLOTS SO THAT THE OUTERMOST AND INNERMOST SLOTS ARE EQUALLY SPACED FROM THE EDGE OF PAVEMENT AND THE LONGITUDINAL JOINT, RESPECTIVELY.

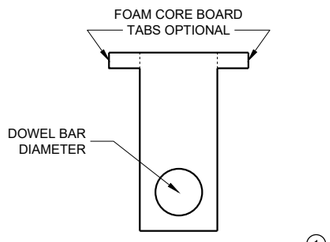
⇨ DIRECTION OF TRAFFIC



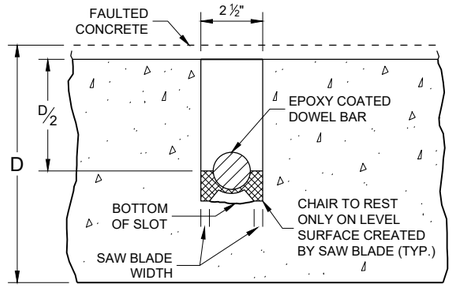
PLAN VIEW



SIDE VIEW
SECTION A - A
DOWEL BAR INSTALLATION DETAIL



¼" FOAM CORE BOARD 1



SECTION B - B

RETROFIT DOWEL BAR INSTALLATION

RETROFIT DOWEL BARS

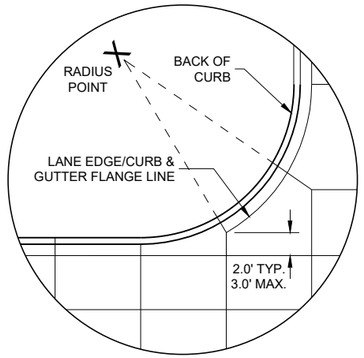
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

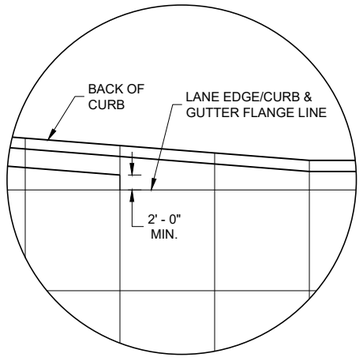
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

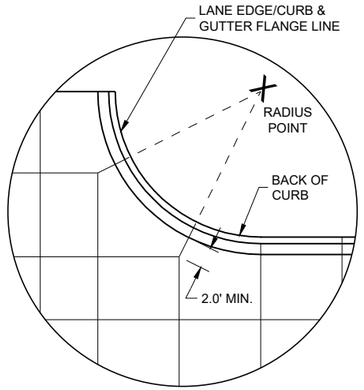
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SDD 13C10 - 03



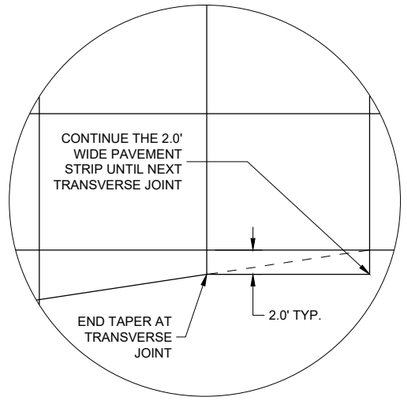
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

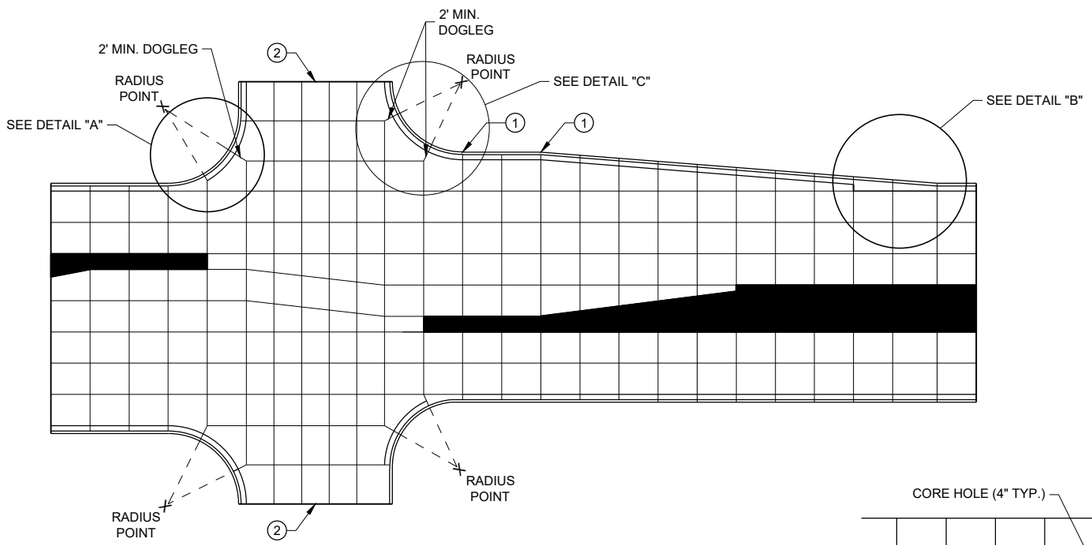
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.

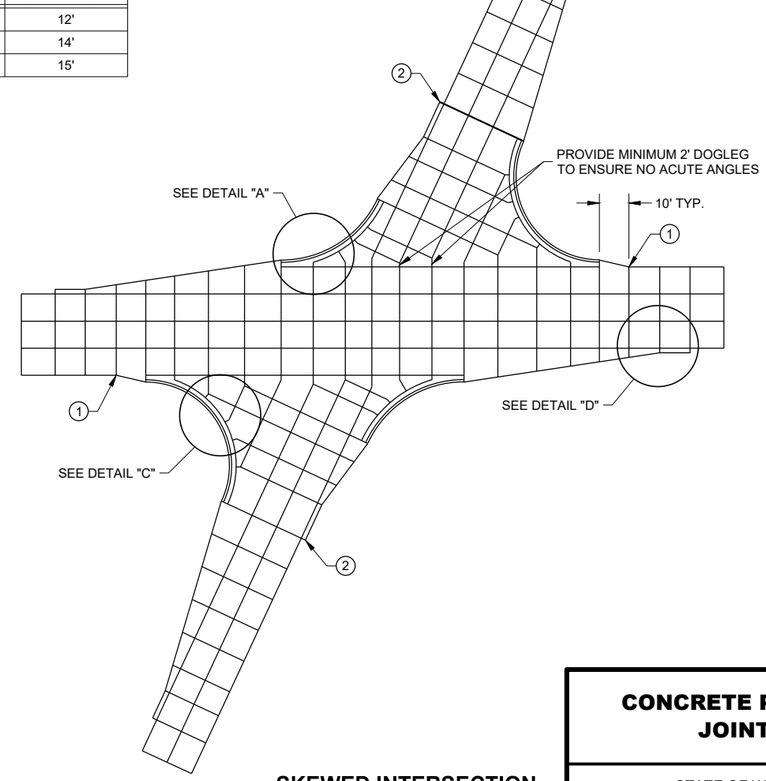
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



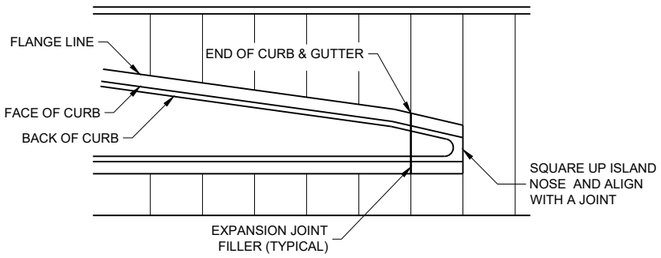
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

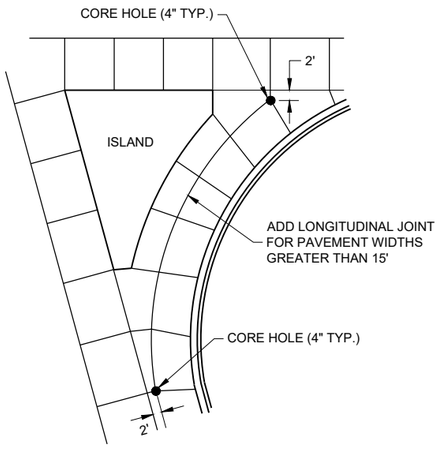
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
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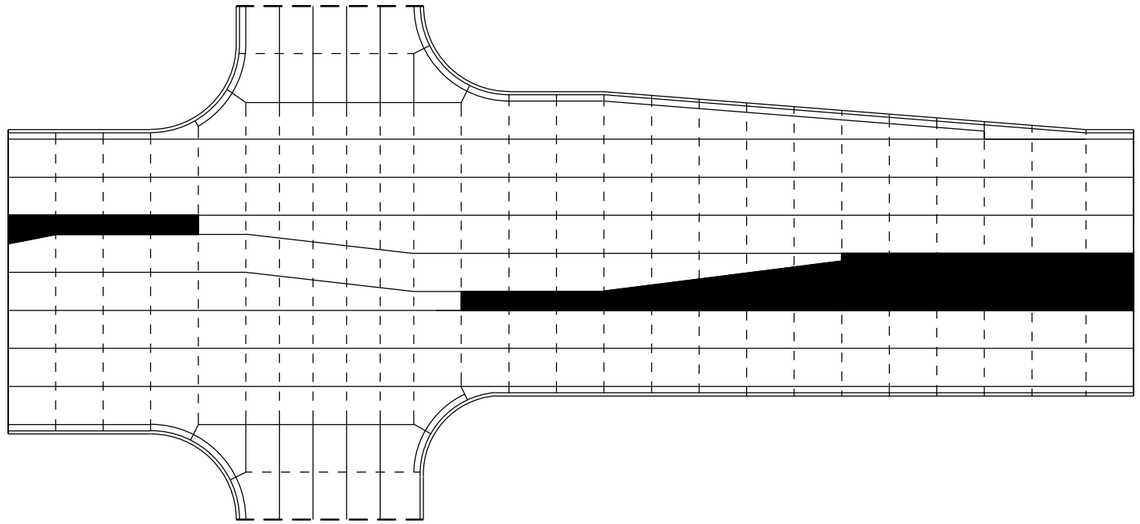
SDD 13C18 - 08a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

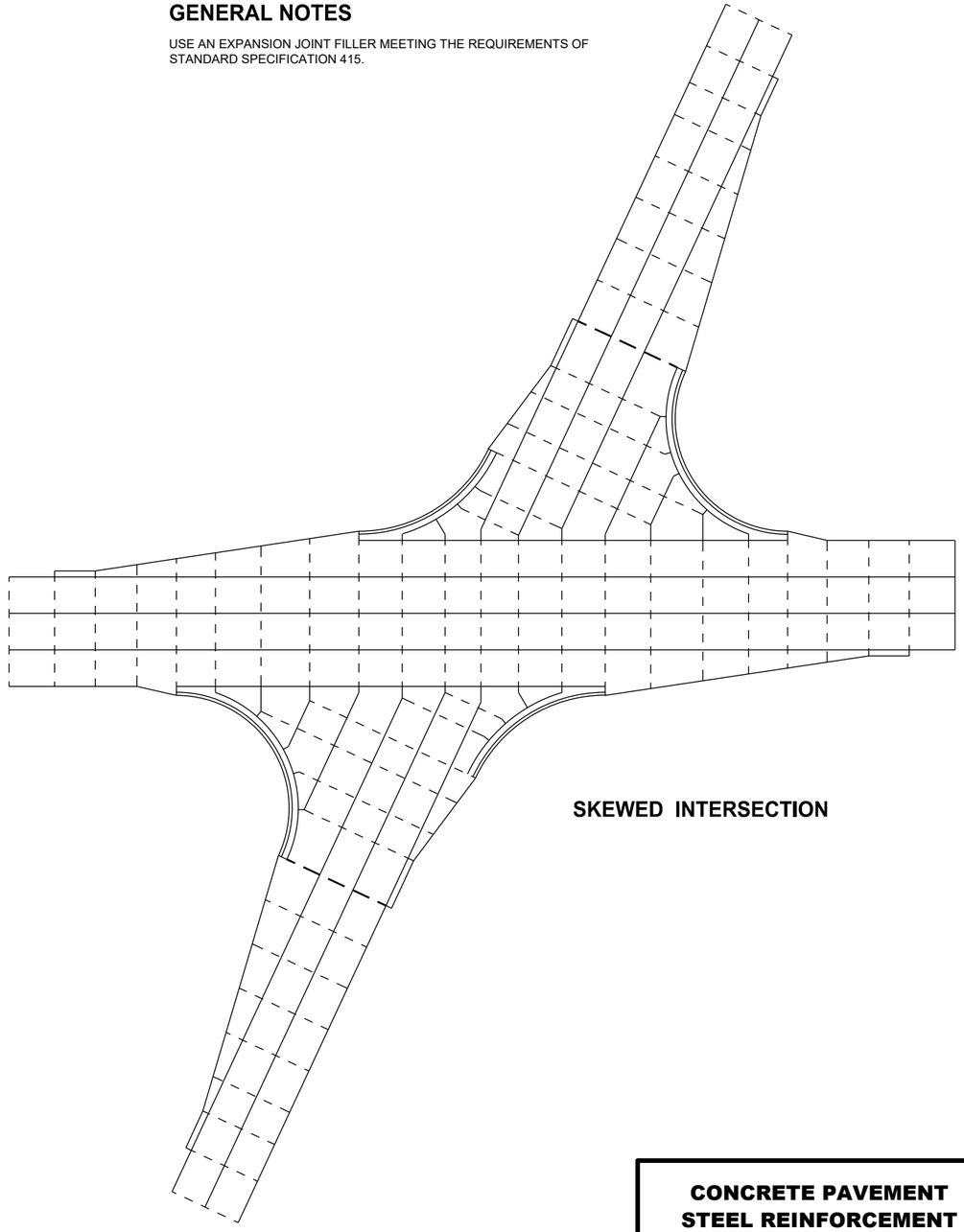
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

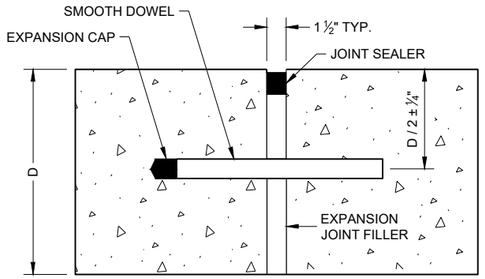
SDD 13C18 - 08b

CONCRETE PAVEMENT STEEL REINFORCEMENT

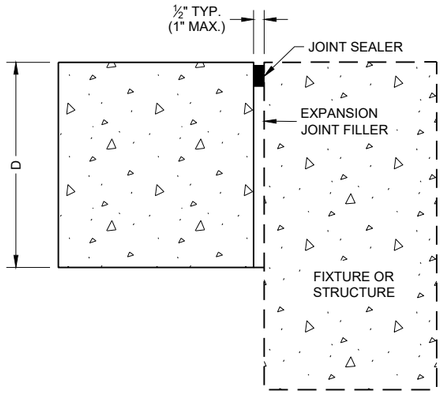
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

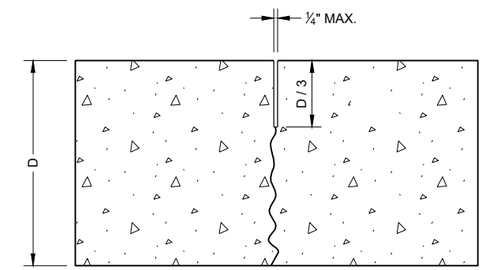
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

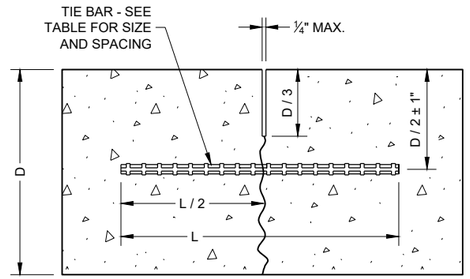
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

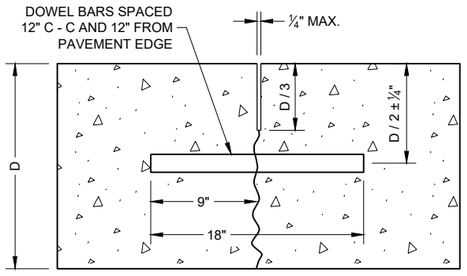
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

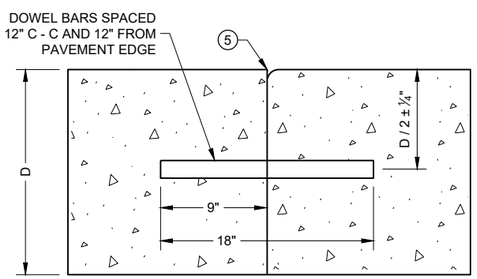


TIED LONGITUDINAL

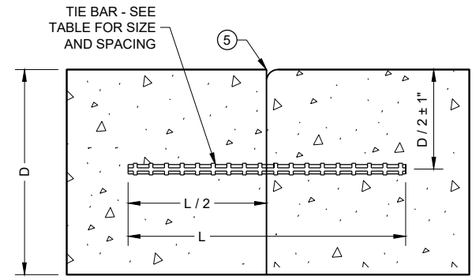


DOWELED TRANSVERSE

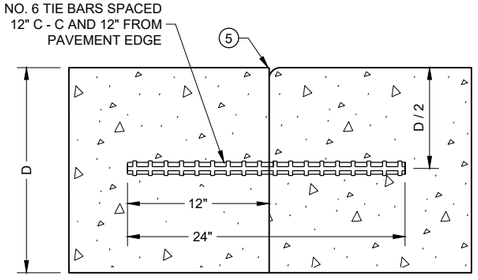
CONTRACTION JOINTS (2)



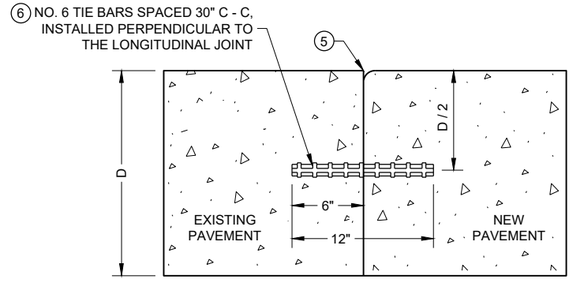
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



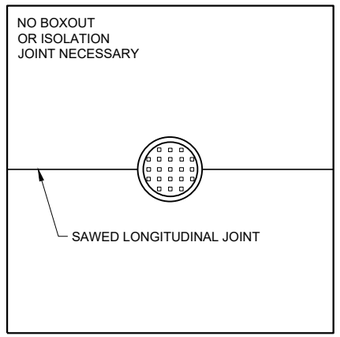
TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



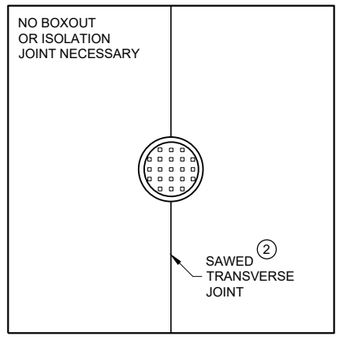
TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS (4)

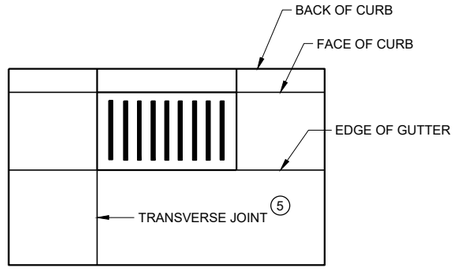
CONCRETE PAVEMENT JOINT TYPES



MANHOLE WITH LONGITUDINAL JOINT



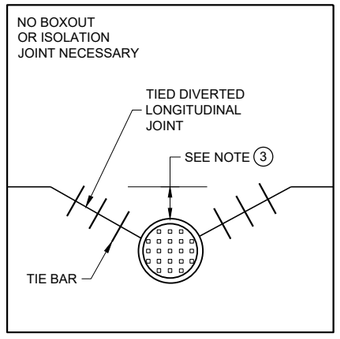
MANHOLE WITH TRANSVERSE JOINT



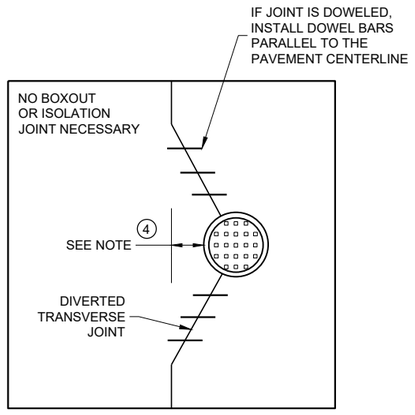
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

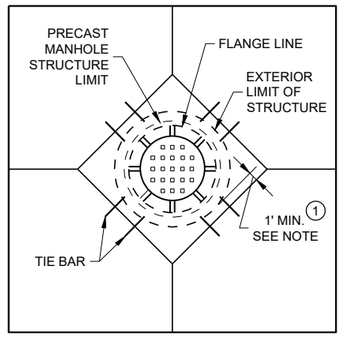
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

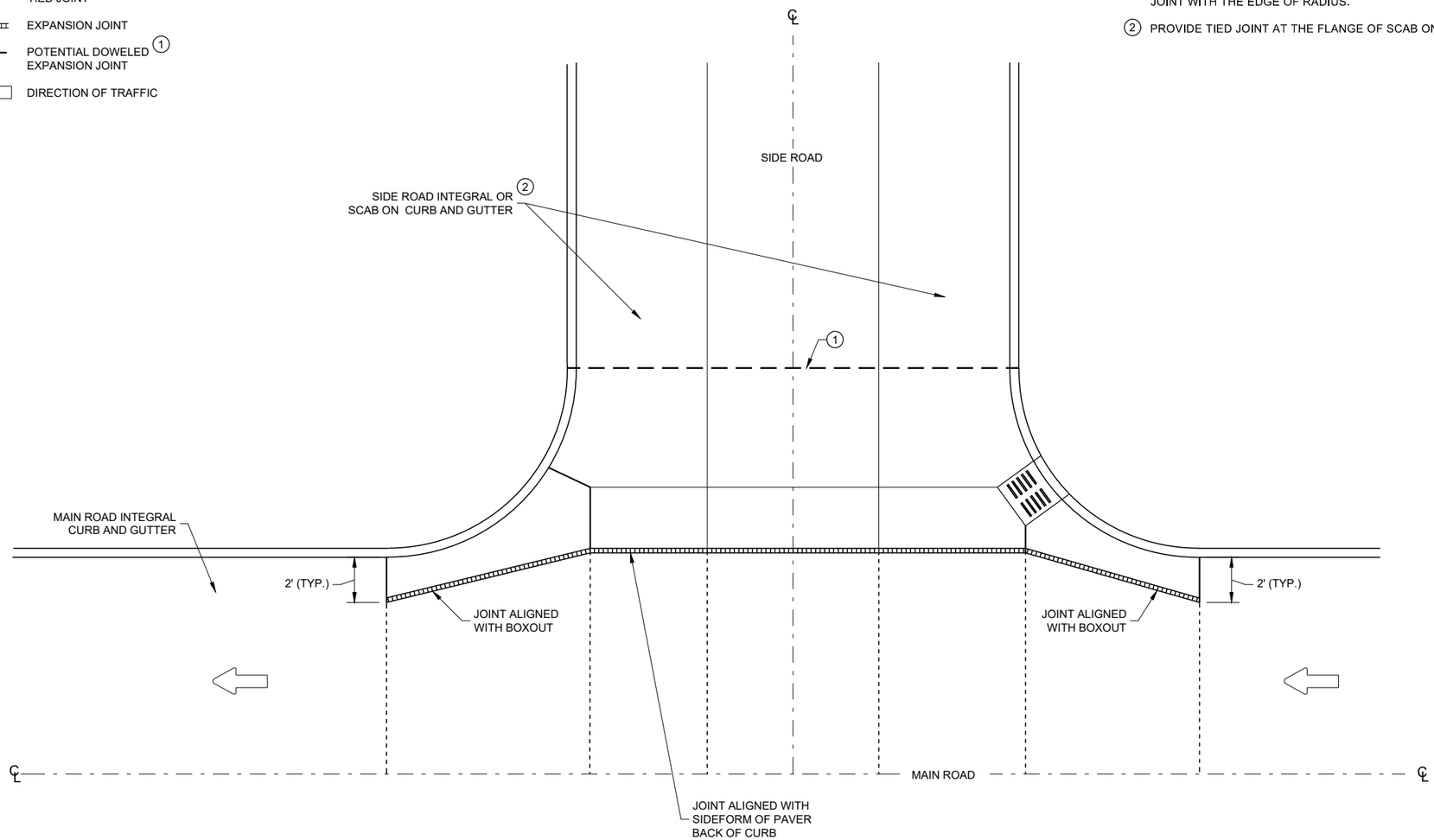
FHWA

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SDD13C18 - 08d

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

(1) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.

(2) PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

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(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

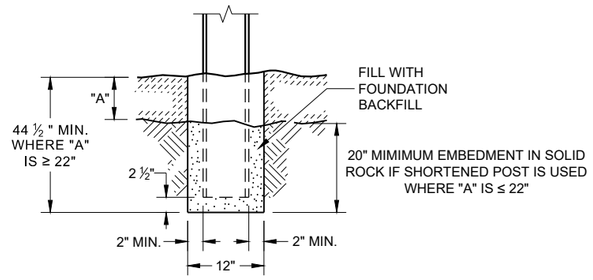
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

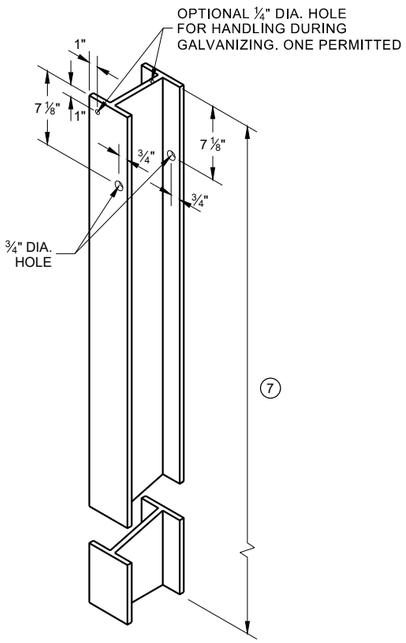
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

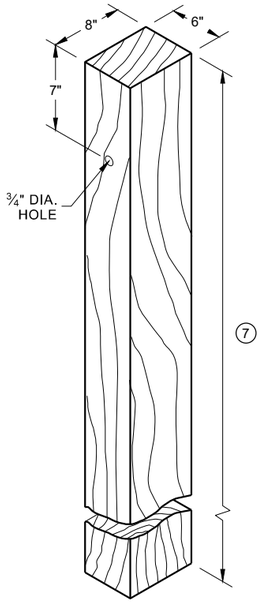
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



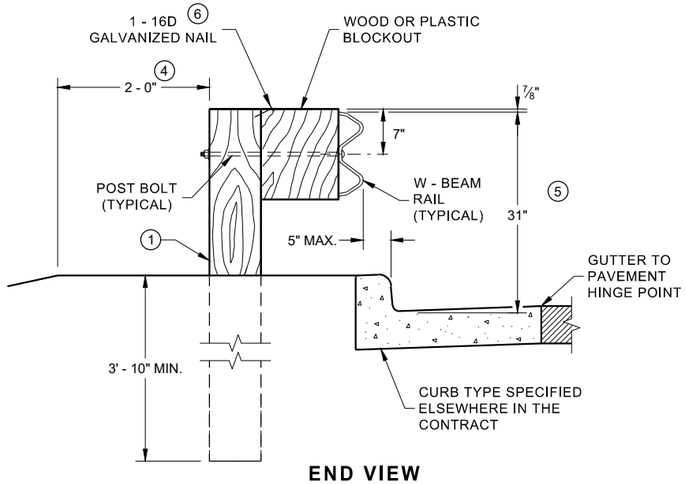
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



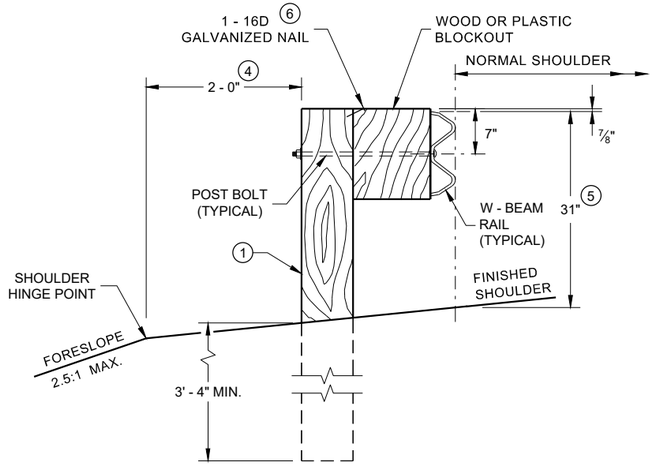
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



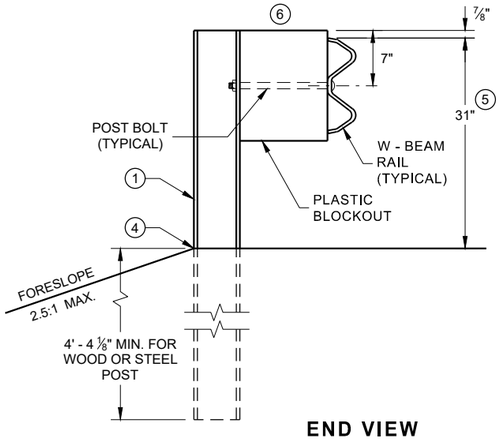
WOOD POST (6" X 8") NOMINAL (1)



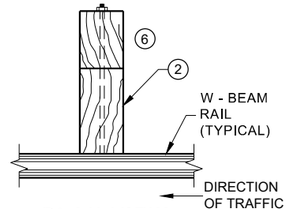
END VIEW
LOCATED ALONG A CURBED ROADWAY



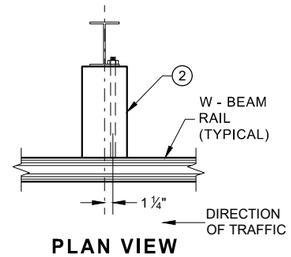
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



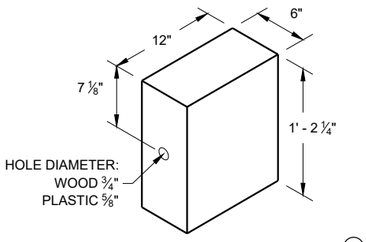
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



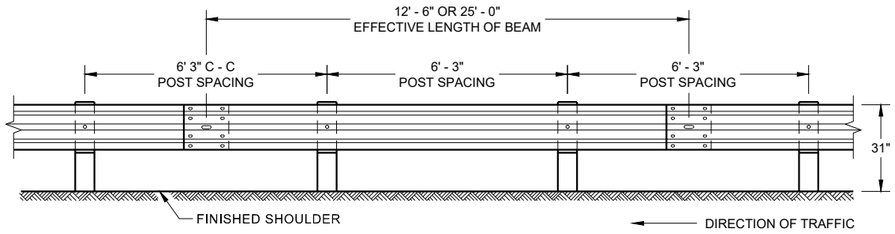
WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

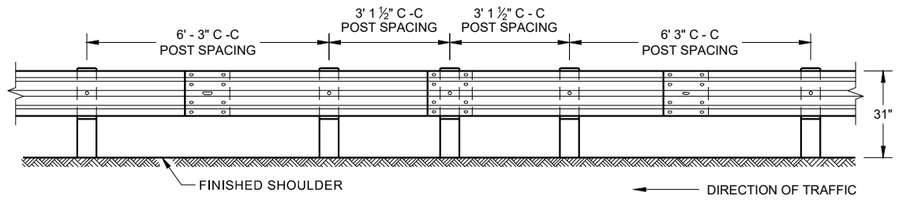
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 07a

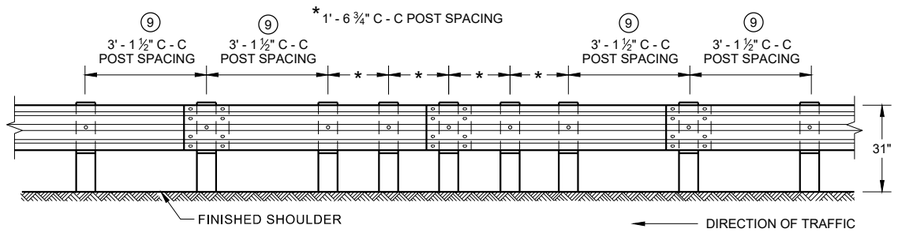
SDD 14B42 - 07a



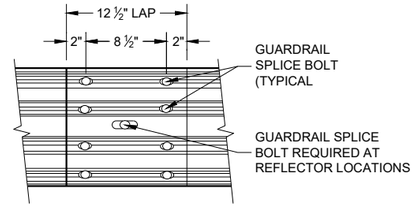
FRONT VIEW
POST SPACING STANDARD INSTALLATION



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

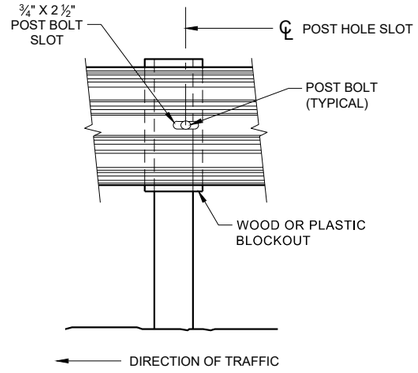
GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

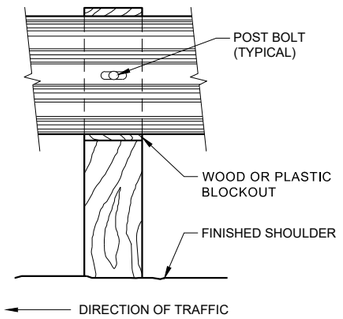
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

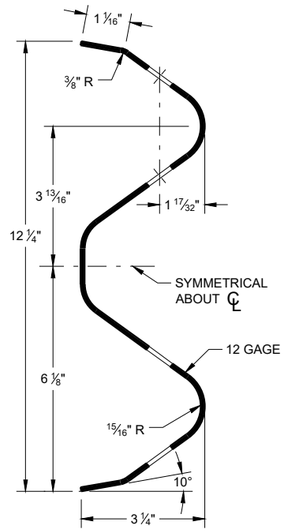
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



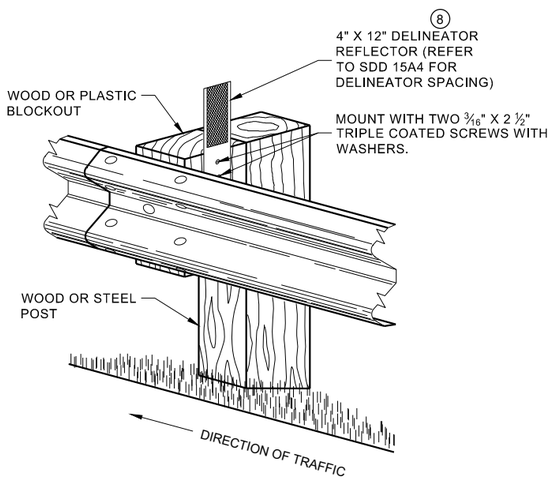
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



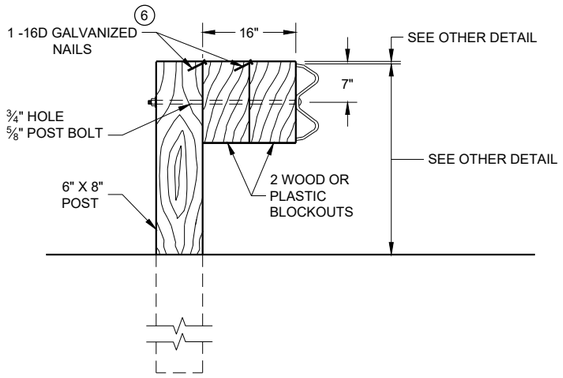
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

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

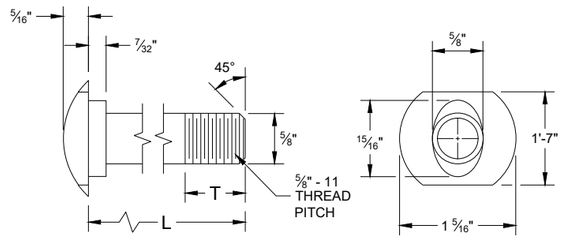


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

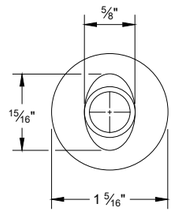
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

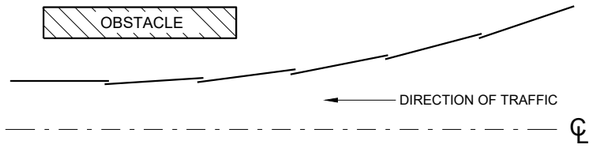


POST BOLT TABLE

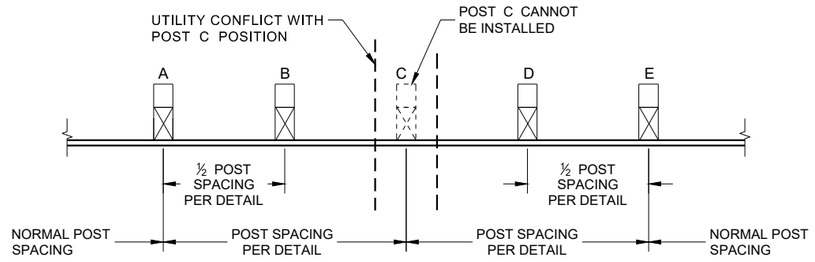
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



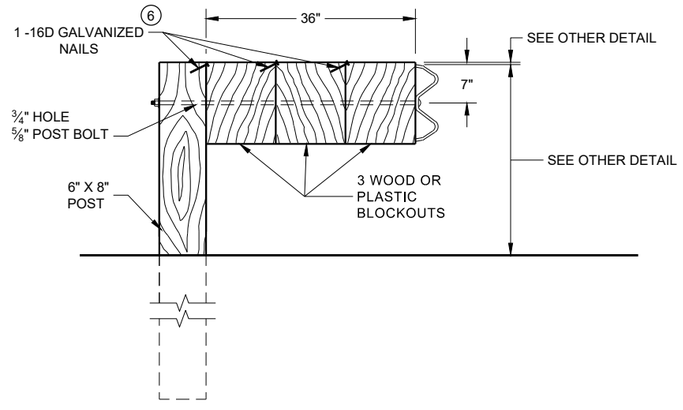
ALTERNATE BOLT HEAD



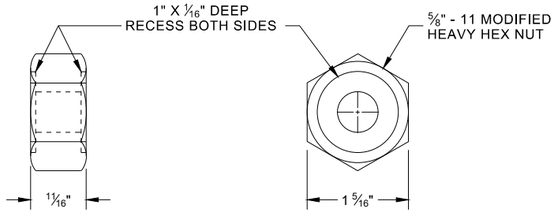
PLAN VIEW
BEAM LAPPING DETAIL



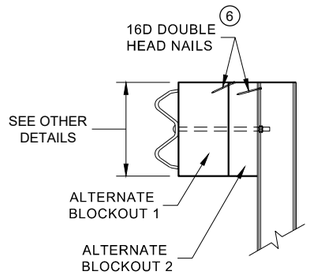
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



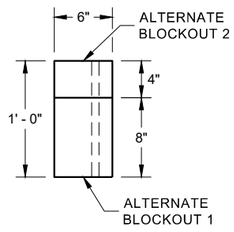
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

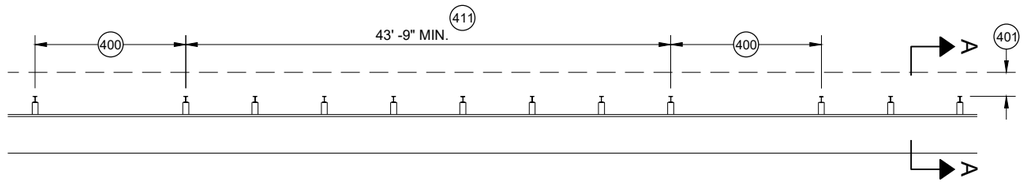
NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

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

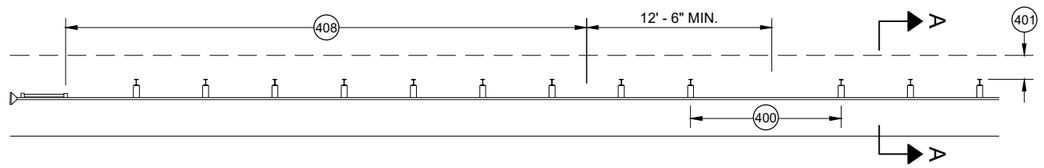
(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

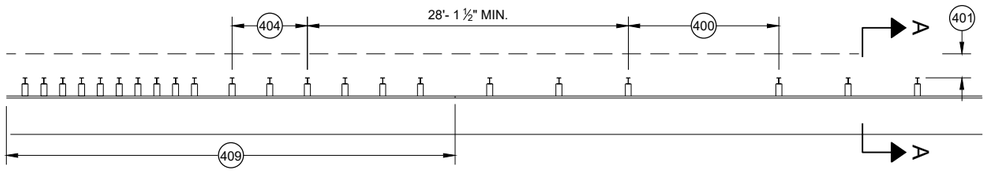
6
SDD 14B42 - 07c



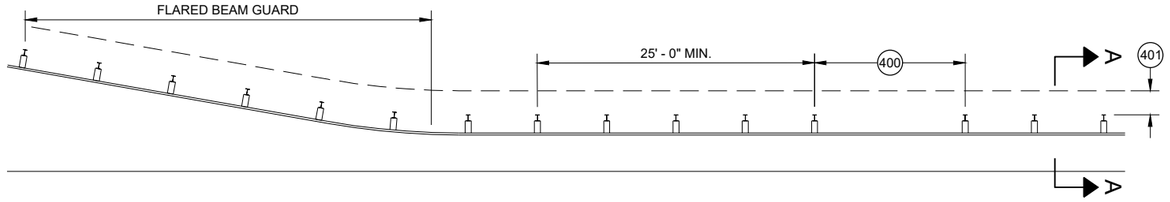
MISSING POST IN MGS GUARDRAIL



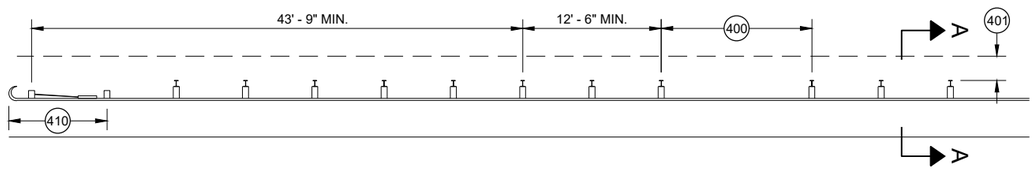
MISSING POST IN MGS GUARDRAIL NEAR EAT



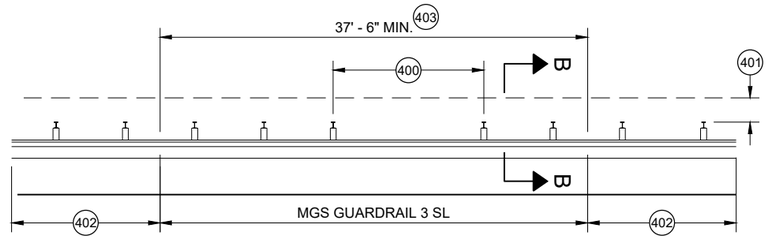
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

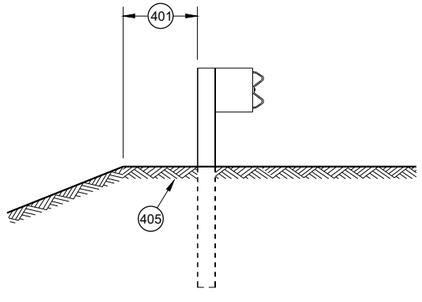


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

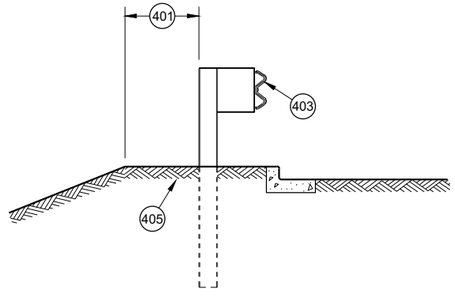


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(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

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.

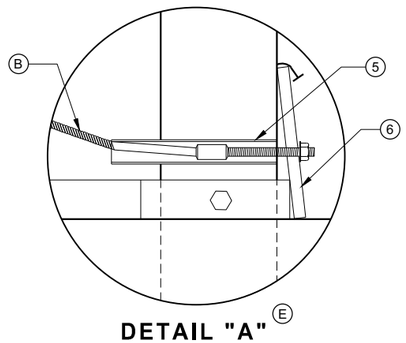
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

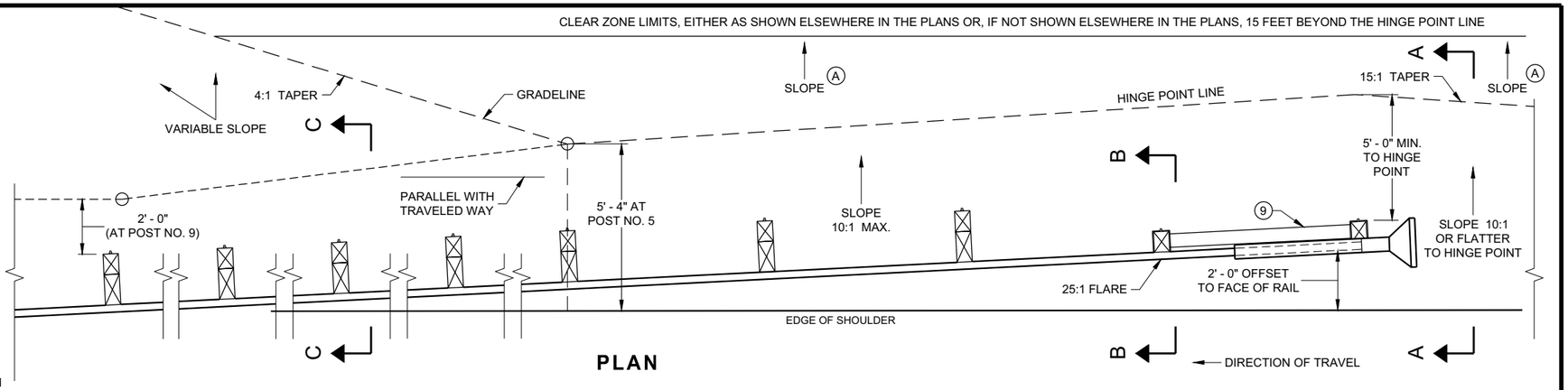
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

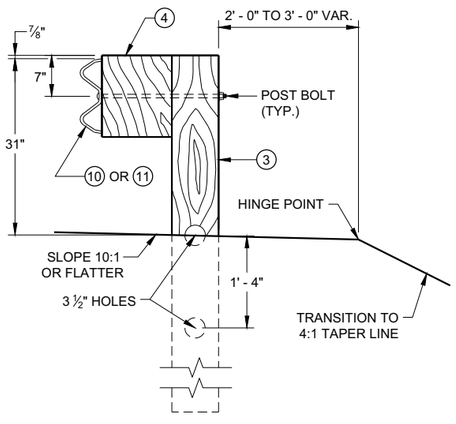
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

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.

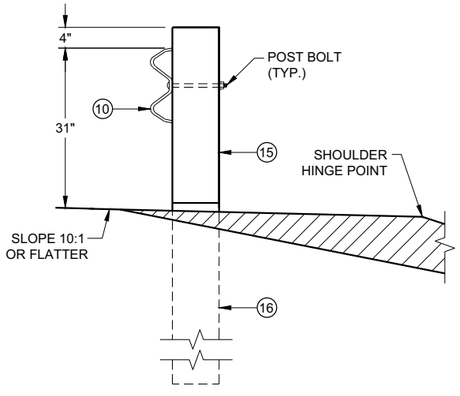


DETAIL "A" (E)

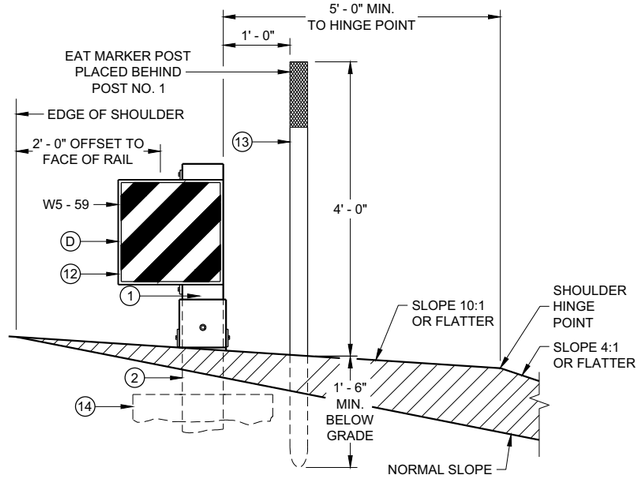




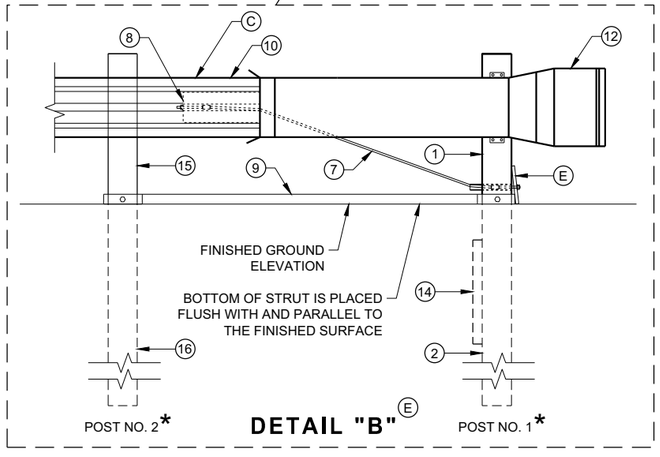
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



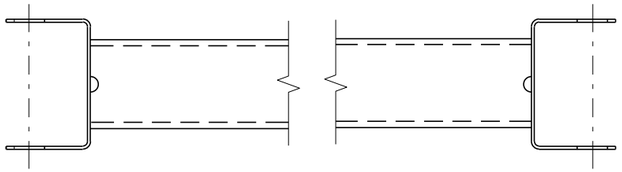
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

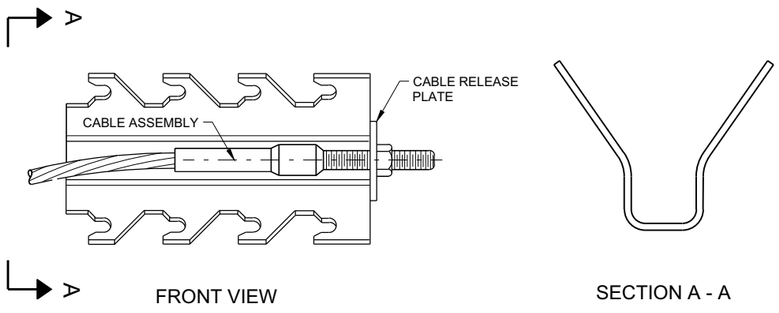
SDD 14B44 - 04a



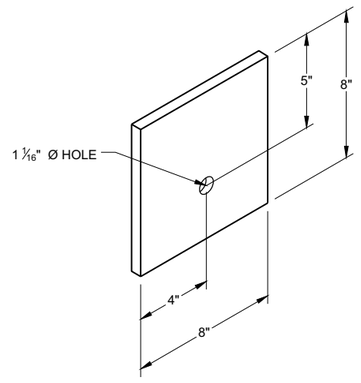
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX ⑧ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

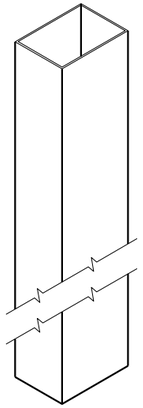
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SDD 14B44 - 04b

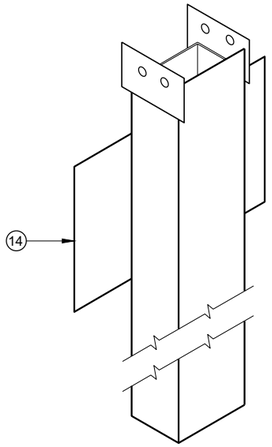
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

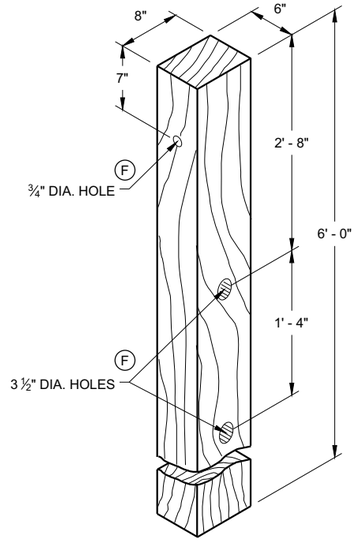
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



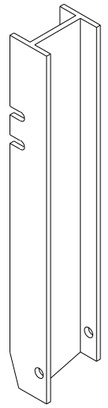
UPPER POST NO. 1 (1) (E)



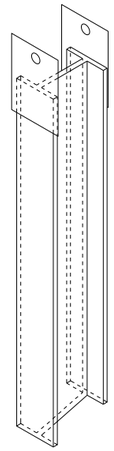
LOWER POST NO. 1 (2) (E)



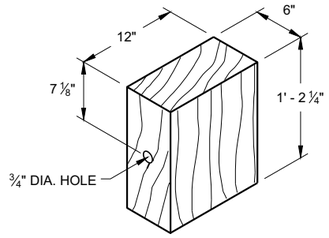
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



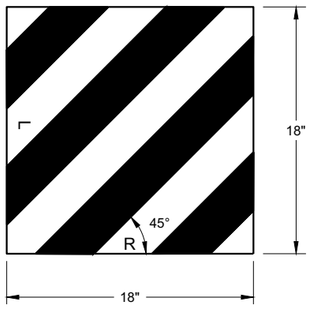
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

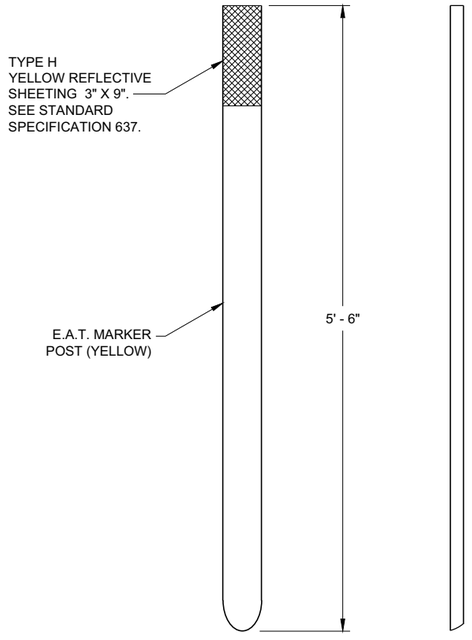


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



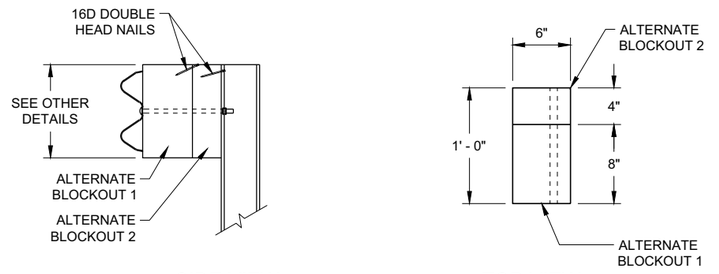
W5 - 59

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)

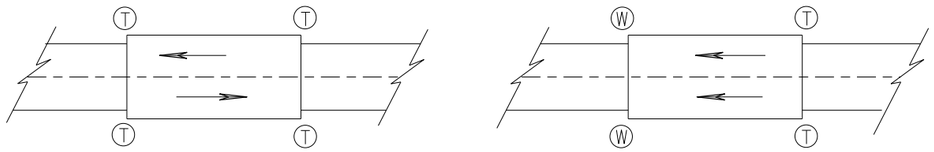
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

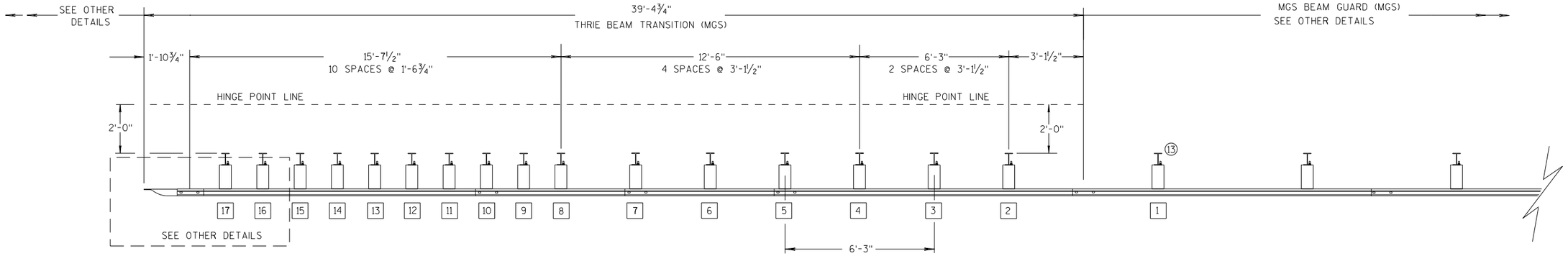
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

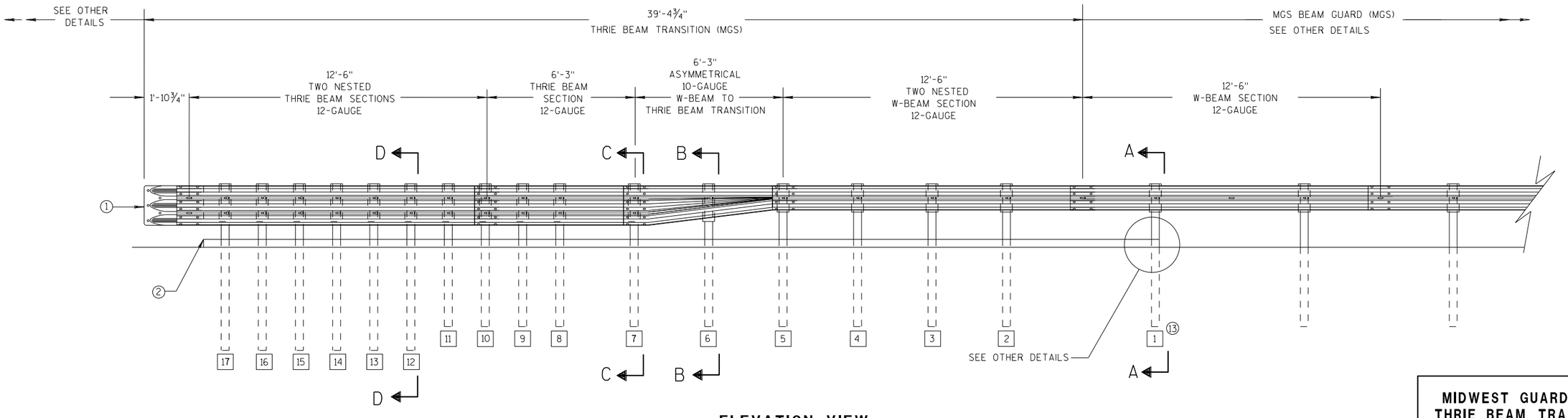
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(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

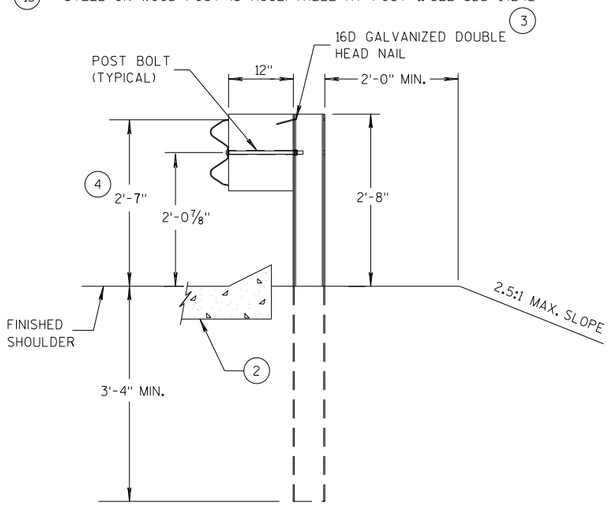
GENERAL NOTES

(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.

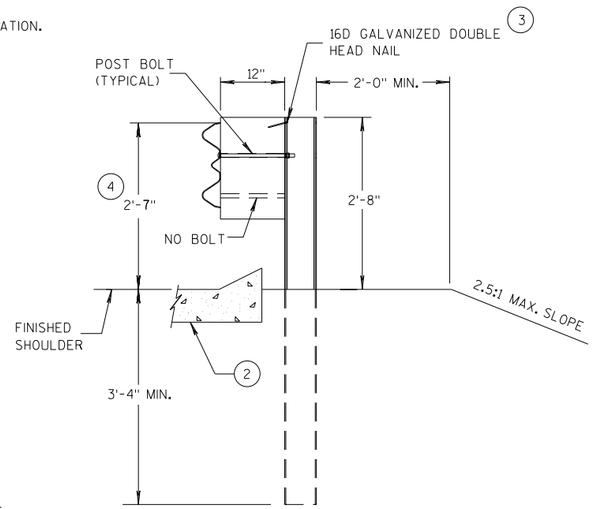
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



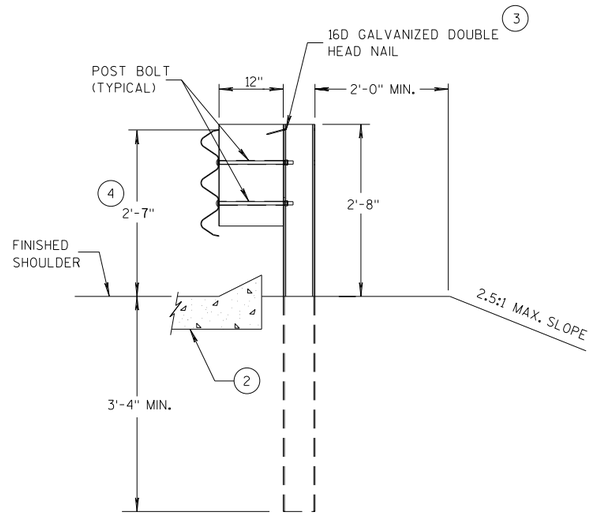
SECTION A-A (13)

POSTS 1-5



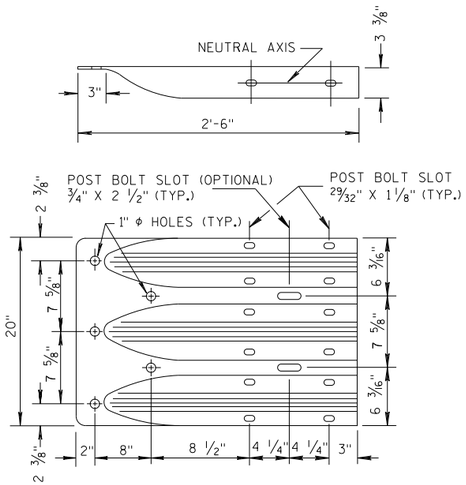
SECTION B-B

POST 6

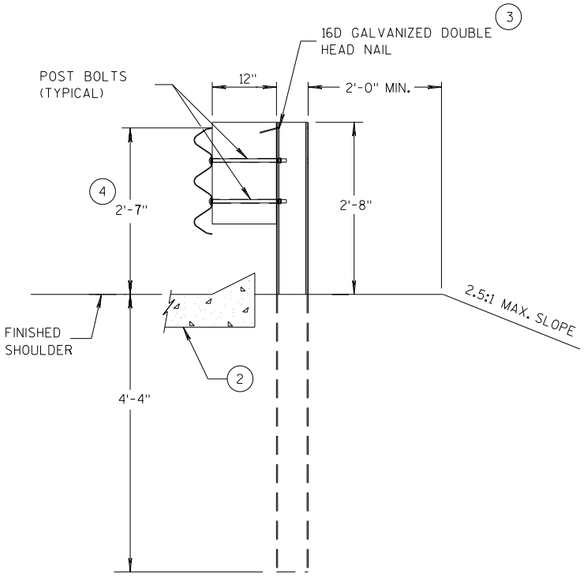


SECTION C-C

POSTS 7-11

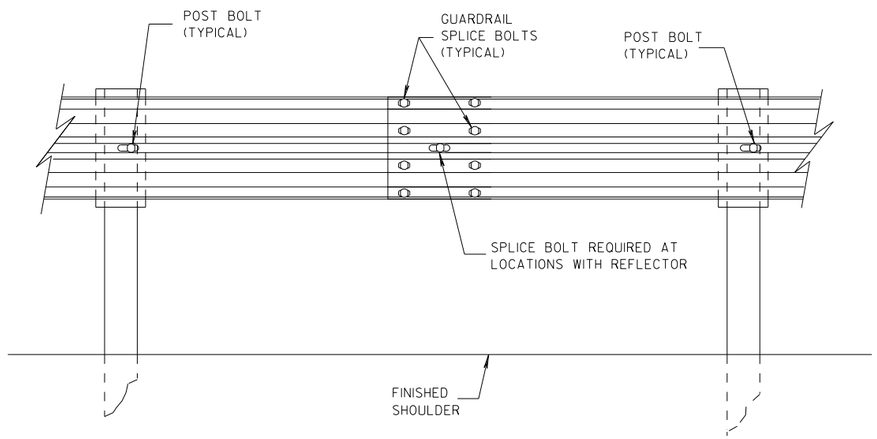


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

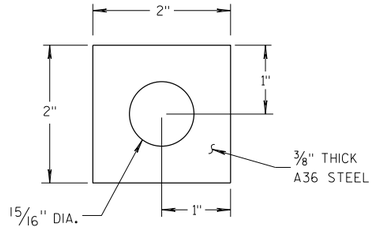
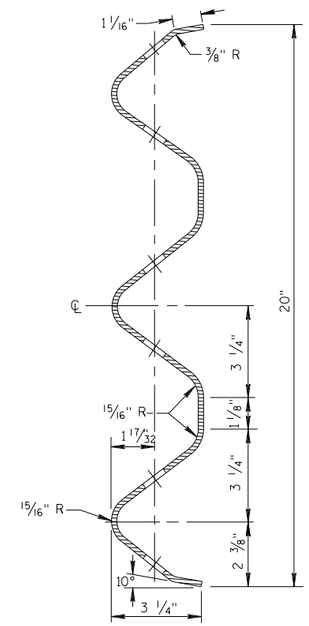


PLATE WASHER DETAIL



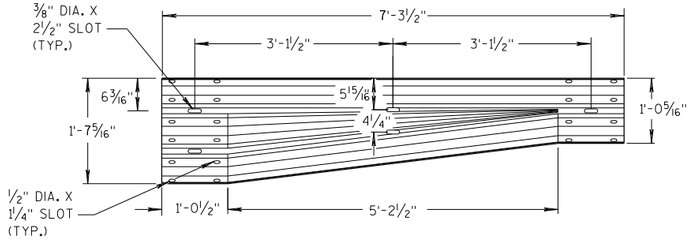
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

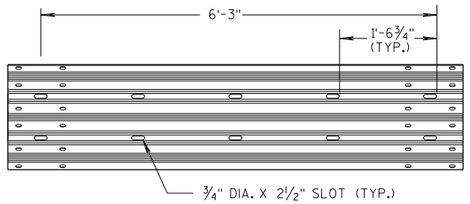
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

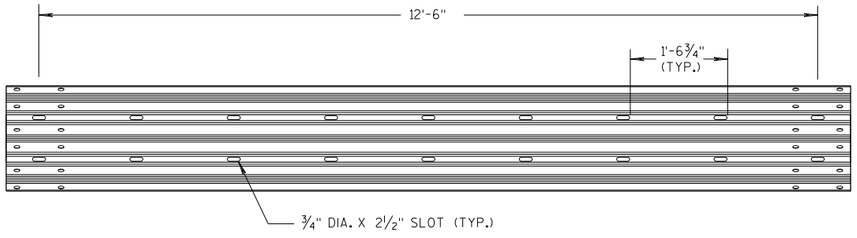
S.D.D. 14 B 45-5b



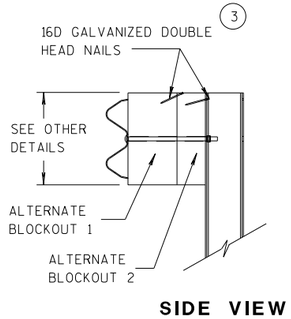
W-BEAM TO THRIE BEAM TRANSITION SECTION



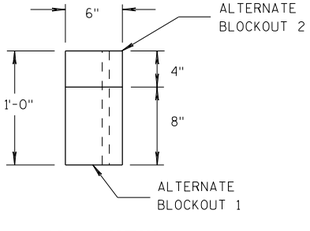
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

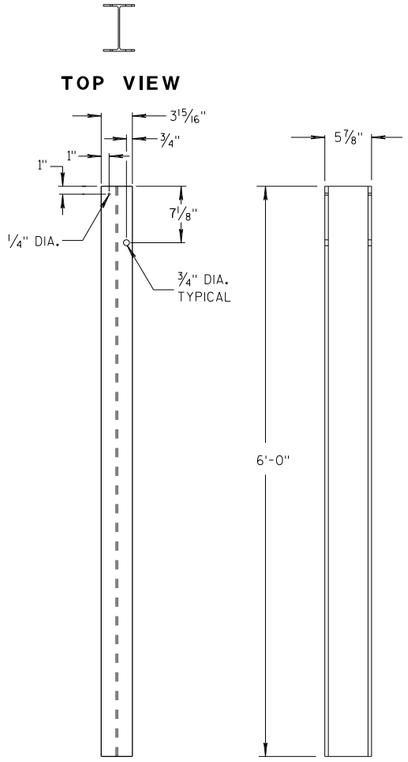


SIDE VIEW



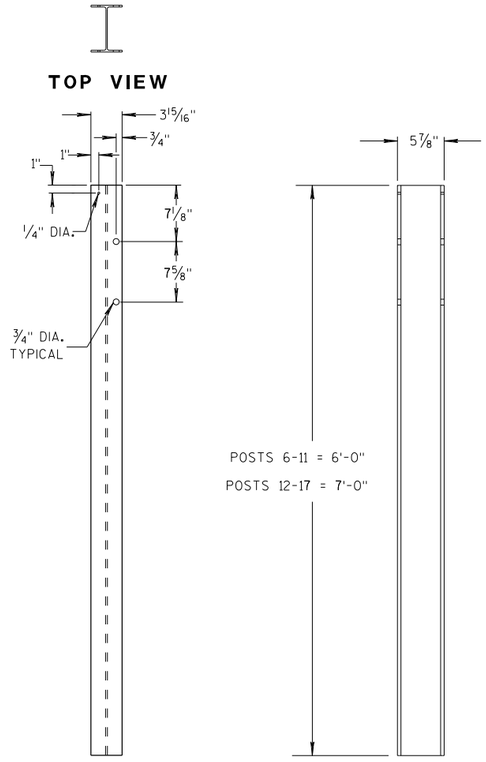
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



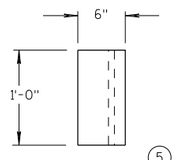
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

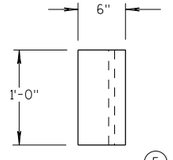


FRONT VIEW SIDE VIEW

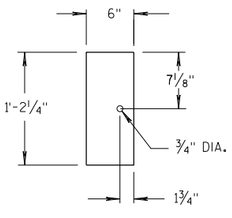
STEEL POSTS 6-17



TOP VIEW (5)

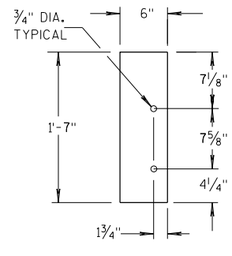


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

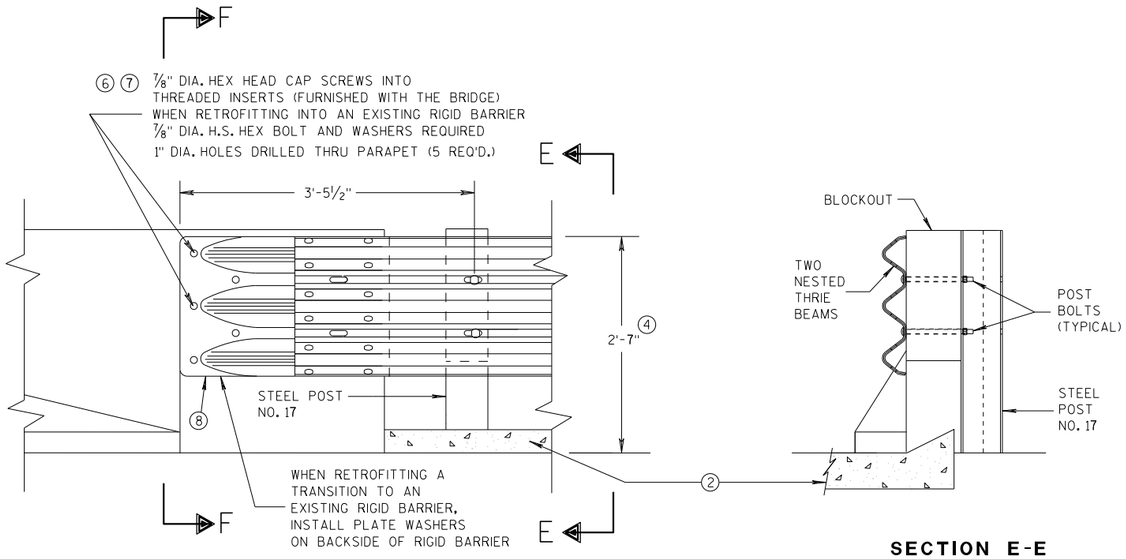
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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.

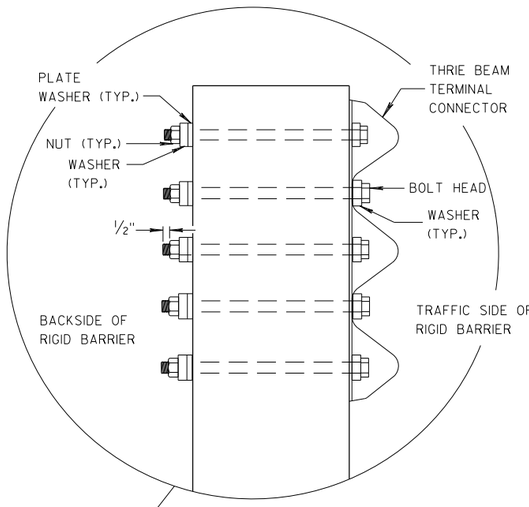
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

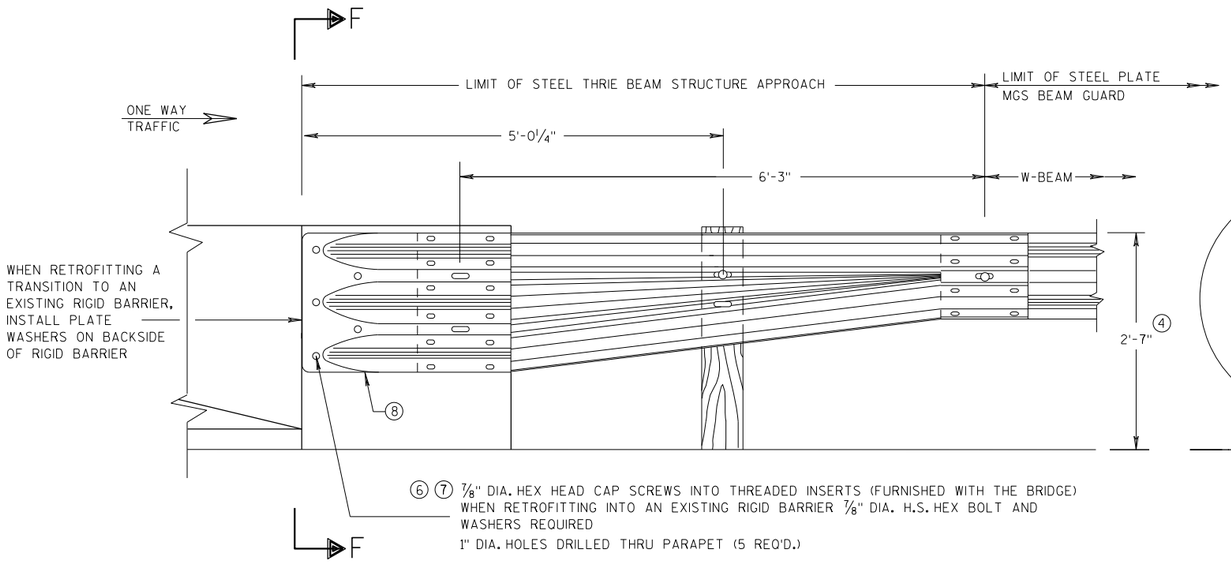
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

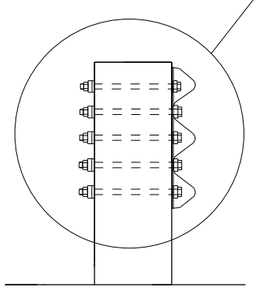
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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".

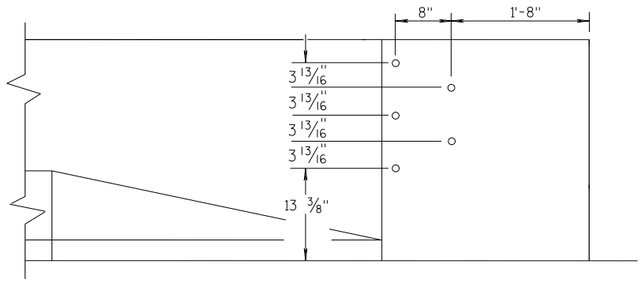




FRONT VIEW



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

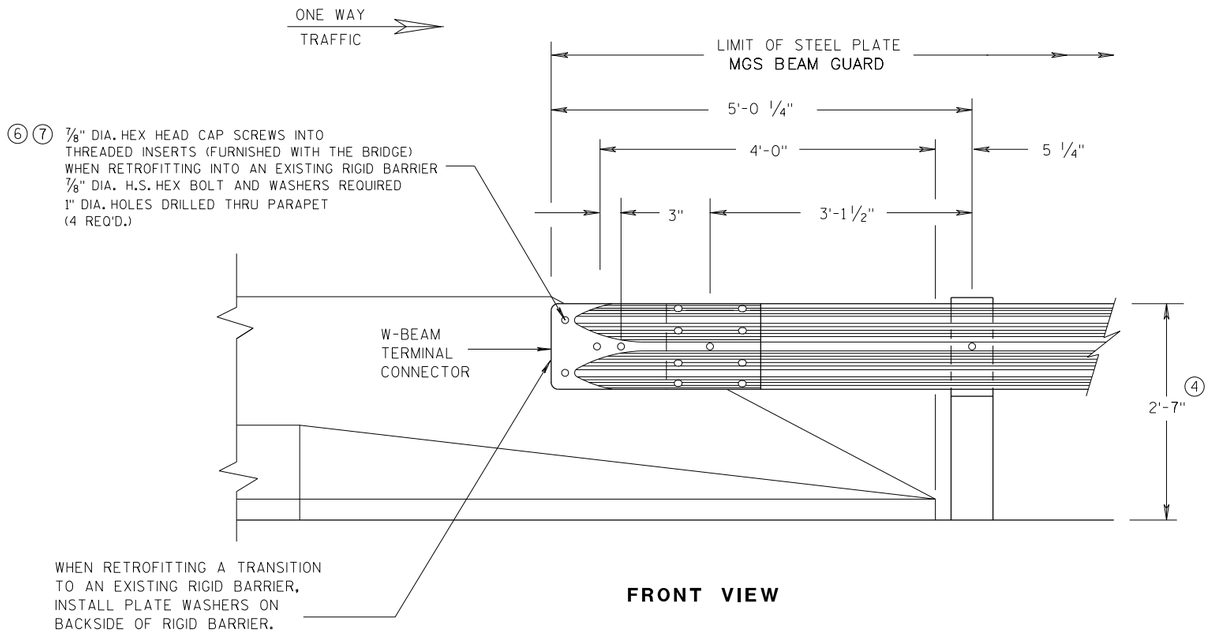
APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D UNIT SUPERVIS
NT
FHWA

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S.D.D. 14 B 45-5d

6

S.D.D. 14 B 45-5d



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

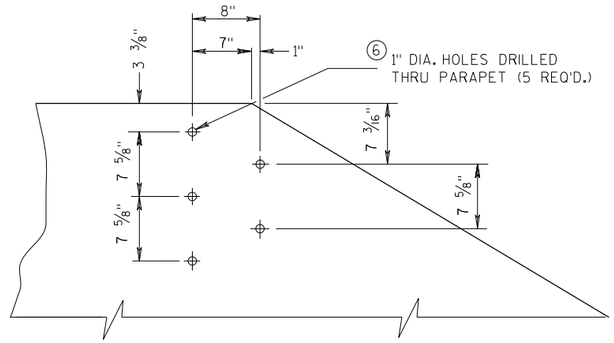
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

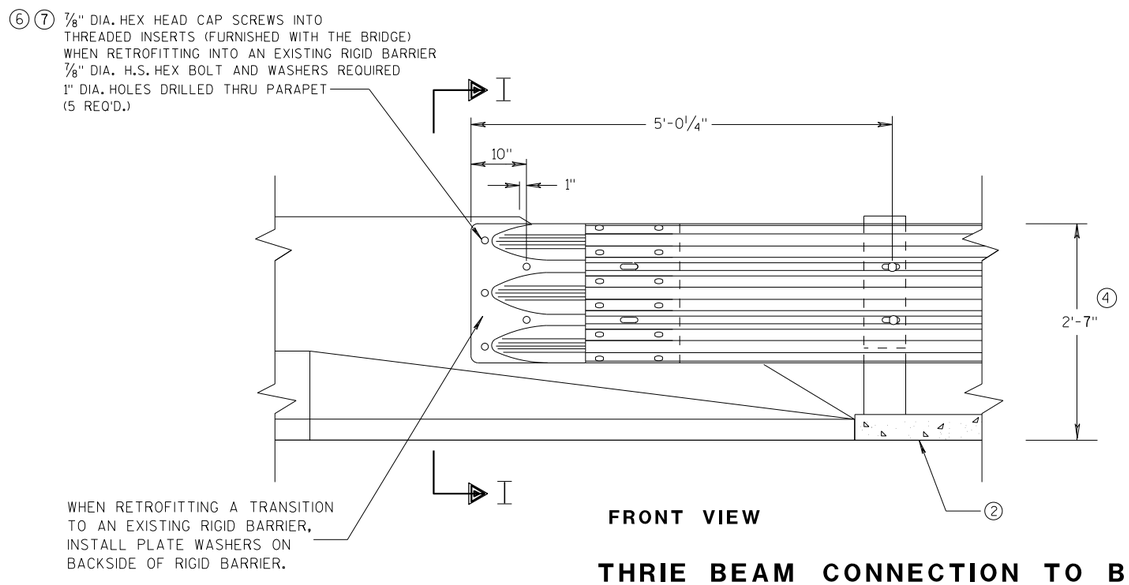
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

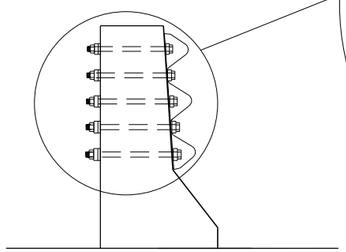
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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.



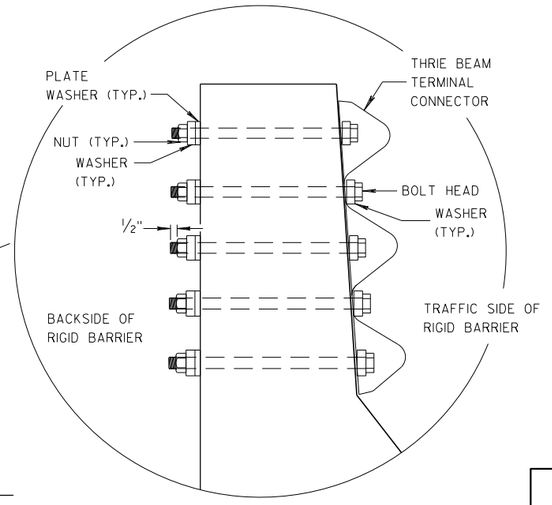
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

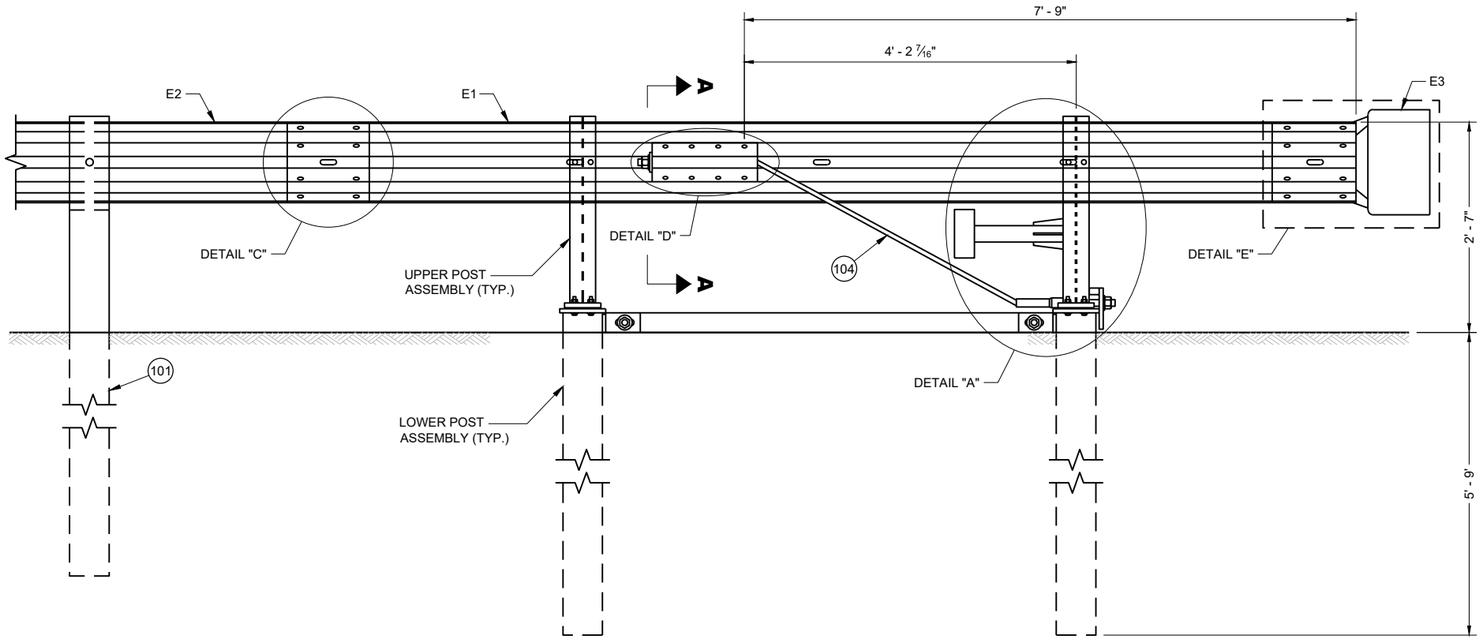
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

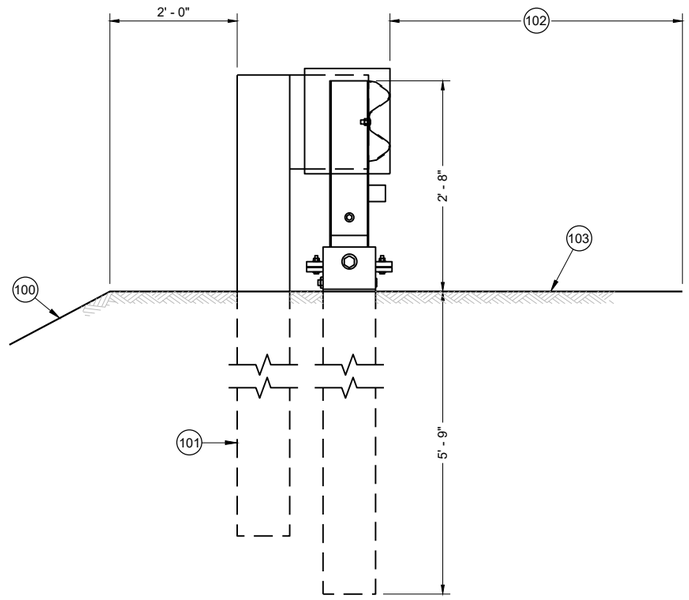
APPROVED
07/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS I
UNIT SUPERVI
ENT
FHWA

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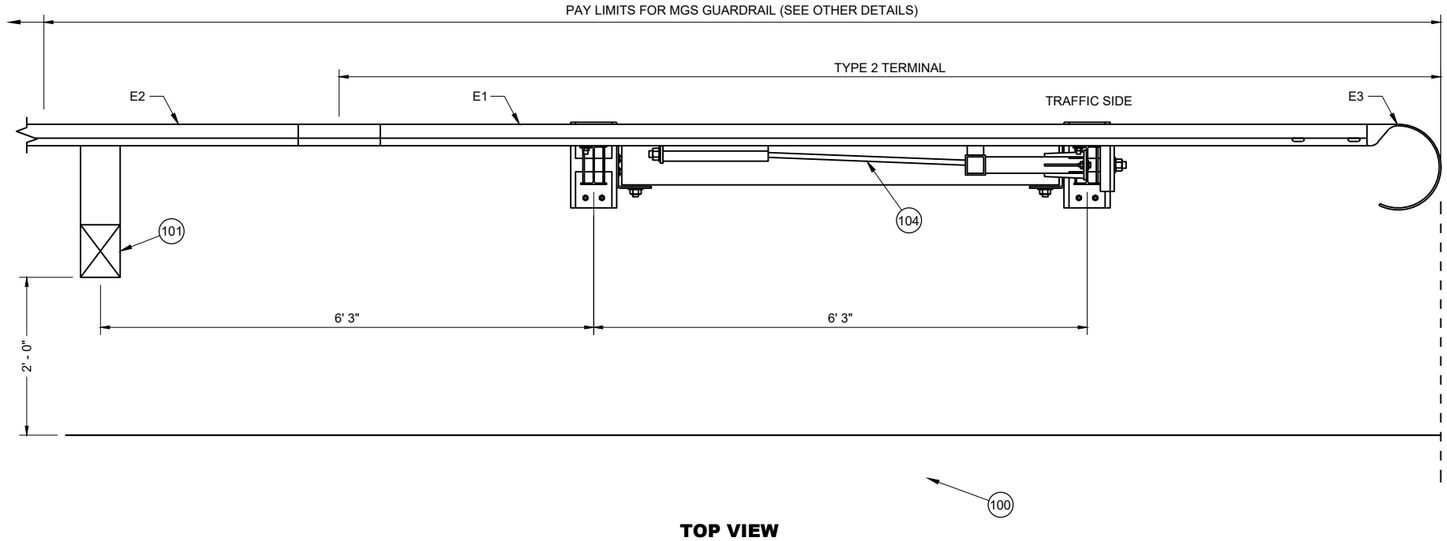
S.D.D. 14 B 45-5f



BACK VIEW
TYPE 2 TERMINAL



SIDE VIEW
TYPE 2 TERMINAL



TOP VIEW
TYPE 2 TERMINAL

GENERAL NOTES

(100) MAXIMUM SLOPE IS 2.5:1.

(101) SEE SDD 14B42 FOR MORE INFORMATION.

(102) SHOULDER

(103) MAXIMUM SLOPE IS 10:1.

(104) AFTER ASSEMBLY, CABLE IS TO BE TIGHTENED WITHOUT TWISTING THE CABLE.

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

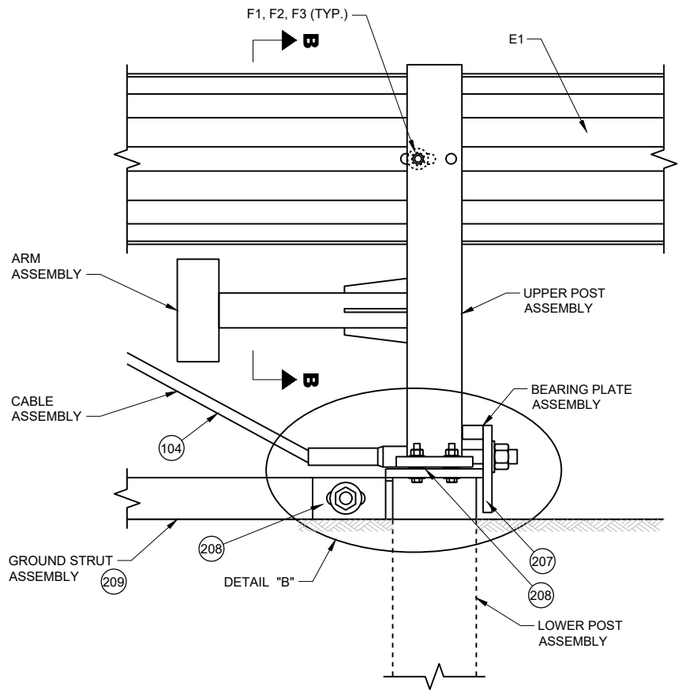
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

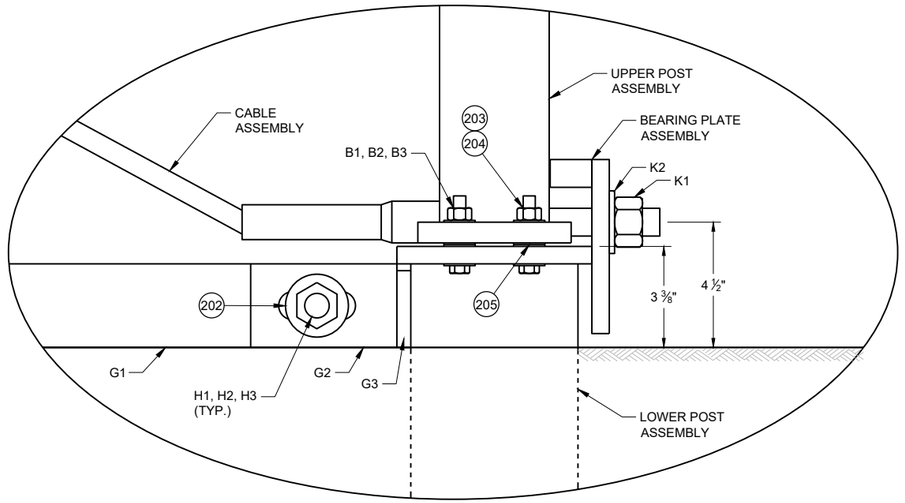
SDD 14B47-06a

6

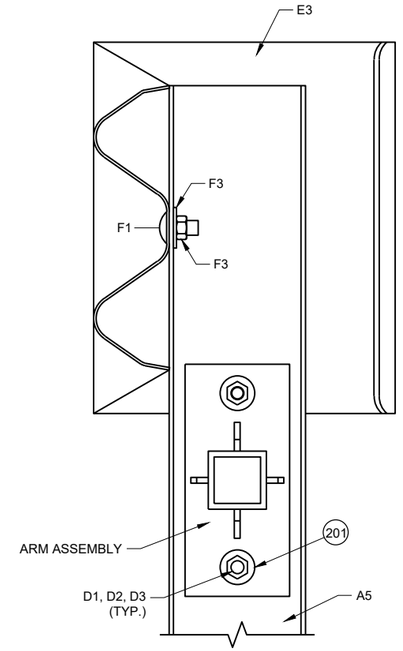
SDD 14B47-06a



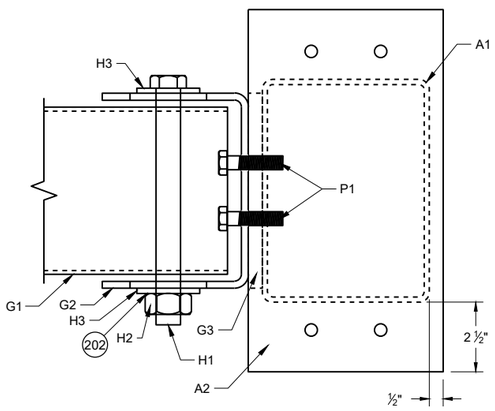
DETAIL "A"



DETAIL "B"

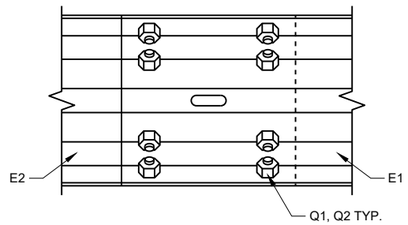


SECTION B - B

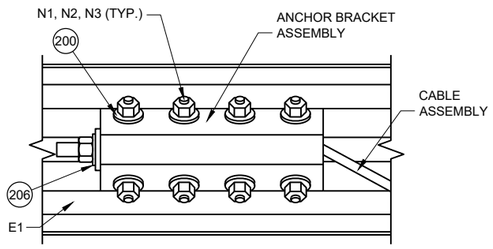


TOP VIEW

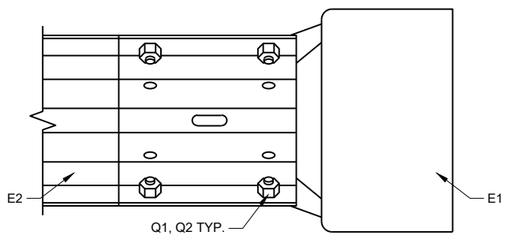
GROUND STRUT CONNECTION DETAIL



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.

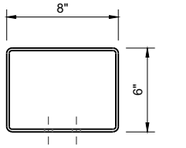
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

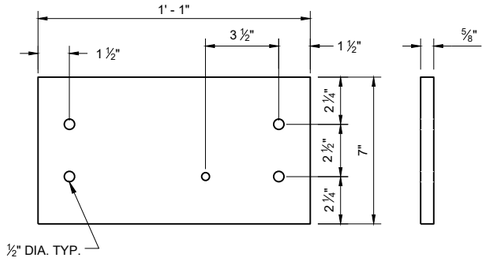
6
SDD 14B47-06b

GENERAL NOTES

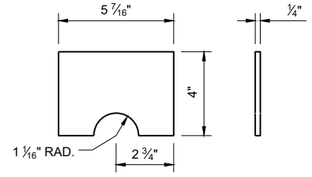
(300) TAP FOR 1/2" AFTER GALVANIZATION



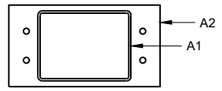
TOP VIEW



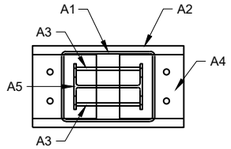
LOWER PLATE (A2)

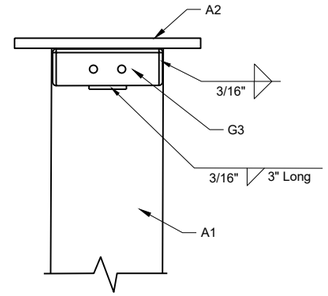


POST GUSSET (A3)

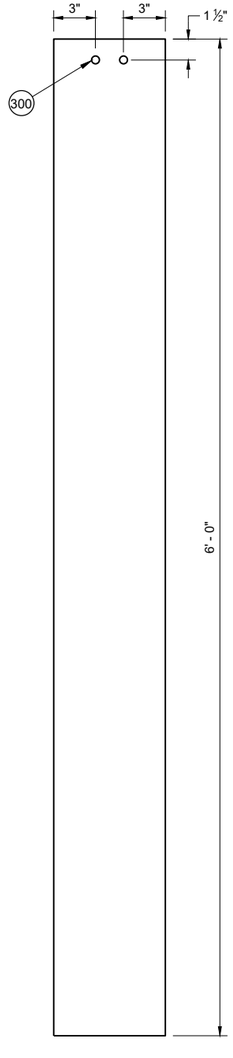


PLAN VIEW



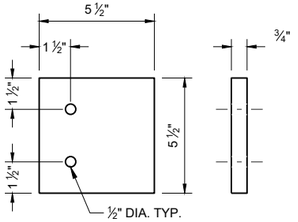


WELDING DETAIL
G3 AND A1

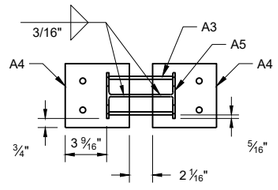


SIDE VIEW

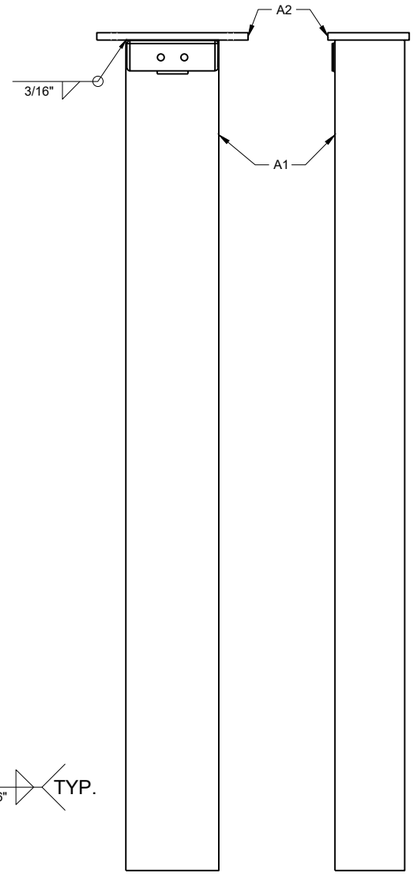
FOUNDATION
TUBE (A1)



UPPER PLATE (A4)



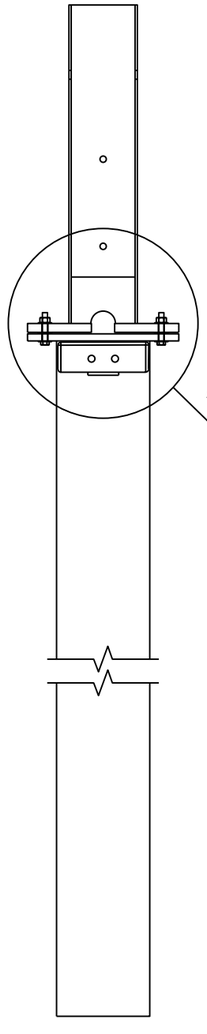
PLAN VIEW



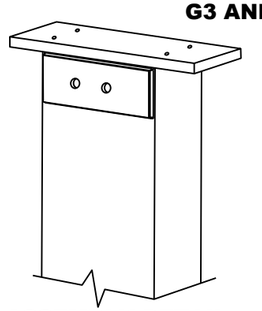
FRONT VIEW

SIDE VIEW

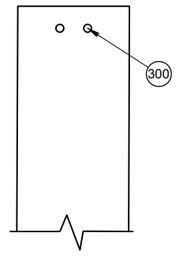
LOWER POST ASSEMBLY



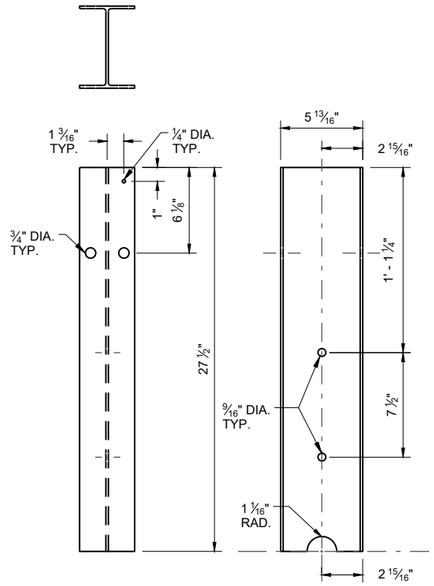
ASSEMBLED POST



ASSEMBLY DETAIL
ISOMETRIC

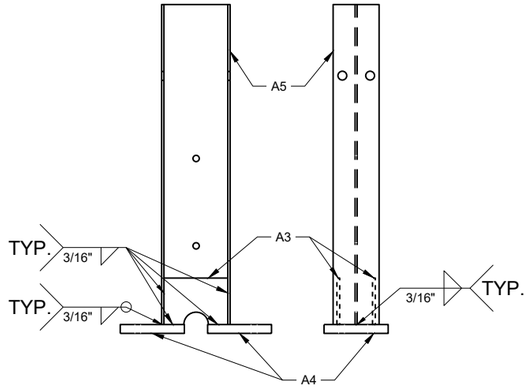


A1



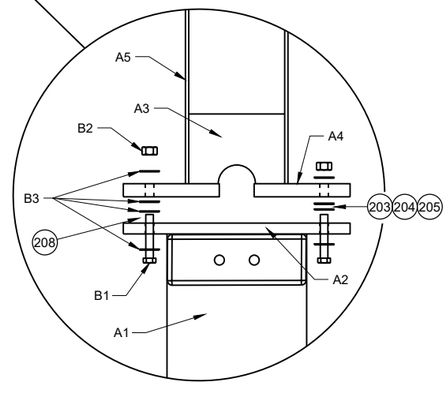
FRONT VIEW SIDE VIEW

TYPE 2 POST (A5)



SIDE VIEW FRONT VIEW

UPPER POST ASSEMBLY



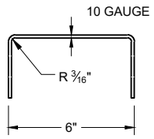
POST CONNECTION DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

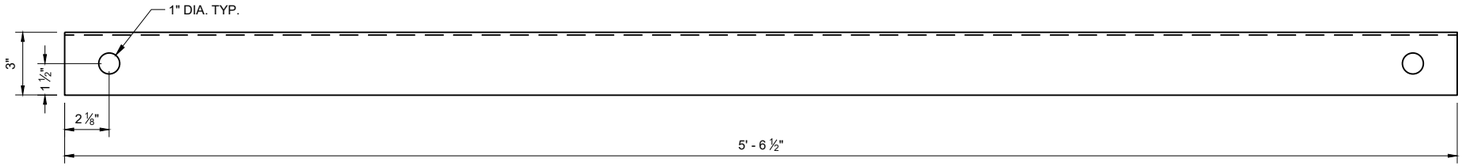
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B47-06c

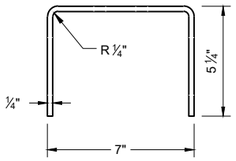


SIDE VIEW

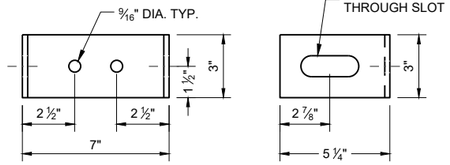


FRONT VIEW

GROUND STRUT CHANNEL (G1)

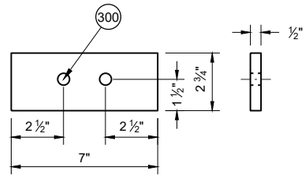


TOP VIEW

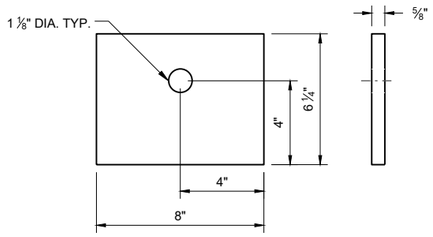


FRONT VIEW SIDE VIEW

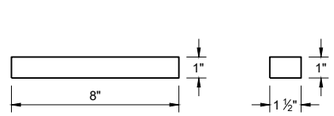
GROUND STRUT CONNECTOR (G2)



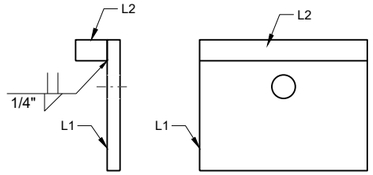
GROUND STRUT PLATE (G3)



BEARING PLATE (L1)

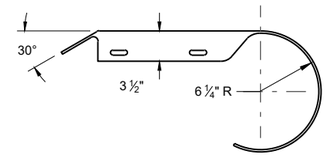


BEARING PLATE FLANGE (L2)

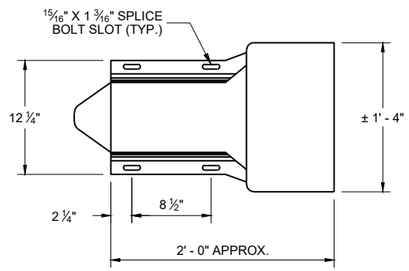


SIDE VIEW FRONT VIEW

BEARING PLATE ASSEMBLY

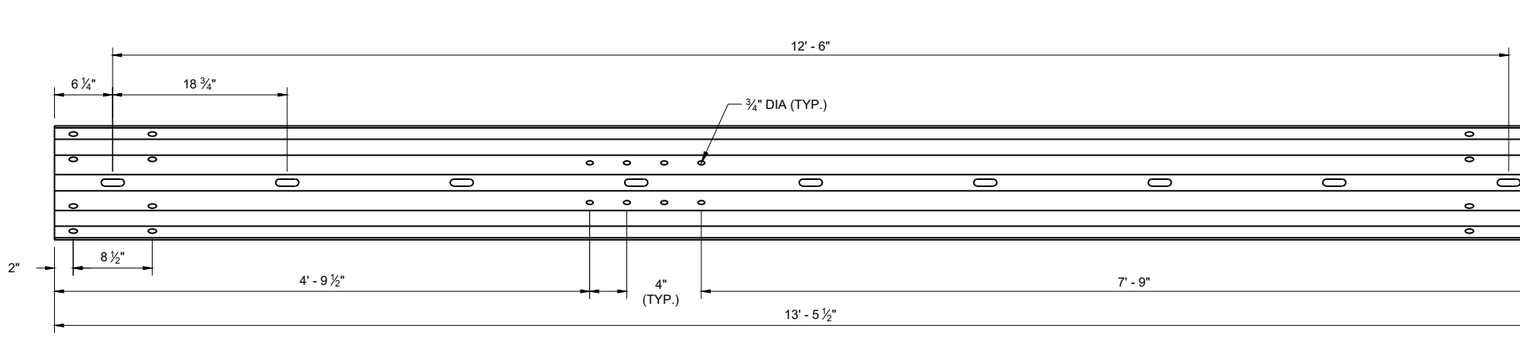


PLAN VIEW

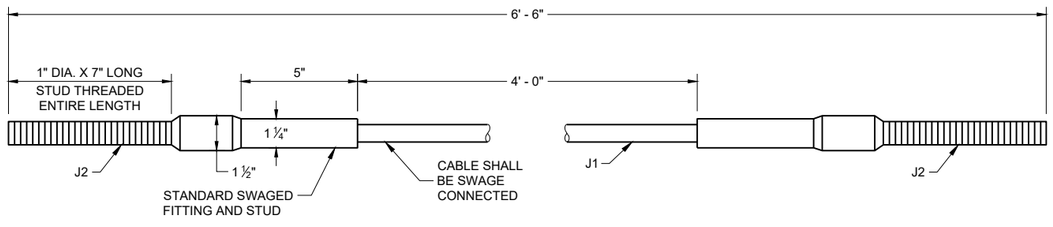


ELEVATION VIEW

ROUNDED BUFFER END (E3)



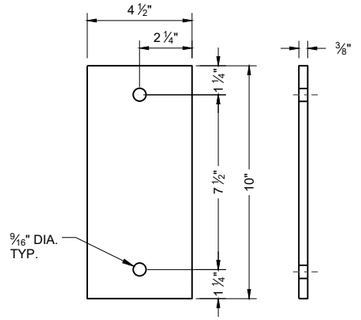
TYPE 2 GUARDRAIL (E1)



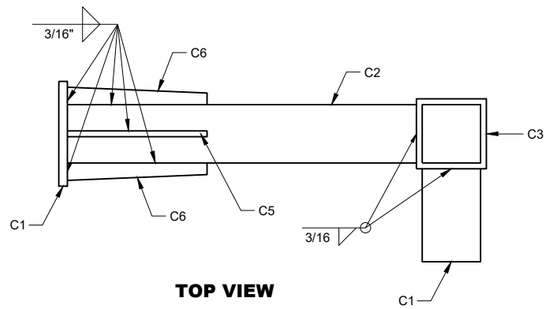
CABLE ASSEMBLY

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

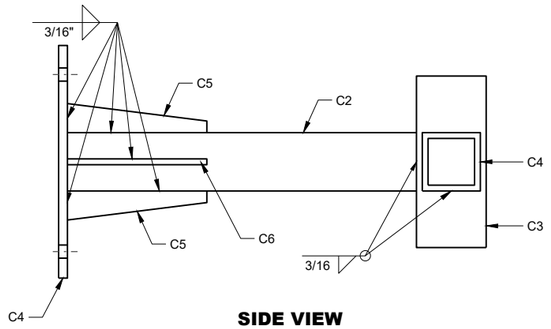
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



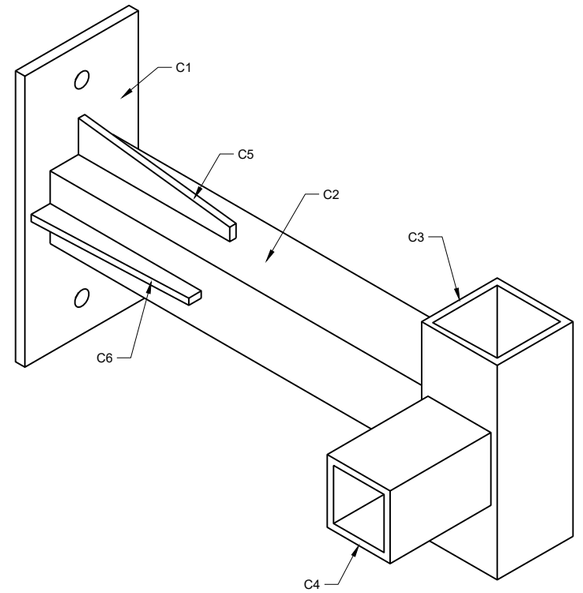
ARM PLATE (C1)



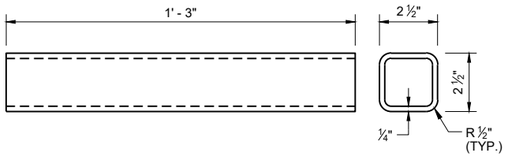
TOP VIEW
ARM ASSEMBLY



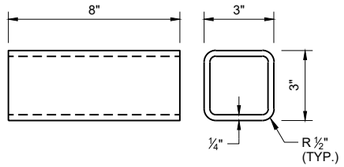
SIDE VIEW
ARM ASSEMBLY



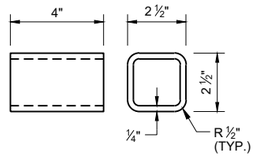
ISOMETRIC VIEW
ARM ASSEMBLY



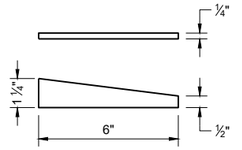
ARM TUBE 1 (C2)



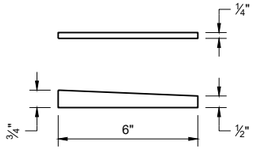
ARM TUBE 2 (C3)



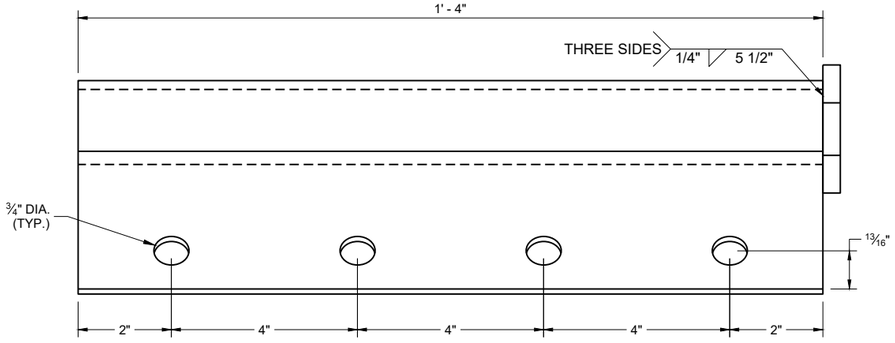
ARM TUBE 3 (C4)

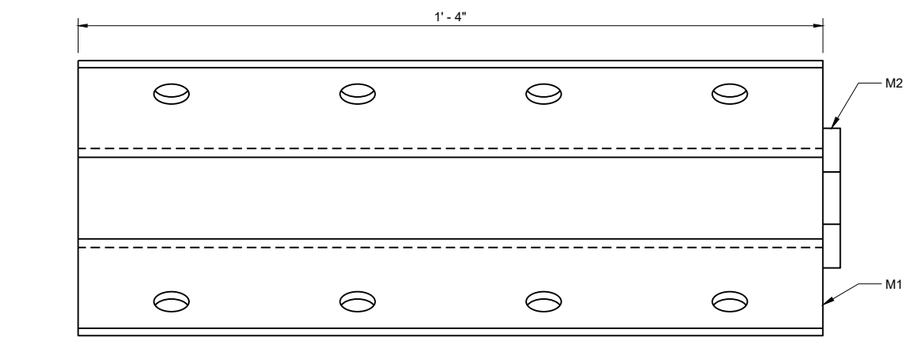


ARM GUSSET PLATE 1 (C5)

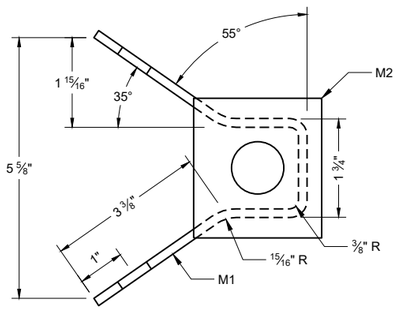


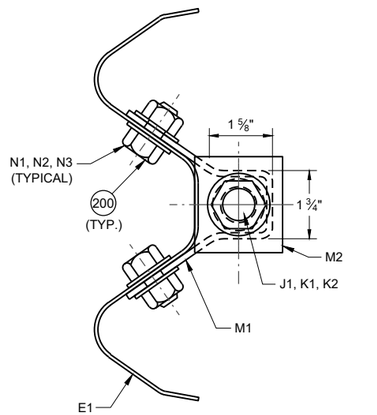
ARM GUSSET PLATE 2 (C6)

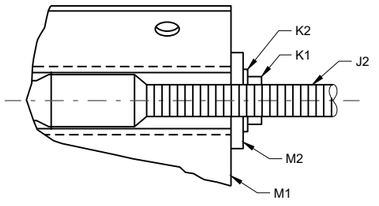




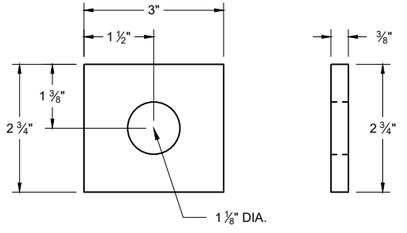
ANCHOR BRACKET (M1, M2)







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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B47-06f

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.

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MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

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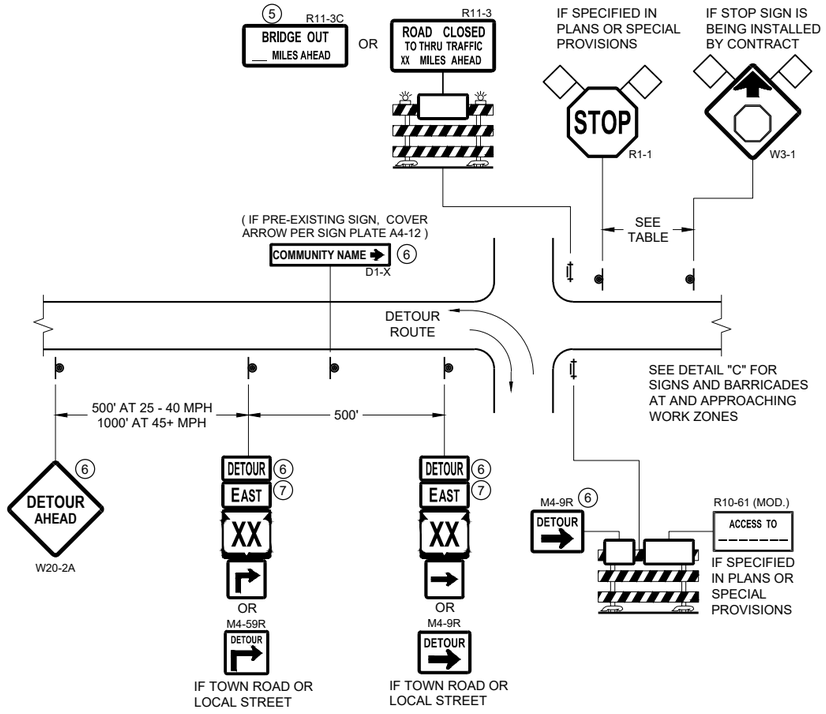
APPROVED
December 2024
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

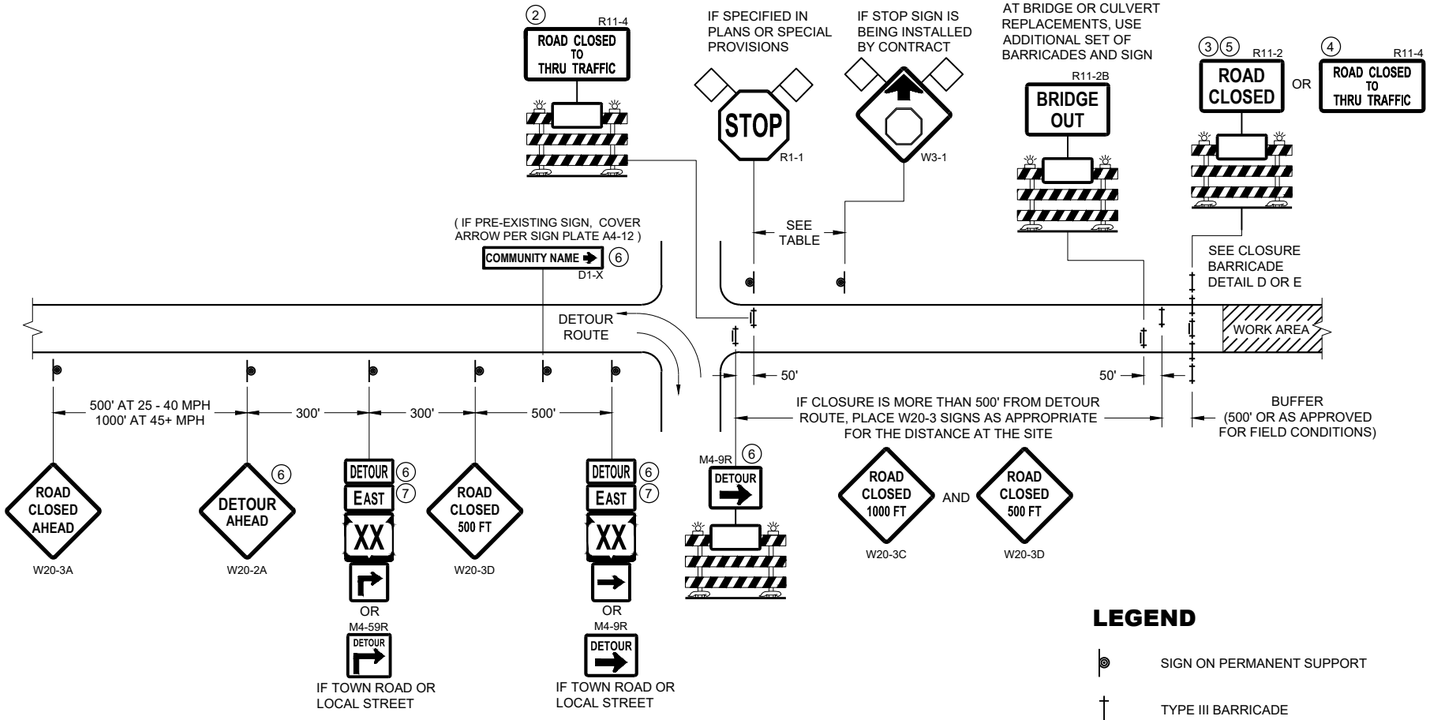
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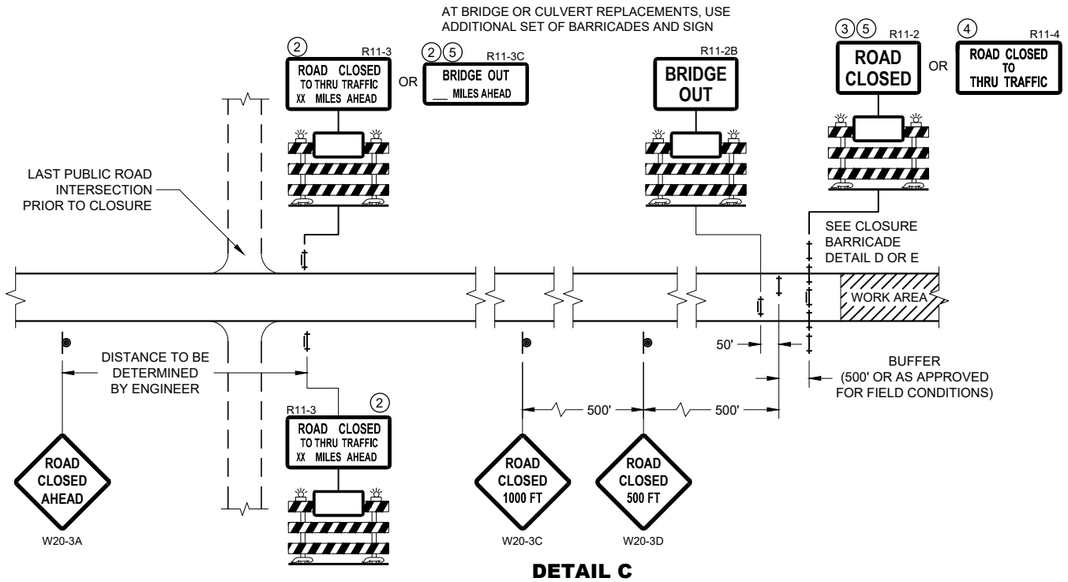
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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)



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

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

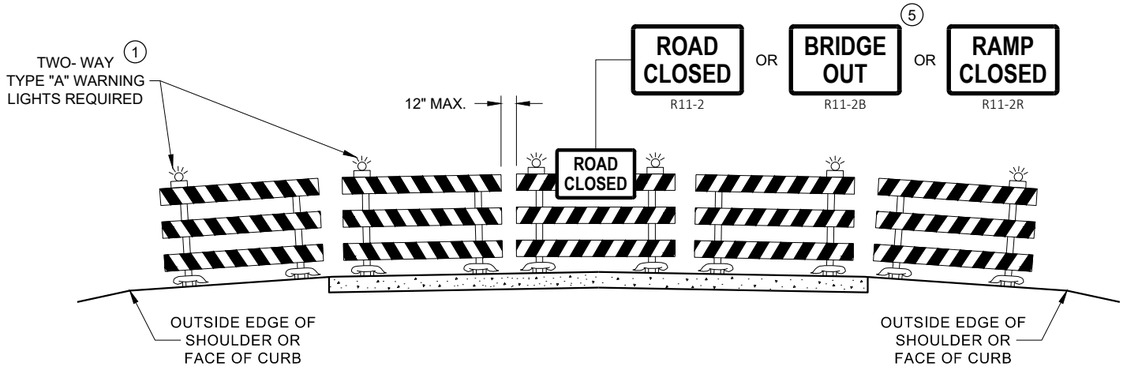
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APPROVED
May 2023
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/S/ Andrew Heidtke
WORK ZONE ENGINEER

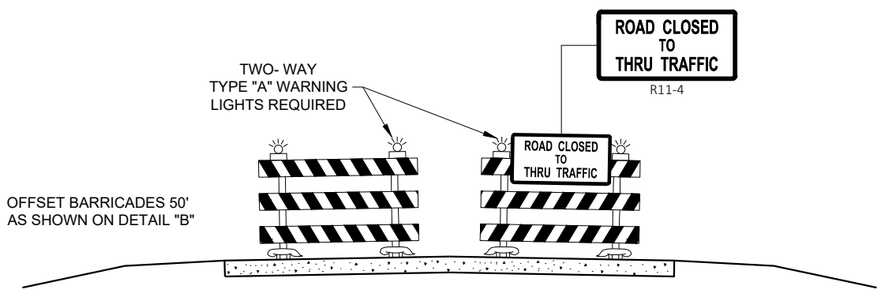
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DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

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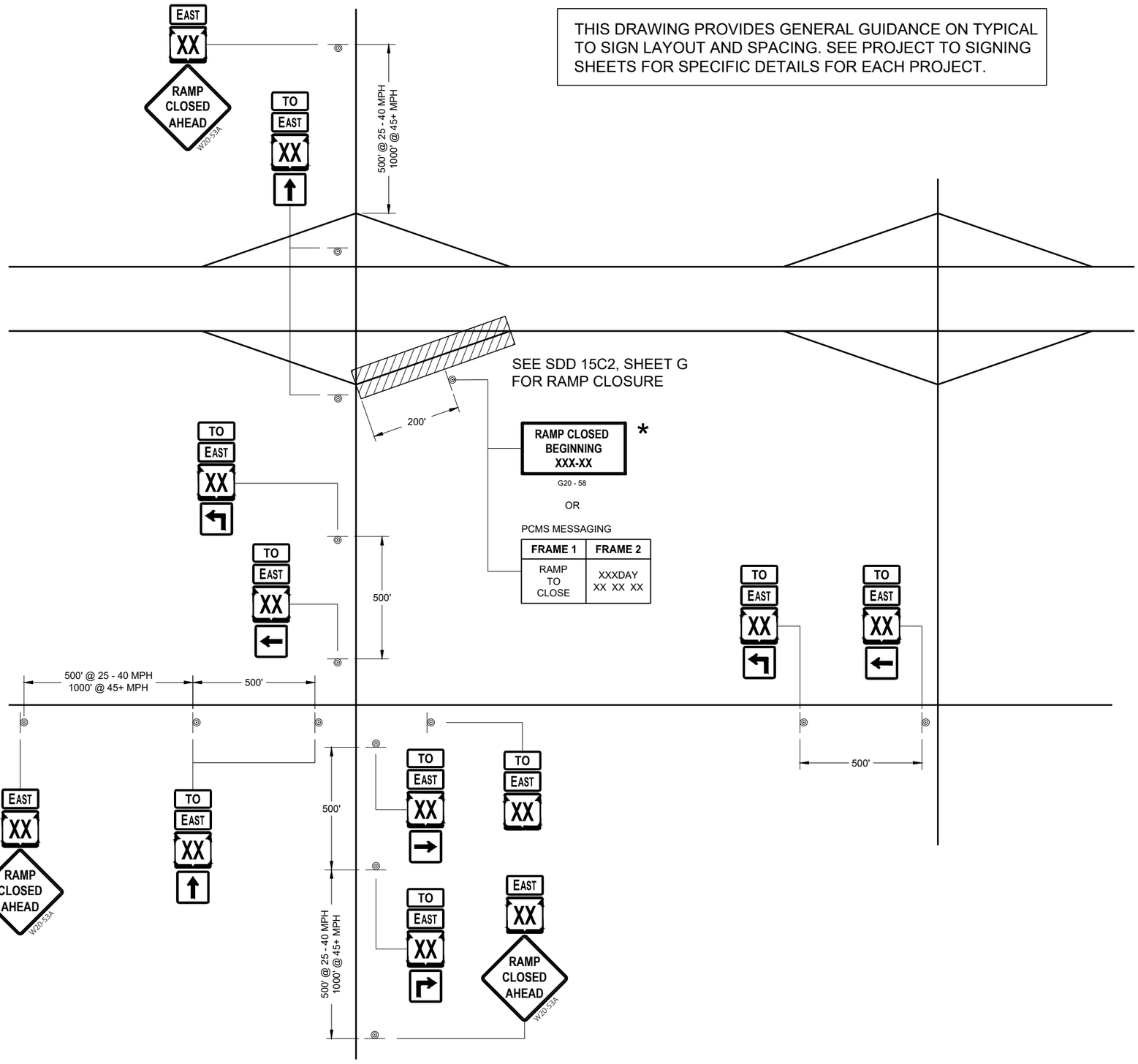
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THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL TO SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

XX M1 - 6 OR XX M1 - 4 OR INTERSTATE XX M1 - 1

M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE TO ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND TO SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

SIGNS THAT SHALL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOW:
- M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
- W20 - 53A SHALL BE 48" X 48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

ON RAMP LANE CLOSURE

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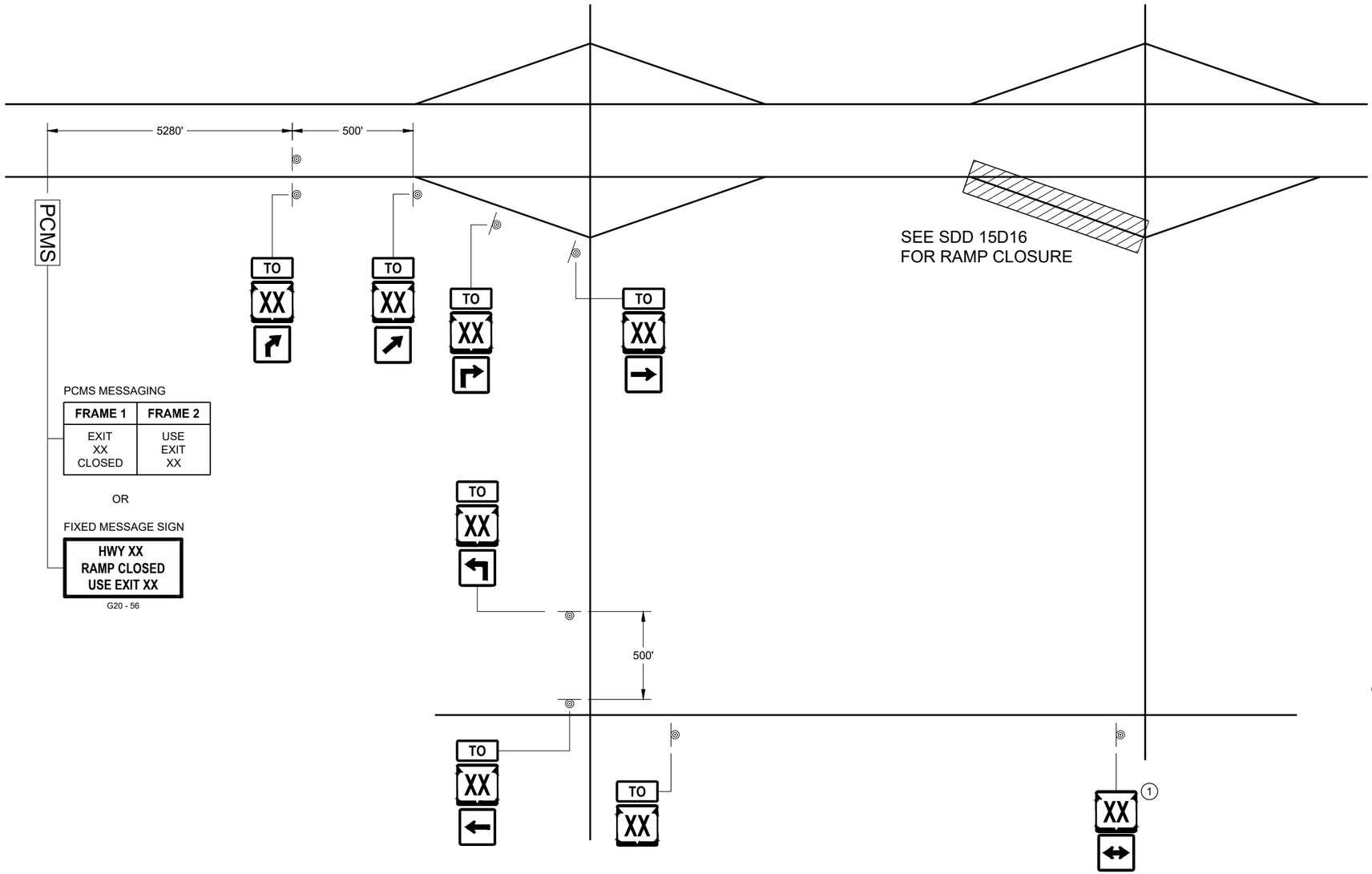
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THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.



PCMS MESSAGING

FRAME 1	FRAME 2
EXIT XX CLOSED	USE EXIT XX

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

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

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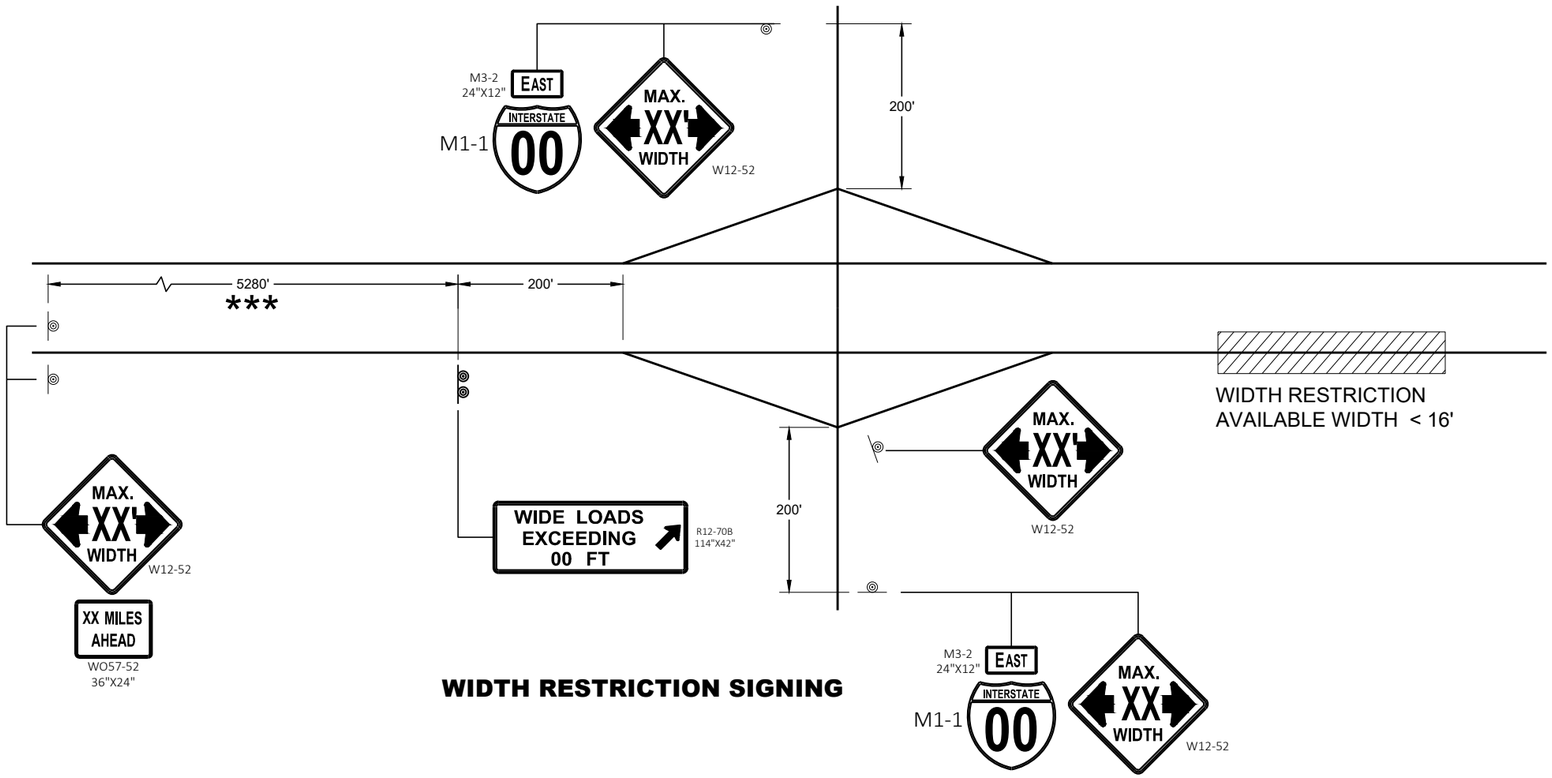
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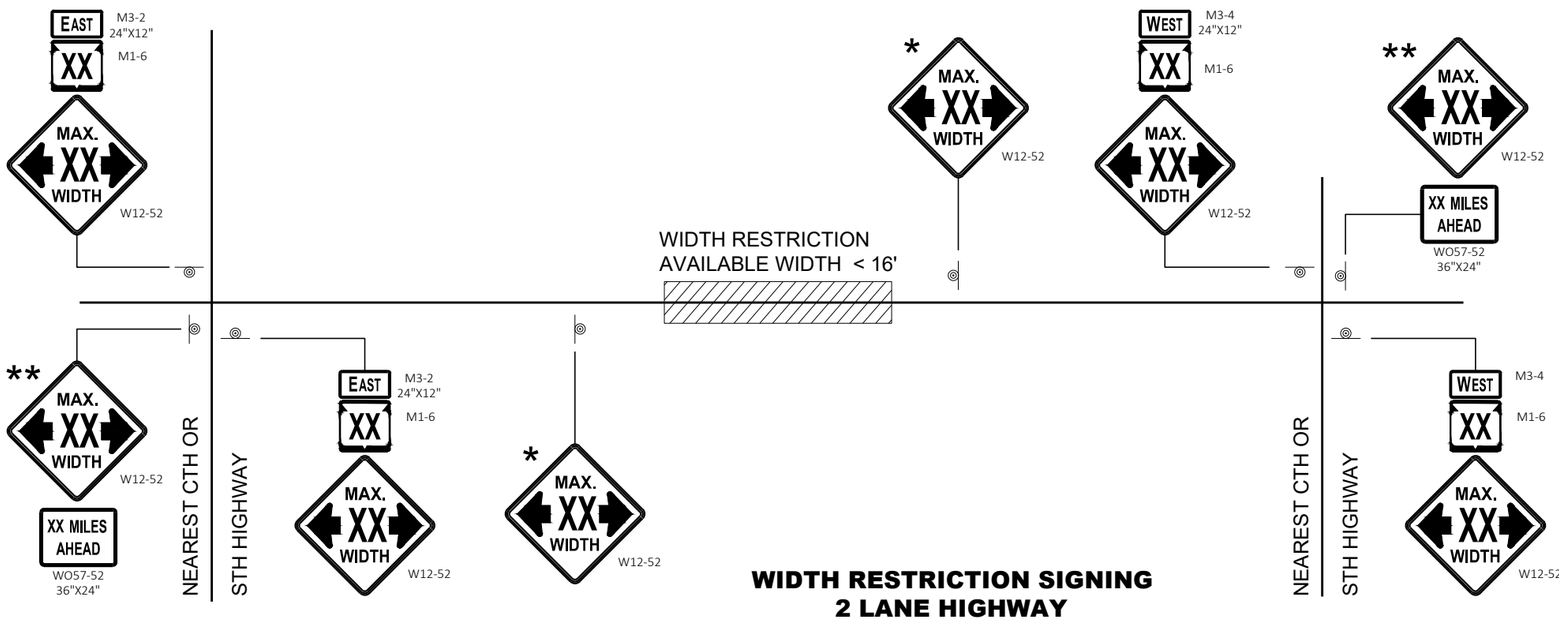
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SDD 15C02 - 09e



WIDTH RESTRICTION SIGNING



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.



WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH

ADVANCED WIDTH RESTRICTION SIGNING

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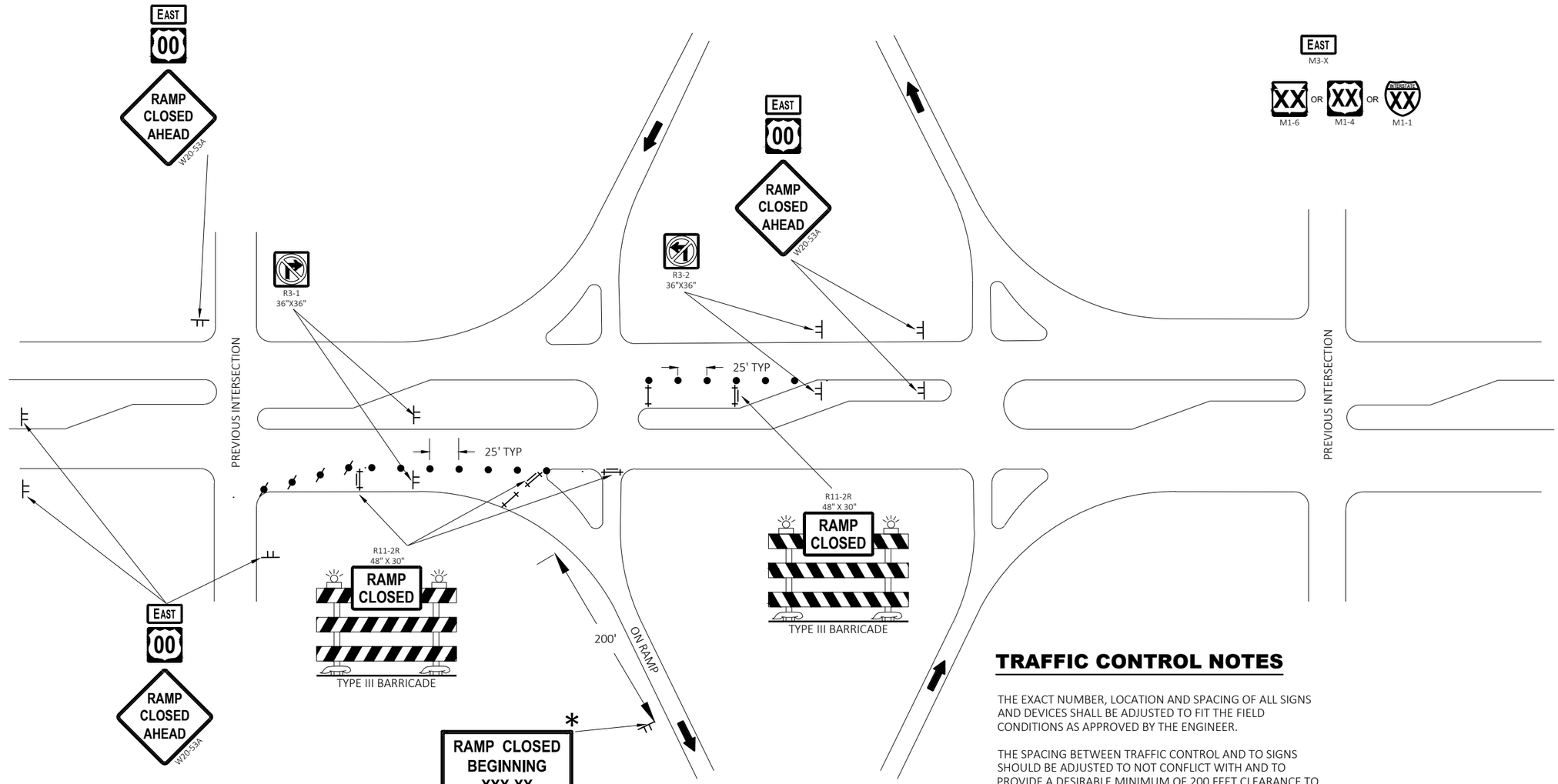
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LEGEND

- 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
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEE

FHWA

6

SDD 15C02-09g

6

SDD 15C02-09g

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

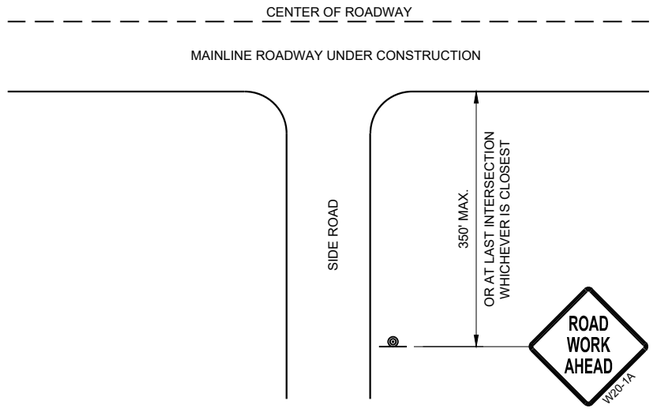
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

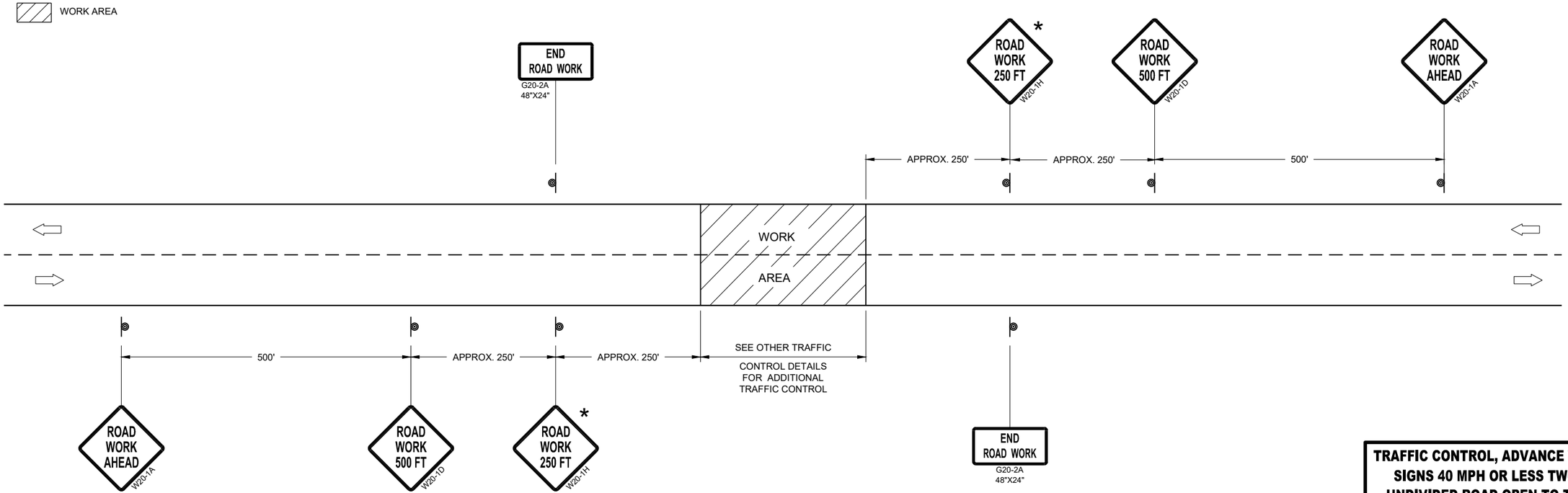
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

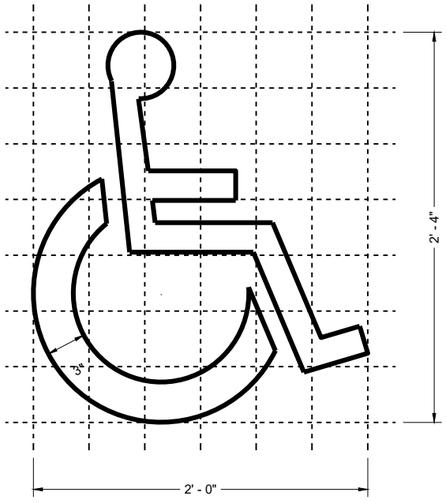
FHWA

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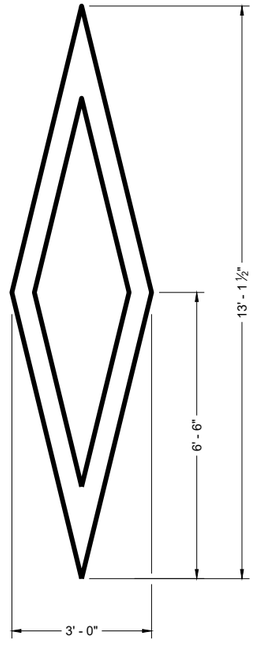
SDD 15C05 - 05

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

6

6

SDD 15C07-16a

SDD 15C07-16a

PAVEMENT MARKING SYMBOLS

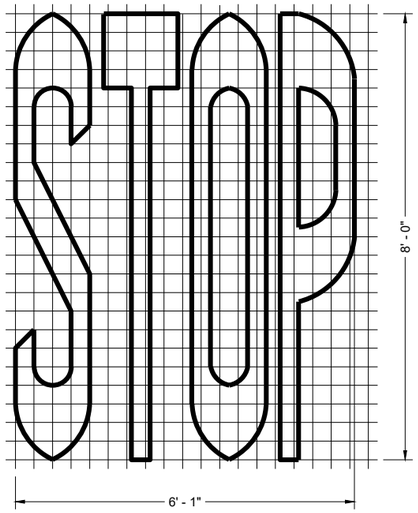
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

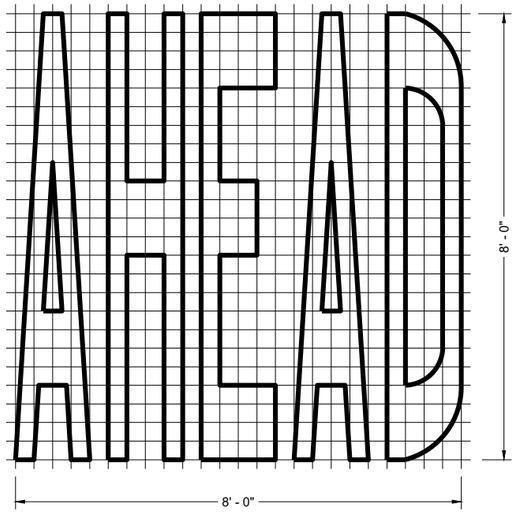
APPROVED

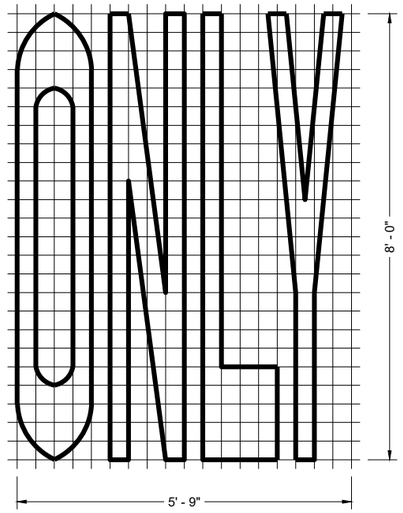
November 2024
DATE

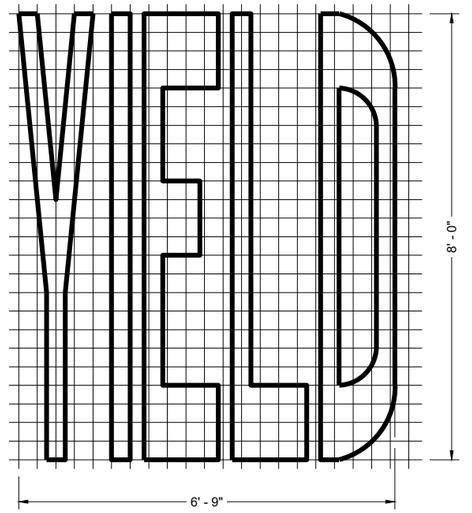
/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

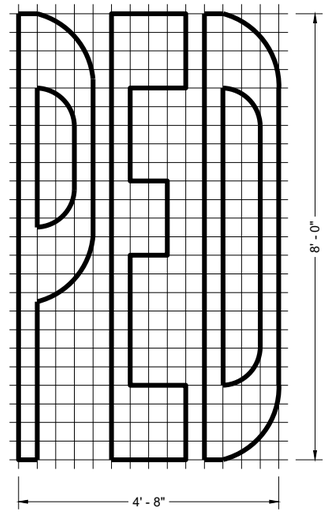
FHWA

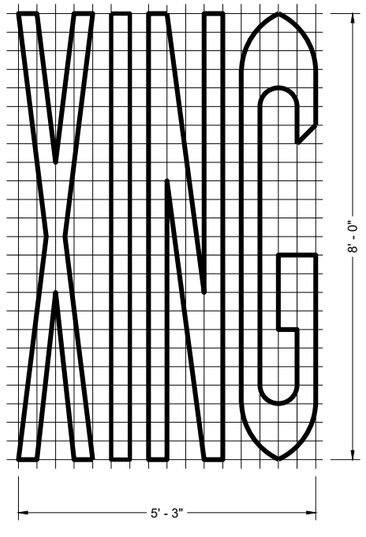


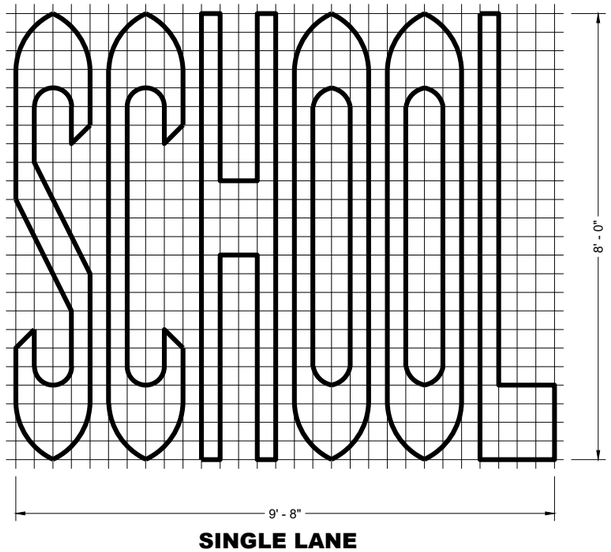




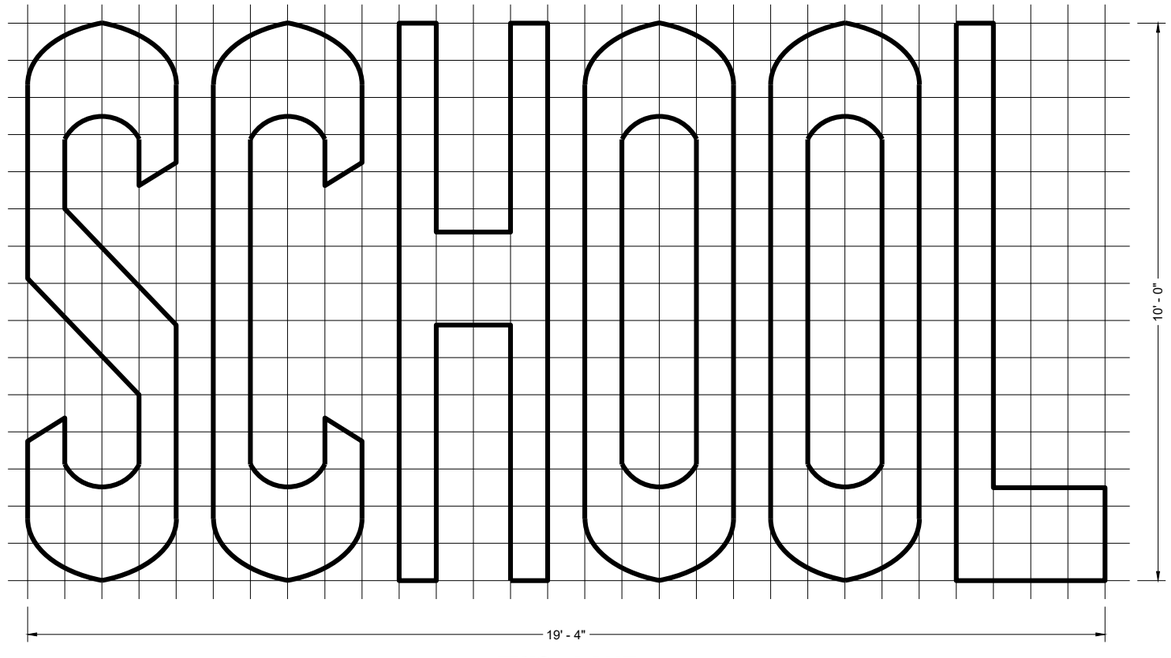








SINGLE LANE



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/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

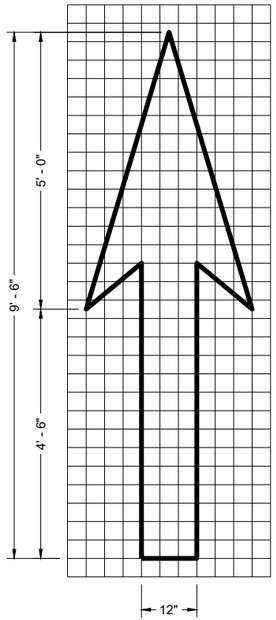
FHWA

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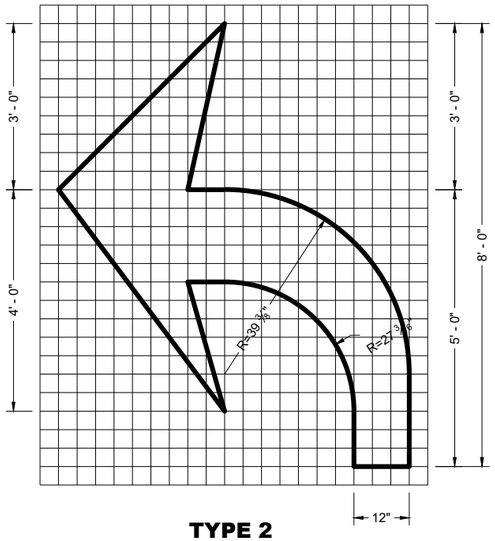
SDD 15C07-16b

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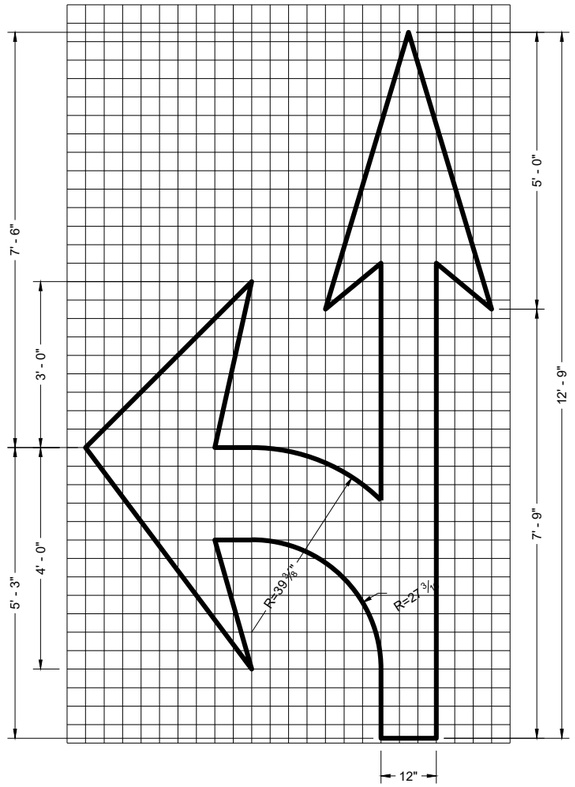
SDD 15C07-16b



TYPE 1



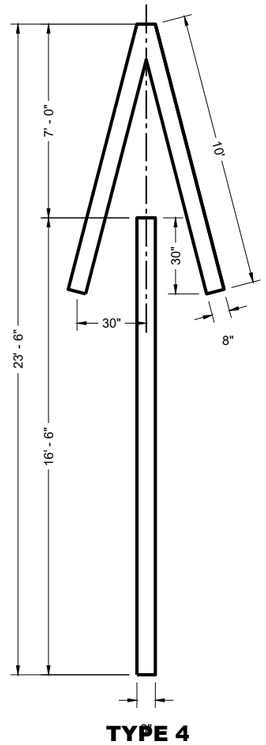
TYPE 2



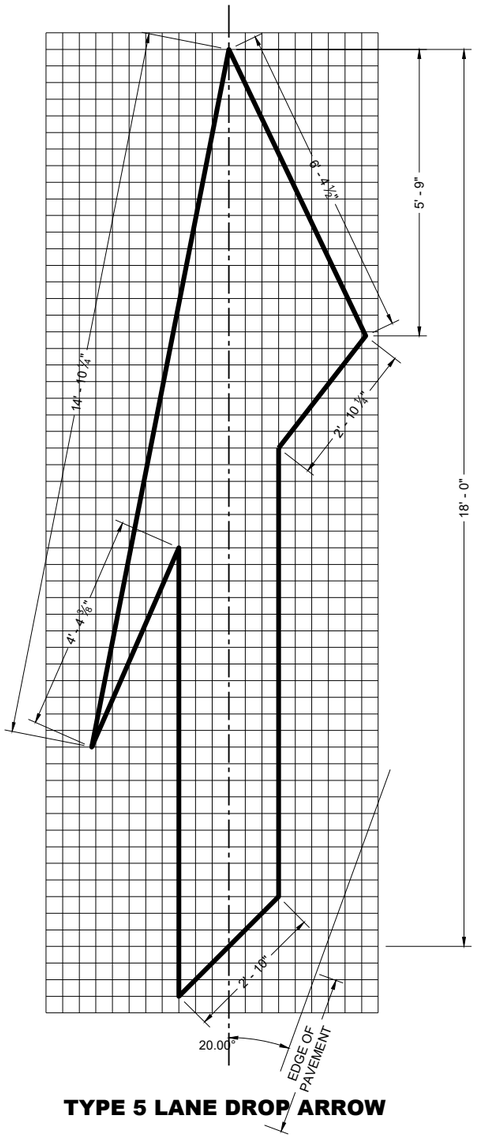
TYPE 3

GENERAL NOTES

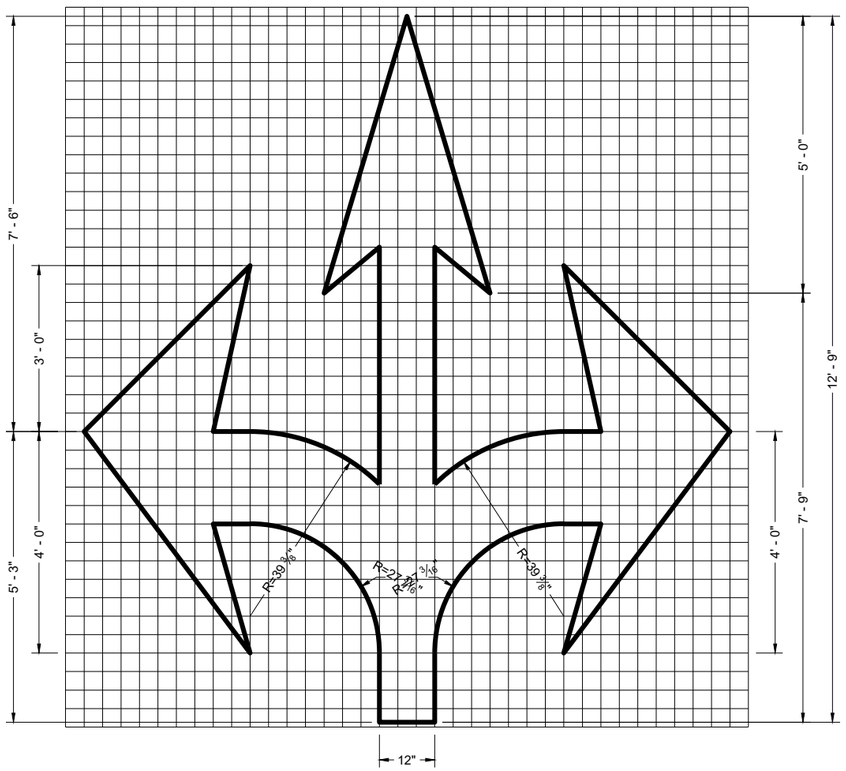
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



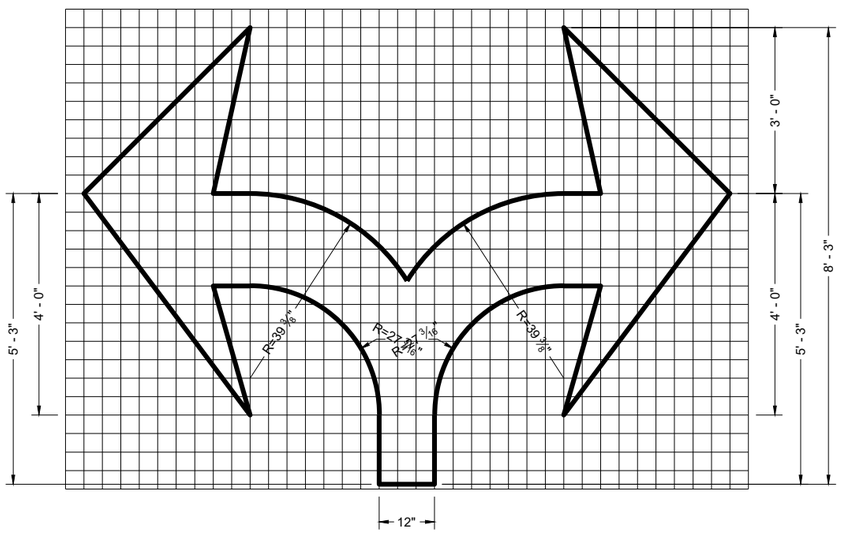
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

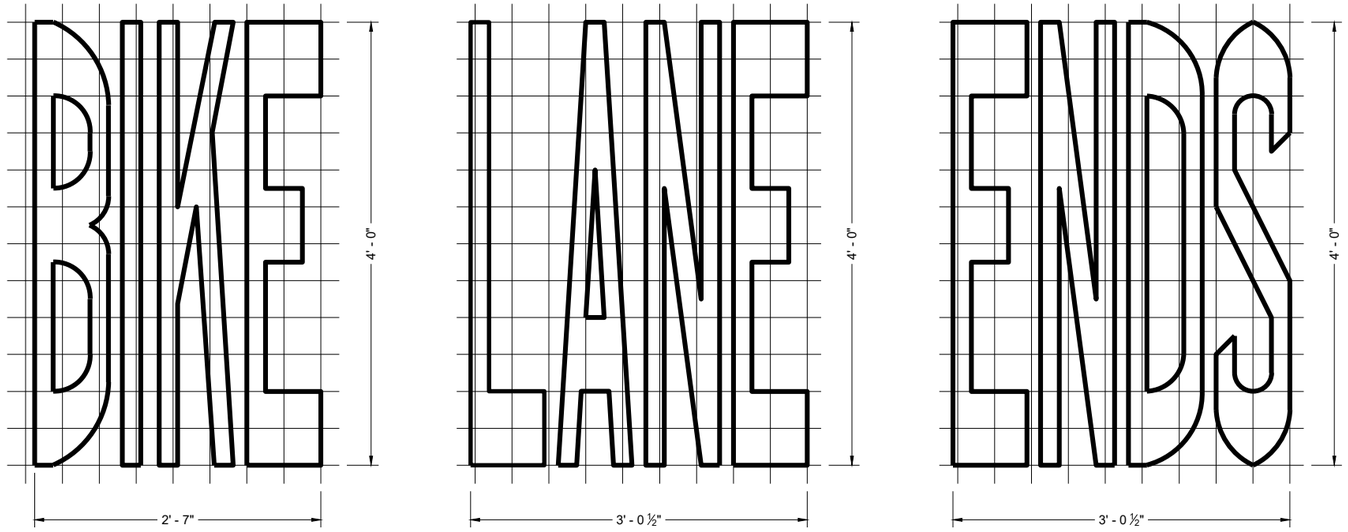
APPROVED
November 2024 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C07-16c

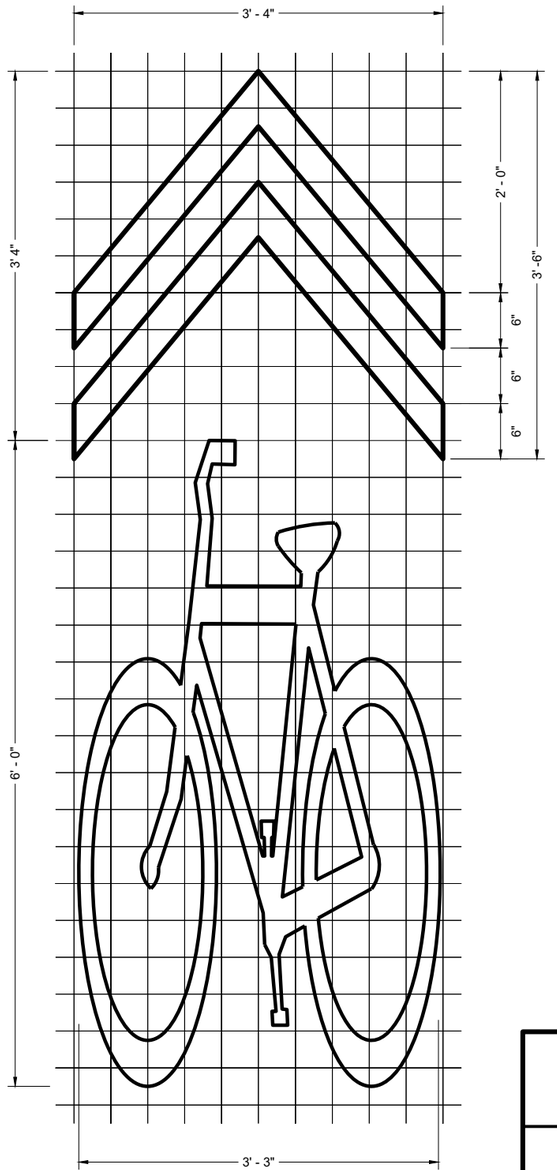
SDD 15C07-16c



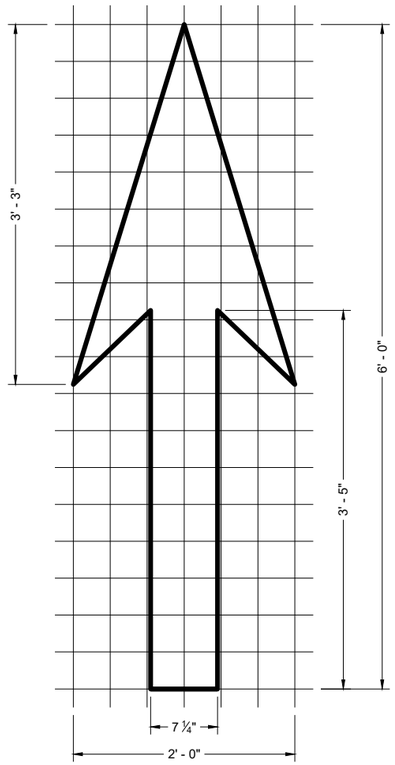
BIKE LANE WORDS

GENERAL NOTES

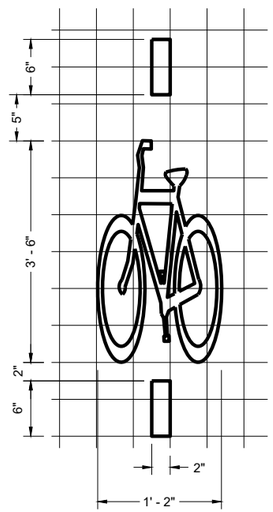
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



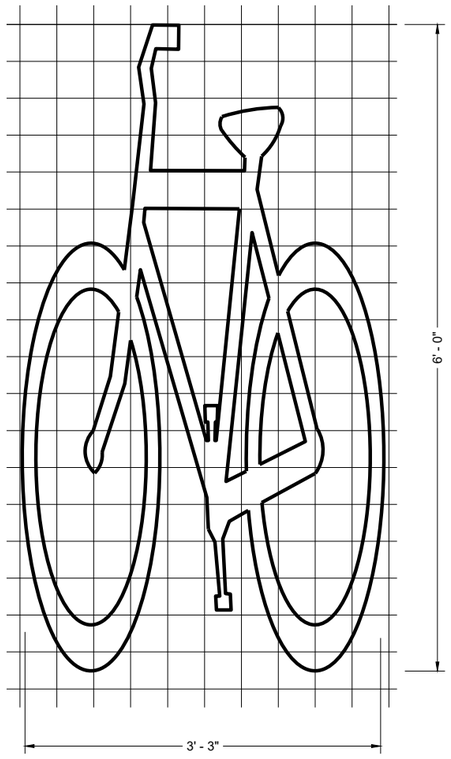
BIKE LANE SYMBOL FOR SHARED LANE



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING



BIKE LANE SYMBOL

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C07-16e

SDD 15C07-16e

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.

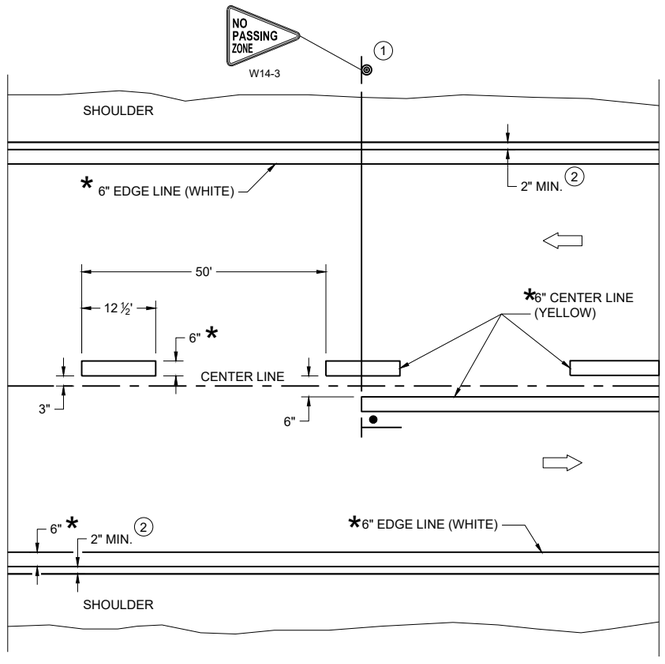
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

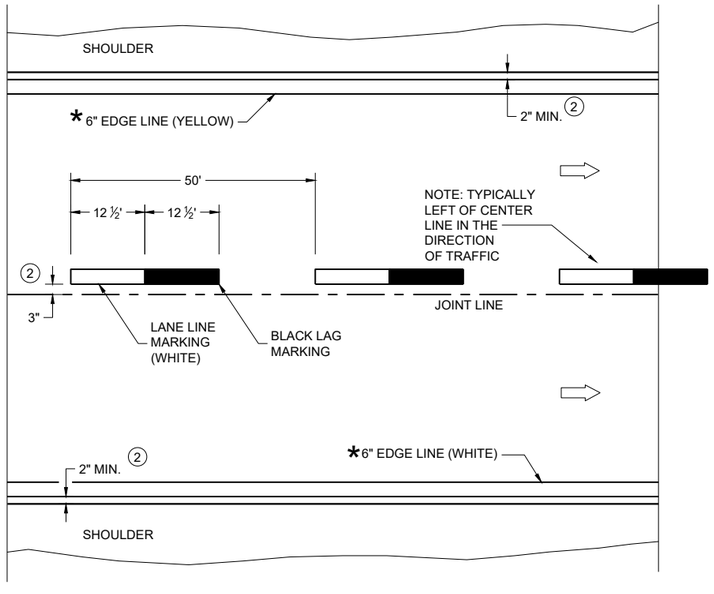
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE

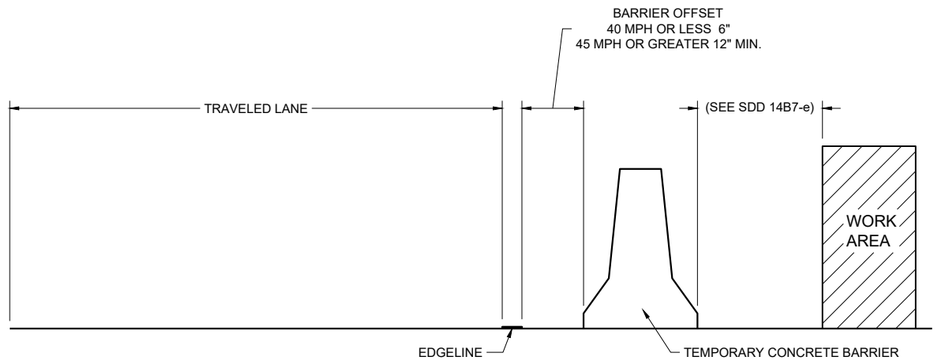
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

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SDD 15C08-24a

SDD 15C08-24a



TEMPORARY BARRIER OFFSET FROM EDGELINE

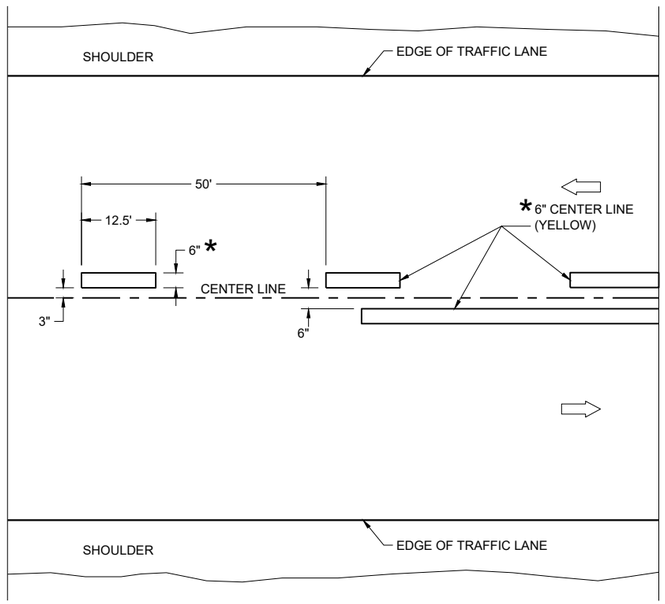
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

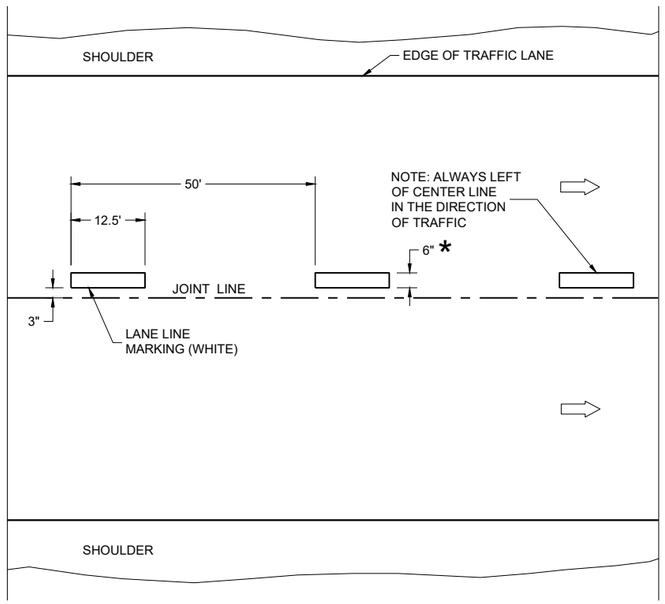
LEGEND

DIRECTION OF TRAFFIC

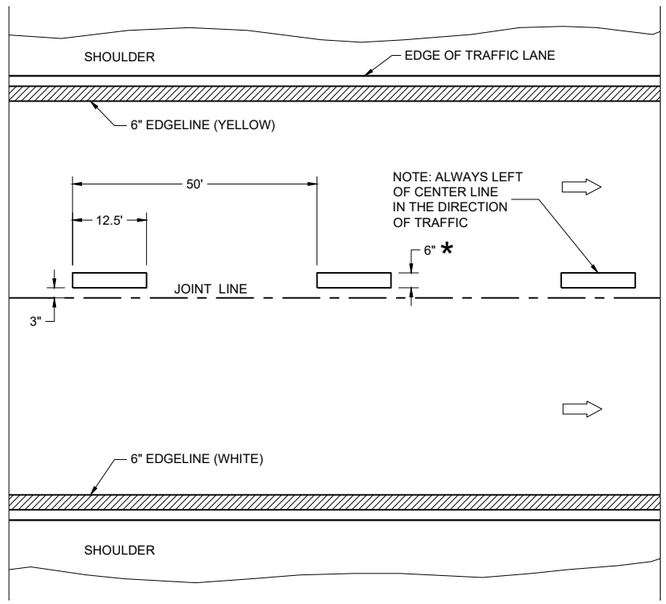
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

SDD 15C08-24b

6

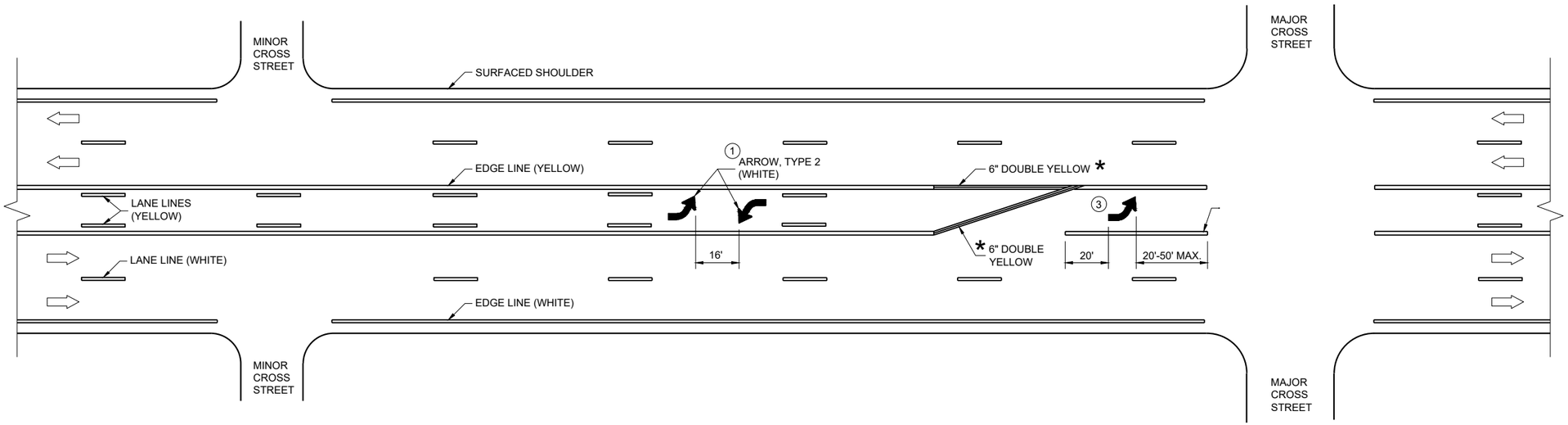
SDD 15C08-24b

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

⇨ DIRECTION OF TRAFFIC

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



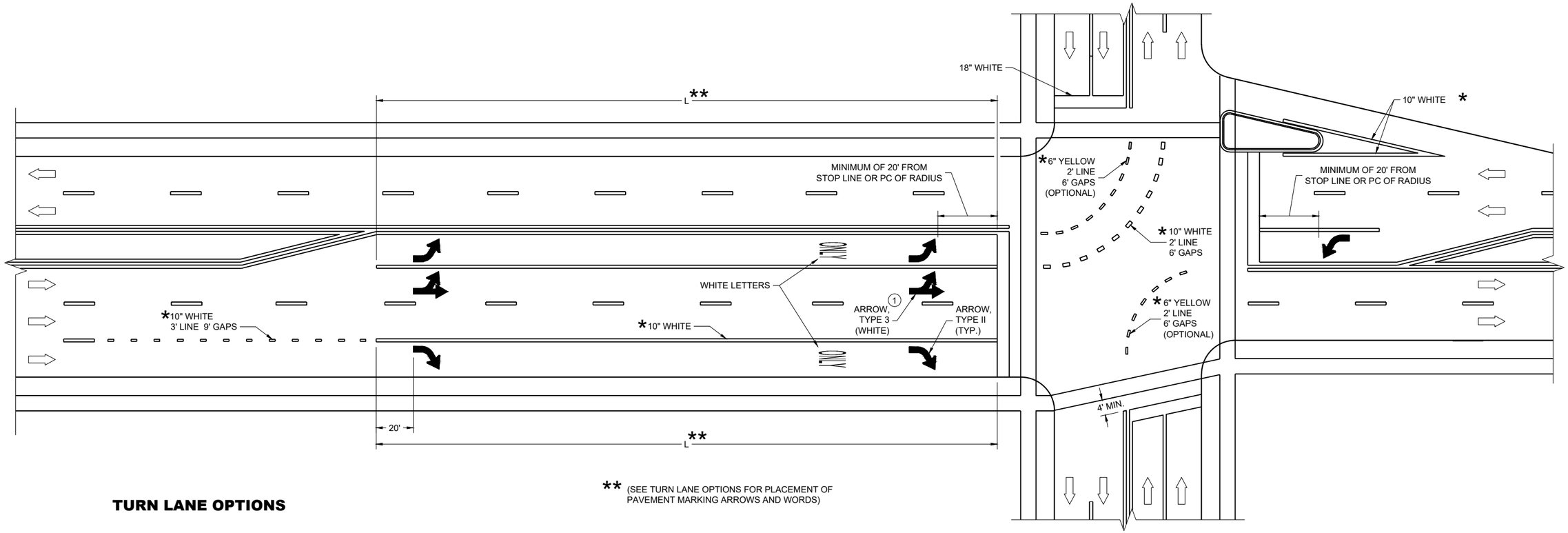
TWO WAY LEFT TURN LANE

6

SDD 15C08-24c

PAVEMENT MARKING (TURN LANES)

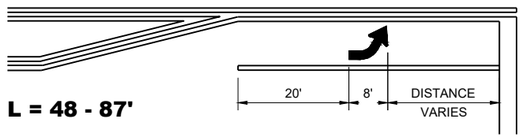
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



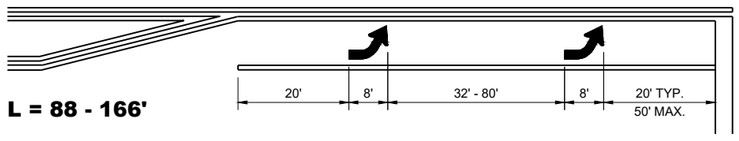
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

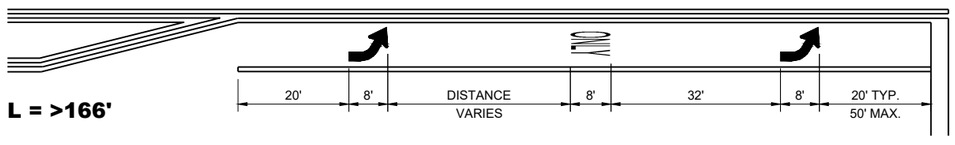
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT
REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

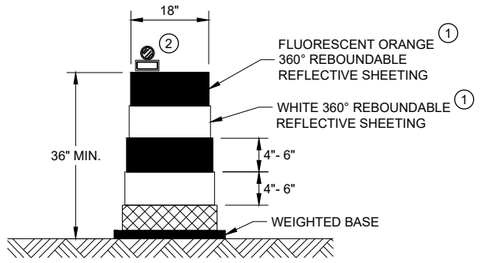
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

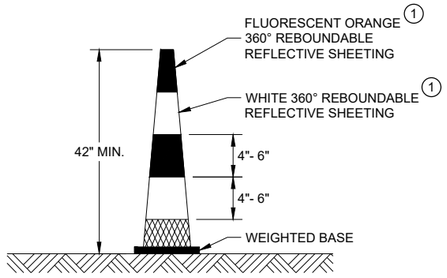
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

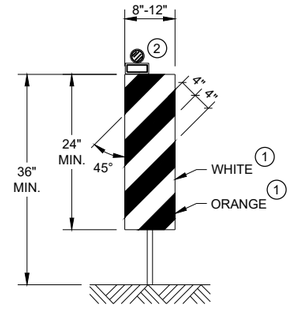
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

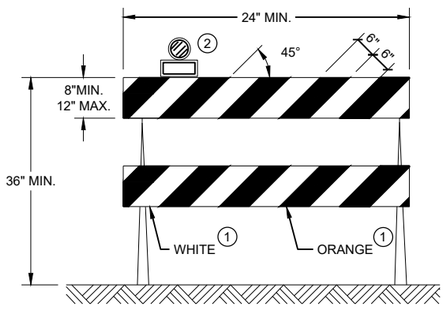
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



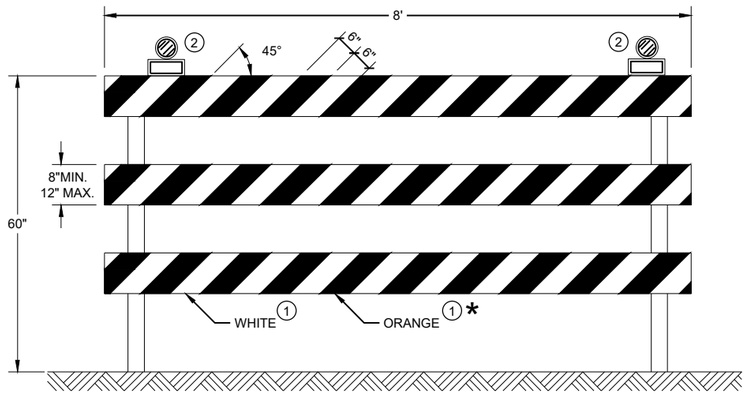
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

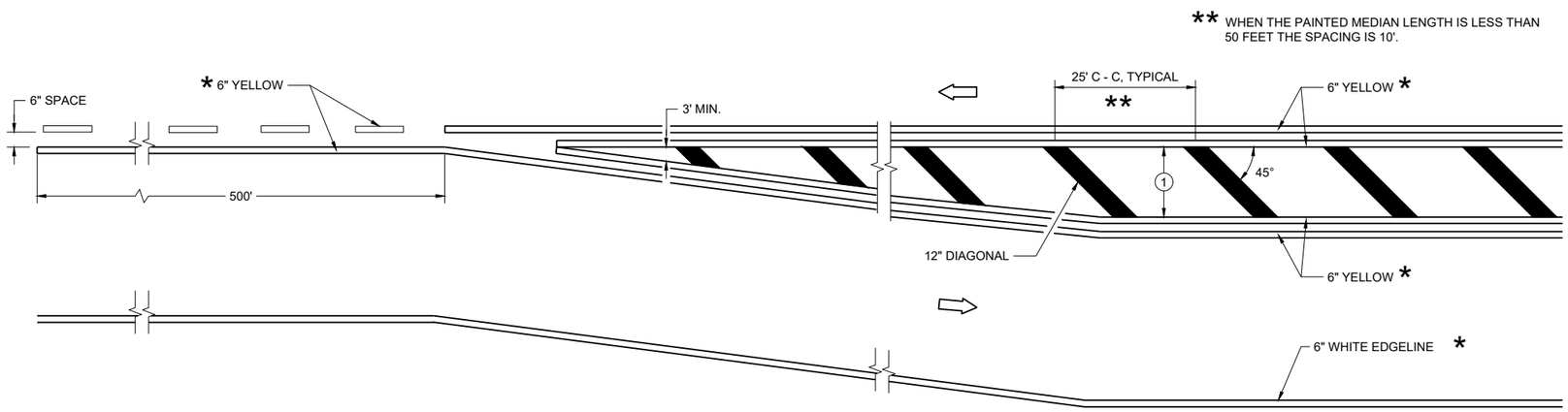
FHWA

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SDD 15C11 - 10b

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SDD 15C11 - 10b



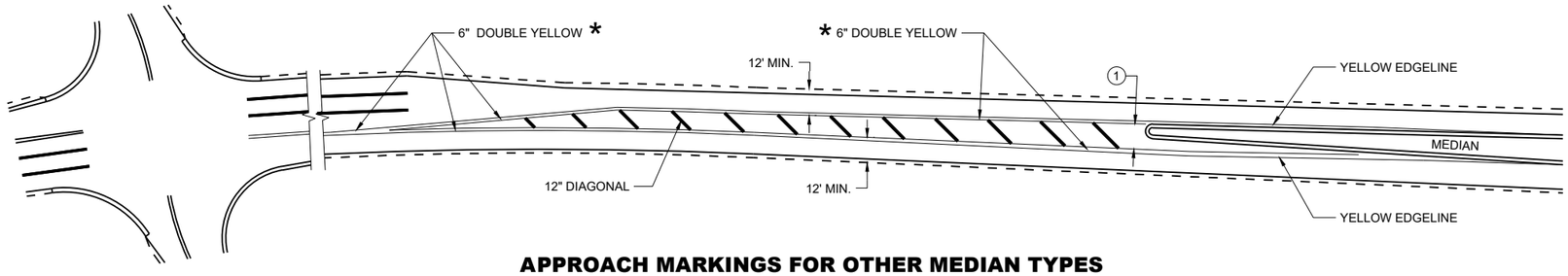
MEDIAN ISLAND DETAIL

GENERAL NOTES

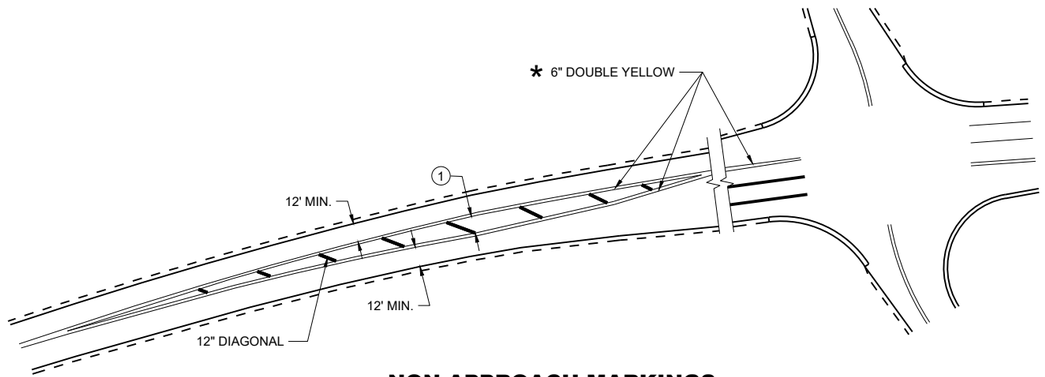
(1) DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

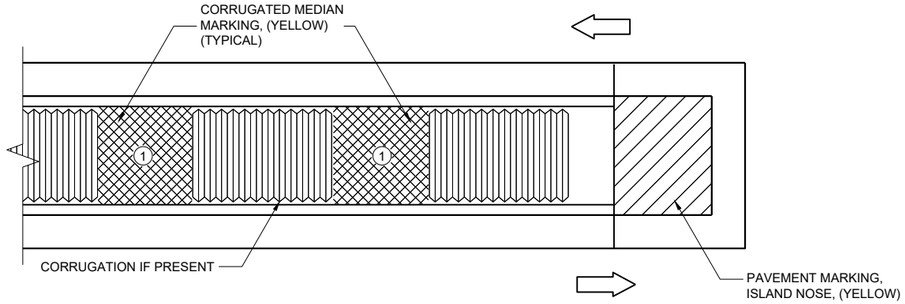
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

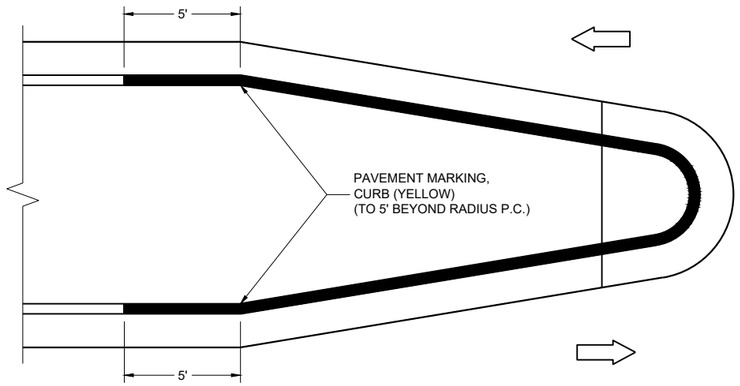
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SDD 15C18-09a

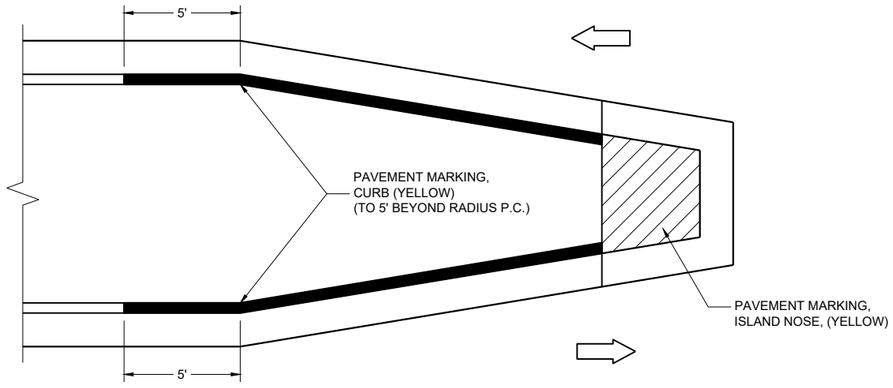
SDD 15C18-09a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

**TYPICAL PLACEMENT OF
PAVEMENT MARKING ON MEDIAN ISLANDS**

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

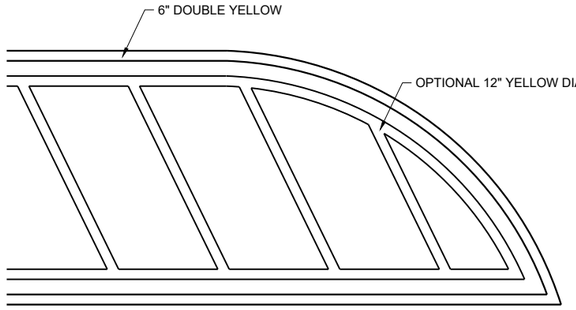
(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL



FLUSH MEDIAN ISLAND NOSE

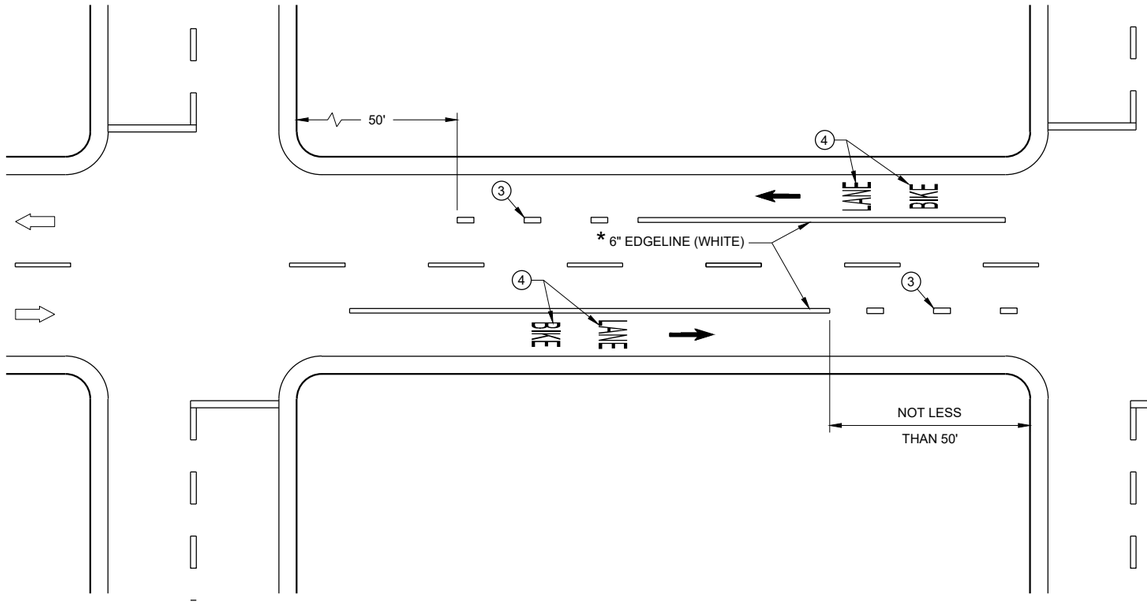
**PAVEMENT MARKINGS,
MEDIAN ISLAND NOSE**

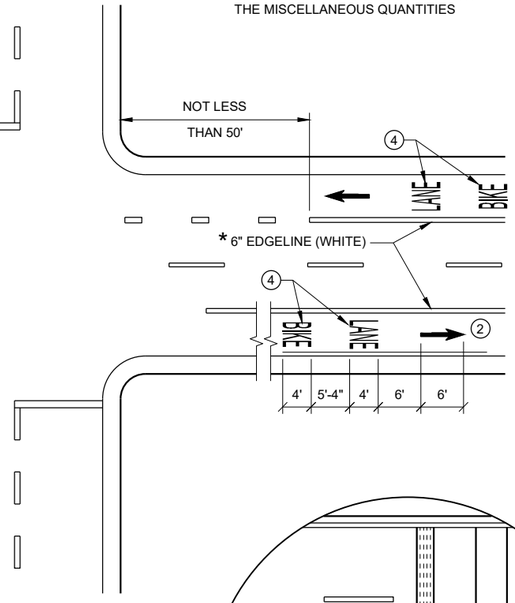
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA



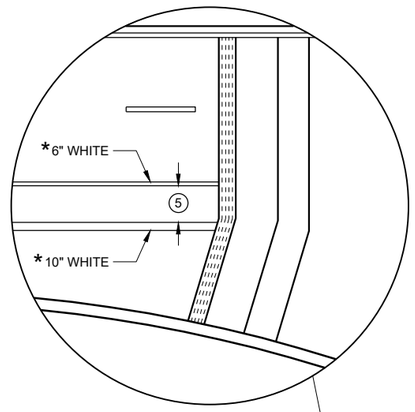


GENERAL NOTES

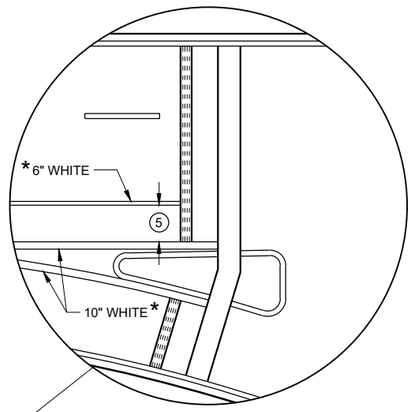
1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3' LINE, 9' GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. BIKE SYMBOLS OR WORDS MAY BE USED.
5. BIKE ACCOMMODATION IS TYPICAL 5 FEET WIDE AND MINIMUM OF 4 FEET FROM A LONGITUDINAL JOINT. USE 5 FEET AT ≥ 45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FOOT WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

DIRECTION OF TRAVEL

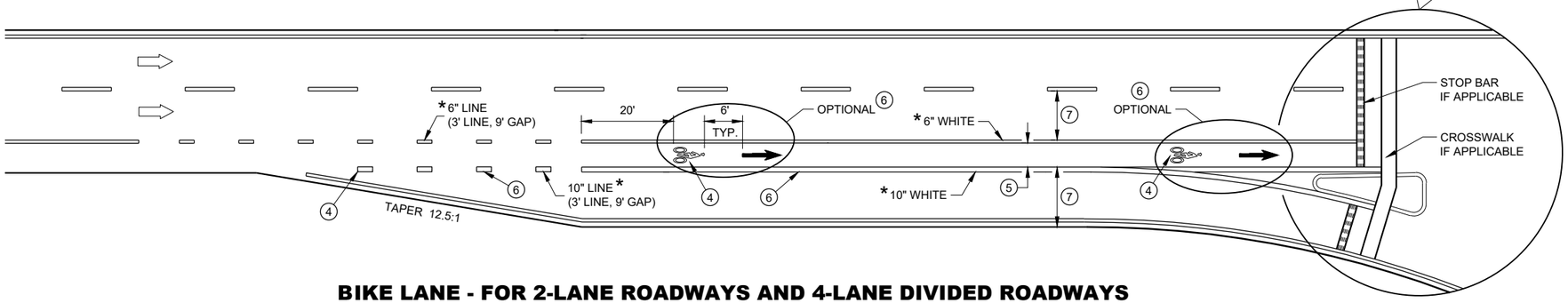
DESIGNATED BIKE LANE - NO PARKING



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND



BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS
(4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

BIKE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

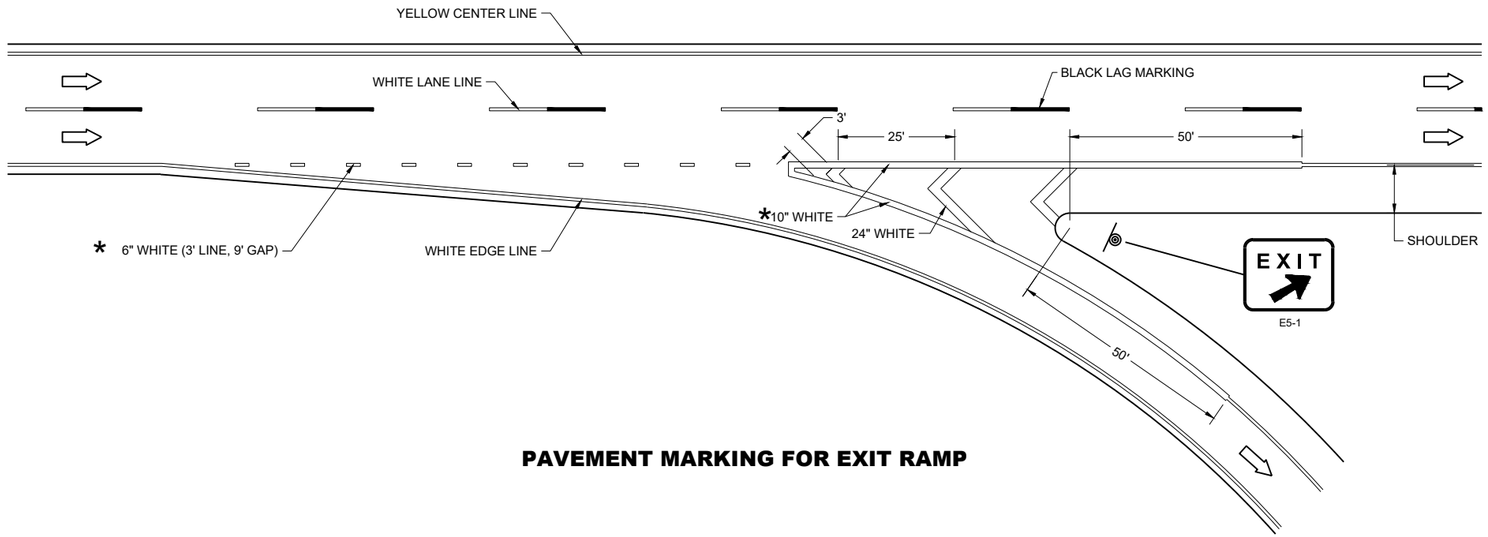
FHWA

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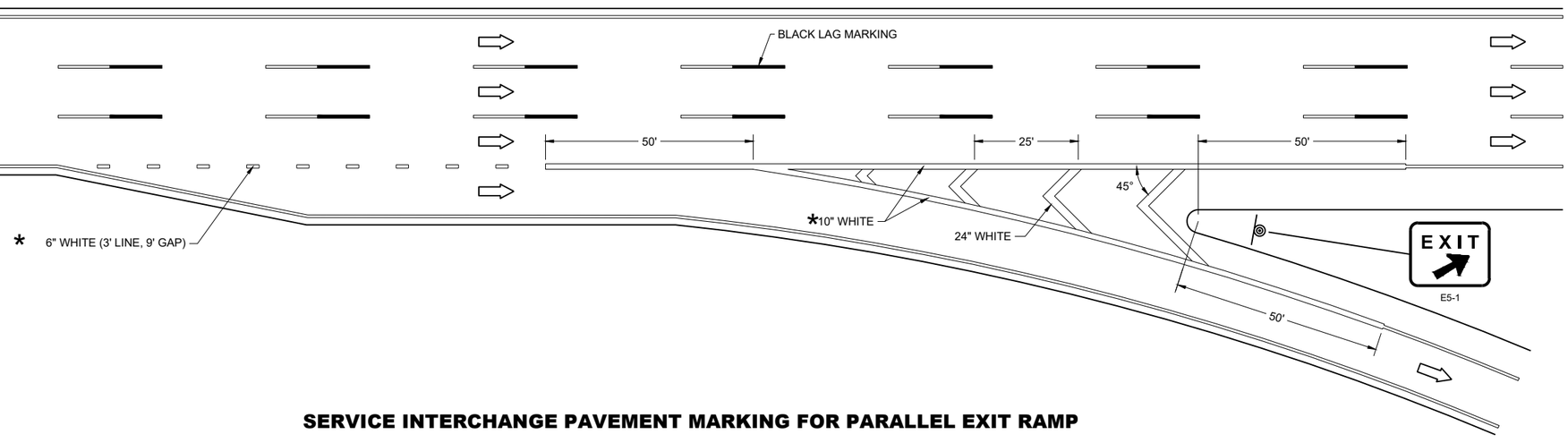
SDD 15C29-08a

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SDD 15C29-08a



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

PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

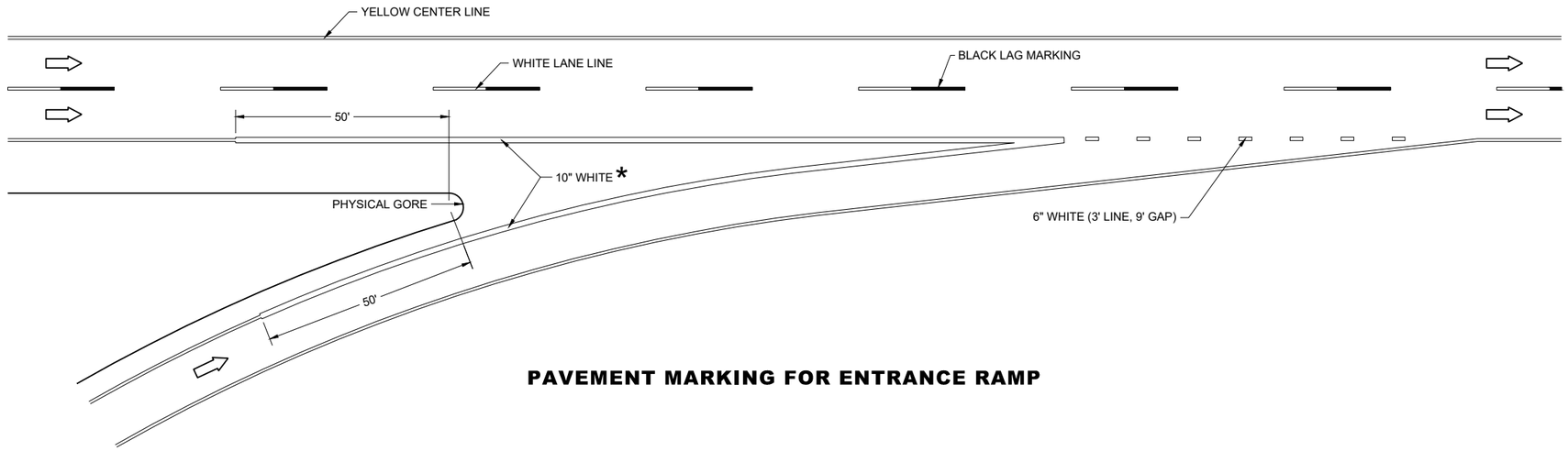
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SDD 15C31-08a

SDD 15C31-08a

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

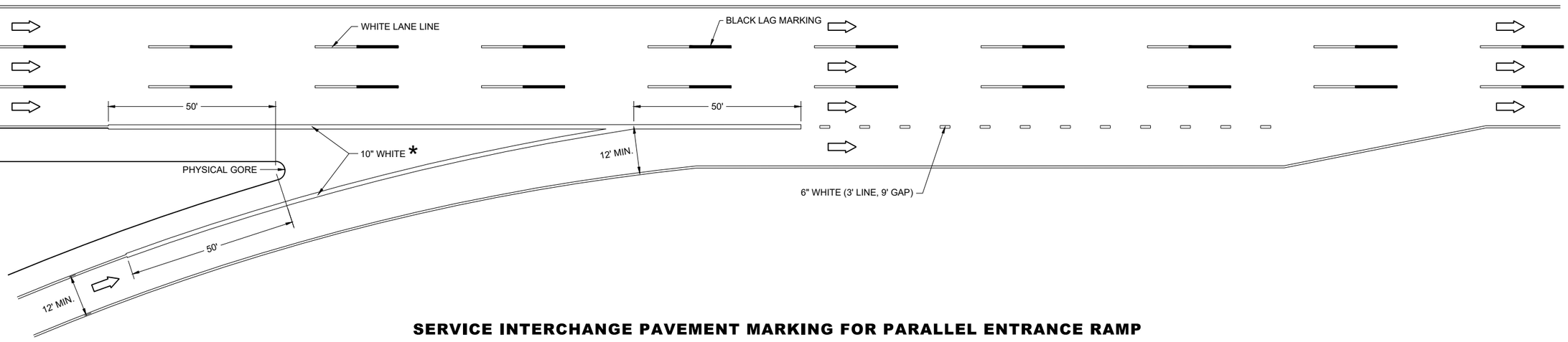


PAVEMENT MARKING FOR ENTRANCE RAMP

LEGEND

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

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SDD 15C31-08c

SDD 15C31-08c

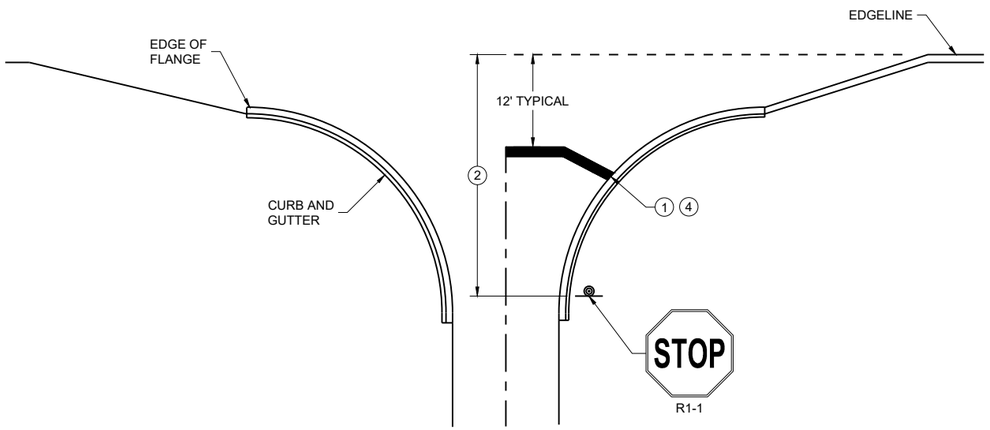
PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

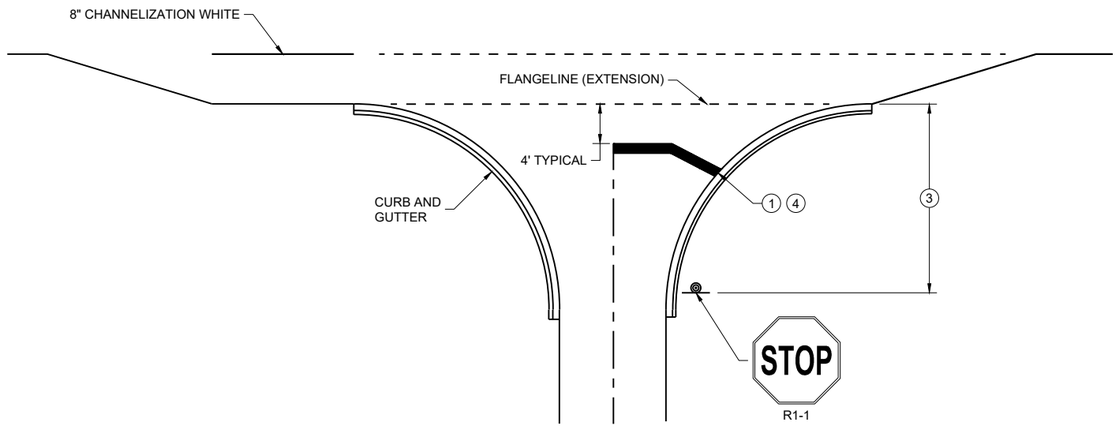
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

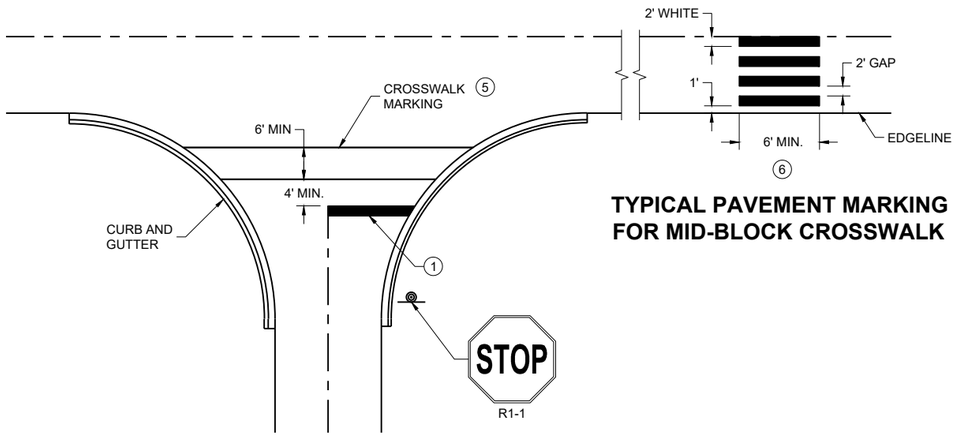
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE 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

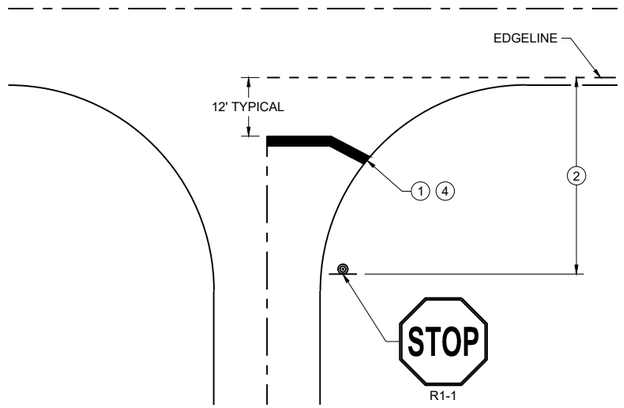


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



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

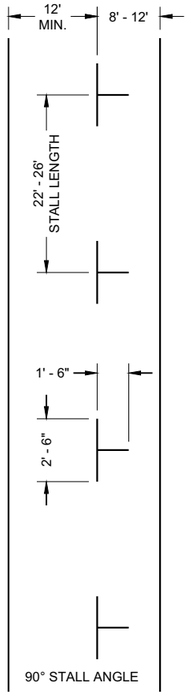
FHWA

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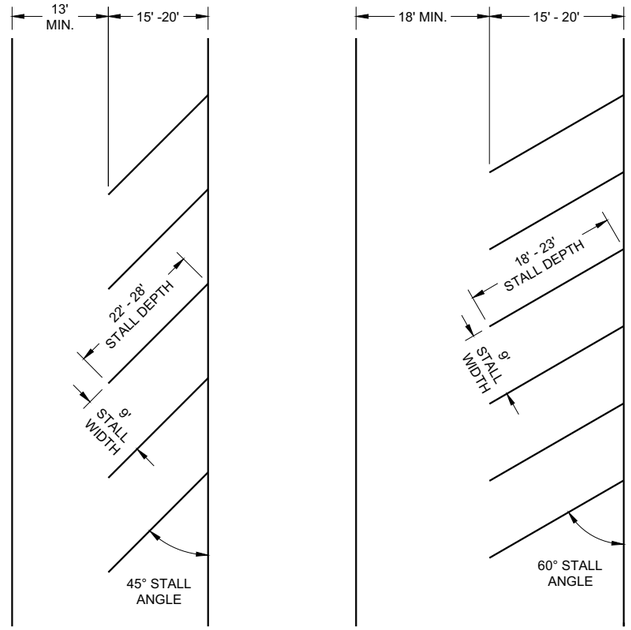
SDD 15C33-05

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SDD 15C33-05

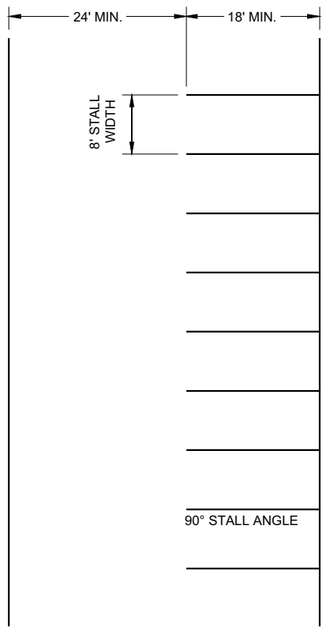


PARALLEL PARKING



ANGLED PARKING

(ANGLED PARKING IS NOT ALLOWED ON STATE HIGHWAYS UNLESS A DESIGN JUSTIFICATION HAS BEEN COMPLETED.)



PARKING LOTS

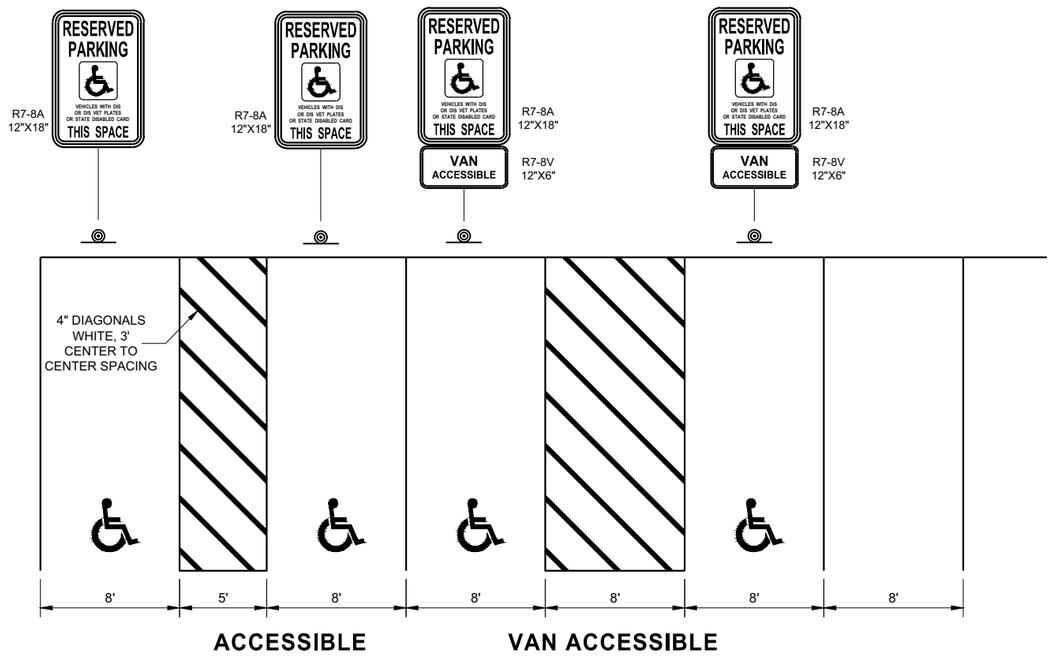
GENERAL NOTES

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 MAF ENGINEER

FHWA

SDD 15C36 - 01

SDD 15C36 - 01

6

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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.

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. 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.

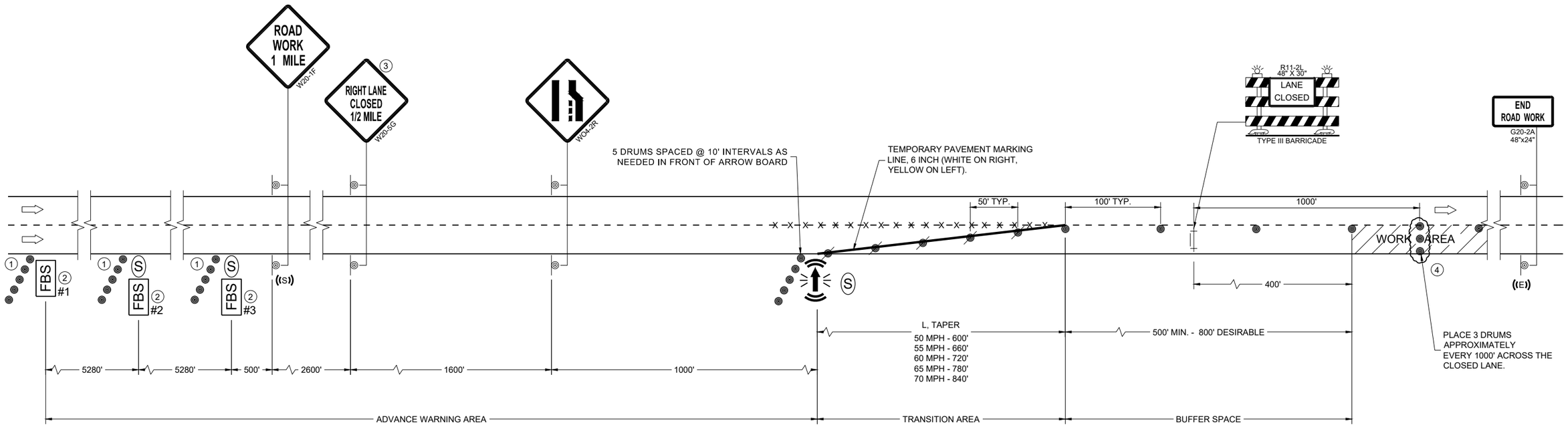
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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.

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
February 2025 — DATE
/S/ Erin Schwark — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6
SDD 15D12-15d

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.

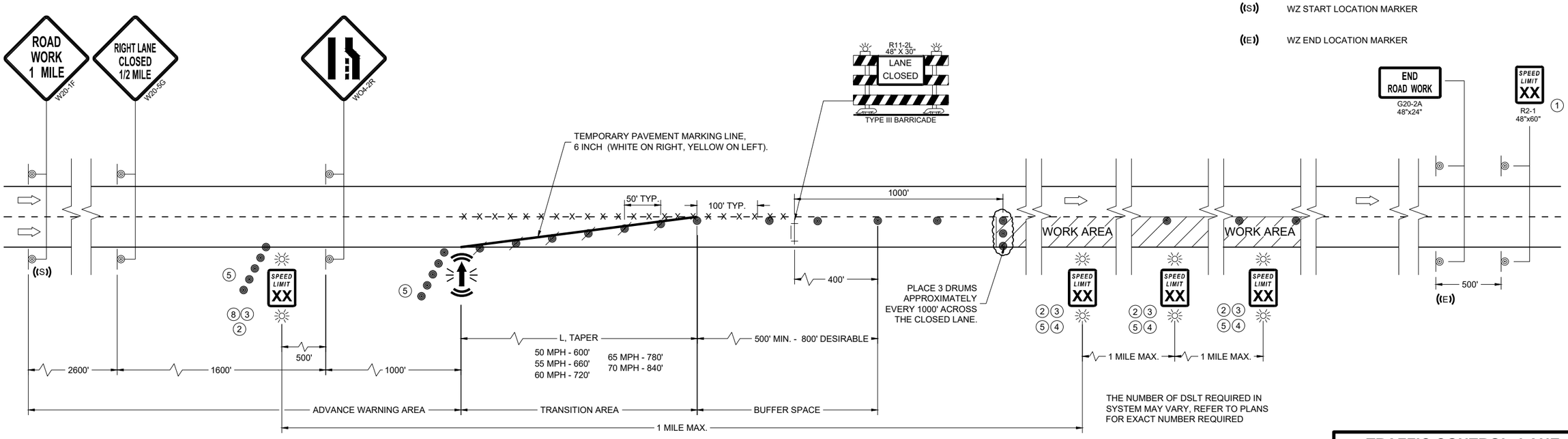
(3) PLACE DSLT AT EXISTING POST MOUNTED SPEED LIMIT SIGN AFTER THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. IF THERE IS NOT AN EXISTING SIGN, PLACE 1,500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP

(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
February 2025 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

SDD 15D12-15g

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

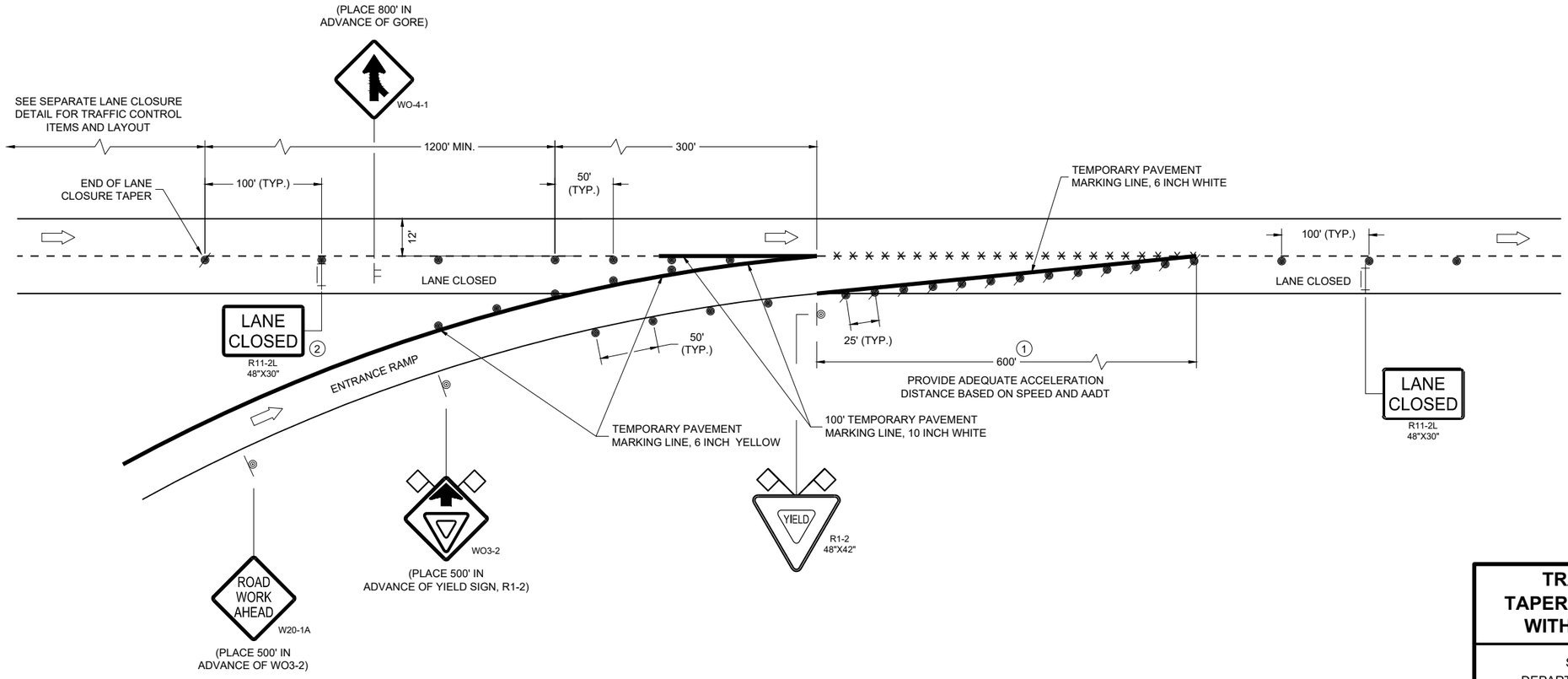
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING 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) 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

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

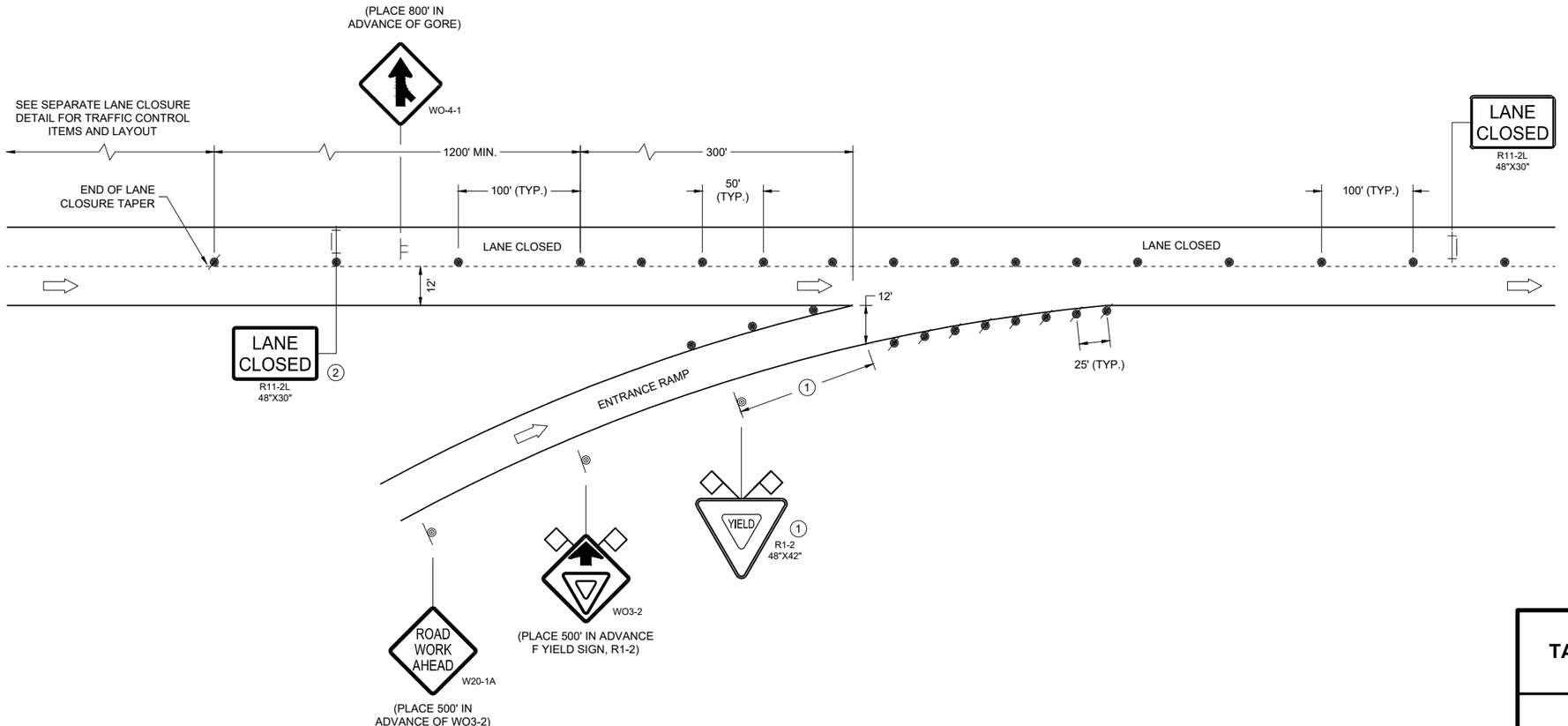
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

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.

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.

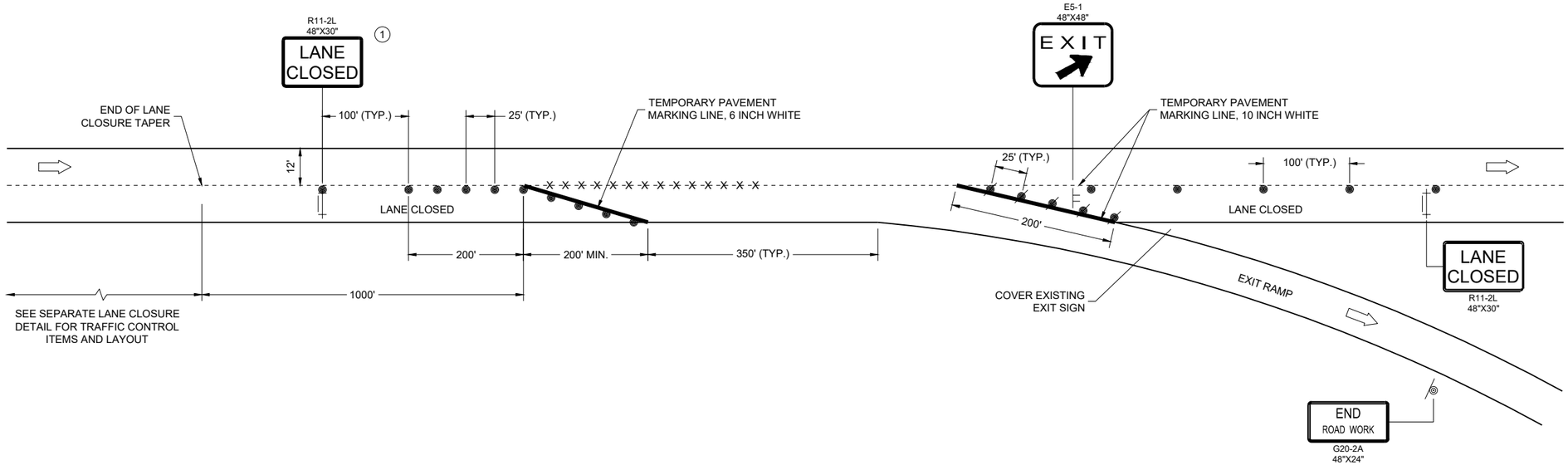
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

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) 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.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

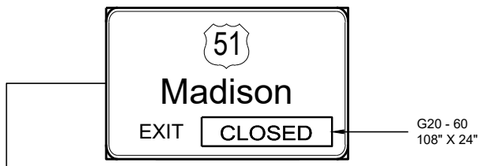
PLACE TEMPORARY PAVEMENT MARKING LINE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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.

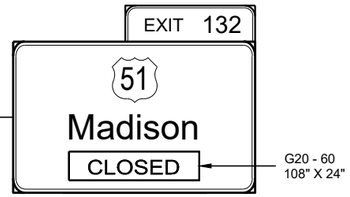
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

(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

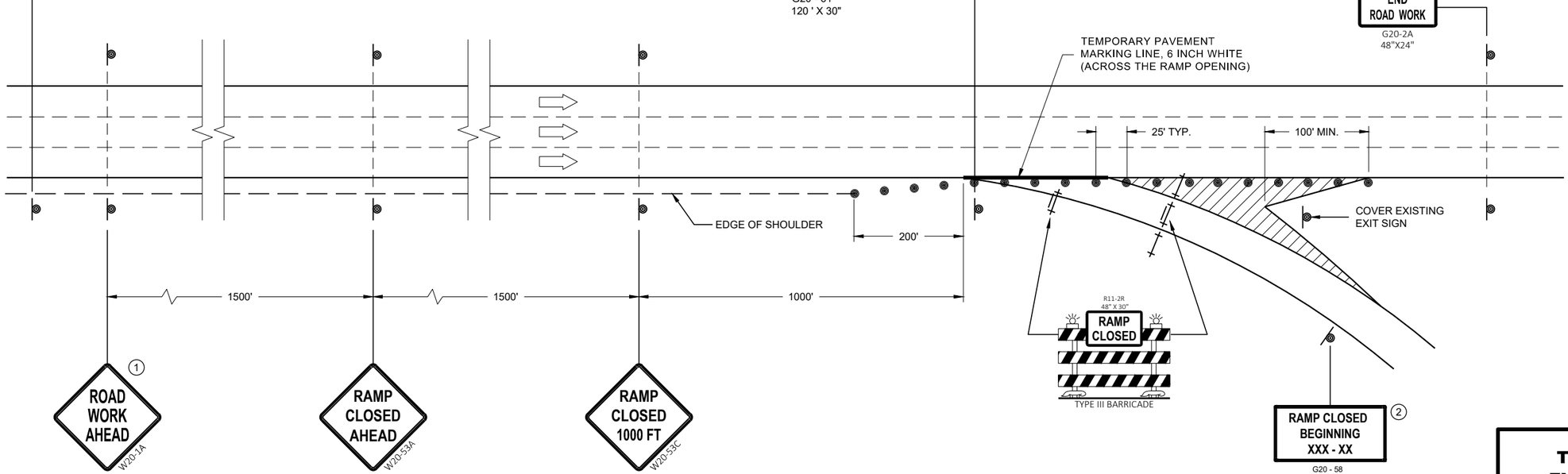


PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN



G20 - 61
120 ' X 30"

COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 15D16-06

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

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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 TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

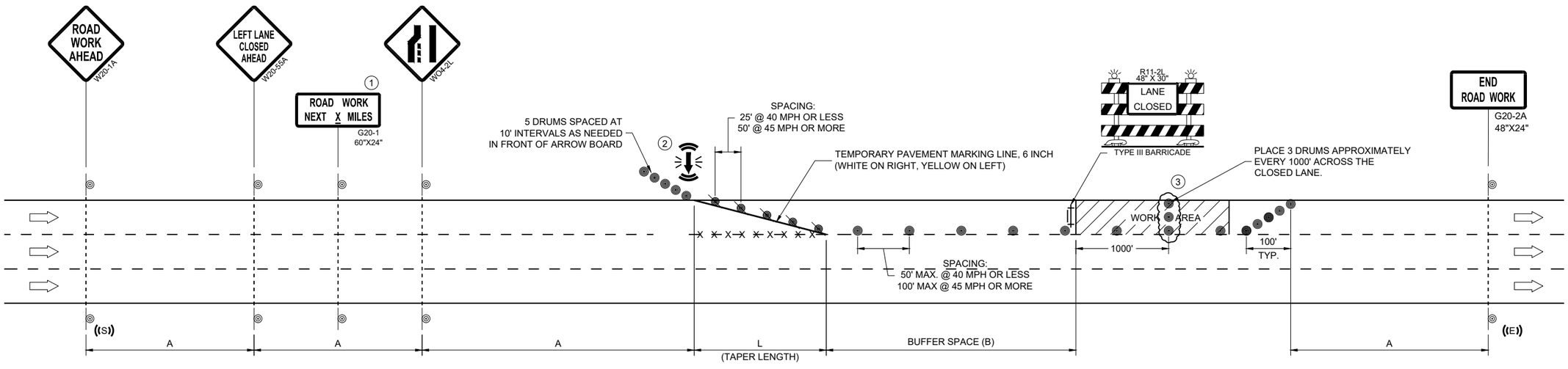
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.

(3) 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.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	155'
30	200'	180'	200'
35	350'	245'	250'
40	350'	320'	305'
45	500'	540'	360'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15D20-10a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- CONNECTED ARROW BOARD
- WORK AREA
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

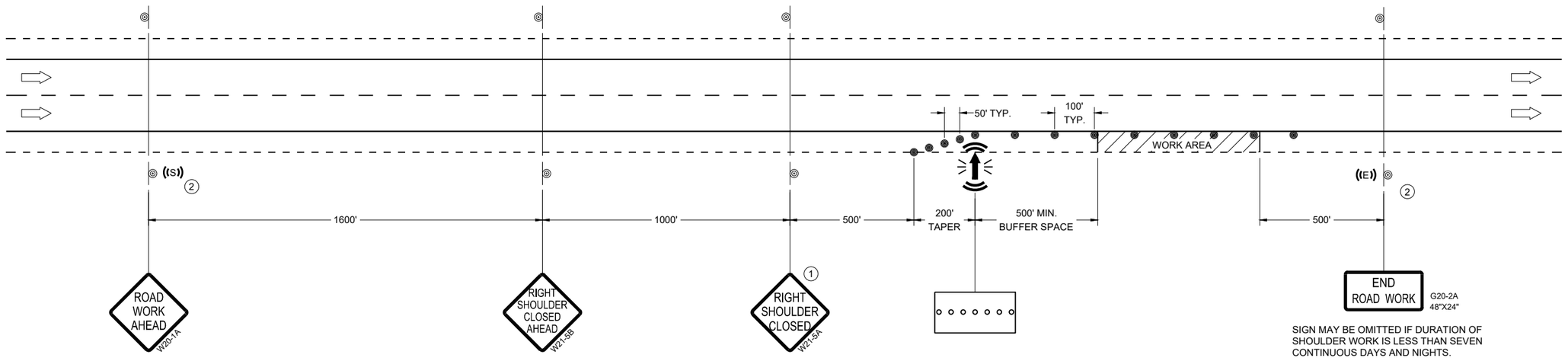
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

(1) FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR THE W21-5A SIGN MAY BE OMITTED.

(2) IF ALREADY PRESENT WITHIN PROJECT , DO NOT INCLUDE ADDITIONAL DEVICE.



SIGN MAY BE OMITTED IF DURATION OF SHOULDER WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.

TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

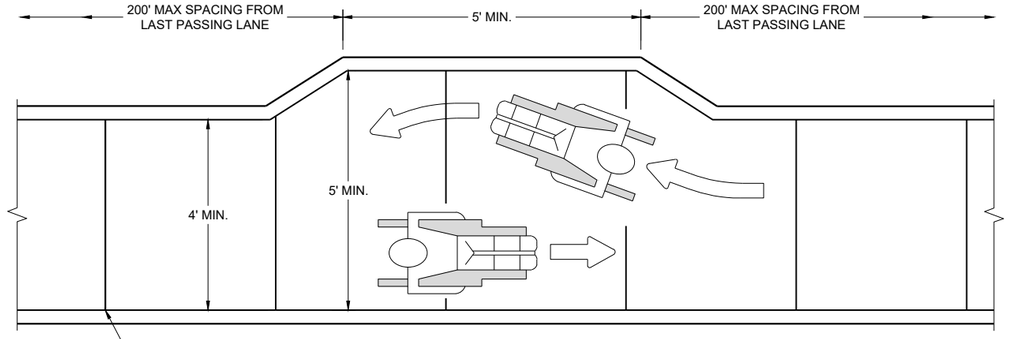
APPROVED

February 2025
DATE

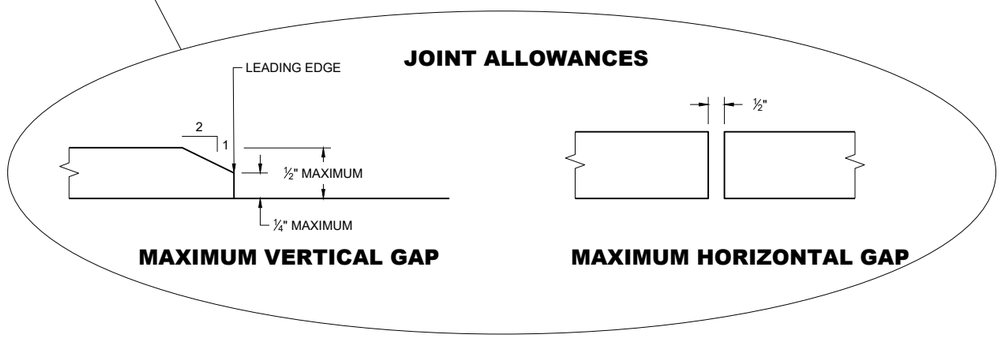
/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

6
SDD 15D27-04



NARROW SIDEWALK PASSING DETAIL



MAXIMUM VERTICAL GAP

MAXIMUM HORIZONTAL GAP

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

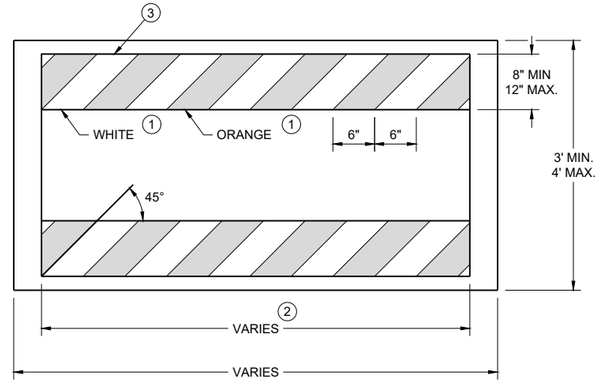
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

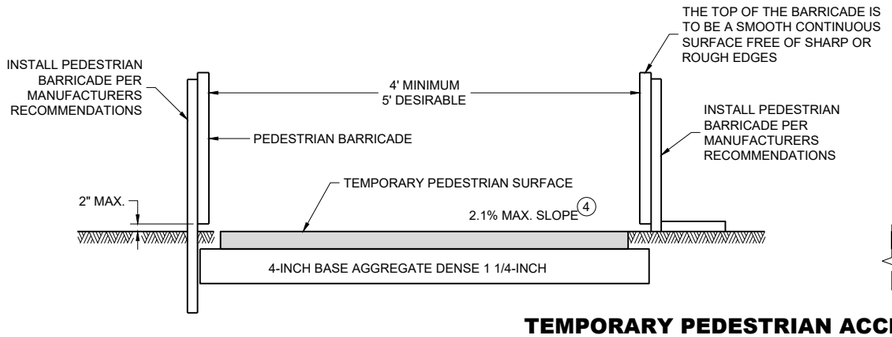
(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

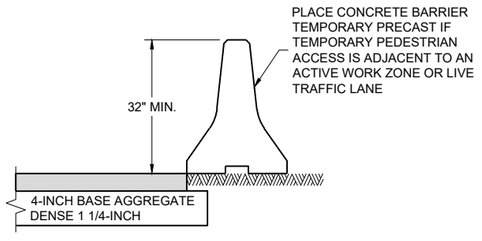
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

(4) WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.



TEMPORARY PEDESTRIAN BARRICADE *





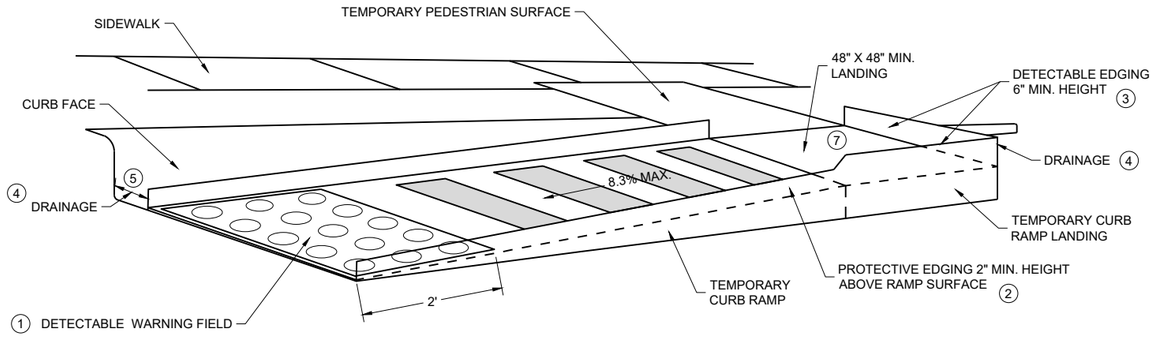
TEMPORARY PEDESTRIAN ACCESS

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15D30-11a

6



PERSPECTIVE VIEW

GENERAL NOTES

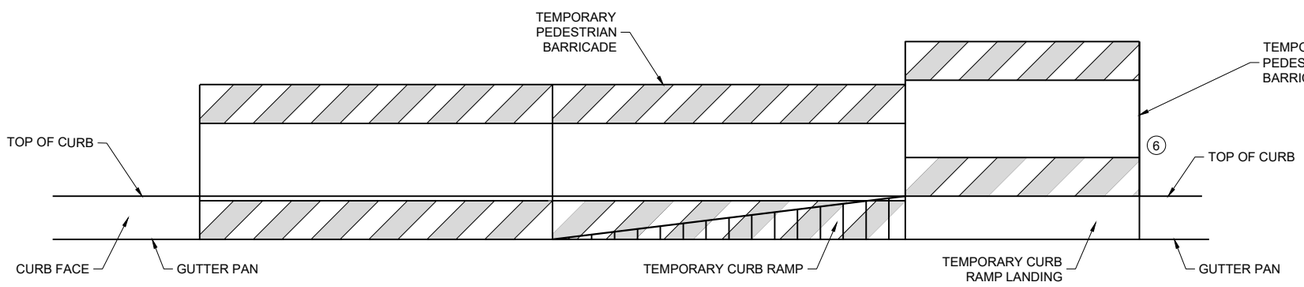
CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

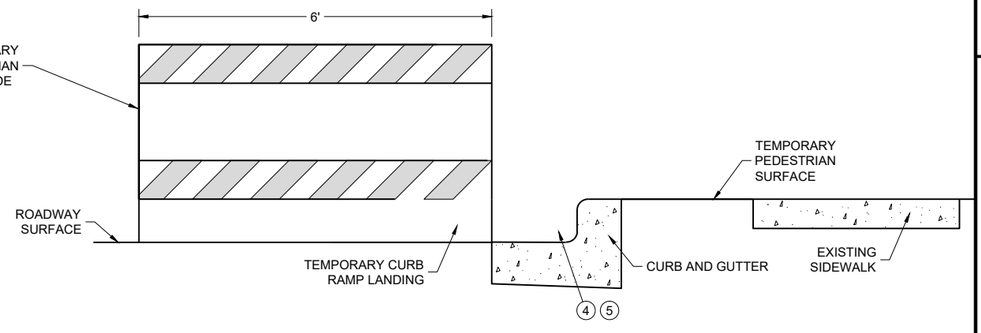
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

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

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

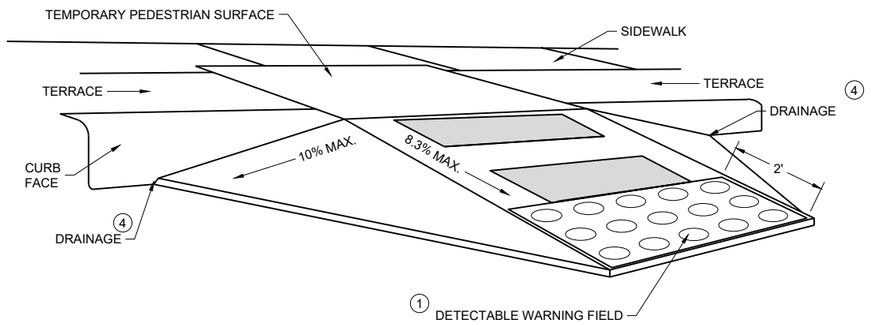
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

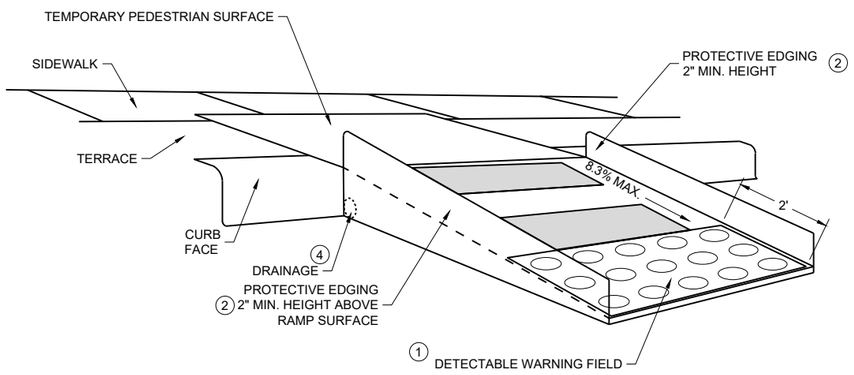
SDD 15D30-11b

6

SDD 15D30-11b



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

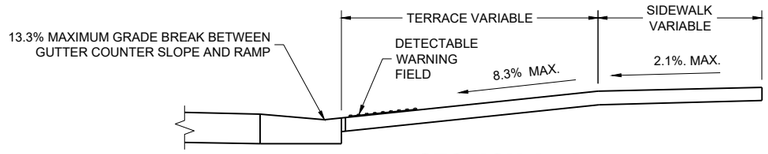
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

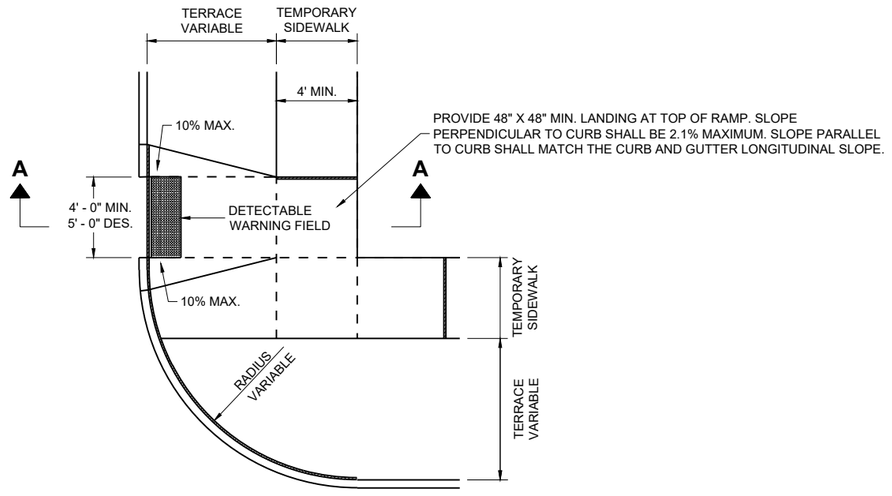
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

GENERAL NOTES



SECTION A - A



PLAN VIEW
TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

6

SDD 15D30-11d

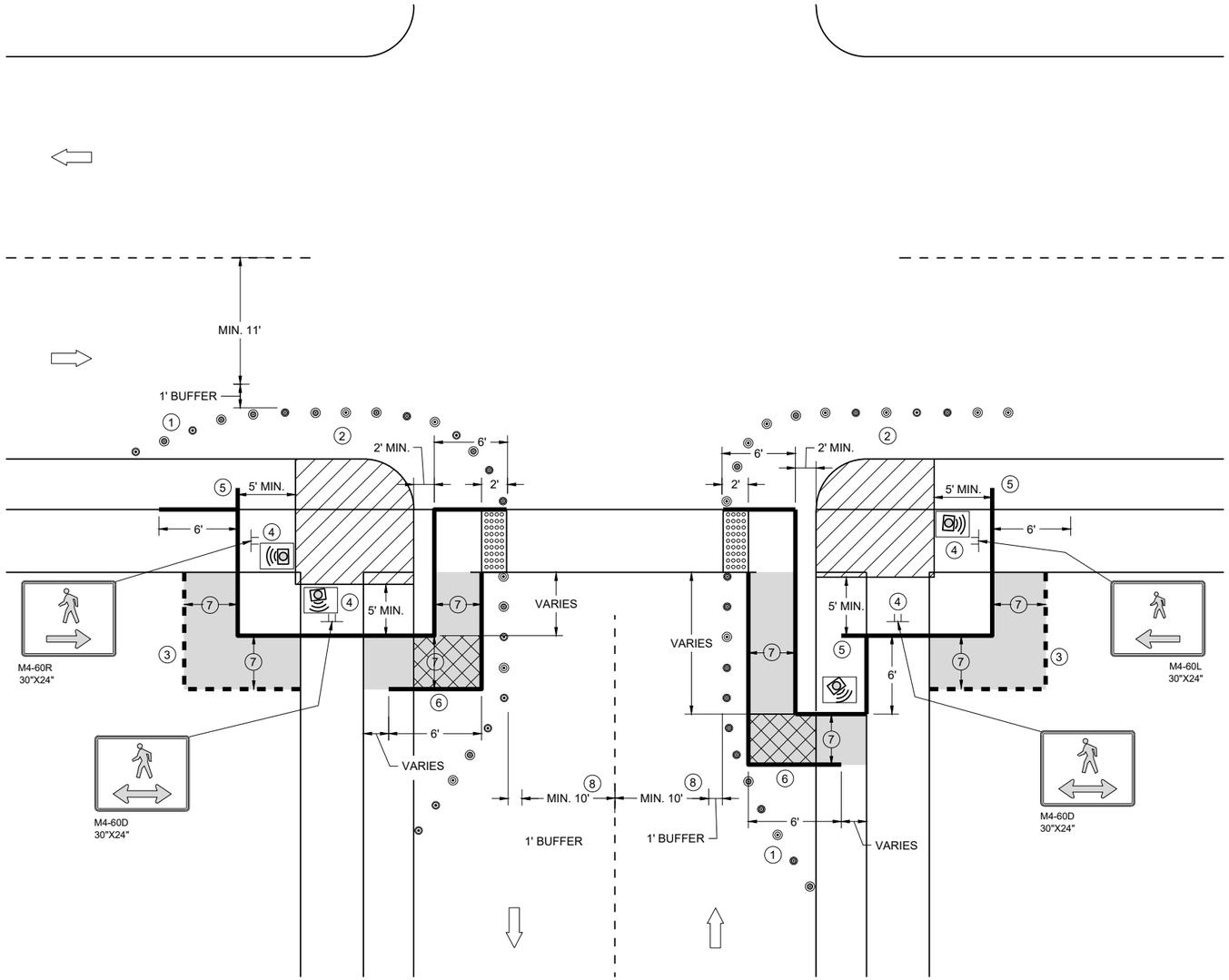
TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15D30-11d



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
7. 4 FEET MINIMUM, 5 FEET DESIRABLE
8. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15D30-11i

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS 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.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

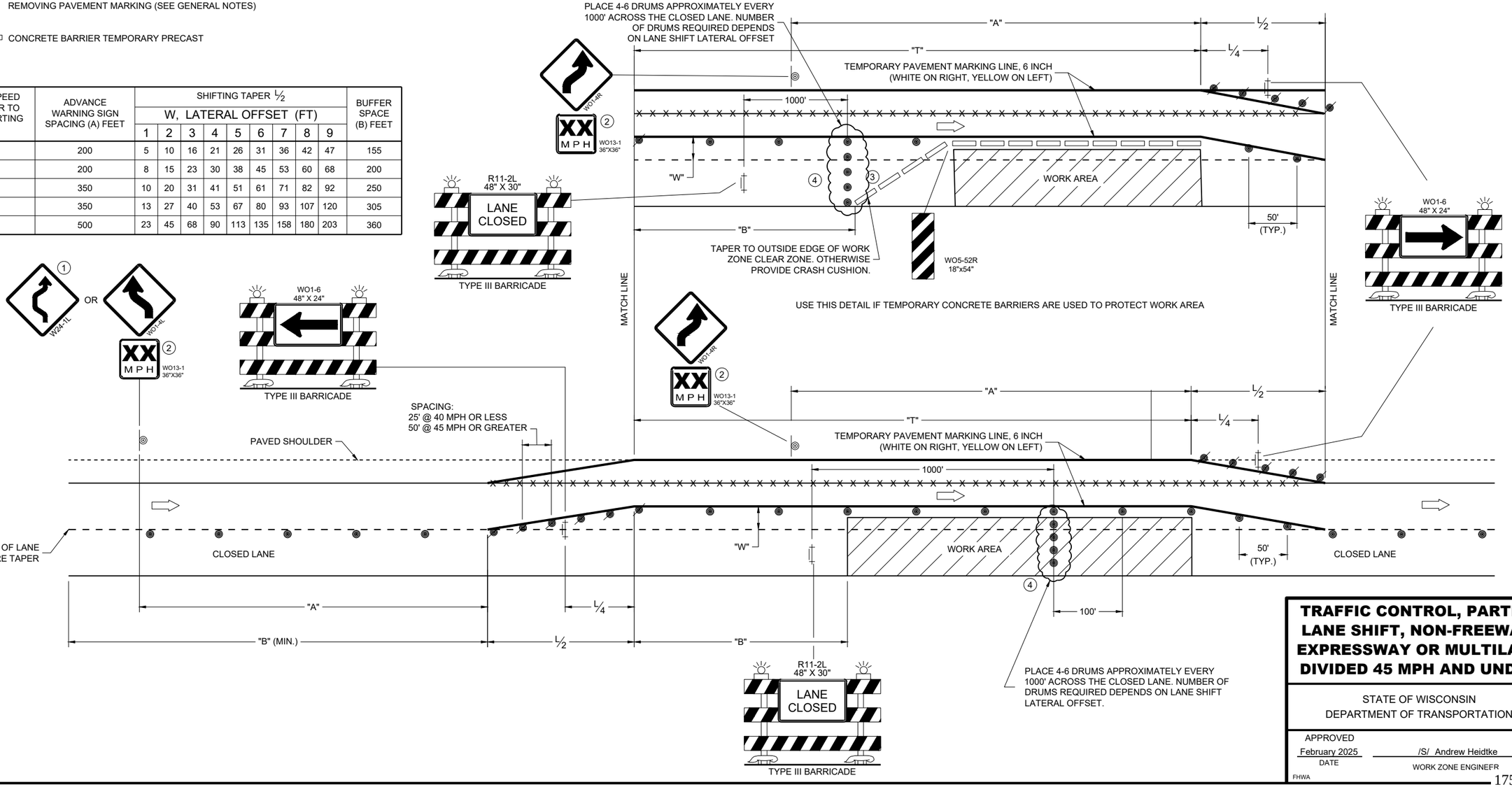
(1) USE ONLY WHEN T<600', OMIT WO1-4R.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(3) BARRIER FLARE RATE: 6:1 @ 40 MPH OR LESS
8:1 @ 45 MPH OR GREATER

(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.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER 1/2 W, LATERAL OFFSET (FT)									BUFFER SPACE (B) FEET
		1	2	3	4	5	6	7	8	9	
25	200	5	10	16	21	26	31	36	42	47	155
30	200	8	15	23	30	38	45	53	60	68	200
35	350	10	20	31	41	51	61	71	82	92	250
40	350	13	27	40	53	67	80	93	107	120	305
45	500	23	45	68	90	113	135	158	180	203	360



TRAFFIC CONTROL, PARTIAL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEFR

FHWA

6

SDD 15D40-06c

6

SDD 15D40-06c

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER 1/2 W, LATERAL OFFSET (FT)								
	1	2	3	4	5	6	7	8	9
50	25	50	75	100	125	150	175	200	225
55	28	55	83	110	138	165	193	220	248
60	30	60	90	120	150	180	210	240	270
65	33	65	98	130	163	195	228	260	293
70	35	70	105	140	175	210	245	280	315

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

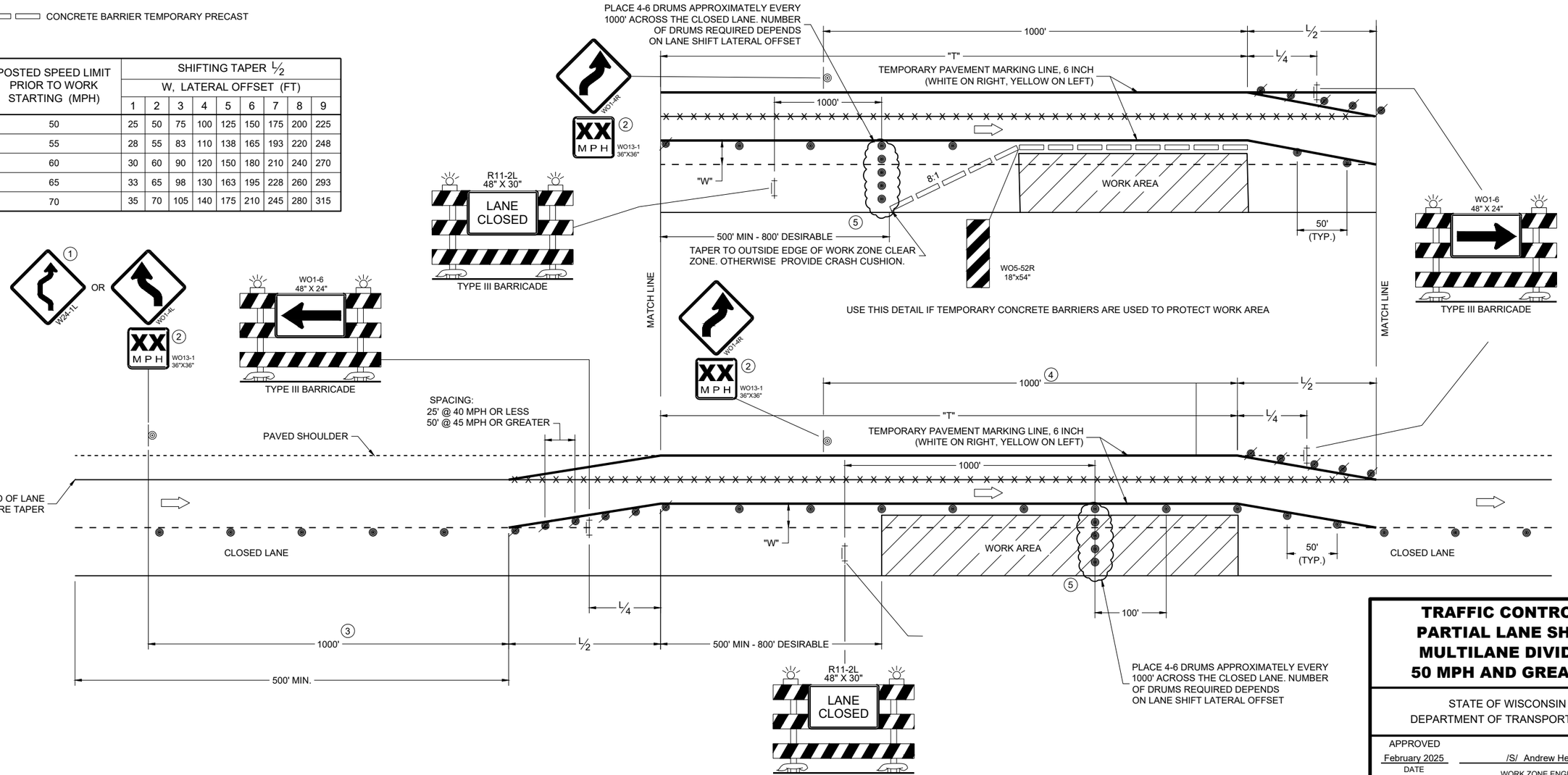
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

1. USE ONLY WHEN T<600', OMIT WO1-4R.
2. IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.
3. IF THE BEGINNING OF LANE SHIFT TAPER IS 1200 FEET OR LESS FROM END OF LANE CLOSURE TAPER, PLACE THE WO1-4L SIGN 200 FEET AFTER THE END OF THE LANE CLOSURE TAPER.
4. IF THE BEGINNING OF THE SECOND LANE SHIFT TAPER IS 1200 FEET OR LESS FROM END OF THE FIRST LANE CLOSURE TAPER, PLACE THE WO1-4L SIGN 200 FEET AFTER THE END OF THE FIRST LANE CLOSURE TAPER.
5. 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, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

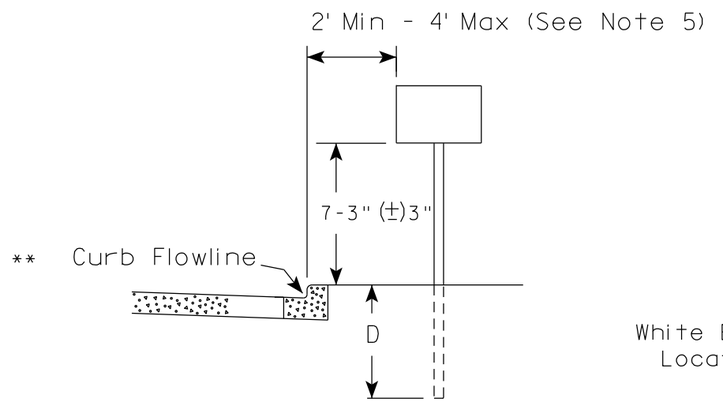
APPROVED
February 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

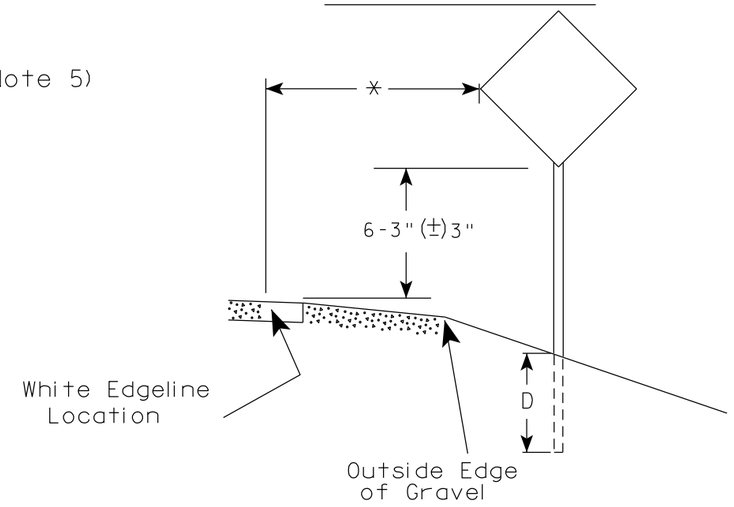
FHWA

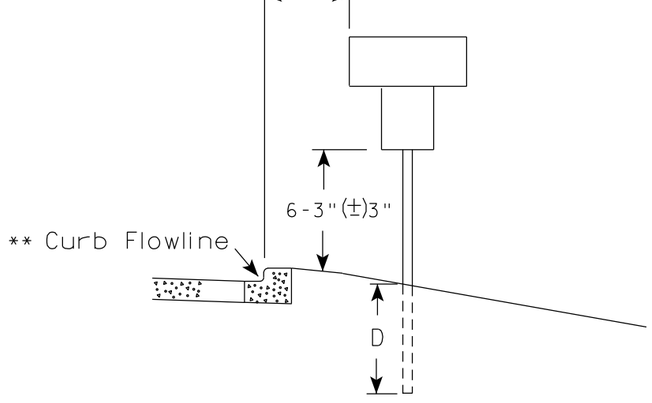
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SDD 15D40-06d

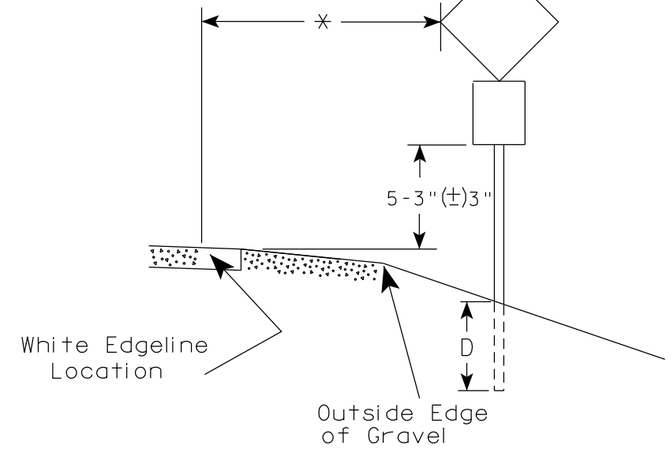
URBAN AREA



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.

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.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

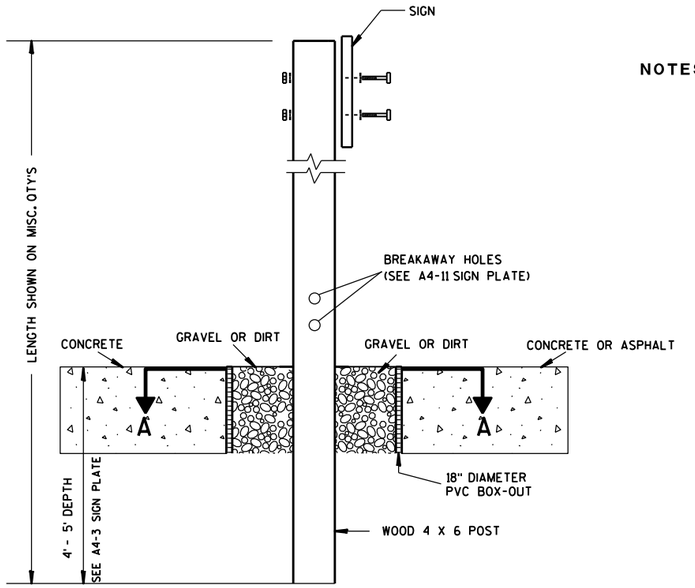
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

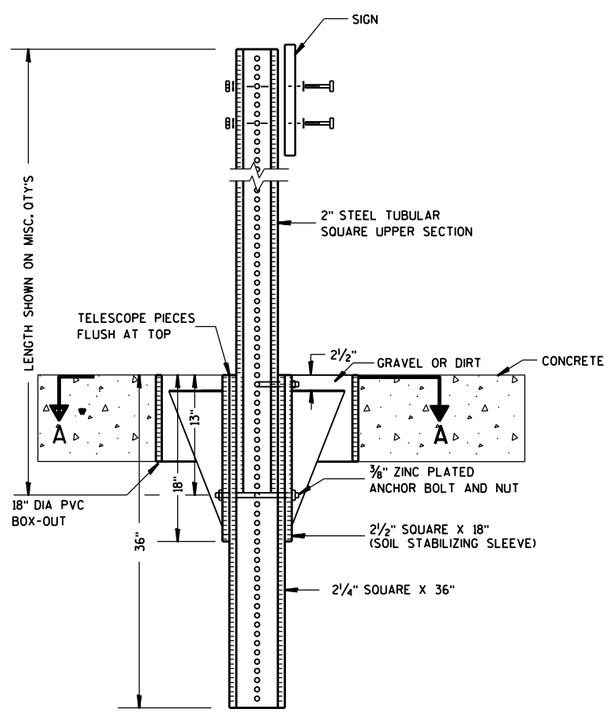
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 177	E



ELEVATION VIEW

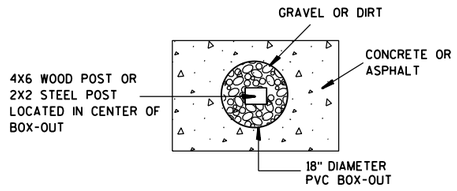
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

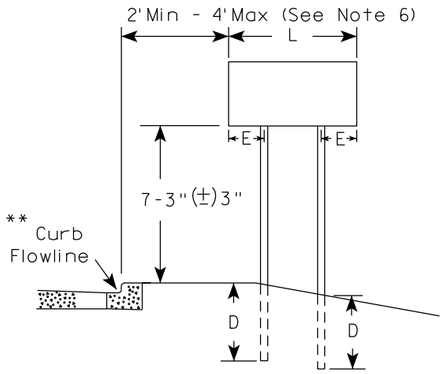
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

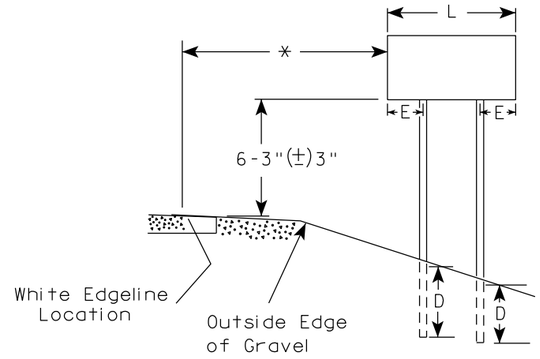
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

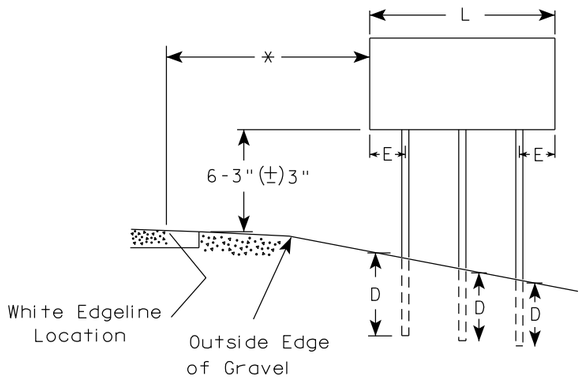
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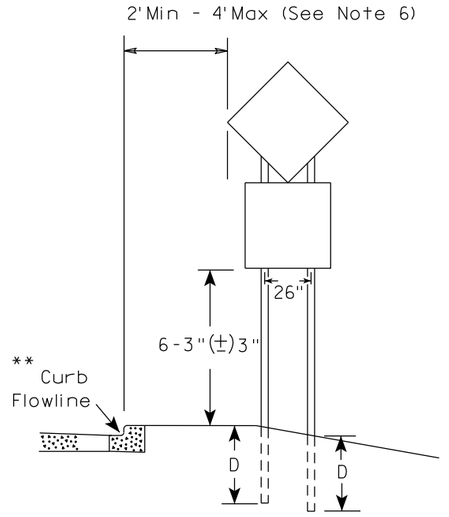
URBAN AREA



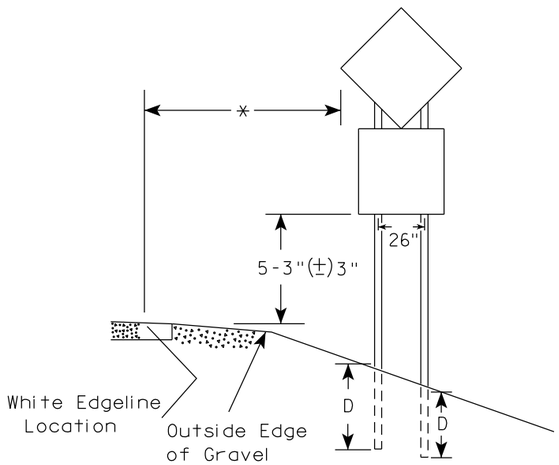
RURAL AREA (See Note 3)







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'

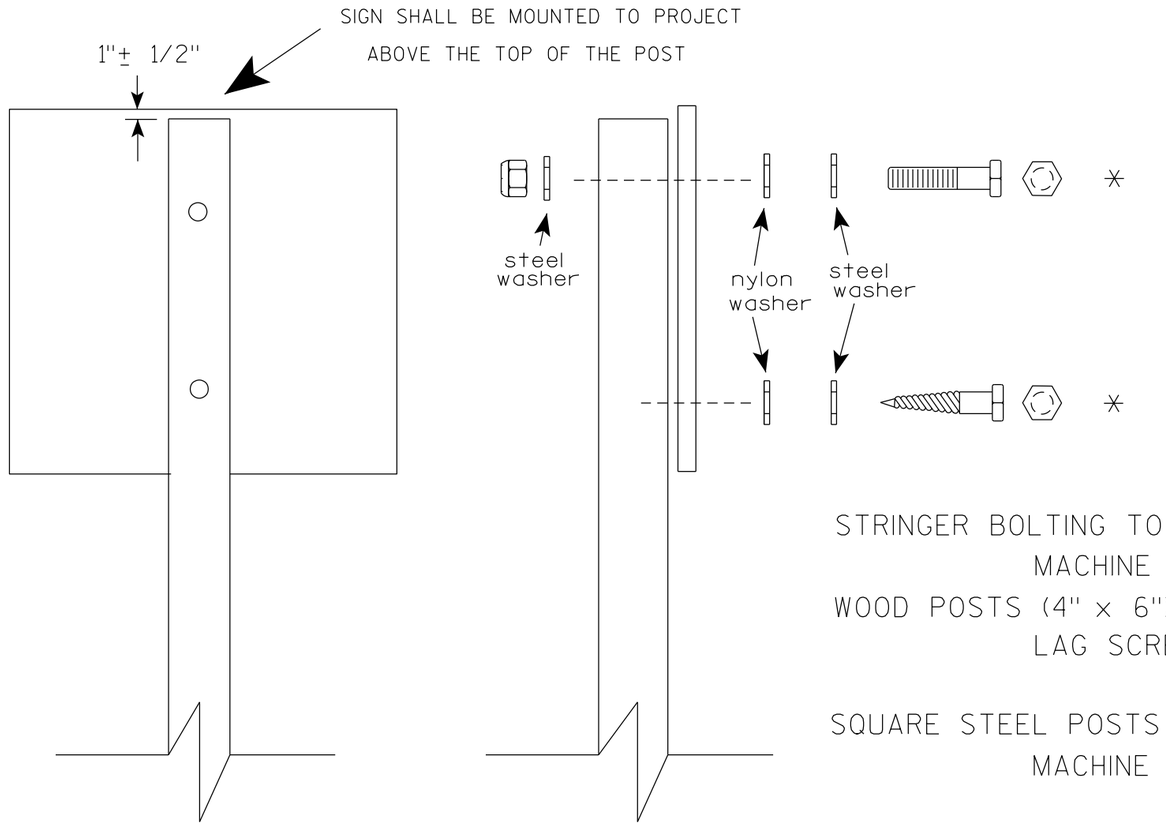
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 179	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

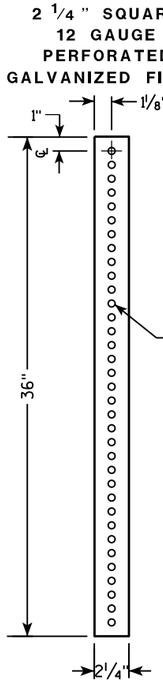
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

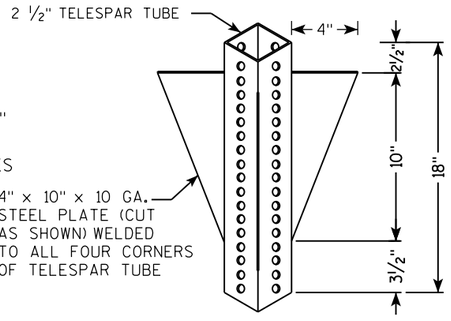
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

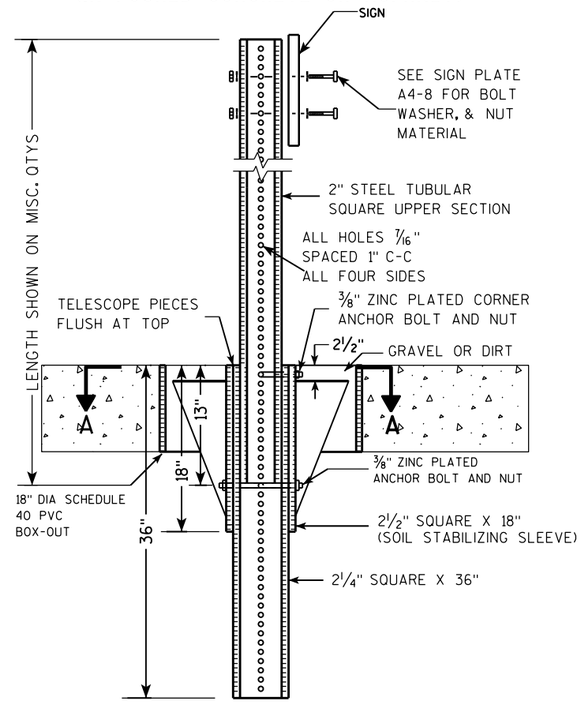
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



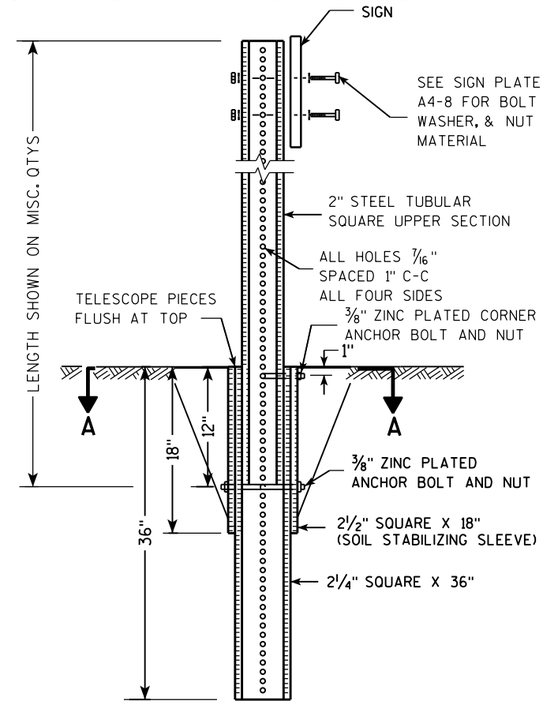
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

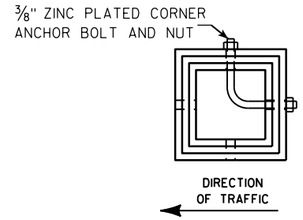


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

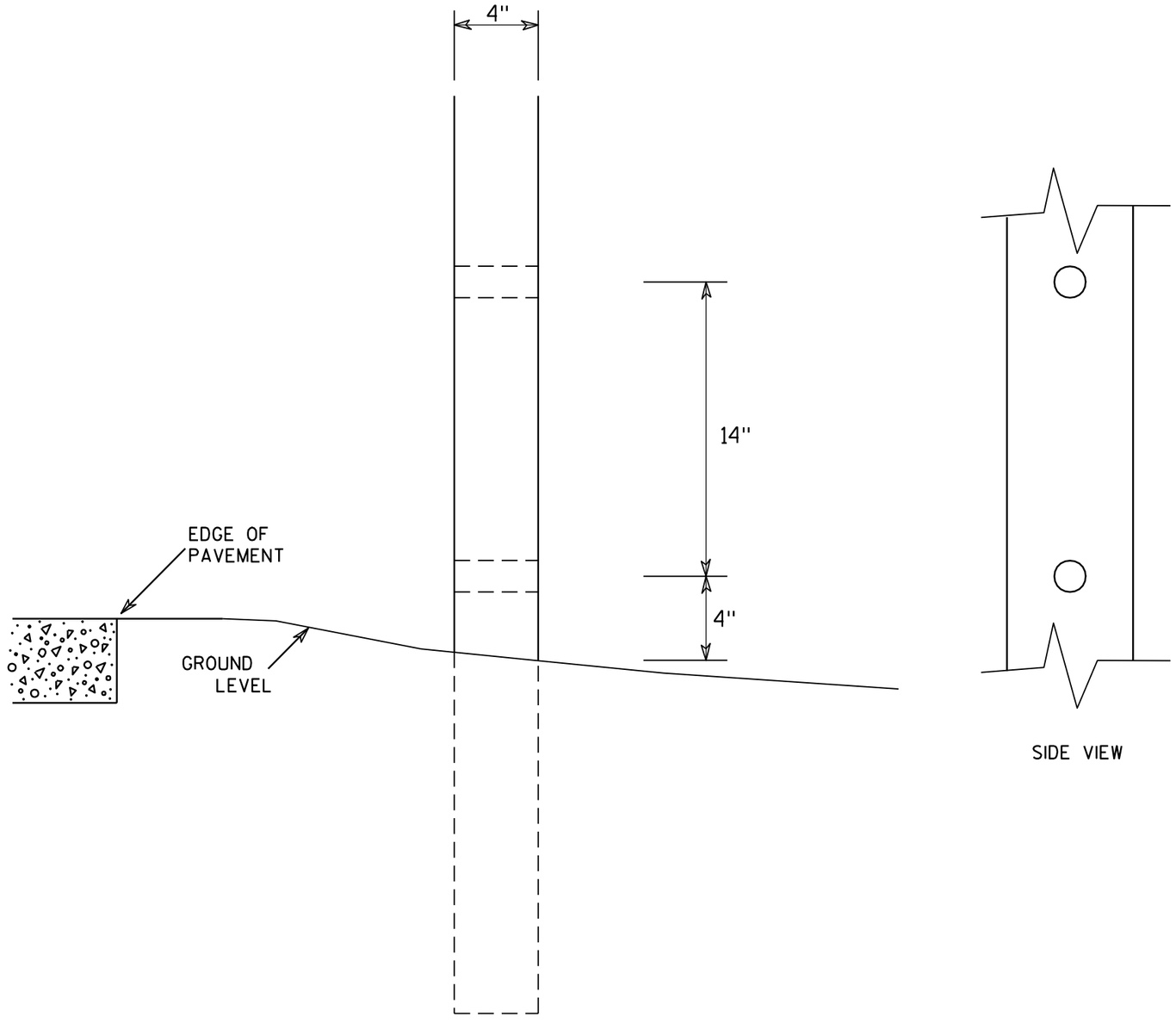
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000
WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

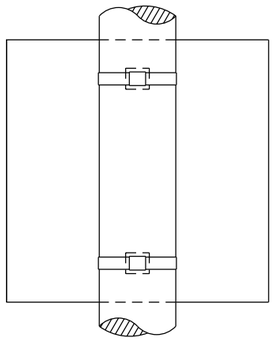
APPROVED Chester J Spang for State Traffic Engineer

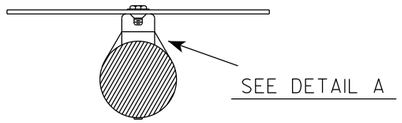
DATE 3/27/97 PLATE NO. A4-11.2

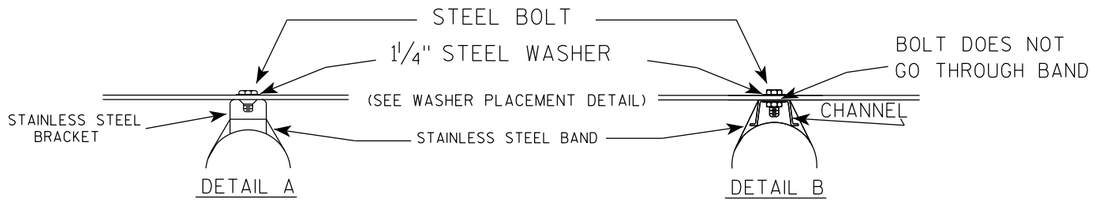
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 182	E

BANDING

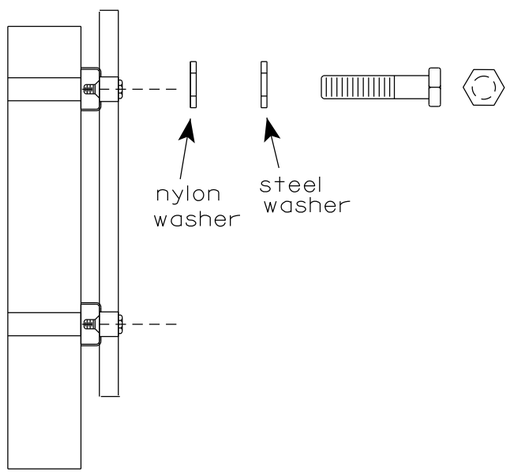
SINGLE SIGN







WASHER PLACEMENT

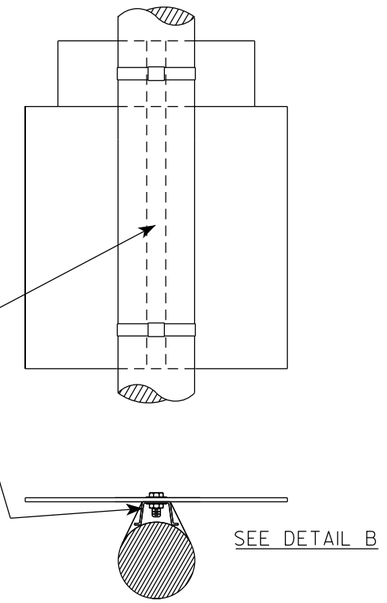


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

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

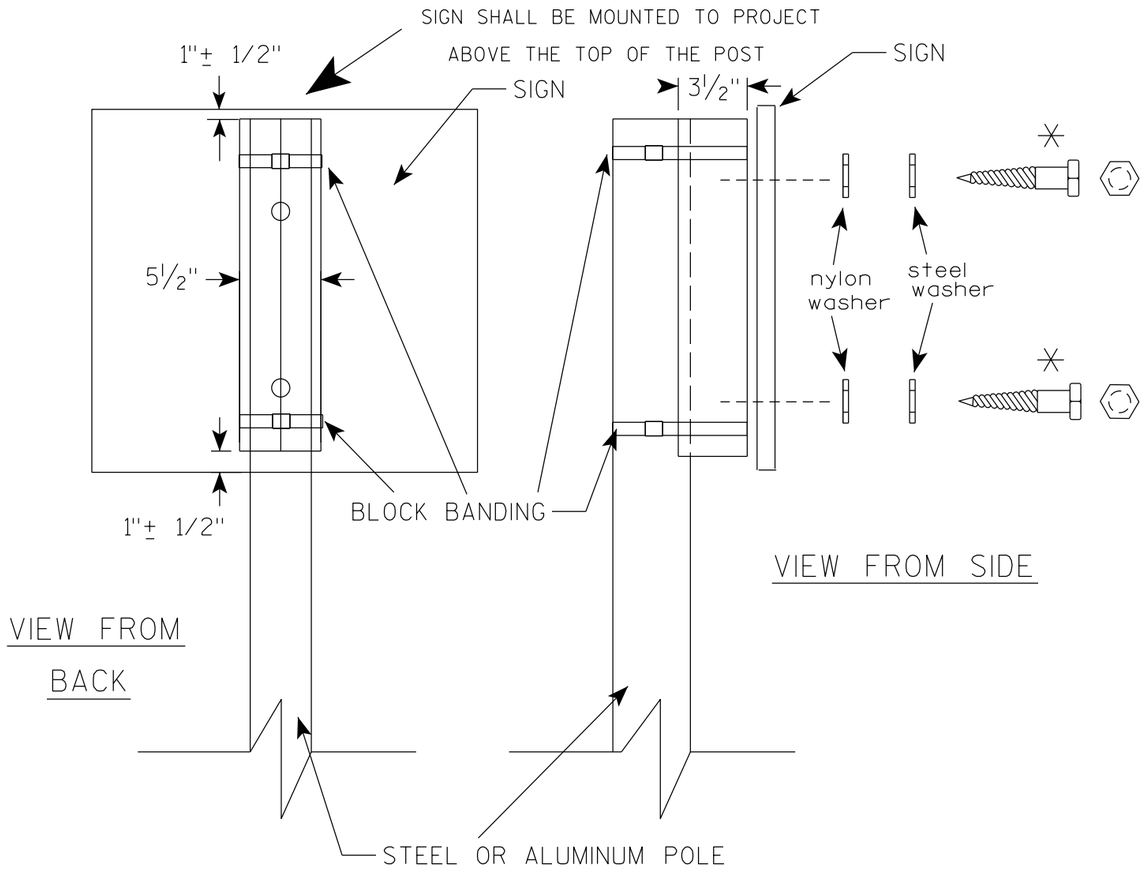
DATE 6/10/19 PLATE NO. A5-9.4

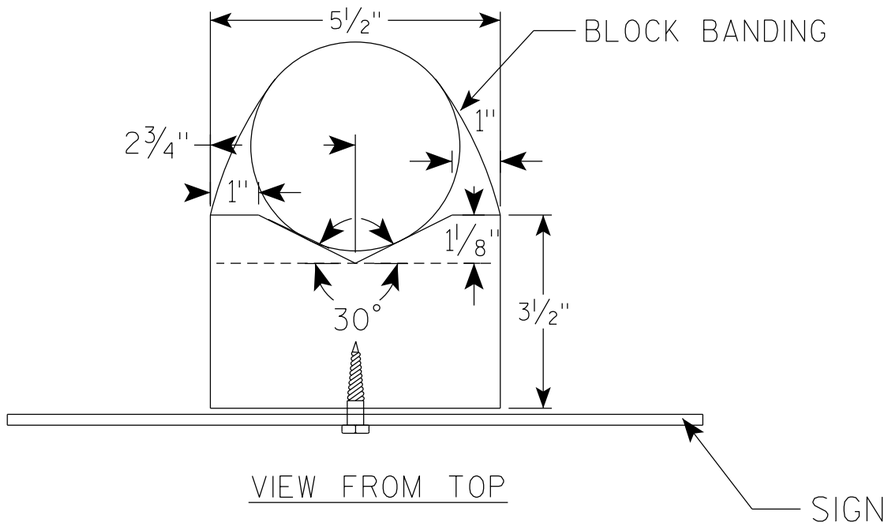
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 183	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

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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

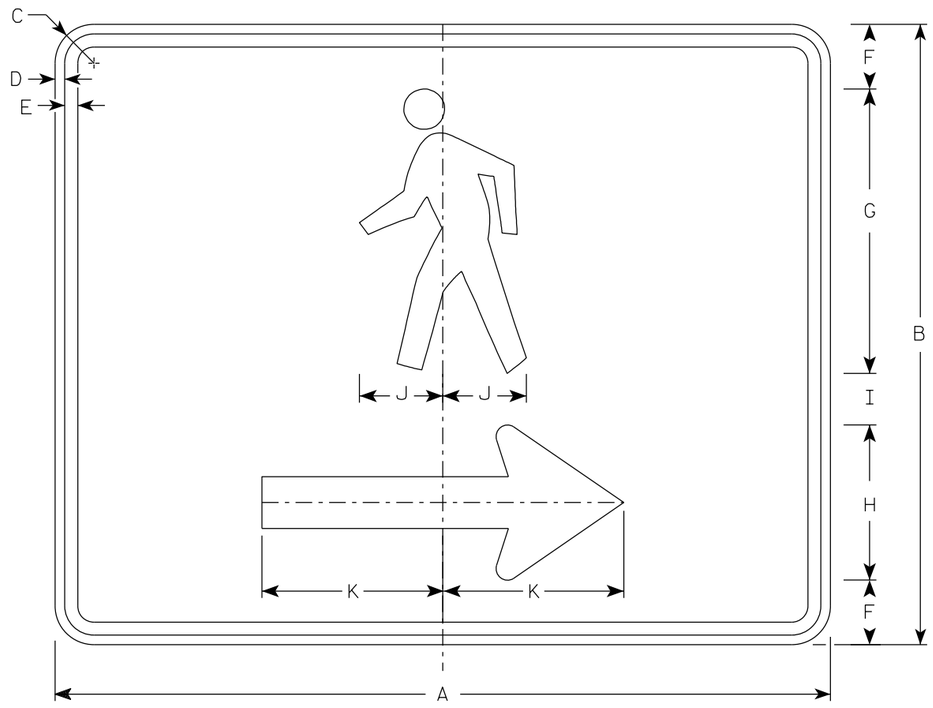
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

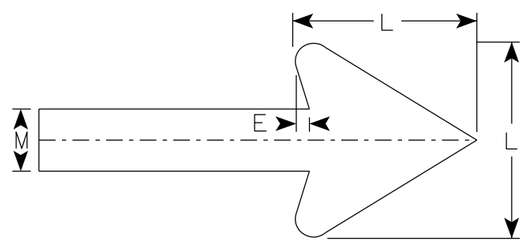
SHEET NO: 184 E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-60L is the same as M4-60R except the arrow is reversed.



M4-60R



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 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
2M	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
3																											
4																											
5																											

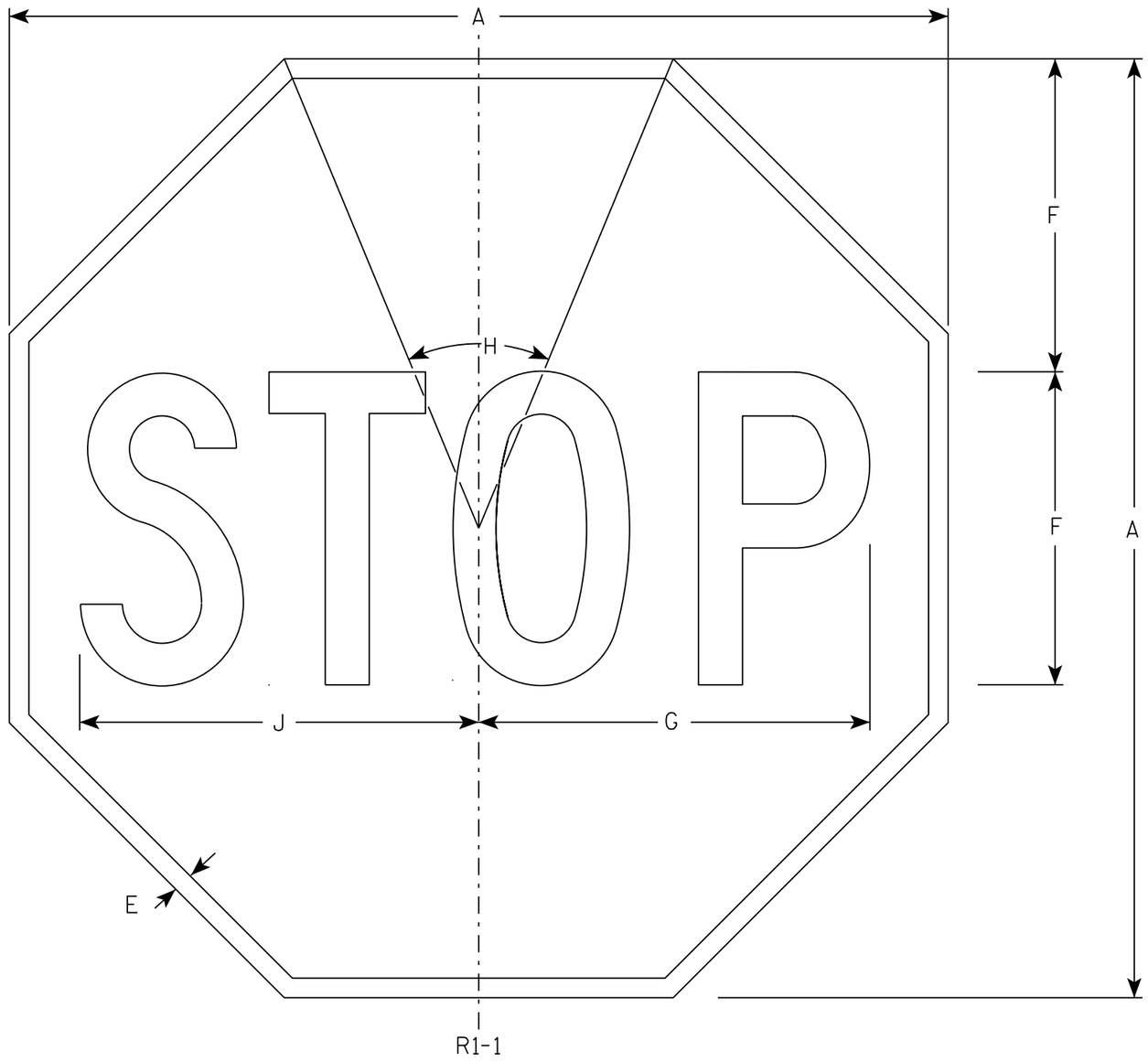
STANDARD SIGN
M4-60 L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/2023 PLATE NO. M4-60.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 185 | E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

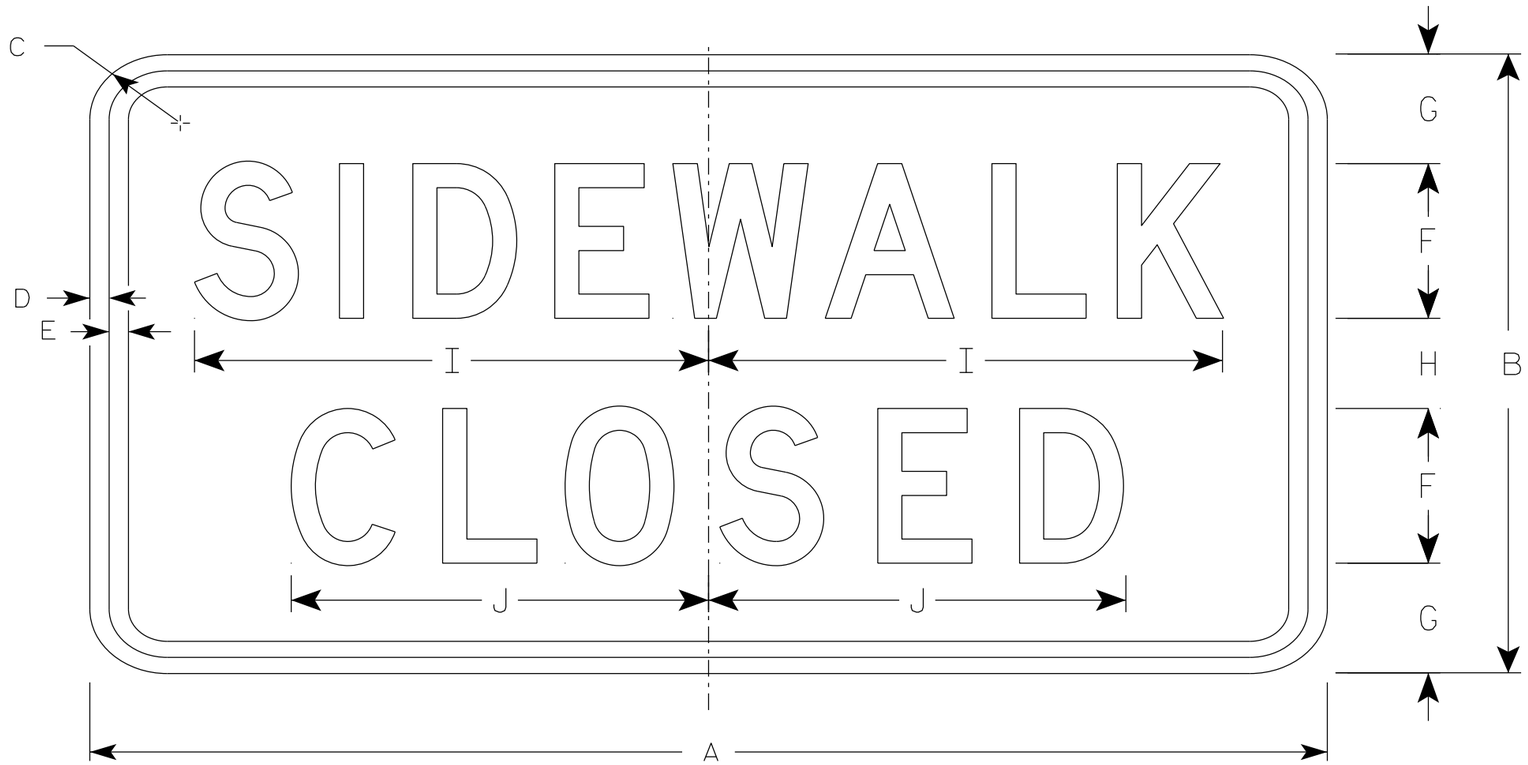
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 186	E



R9-9

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

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 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
2M	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
3	30	18	1 ½	½	½	4	3 ½	3	12 ½	10 ¼																	3.75
4																											
5																											

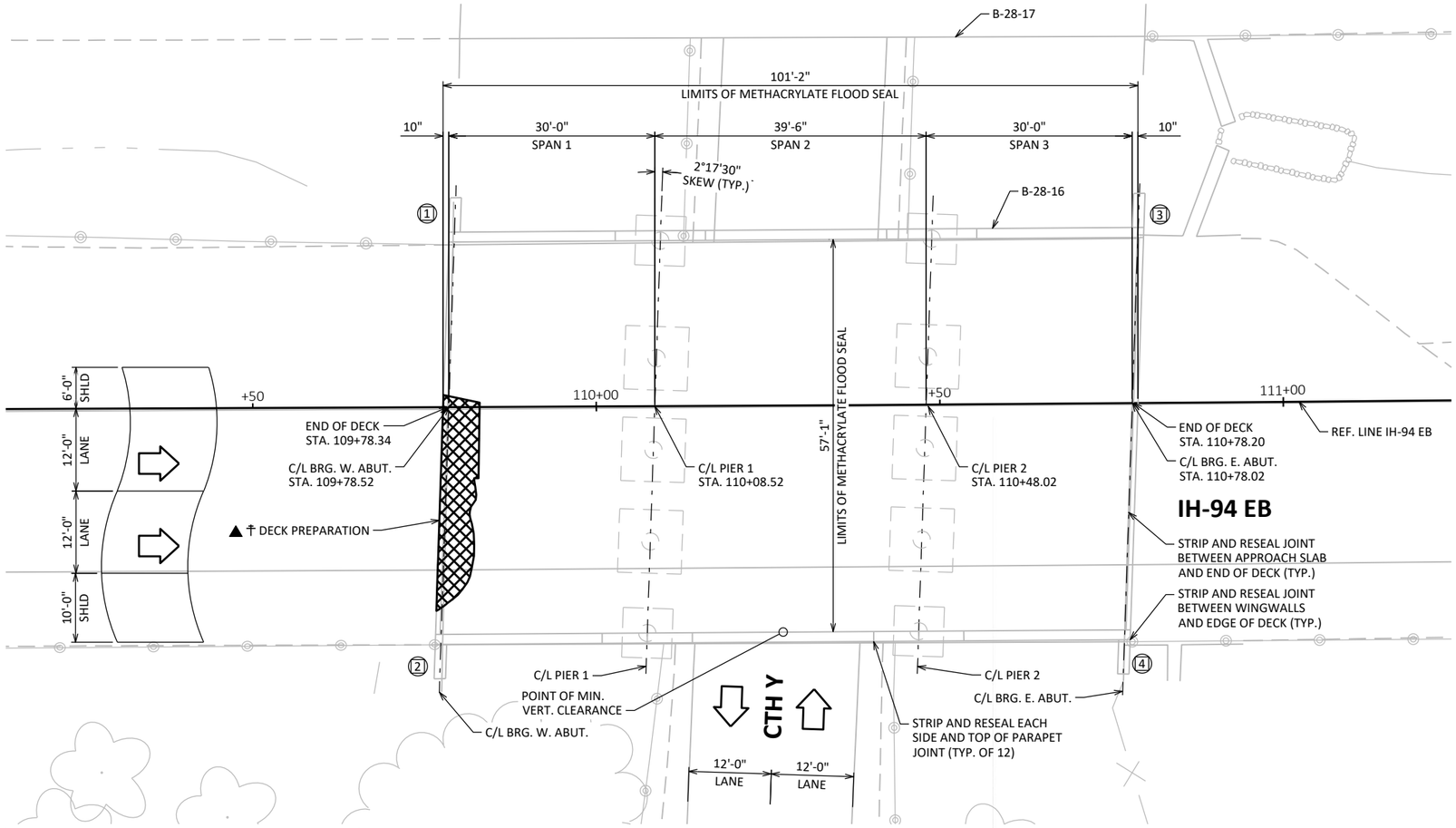
STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9.7

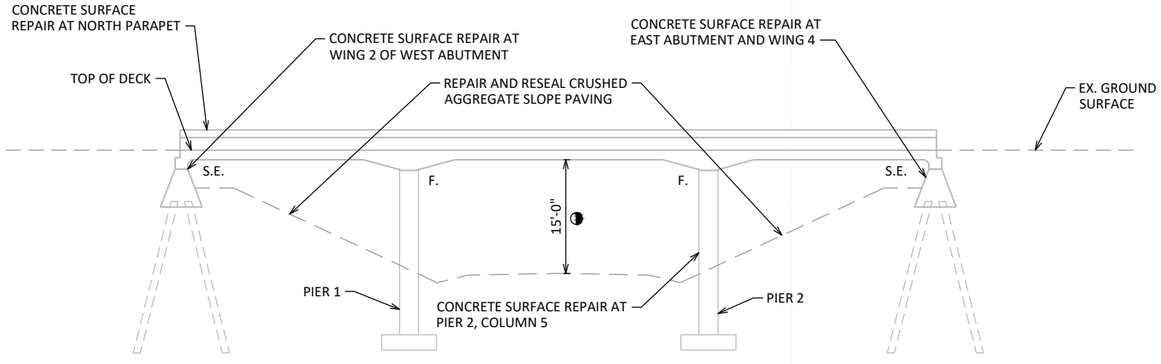
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 187 | E



† DECK PREPARATION AREAS SHOWN ON PLAN ARE BASED ON A LEVEL 2 INFRARED THERMOGRAPHIC DECK SURVEY. SURVEY WAS COMPLETED: 5/16/2022.

PLAN

(THREE SPAN HAUNCHED CONCRETE SLAB)



ELEVATION

(NORMAL TO CTH Y)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS20
INVENTORY RATING: HS24
OPERATING RATING: HS40
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS
(RATINGS TAKEN FROM HSI, 5/30/2025)

MATERIAL PROPERTIES:

CONCRETE MASONRY:
RAPID SET DECK REPAIR ——— f'_c = 4,000 PSI (3,000 PSI AT 3 HOURS)
CONCRETE SURFACE REPAIR ——— f'_c = 4,000 PSI

TRAFFIC DATA

IH-94 EB:
ADT = 25,500 (2047)
R.D.S. = 70 MPH

CTH Y:
ADT = 1,440 (2042)
R.D.S. = 30 MPH

LEGEND

◑ LOCATION PER EX. PLANS AND MIN. CLEARANCE FROM HSI 10/23/2006.

(#) INDICATES WING NUMBER.

▲ THE TYPE AND EXTENT OF DECK PREPARATION/REPAIR IS AS DETERMINED BY FIELD ENGINEER.

SCOPE OF WORK

- SEAL JOINTS BETWEEN THE CONCRETE APPROACH SLAB AND END OF BRIDGE DECK AT WEST AND EACH APPROACHES.
- STRIP AND RESEAL JOINTS BETWEEN THE WINGWALLS/PARAPETS AND BACK FACE OF ABUTMENTS AT ALL FOUR WINGS AND 12 PARAPET JOINTS ON THE SUPERSTRUCTURE.
- PATCH THE CONCRETE DECK BASED ON THE DEPARTMENT PROVIDED INFRARED THERMOGRAPHY DECK SCAN.
- CONCRETE SURFACE REPAIR AT THE ABUTMENTS, PIERS, SUPERSTRUCTURE AND AT LOCATIONS DIRECTED BY ENGINEER.
- METHACRYLATE FLOOD SEAL OF THE CONCRETE BRIDGE DECK.
- REPAIR AND RESEAL THE CRUSHED AGGREGATE SLOPE PAVING.

LIST OF DRAWINGS:

1. GENERAL PLAN
2. GENERAL NOTES, CROSS SECTION, & QUANTITIES

STRUCTURE DESIGN CONTACTS:

BUREAU OF STRUCTURES CONTACT:
AARON BONK (608) 261-0261

DESIGN CONSULTANT CONTACT:
EVAN CONSTANT (608) 251-4843

NO.	DATE	REVISION	BY

STRAND ASSOCIATES®
910 WEST WINGRA DRIVE
MADISON, WISCONSIN 53715
(608)-251-4843
(608) 251-8655 FAX
WWW.STRAND.COM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/04/25
CHIEF STRUCTURES DESIGN ENGINEER DATE

WISCONSIN
EVAN J. CONSTANT
E-48226
MADISON
WI
PROFESSIONAL ENGINEER
5-30-25

STATE PROJECT NUMBER
1067-04-61

STRUCTURE B-28-16

IH-94 EB OVER CTH Y

COUNTY	VILLAGE
JEFFERSON	JOHNSON CREEK

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
EJC	BMO	EJC	BMO

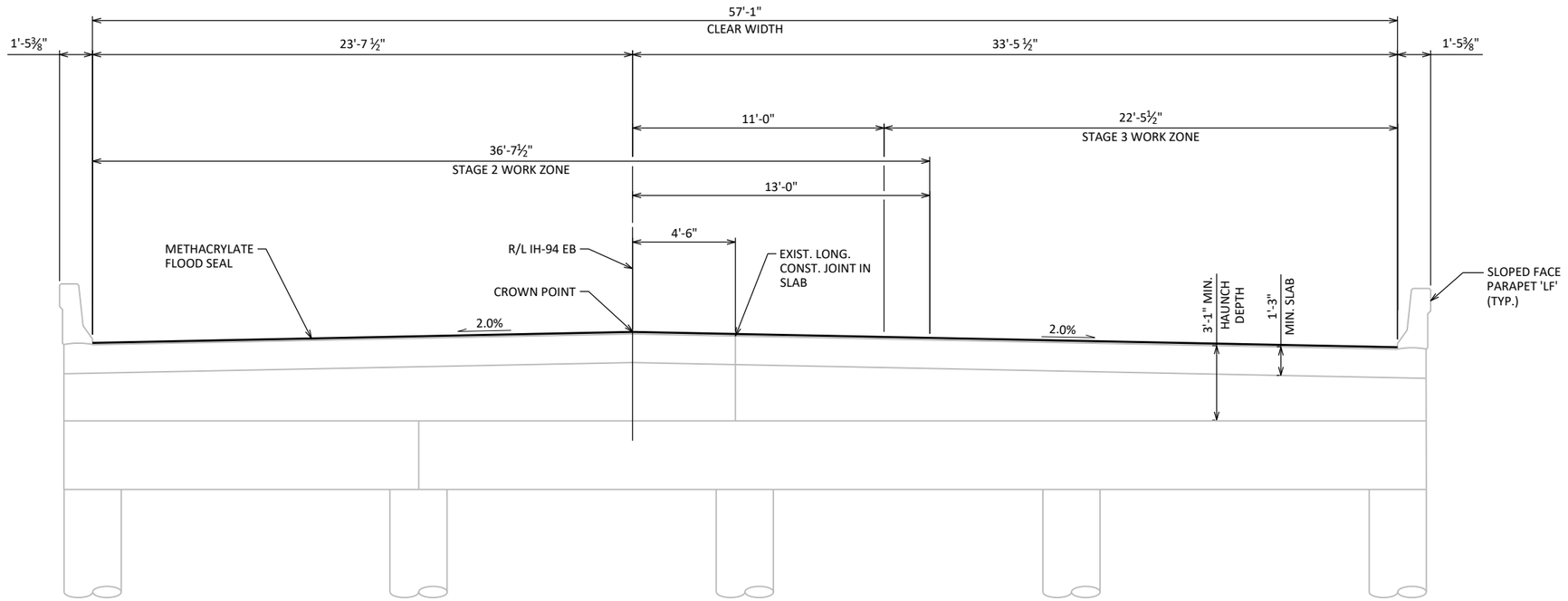
GENERAL PLAN

SHEET 1 OF 2
188

I.D. 1067-04-31
DATE:
SCALE =

STATE PROJECT NUMBER

1067-04-61



CROSS SECTION

(LOOKING EAST)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND SUBSEQUENT REHABILITATION PLANS.

ALL DIMENSION ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATION ARE IN FEET. DIMENSION HAVE BEEN CONVERTED FROM SUPERSTRUCTURE REPLACEMENT METRIC DRAWINGS.

ALL CONCRETE REMOVAL FOR CONCRETE SURFACE REPAIR SHALL BE DEFINED BY A 1/2-INCH DEEP SAW CUT. ALL CONCRETE REMOVAL FOR SAWING PAVEMENT DECK PREPARATION AREAS SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.

PREPARATION DECKS TYPE 1, PREPARATION DECKS TYPE 2, AND CONCRETE SURFACE REPAIR AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE FIELD ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

SEAL THE JOINT BETWEEN THE CONCRETE APPROACH SLAB AND END OF BRIDGE DECK WITH HOT POURED JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6. HOLD ¼-INCH BELOW PAVEMENT SURFACE. WORK TO BE INCLUDED WITH "METHACRYLATE FLOOD SEAL".

STRIP AND RESEAL JOINTS BETWEEN WINGWALLS AND EDGE OF DECK AND PARAPET JOINTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. WORK TO BE INCLUDED WITH "METHACRYLATE FLOOD SEAL".

METHACRYLATE FLOOD SEAL SHALL TAKE PLACE AFTER CONCRETE DECK PATCHING. CONCRETE DECK PATCHES SHALL BE CURED A MINIMUM 21 DAYS PRIOR TO FLOOD SEAL. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

SEE ROADWAY PLANS FOR TRAFFIC CONTROL PLANS AND STAGED CONSTRUCTION DETAILS. WORK ON THE BRIDGE DECK TO BE COMPLETED DURING STAGE 2 AND STAGE 3.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	W. ABUT	PIER 1	PIER 2	E. ABUT.	SUPERSTRUCTURE	TOTAL	UNIT
509.0301	PREPARATION DECKS TYPE 1	---	---	---	---	30	30	SY
509.0302	PREPARATION DECKS TYPE 2	---	---	---	---	12	12	SY
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	---	---	---	---	300	300	LF
509.1500	CONCRETE SURFACE REPAIR	6	---	9	15	2	32	SF
604.9010.S	SLOPE PAVING REPAIR CRUSHED AGGREGATE	5	---	---	5	---	10	CY
604.9015.S	RESEAL CRUSHED AGGREGATE SLOPE PAVING	234	---	---	234	---	468	SY
SPV.0035.01	RAPID SET DECK REPAIR	---	---	---	---	4	4	CY
SPV.0180.02	METHACRYLATE FLOOD SEAL	---	---	---	---	634	634	SY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-28-16

DRAWN BY EJC | PLANS CK'D BMO

GENERAL NOTES, CROSS SECTION, & QUANTITIES

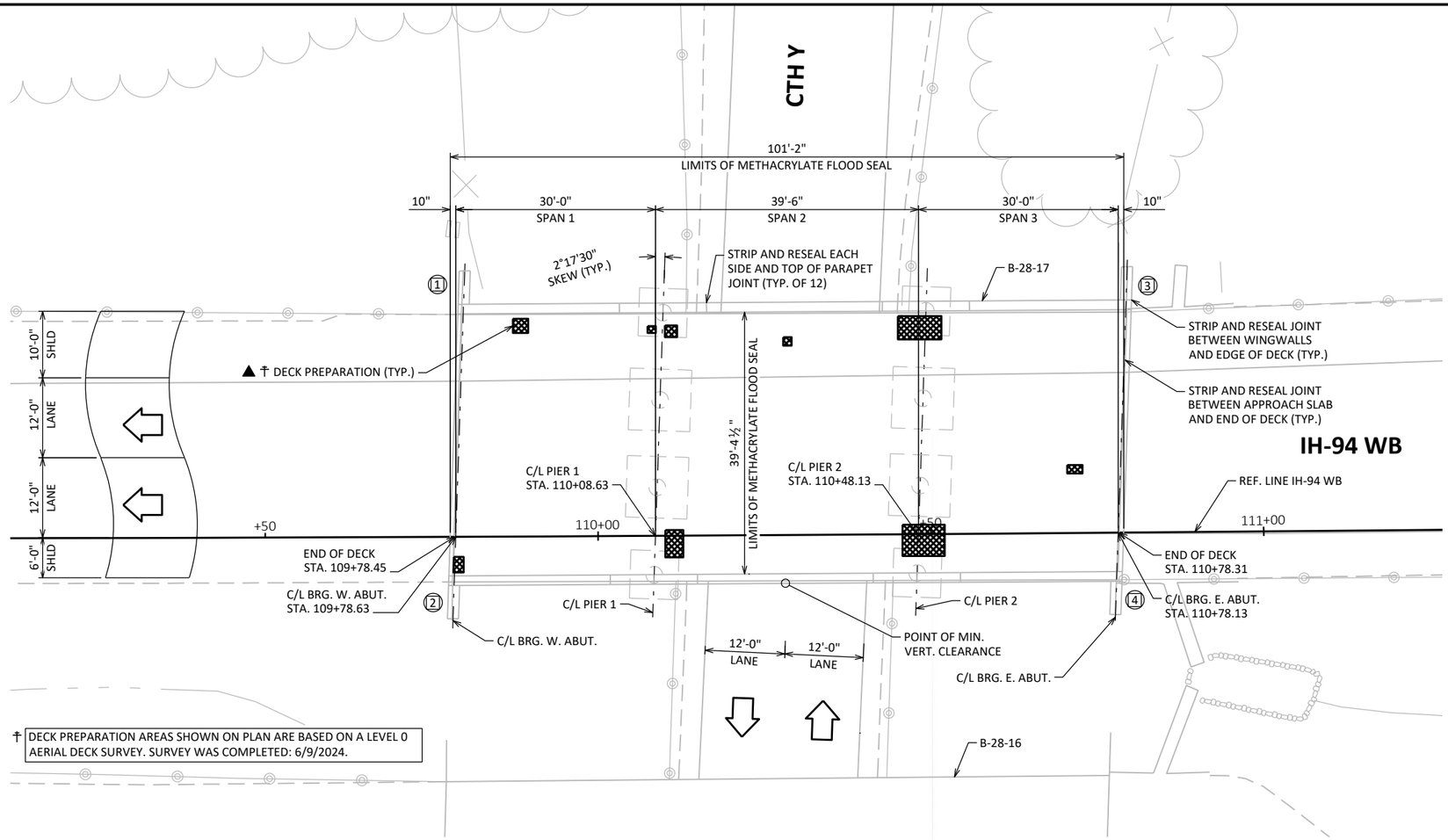
SHEET 2

189

SCALE =

8

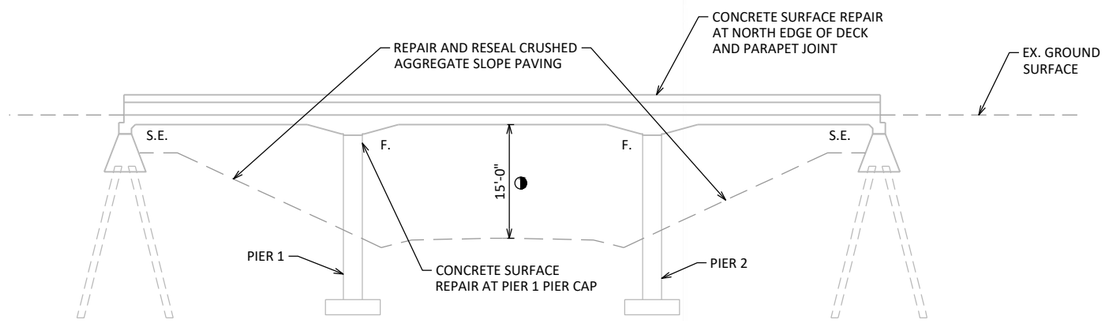
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† DECK PREPARATION AREAS SHOWN ON PLAN ARE BASED ON A LEVEL 0 AERIAL DECK SURVEY. SURVEY WAS COMPLETED: 6/9/2024.

PLAN

(THREE SPAN HUNCHED CONCRETE SLAB)



ELEVATION

(NORMAL TO CTH Y)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS20
INVENTORY RATING: HS26
OPERATING RATING: HS43
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 240 KIPS
(RATINGS TAKEN FROM HSI, 5/30/2025)

MATERIAL PROPERTIES:

CONCRETE MASONRY:
RAPID SET DECK REPAIR ——— f'_c = 4,000 PSI (3,000 PSI AT 3 HOURS)
CONCRETE SURFACE REPAIR ——— f'_c = 4,000 PSI

TRAFFIC DATA

IH-94 WB:
ADT = 25,500 (2047)
R.D.S. = 70 MPH

CTH Y:
ADT = 1,440 (2042)
R.D.S. = 30 MPH

LEGEND

◑ LOCATION PER EX. PLANS AND MIN. CLEARANCE FROM HSI 10/23/2006.

(#) INDICATES WING NUMBER.

▲ THE TYPE AND EXTENT OF DECK PREPARATION/REPAIR IS AS DETERMINED BY FIELD ENGINEER.

SCOPE OF WORK

- SEAL JOINTS BETWEEN THE CONCRETE APPROACH SLAB AND END OF BRIDGE DECK AT WEST AND EACH APPROACHES.
- STRIP AND RESEAL JOINTS BETWEEN THE WINGWALLS/PARAPETS AND BACK FACE OF ABUTMENTS AT ALL FOUR WINGS AND 12 PARAPET JOINTS ON THE SUPERSTRUCTURE.
- PATCH THE CONCRETE DECK BASED ON THE DEPARTMENT PROVIDED INFRARED THERMOGRAPHY DECK SCAN.
- CONCRETE SURFACE REPAIR AT THE PIER, SUPERSTRUCTURE, AND AT LOCATIONS DIRECTED BY ENGINEER.
- METHACRYLATE FLOOD SEAL OF THE CONCRETE BRIDGE DECK.
- REPAIR AND RESEAL THE CRUSHED AGGREGATE SLOPE PAVING.

LIST OF DRAWINGS:

1. GENERAL PLAN
2. GENERAL NOTES, CROSS SECTION, & QUANTITIES

STRUCTURE DESIGN CONTACTS:

BUREAU OF STRUCTURES CONTACT:
AARON BONK (608) 261-0261

DESIGN CONSULTANT CONTACT:
EVAN CONSTANT (608) 251-4843

NO.	DATE	REVISION	BY

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WISCONSIN
EVAN J. CONSTANT
E-48226
MADISON
WI
PROFESSIONAL ENGINEER
5-30-25

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED JLR 08/04/25
CHIEF STRUCTURES DESIGN ENGINEER DATE

STATE PROJECT NUMBER
1067-04-61

STRUCTURE B-28-17

IH-94 WB OVER CTH Y

COUNTY	VILLAGE
JEFFERSON	JOHNSON CREEK

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
EJC	BMO	EJC	BMO

GENERAL PLAN

SHEET 1 OF 2
190

SCALE =

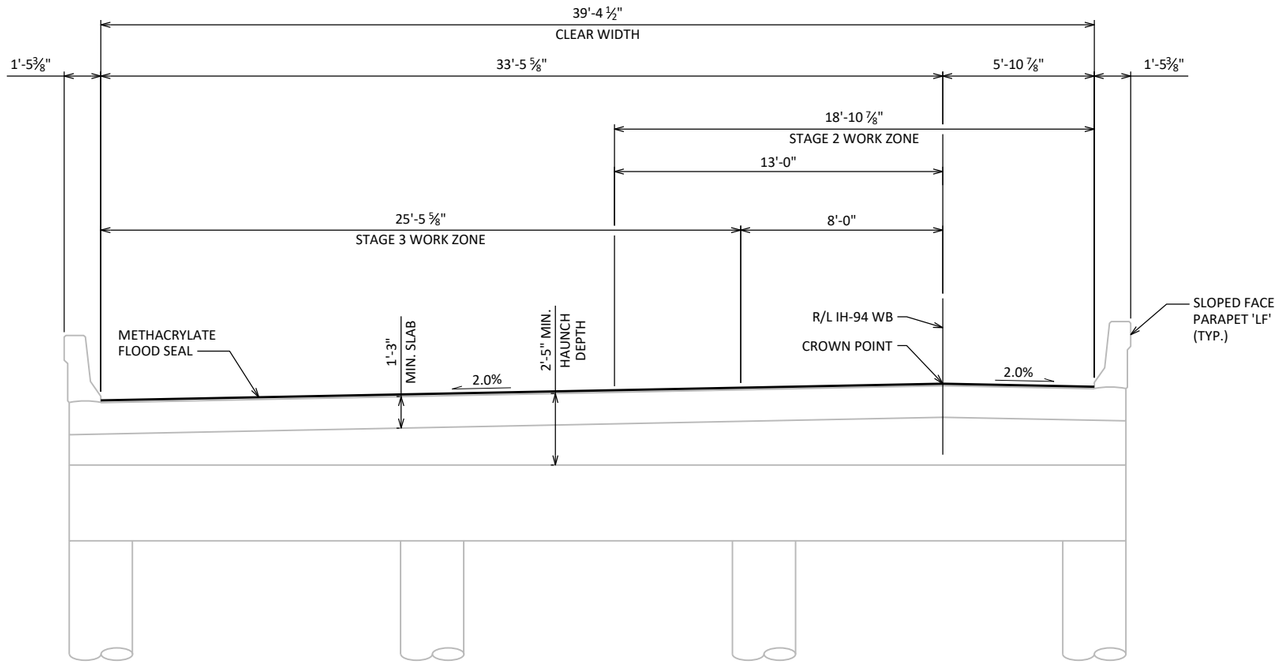
I.D. 1067-04-31 DATE:

8

8

STATE PROJECT NUMBER

1067-04-61



CROSS SECTION

(LOOKING EAST)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND SUBSEQUENT REHABILITATION PLANS.

ALL DIMENSION ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATION ARE IN FEET. DIMENSION HAVE BEEN CONVERTED FROM SUPERSTRUCTURE REPLACEMENT METRIC DRAWINGS.

ALL CONCRETE REMOVAL FOR CONCRETE SURFACE REPAIR SHALL BE DEFINED BY A 1/2-INCH DEEP SAW CUT. ALL CONCRETE REMOVAL FOR SAWING PAVEMENT DECK PREPARATION AREAS SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2, AND CONCRETE SURFACE REPAIR AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE FIELD ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

SEAL THE JOINT BETWEEN THE CONCRETE APPROACH SLAB AND END OF BRIDGE DECK WITH HOT POURED JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6. HOLD ¼-INCH BELOW PAVEMENT SURFACE. WORK TO BE INCLUDED WITH "METHACRYLATE FLOOD SEAL".

STRIP AND RESEAL JOINTS BETWEEN WINGWALLS AND EDGE OF DECK AND PARAPET JOINTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. WORK TO BE INCLUDED WITH "METHACRYLATE FLOOD SEAL".

METHACRYLATE FLOOD SEAL SHALL TAKE PLACE AFTER CONCRETE DECK PATCHING. CONCRETE DECK PATCHES SHALL BE CURED A MINIMUM 21 DAYS PRIOR TO FLOOD SEAL. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

SEE ROADWAY PLANS FOR TRAFFIC CONTROL PLANS AND STAGED CONSTRUCTION DETAILS. WORK ON THE BRIDGE DECK TO BE COMPLETED DURING STAGE 2 AND STAGE 3.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	W. ABUT	PIER 1	PIER 2	E. ABUT.	SUPERSTRUCTURE	TOTAL	UNIT
509.0301	PREPARATION DECKS TYPE 1	---	---	---	---	14	14	SY
509.0302	PREPARATION DECKS TYPE 2	---	---	---	---	6	6	SY
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	---	---	---	---	140	140	LF
509.1500	CONCRETE SURFACE REPAIR	---	6	---	---	8	14	SF
604.9010.S	SLOPE PAVING REPAIR CRUSHED AGGREGATE	5	---	---	5	---	10	CY
604.9015.S	RESEAL CRUSHED AGGREGATE SLOPE PAVING	165	---	---	165	---	330	SY
SPV.0035.01	RAPID SET DECK REPAIR	---	---	---	---	2	2	CY
SPV.0180.02	METHACRYLATE FLOOD SEAL	---	---	---	---	437	437	SY

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

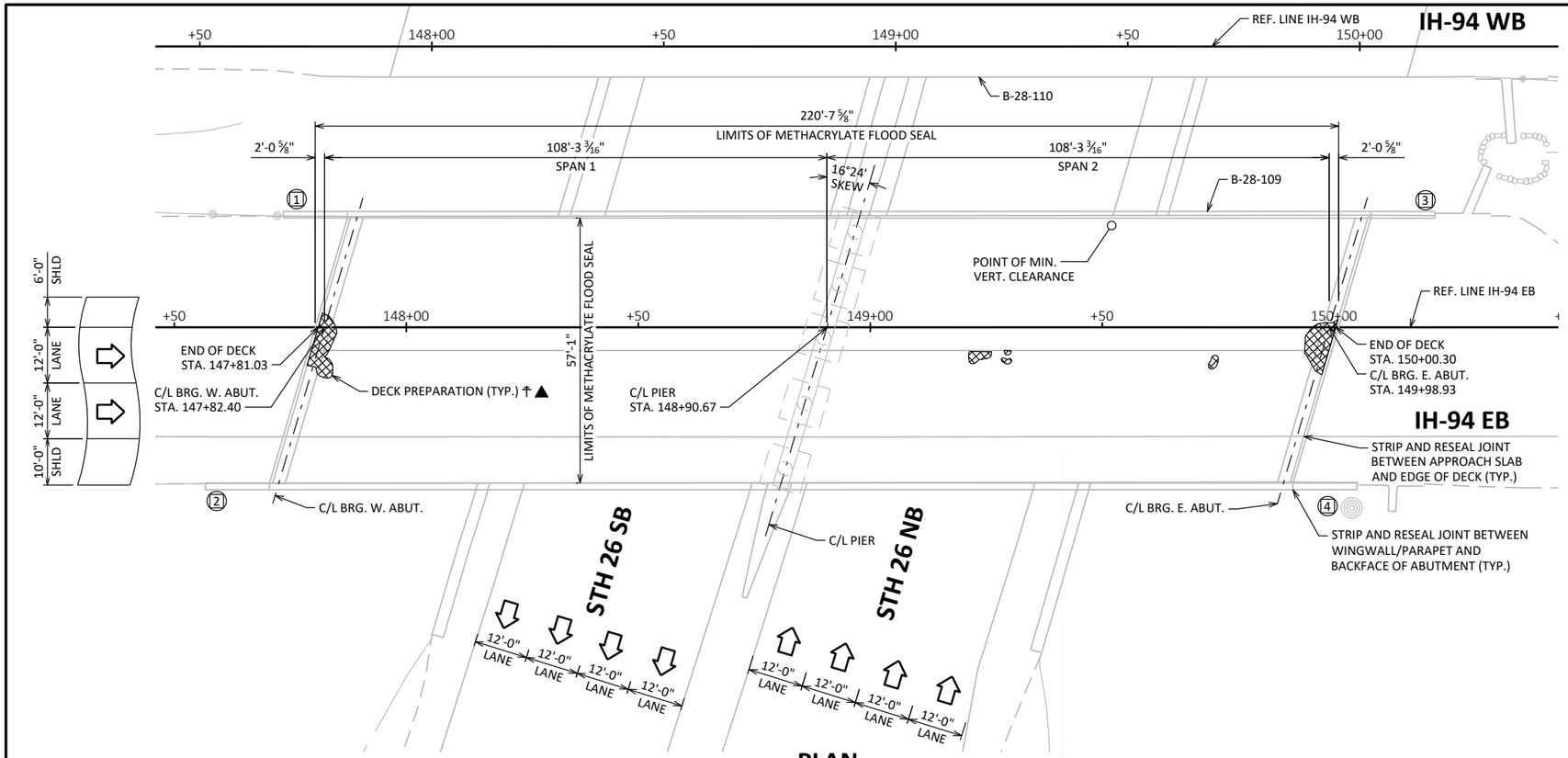
STRUCTURE B-28-17

DRAWN BY EJC | PLANS CK'D BMO

GENERAL NOTES, CROSS SECTION, & QUANTITIES

SHEET 2
191

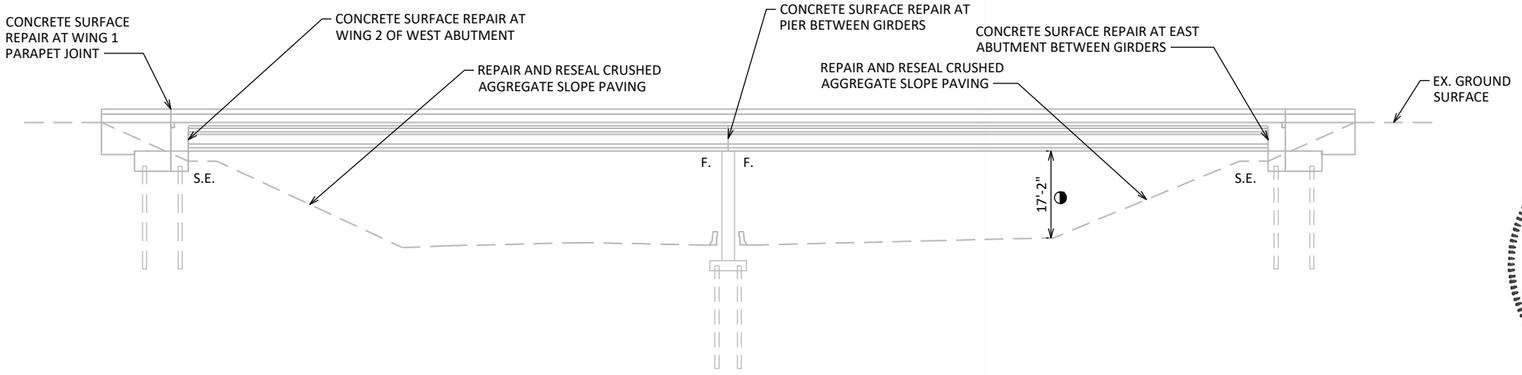
SCALE =



PLAN

(2 SPAN - 54" PRESTRESSED CONCRETE GIRDERS)

† DECK PREPARATION AREAS SHOWN ON PLAN ARE BASED ON A LEVEL 2 INFRARED THERMOGRAPHIC DECK SURVEY. SURVEY WAS COMPLETED: 5/16/2022.



ELEVATION

(NORMAL TO STH 26)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS20
INVENTORY RATING: HS23
OPERATING RATING: HS54
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS
(RATINGS TAKEN FROM HSI, 5/30/2025)

MATERIAL PROPERTIES:

CONCRETE MASONRY:
RAPID SET DECK REPAIR ——— f'_c = 4,000 PSI (3,000 PSI AT 3 HOURS)
CONCRETE SURFACE REPAIR ——— f'_c = 4,000 PSI

TRAFFIC DATA

IH-94 EB:
ADT = 25,500 (2047)
R.D.S. = 70 MPH

STH 26:
ADT = 20,100 (2018)
R.D.S. = 50 MPH

LEGEND

◑ LOCATION PER EX. PLANS AND MIN. CLEARANCE FROM HSI 10/23/2006.

(#) INDICATES WING NUMBER.

▲ THE TYPE AND EXTEND OF DECK PREPARATION/REPAIR IS AS DETERMINED BY FIELD ENGINEER.

SCOPE OF WORK

- SEAL JOINTS BETWEEN THE CONCRETE APPROACH SLAB AND END OF BRIDGE DECK AT WEST AND EACH APPROACHES.
- STRIP AND RESEAL JOINTS BETWEEN THE WINGWALLS/PARAPETS AND BACK FACE OF ABUTMENTS AT ALL FOUR WINGS.
- PATCH THE CONCRETE DECK BASED ON THE DEPARTMENT PROVIDED INFRARED THERMOGRAPHY DECK SCAN.
- CONCRETE SURFACE REPAIR AT THE ABUTMENTS, PIER, SUPERSTRUCTURE, AND AT LOCATIONS DIRECTED BY ENGINEER.
- METHACRYLATE FLOOD SEAL OF THE CONCRETE BRIDGE DECK.
- REPAIR AND RESEAL THE CRUSHED AGGREGATE SLOPE PAVING.

LIST OF DRAWINGS:

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2. GENERAL NOTES, CROSS SECTION, & QUANTITIES

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WISCONSIN
EVAN J. CONSTANT
E-48226
MADISON
WI
PROFESSIONAL ENGINEER
5-30-25

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED JLR 08/04/25
CHIEF STRUCTURES DESIGN ENGINEER DATE

STATE PROJECT NUMBER
1067-04-61

STRUCTURE B-28-109

IH-94 EB OVER STH 26

COUNTY	VILLAGE
JEFFERSON	JOHNSON CREEK

DESIGN SPEC.
REHABILITATION N/A

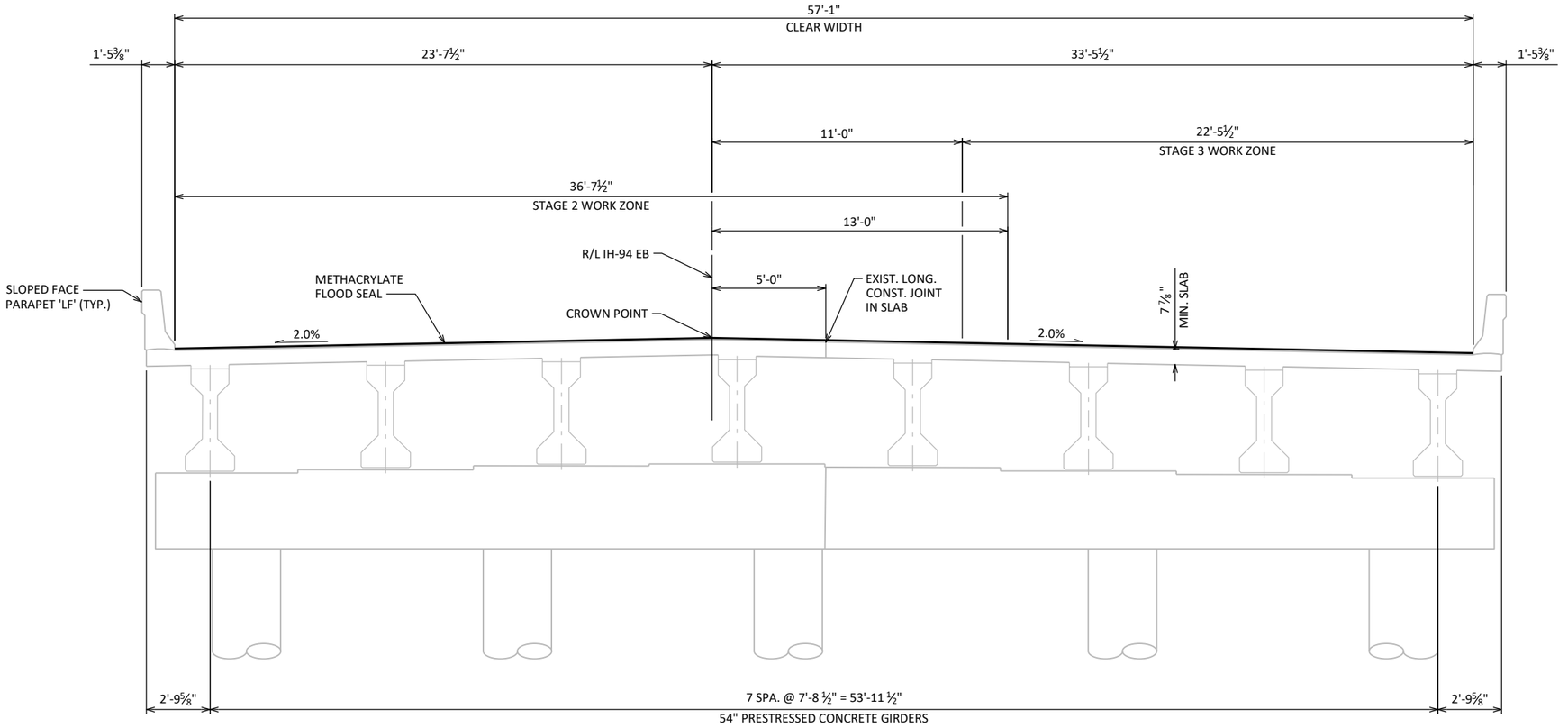
DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
EJC	BMO	EJC	BMO

GENERAL PLAN

SHEET 1 OF 2
192

SCALE =

I.D. 1067-04-31 DATE:



CROSS SECTION

(LOOKING EAST)

STATE PROJECT NUMBER

1067-04-61

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSION ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATION ARE IN FEET. DIMENSION HAVE BEEN CONVERTED FROM ORIGINAL STRUCTURE METRIC DRAWINGS.

ALL CONCRETE REMOVAL FOR CONCRETE SURFACE REPAIR SHALL BE DEFINED BY A 1/2-INCH DEEP SAW CUT. ALL CONCRETE REMOVAL FOR SAWING PAVEMENT DECK PREPARATION AREAS SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE FIELD ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

SEAL THE JOINT BETWEEN THE CONCRETE APPROACH SLAB AND END OF BRIDGE DECK WITH HOT POURED JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6. HOLD ¼-INCH BELOW PAVEMENT SURFACE. WORK TO BE INCLUDED WITH "METHACRYLATE FLOOD SEAL".

STRIP AND RESEAL JOINTS BETWEEN WINGWALLS/PARAPETS AND BACK FACE OF ABUTMENTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. WORK TO BE INCLUDED WITH "METHACRYLATE FLOOD SEAL".

METHACRYLATE FLOOD SEAL SHALL TAKE PLACE AFTER CONCRETE DECK PATCHING. CONCRETE DECK PATCHES SHALL BE CURED A MINIMUM 21 DAYS PRIOR TO FLOOD SEAL. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

SEE ROADWAY PLANS FOR TRAFFIC CONTROL PLANS AND STAGED CONSTRUCTION DETAILS. WORK ON THE BRIDGE DECK TO BE COMPLETED DURING STAGE 2 AND STAGE 3.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	W. ABUT	PIER	E. ABUT.	SUPERSTRUCTURE	TOTAL	UNIT
509.0301	PREPARATION DECKS TYPE 1	---	---	---	23	23	SY
509.0302	PREPARATION DECKS TYPE 2	---	---	---	9	9	SY
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	---	---	---	230	230	LF
509.1500	CONCRETE SURFACE REPAIR	2	9	2	2	15	SF
604.9010.S	SLOPE PAVING REPAIR CRUSHED AGGREGATE	5	---	20	---	25	CY
604.9015.S	RESEAL CRUSHED AGGREGATE SLOPE PAVING	320	---	285	---	605	SY
SPV.0035.01	RAPID SET DECK REPAIR	---	---	---	3	3	CY
SPV.0180.02	METHACRYLATE FLOOD SEAL	---	---	---	1,391	1,391	SY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-28-109

DRAWN BY EJC | PLANS CK'D BMO

GENERAL NOTES, CROSS SECTION, & QUANTITIES

SHEET 2
193

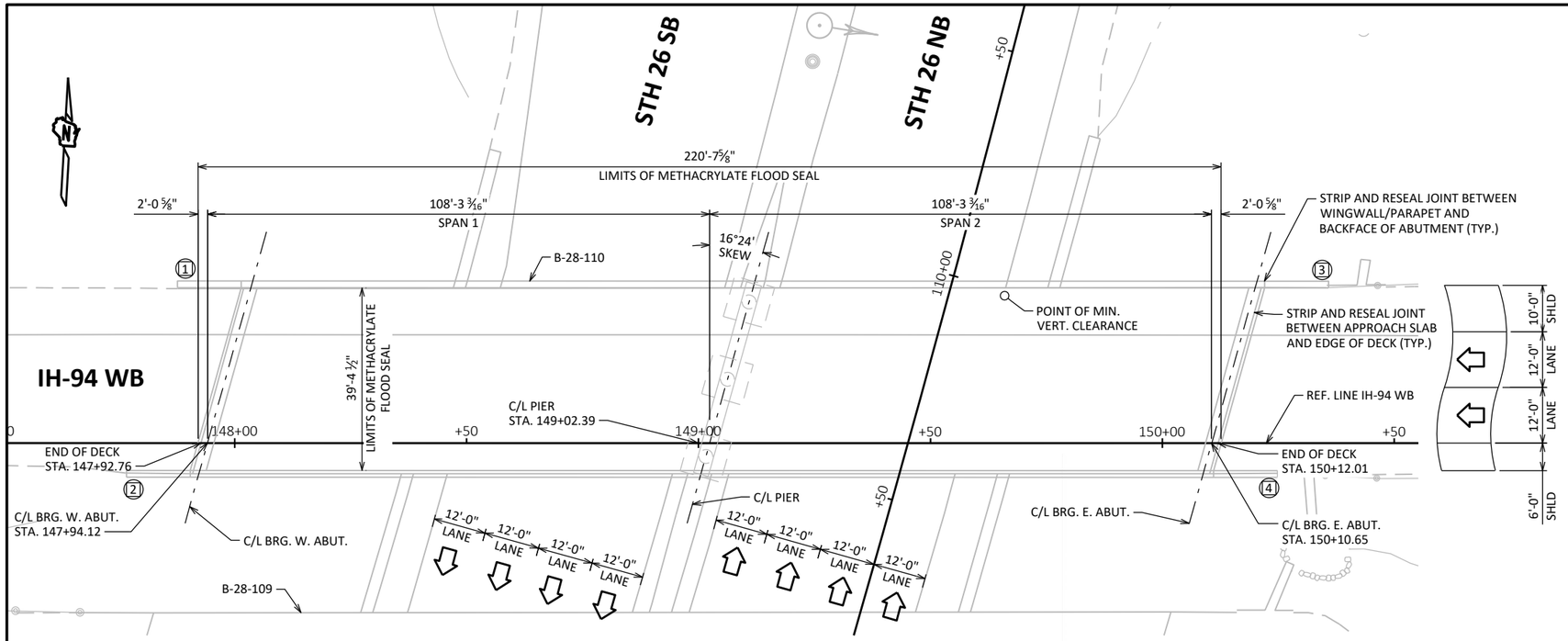
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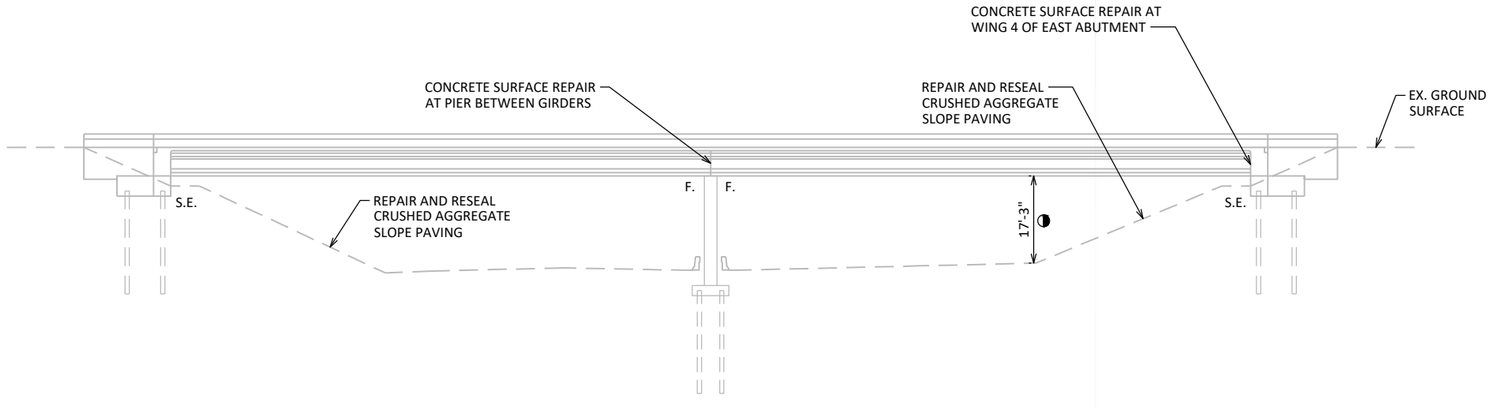
STATE PROJECT NUMBER

1067-04-61



PLAN

(2 SPAN - 54" PRESTRESSED CONCRETE GIRDERS)



ELEVATION

(NORMAL TO STH 26)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS20
INVENTORY RATING: HS23
OPERATING RATING: HS48
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS
(RATINGS TAKEN FROM HSI, 5/30/2025)

MATERIAL PROPERTIES:

CONCRETE MASONRY:
CONCRETE SURFACE REPAIR ——— f'_c = 4,000 PSI

TRAFFIC DATA

IH-94 EB:
ADT = 25,500 (2047)
R.D.S. = 70 MPH

STH 26:
ADT = 20,100 (2018)
R.D.S. = 50 MPH

LEGEND

◑ LOCATION PER EX. PLANS AND MIN. CLEARANCE FROM HSI 10/23/2006.

(#) INDICATES WING NUMBER.

SCOPE OF WORK

- SEAL JOINTS BETWEEN THE CONCRETE APPROACH SLAB AND END OF BRIDGE DECK AT WEST AND EACH APPROACHES.
- STRIP AND RESEAL JOINTS BETWEEN THE WINGWALLS/PARAPETS AND BACK FACE OF ABUTMENTS AT ALL FOUR WINGS.
- CONCRETE SURFACE REPAIR AT THE ABUTMENTS, PIER, AND AT LOCATIONS DIRECTED BY ENGINEER.
- METHACRYLATE FLOOD SEAL OF THE CONCRETE BRIDGE DECK.
- REPAIR AND RESEAL THE CRUSHED AGGREGATE SLOPE PAVING.

LIST OF DRAWINGS:

1. GENERAL PLAN
2. GENERAL NOTES, CROSS SECTION, & QUANTITIES

STRUCTURE DESIGN CONTACTS:
BUREAU OF STRUCTURES CONTACT:
AARON BONK (608) 261-0261

DESIGN CONSULTANT CONTACT:
EVAN CONSTANT (608) 251-4843

NO.	DATE	REVISION	BY

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MADISON, WISCONSIN 53715
(608)-251-4843
(608) 251-8655 FAX
WWW.STRAND.COM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED JLR 08/04/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

WISCONSIN
EVAN J. CONSTANT
E-48226
MADISON
WI
PROFESSIONAL ENGINEER
5-30-25

STRUCTURE B-28-110

IH-94 WB OVER STH 26

COUNTY	VILLAGE
JEFFERSON	JOHNSON CREEK

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
EJC	BMO	EJC	BMO

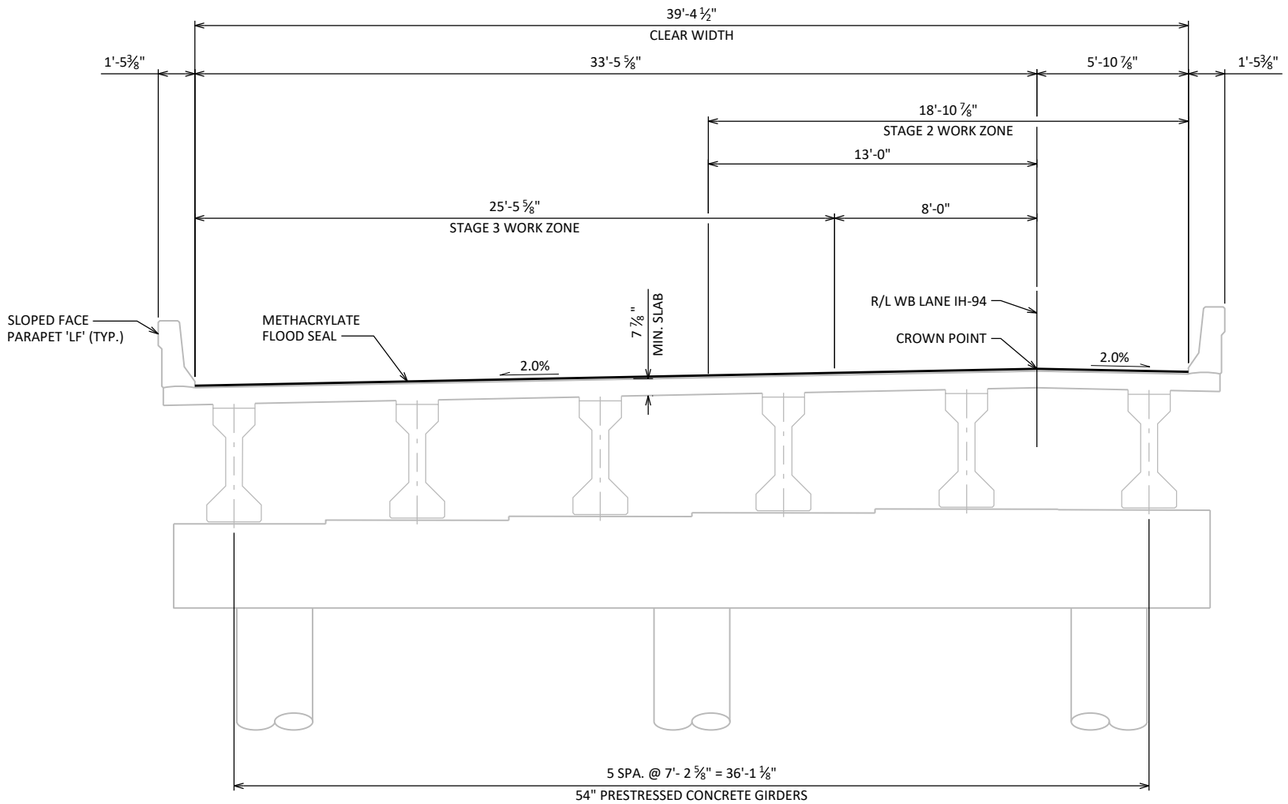
GENERAL PLAN

SHEET 1 OF 2
194

I.D. 1067-04-31
DATE:
SCALE =

8

8



CROSS SECTION
(LOOKING EAST)

STATE PROJECT NUMBER

1067-04-61

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSION ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATION ARE IN FEET.DIMENSION HAVE BEEN CONVERTED FROM ORIGINAL STRUCTURE METRIC DRAWINGS.

ALL CONCRETE REMOVAL FOR CONCRETE SURFACE REPAIR SHALL BE DEFINED BY A 1/2-INCH DEEP SAW CUT.

SEAL THE JOINT BETWEEN THE CONCRETE APPROACH SLAB AND END OF BRIDGE DECK WITH HOT POURED JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6. HOLD ¼-INCH BELOW PAVEMENT SURFACE. WORK TO BE INCLUDED WITH "METHACRYLATE FLOOD SEAL".

STRIP AND RESEAL JOINTS BETWEEN WINGWALLS/PARAPETS AND BACK FACE OF ABUTMENTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. WORK TO BE INCLUDED WITH "METHACRYLATE FLOOD SEAL".

SEE ROADWAY PLANS FOR TRAFFIC CONTROL PLANS AND STAGED CONSTRUCTION DETAILS. WORK ON THE BRIDGE DECK TO BE COMPLETED DURING STAGE 2 AND STAGE 3.

8

8

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	W. ABUT	PIER	E. ABUT.	SUPERSTRUCTURE	TOTAL	UNIT
509.1500	CONCRETE SURFACE REPAIR	---	6	2	---	8	SF
604.9010.S	SLOPE PAVING REPAIR CRUSHED AGGREGATE	5	---	15	---	20	CY
604.9015.S	RESEAL CRUSHED AGGREGATE SLOPE PAVING	220	---	210	---	430	SY
SPV.0180.02	METHACRYLATE FLOOD SEAL	---	---	---	960	960	SY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

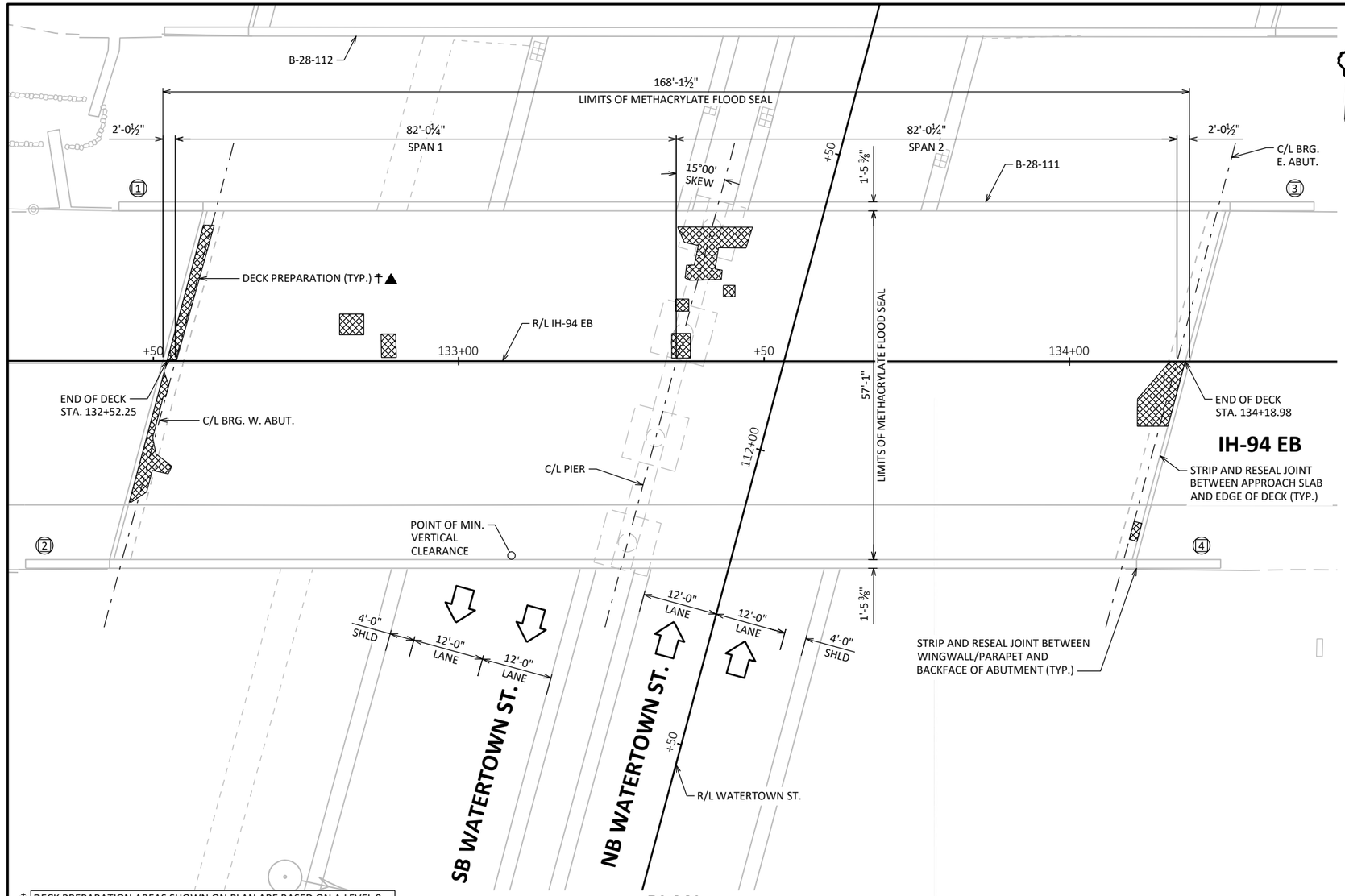
STRUCTURE B-28-110

DRAWN BY EJC | PLANS CK'D BMO

GENERAL NOTES, CROSS SECTION, & QUANTITIES

SHEET 2
195

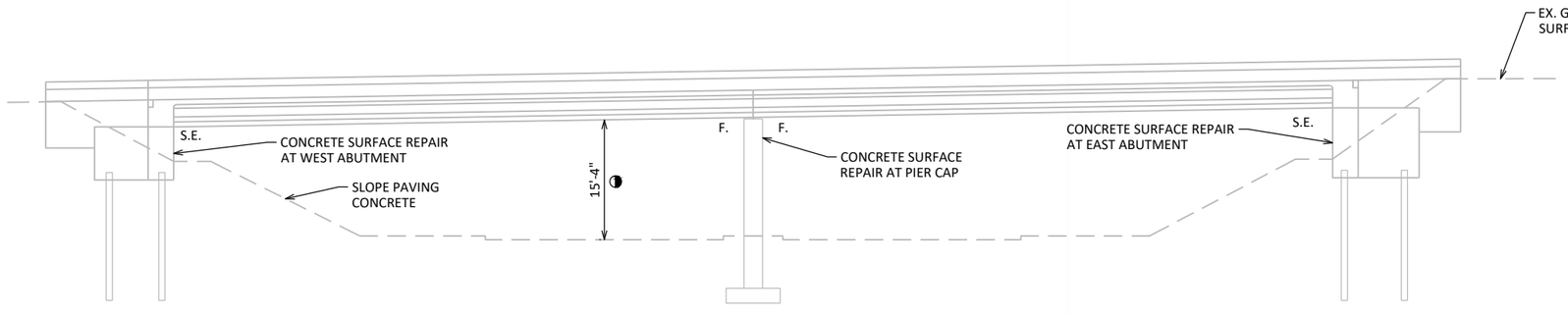
SCALE =



† DECK PREPARATION AREAS SHOWN ON PLAN ARE BASED ON A LEVEL 0 AERIAL DECK SURVEY. SURVEY WAS COMPLETED: 6/9/2024.

PLAN

(2 SPAN 36" PRESTRESSED CONCRETE GIRDER)



ELEVATION

(NORMAL TO WATERTOWN ST.)

STATE PROJECT NUMBER

1067-04-61

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS20
INVENTORY RATING: HS22
OPERATING RATING: HS52
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS
(RATINGS TAKEN FROM HSI, 5/30/2025)

MATERIAL PROPERTIES:

CONCRETE MASONRY:
RAPID SET DECK REPAIR ——— f'_c = 4,000 PSI (3,000 PSI AT 3 HOURS)
CONCRETE SURFACE REPAIR ——— f'_c = 4,000 PSI

TRAFFIC DATA

IH-94 EB:
ADT = 25,500 (2047)
R.D.S. = 70 MPH

WATERTOWN ST:
ADT = 2,000 (2022)
R.D.S. = 30 MPH

LEGEND

◑ LOCATION PER EX. PLANS AND MIN. CLEARANCE FROM HSI 10/23/2006.

(#) INDICATES WING NUMBER.

▲ THE TYPE AND EXTENT OF DECK PREPARATION/REPAIR IS AS DETERMINED BY FIELD ENGINEER.

SCOPE OF WORK

- SEAL JOINTS BETWEEN THE CONCRETE APPROACH SLAB AND END OF BRIDGE DECK AT WEST AND EACH APPROACHES.
- STRIP AND RESEAL JOINTS BETWEEN THE WINGWALLS/PARAPETS AND BACK FACE OF ABUTMENTS AT ALL FOUR WINGS.
- PATCH THE CONCRETE DECK BASED ON THE DEPARTMENT PROVIDED INFRARED THERMOGRAPHY DECK SCAN.
- CONCRETE SURFACE REPAIR AT THE ABUTMENTS, PIERS, AND AT LOCATIONS DIRECTED BY ENGINEER.
- METHACRYLATE FLOOD SEAL OF THE CONCRETE BRIDGE DECK.

LIST OF DRAWINGS:

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(608) 251-8655 FAX
WWW.STRAND.COM

WISCONSIN
EVAN J. CONSTANT
E-48226
MADISON
WI
PROFESSIONAL ENGINEER
5-30-25

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED JJR 08/04/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-28-111

IH-94 EB OVER WATERTOWN ST.

COUNTY	VILLAGE
JEFFERSON	JOHNSON CREEK

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
ABH	EJC	ABH	BMO

GENERAL PLAN

SHEET 1 OF 2
196

SCALE =

I.D. 1067-04-31

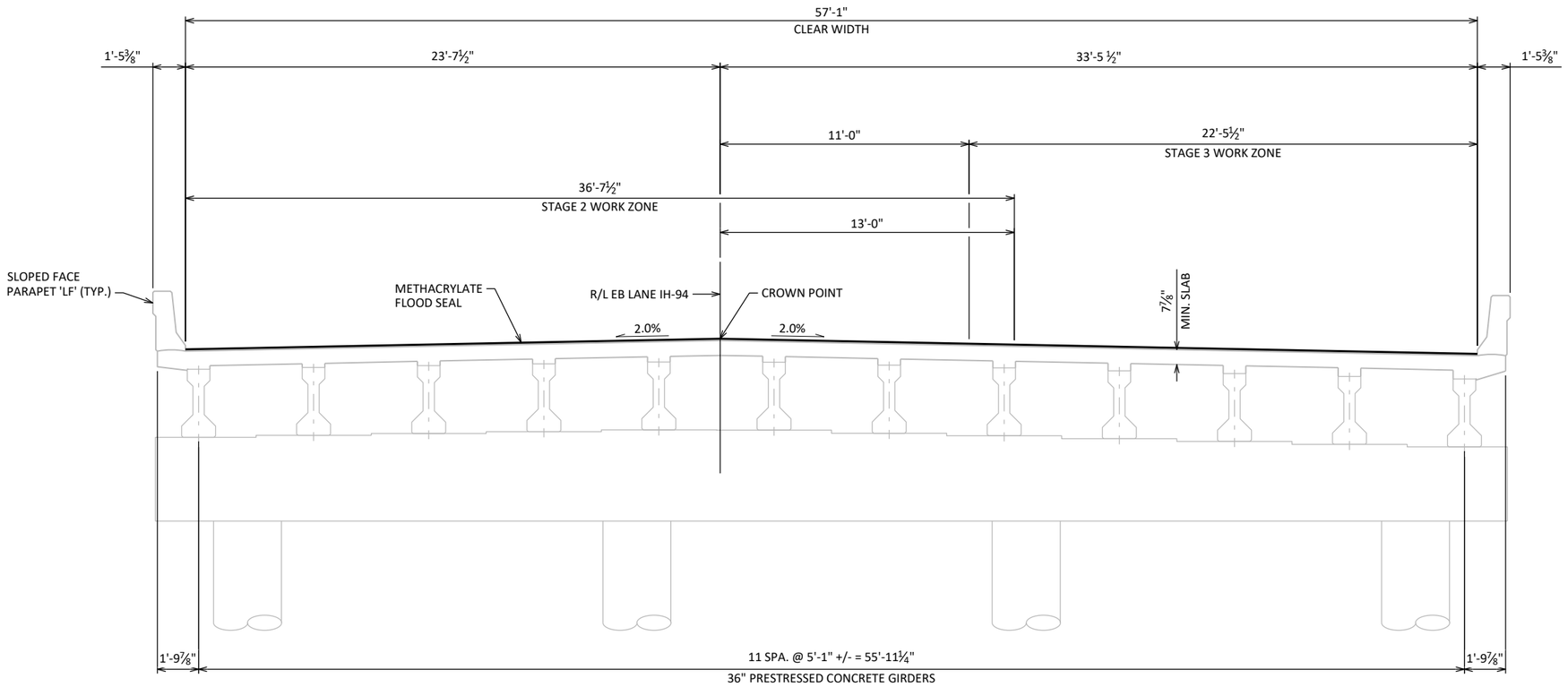
DATE: 03-2025

8

8

STATE PROJECT NUMBER

1067-04-61



CROSS SECTION

(LOOKING EAST)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSION ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATION ARE IN FEET. DIMENSION HAVE BEEN CONVERTED FROM ORIGINAL STRUCTURE METRIC DRAWINGS.

ALL CONCRETE REMOVAL FOR SAWING PAVEMENT DECK PREPARATION AREAS SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT. ALL CONCRETE REMOVAL FOR CONCRETE SURFACE REPAIR SHALL BE DEFINED BY A 1/2-INCH DEEP SAW CUT.

PREPARATION DECKS TYPE 1, PREPARATION DECKS TYPE 2, AND CONCRETE SURFACE REPAIR AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE FIELD ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

SEAL THE JOINT BETWEEN THE CONCRETE APPROACH SLAB AND END OF BRIDGE DECK WITH HOT POURED JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6. HOLD ¼-INCH BELOW PAVEMENT SURFACE. WORK TO BE INCLUDED WITH "METHACRYLATE FLOOD SEAL".

STRIP AND RESEAL JOINTS BETWEEN WINGWALLS/PARAPETS AND BACK FACE OF ABUTMENTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. WORK TO BE INCLUDED WITH "METHACRYLATE FLOOD SEAL".

METHACRYLATE FLOOD SEAL SHALL TAKE PLACE AFTER CONCRETE DECK PATCHING. CONCRETE DECK PATCHES SHALL BE CURED A MINIMUM 21 DAYS PRIOR TO FLOOD SEAL. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

SEE ROADWAY PLANS FOR TRAFFIC CONTROL PLANS AND STAGED CONSTRUCTION DETAILS. WORK ON THE BRIDGE DECK TO BE COMPLETED DURING STAGE 2 AND STAGE 3.

8

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	W. ABUT	PIER	E. ABUT.	SUPERSTRUCTURE	TOTAL	UNIT
509.0301	PREPARATION DECKS TYPE 1	---	---	---	40	40	SY
509.0302	PREPARATION DECKS TYPE 2	---	---	---	16	16	SY
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	---	---	---	400	400	LF
509.1500	CONCRETE SURFACE REPAIR	1	3	1	---	5	SF
SPV.0035.01	RAPID SET DECK REPAIR	---	---	---	5	5	CY
SPV.0180.02	METHACRYLATE FLOOD SEAL	---	---	---	1,058	1,058	SY

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-28-111

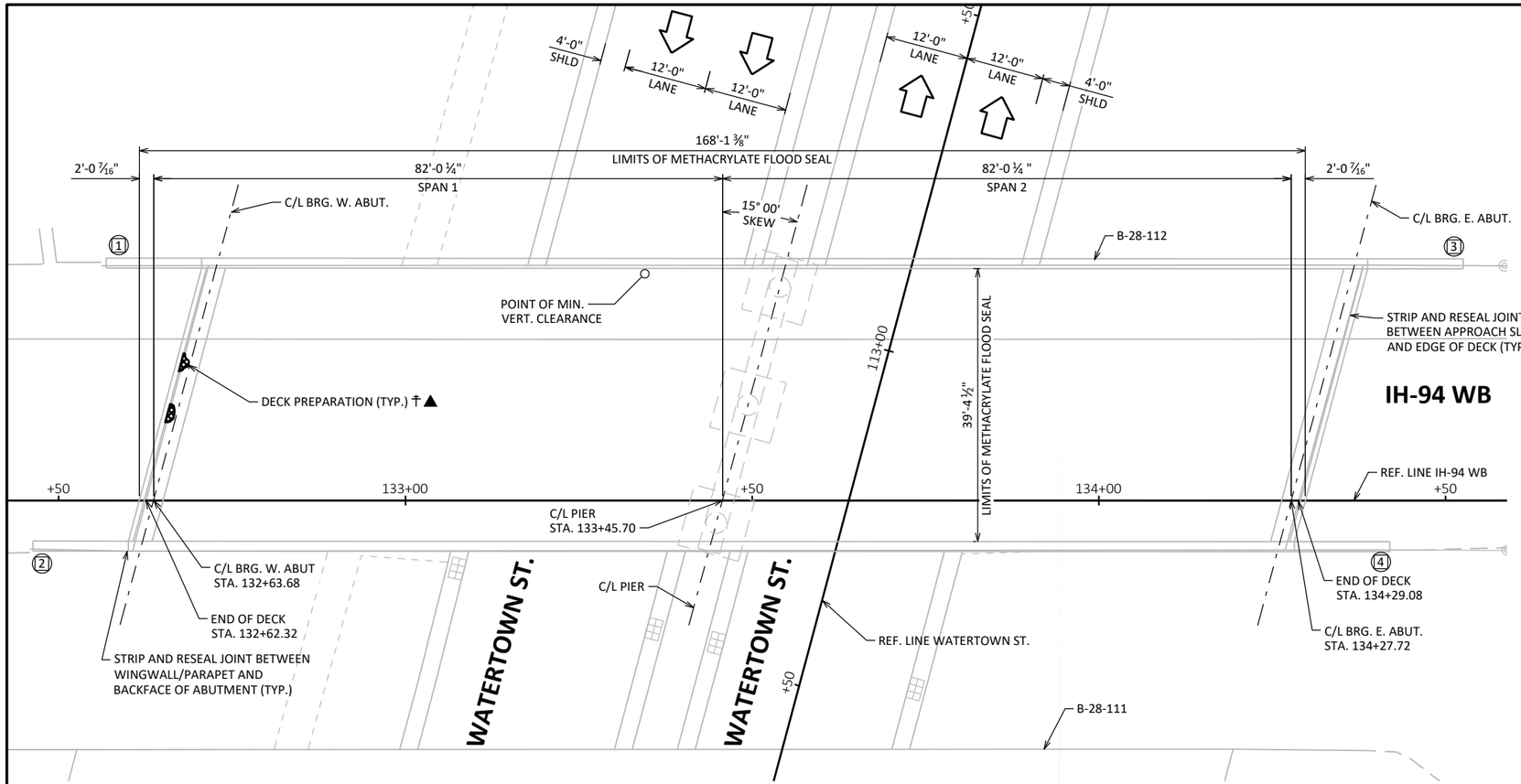
DRAWN BY ABH | PLANS CK'D BMO

GENERAL NOTES, CROSS SECTION, & QUANTITIES

SHEET 2 OF 2

197

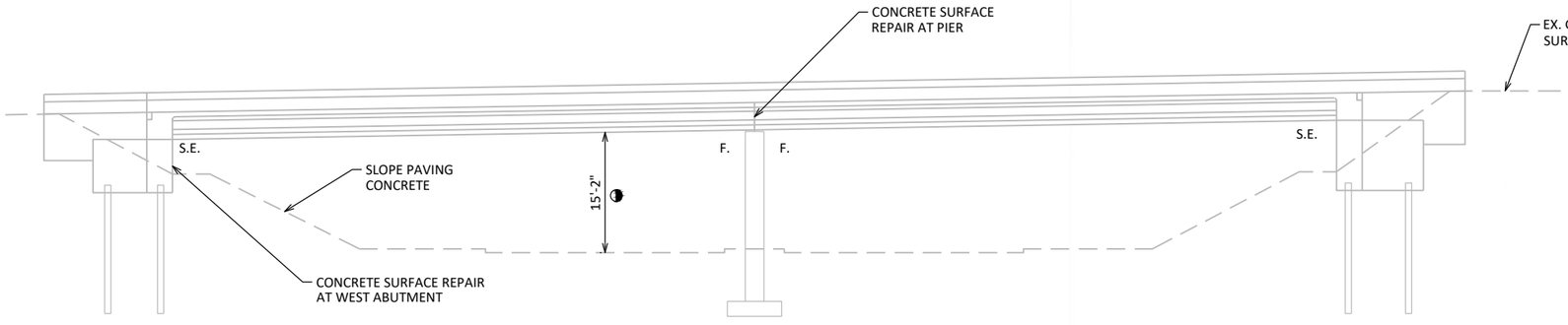
SCALE =



PLAN

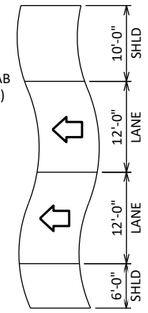
(2 SPAN 36" PRESTRESSED CONCRETE GIRDER)

† DECK PREPARATION AREAS SHOWN ON PLAN ARE BASED ON A LEVEL 2 INFRARED THERMOGRAPHIC DECK SURVEY. SURVEY WAS COMPLETED: 5/16/2022.



ELEVATION

(NORMAL TO WATERTOWN ST.)



STATE PROJECT NUMBER

1067-04-61

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS20
INVENTORY RATING: HS22
OPERATING RATING: HS52
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS
(RATINGS TAKEN FROM HSI, 5/30/2025)

MATERIAL PROPERTIES:

CONCRETE MASONRY:
RAPID SET DECK REPAIR —— f'_c = 4,000 PSI (3,000 PSI AT 3 HOURS)
CONCRETE SURFACE REPAIR —— f'_c = 4,000 PSI

TRAFFIC DATA

IH-94 WB:
ADT = 25,500 (2047)
R.D.S. = 70 MPH

WATERTOWN ST:
ADT = 2,000 (2022)
R.D.S. = 30 MPH

LEGEND

◑ LOCATION PER EX. PLANS AND MIN. CLEARANCE FROM HSI 10/23/2006.

(#) INDICATES WING NUMBER.

▲ THE TYPE AND EXTENT OF DECK PREPARATION/REPAIR IS AS DETERMINED BY FIELD ENGINEER.

SCOPE OF WORK

- SEAL JOINTS BETWEEN THE CONCRETE APPROACH SLAB AND END OF BRIDGE DECK AT WEST AND EACH APPROACHES.
- STRIP AND RESEAL JOINTS BETWEEN THE WINGWALLS/PARAPETS AND BACK FACE OF ABUTMENTS AT ALL FOUR WINGS.
- PATCH THE CONCRETE DECK BASED ON THE DEPARTMENT PROVIDED INFRARED THERMOGRAPHY DECK SCAN.
- CONCRETE SURFACE REPAIR AT THE WEST ABUTMENT, PIER, AND AT LOCATIONS DIRECTED BY ENGINEER.
- METHACRYLATE FLOOD SEAL OF THE CONCRETE BRIDGE DECK.

LIST OF DRAWINGS:

1. GENERAL PLAN
2. GENERAL NOTES, CROSS SECTION, & QUANTITIES

STRUCTURE DESIGN CONTACTS:
BUREAU OF STRUCTURES CONTACT:
AARON BONK (608) 261-0261

DESIGN CONSULTANT CONTACT:
EVAN CONSTANT (608) 251-4843

NO.	DATE	REVISION	BY

STRAND ASSOCIATES®
910 WEST WINGRA DRIVE
MADISON, WISCONSIN 53715
(608)-251-4843
(608) 251-8655 FAX
WWW.STRAND.COM

WISCONSIN
EVAN J. CONSTANT
E-48226
MADISON
WI
PROFESSIONAL ENGINEER
5-30-25

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED JLR 08/04/25
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-28-112

IH-94 WB OVER WATERTOWN ST.

COUNTY	VILLAGE
JEFFERSON	JOHNSON CREEK

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
EJC	BMO	EJC	BMO

GENERAL PLAN

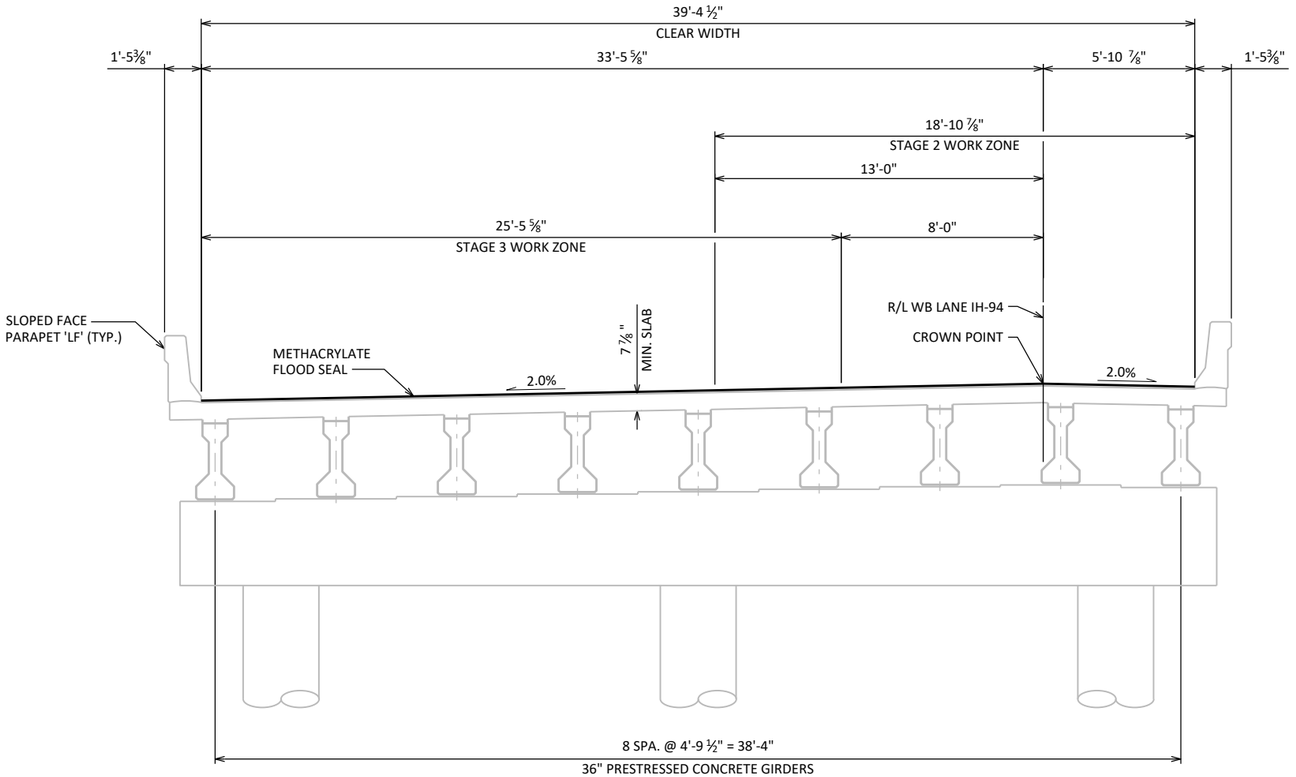
SHEET 1 OF 2
198

SCALE =

I.D. 1067-04-61 DATE:

STATE PROJECT NUMBER

1067-04-61



CROSS SECTION

(LOOKING EAST)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

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8

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	W. ABUT	PIER	E. ABUT.	SUPERSTRUCTURE	TOTAL	UNIT
509.0301	PREPARATION DECKS TYPE 1	---	---	---	5	5	SY
509.0302	PREPARATION DECKS TYPE 2	---	---	---	2	2	SY
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	---	---	---	50	50	LF
509.1500	CONCRETE SURFACE REPAIR	1	1	---	---	2	SF
SPV.0035.01	RAPID SET DECK REPAIR	---	---	---	1	1	CY
SPV.0180.02	METHACRYLATE FLOOD SEAL	---	---	---	730	730	SY

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

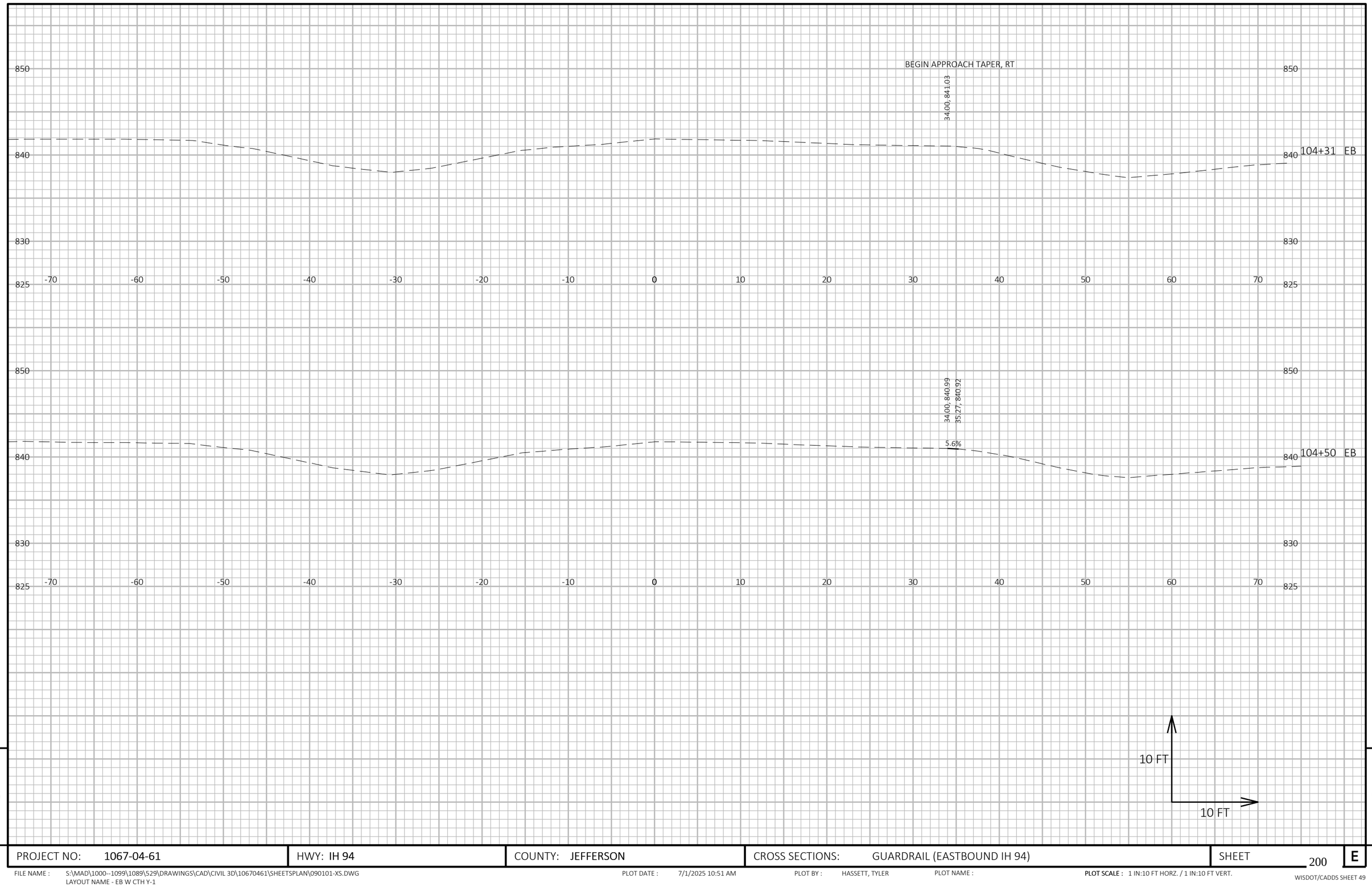
STRUCTURE B-28-112

DRAWN BY EJC | PLANS CK'D BMO

GENERAL NOTES, CROSS SECTION, & QUANTITIES

SHEET 2

SCALE =



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 200	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W CTH Y-1

PLOT DATE : 7/1/2025 10:51 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

850
840
830
825
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

34.00, 840.58
38.61, 840.27
6.6%
105+00 EB

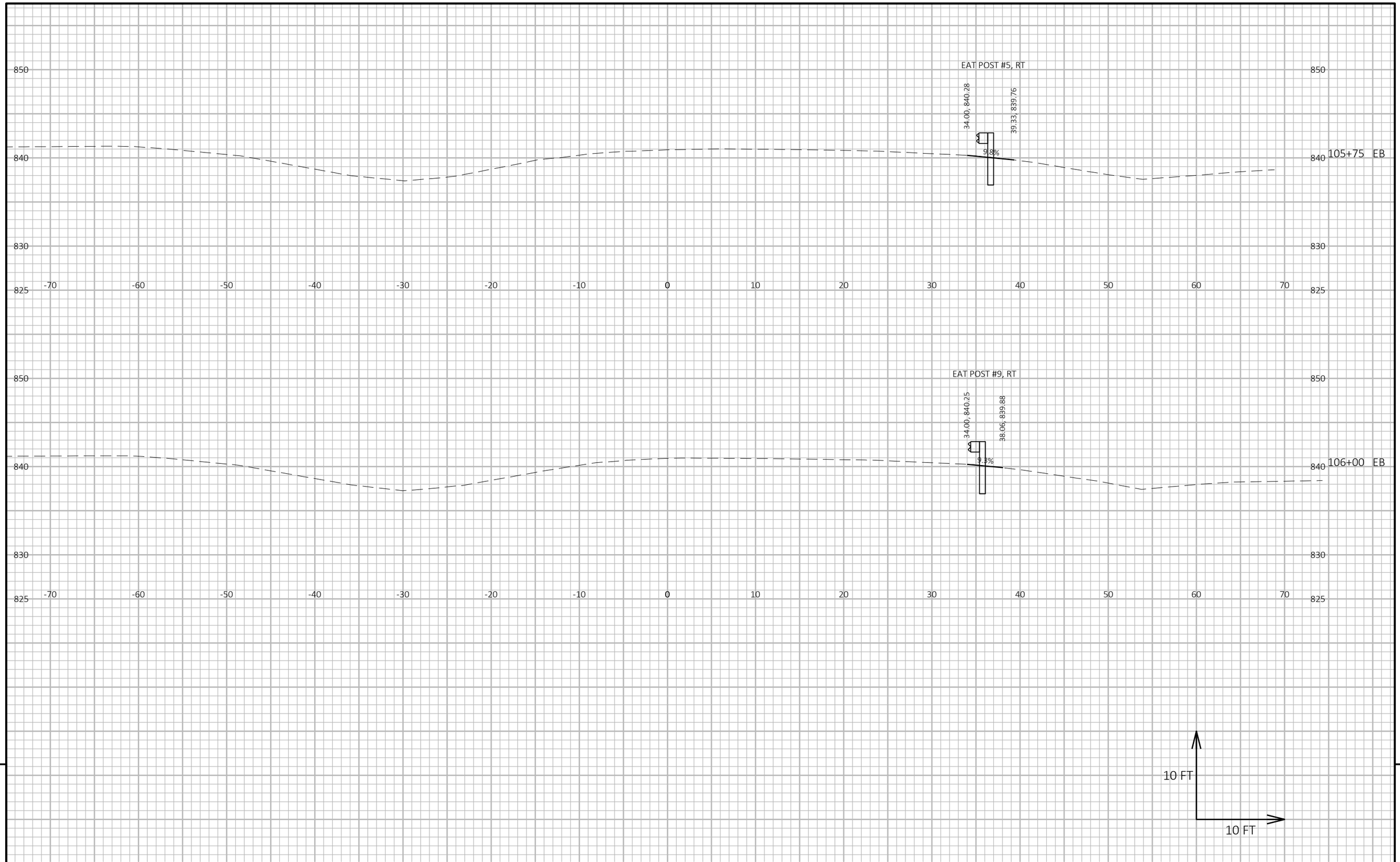
EAT POST #1, RT
34.00, 840.29
41.94, 839.49
43.46, 839.11
10.0%
4.0:1
105+50 EB

10 FT
10 FT

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 201	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W CTH Y-2
PLOT DATE : 7/1/2025 10:51 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

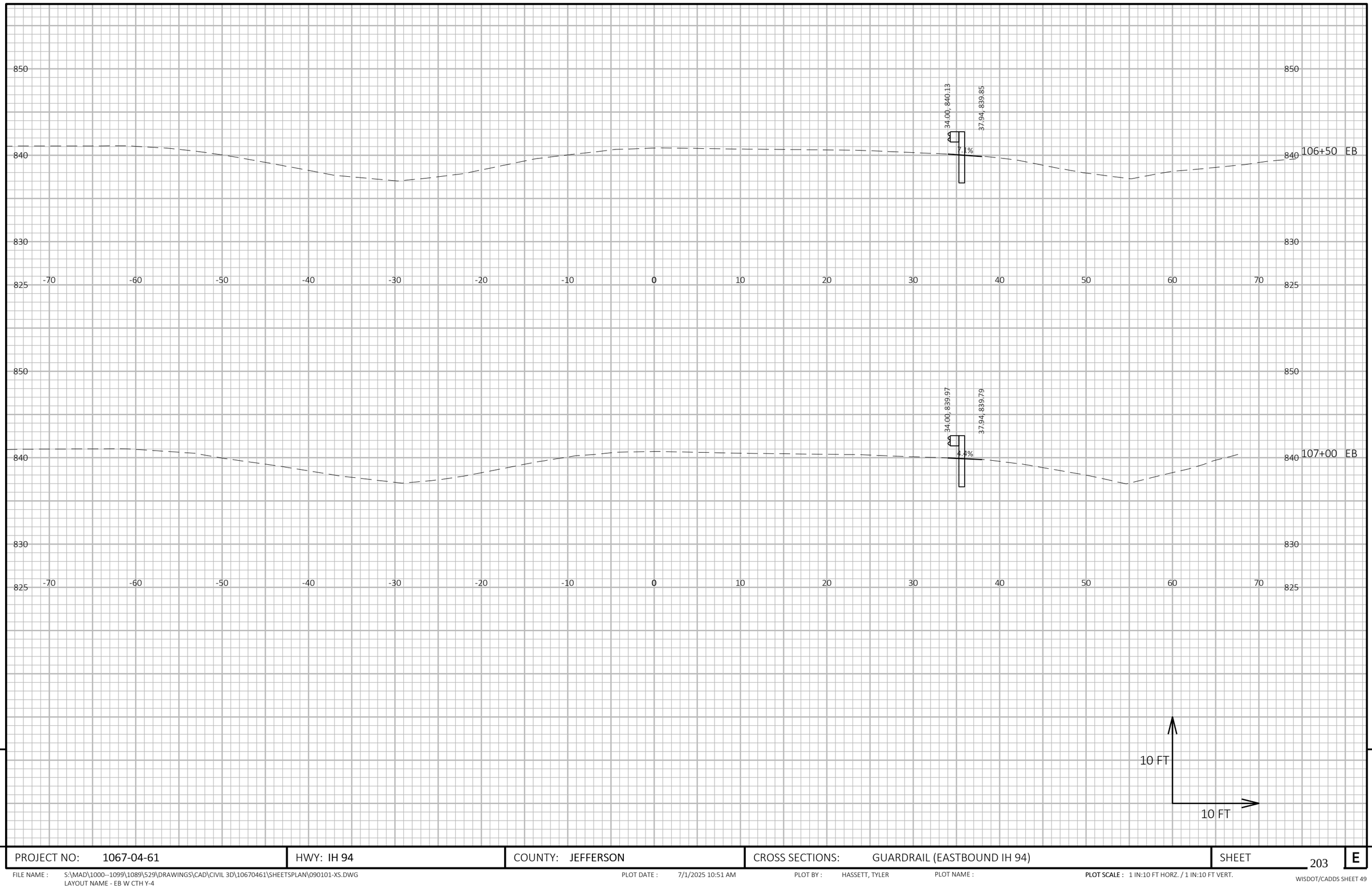
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 202	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W CTH Y-3

PLOT DATE : 7/1/2025 10:51 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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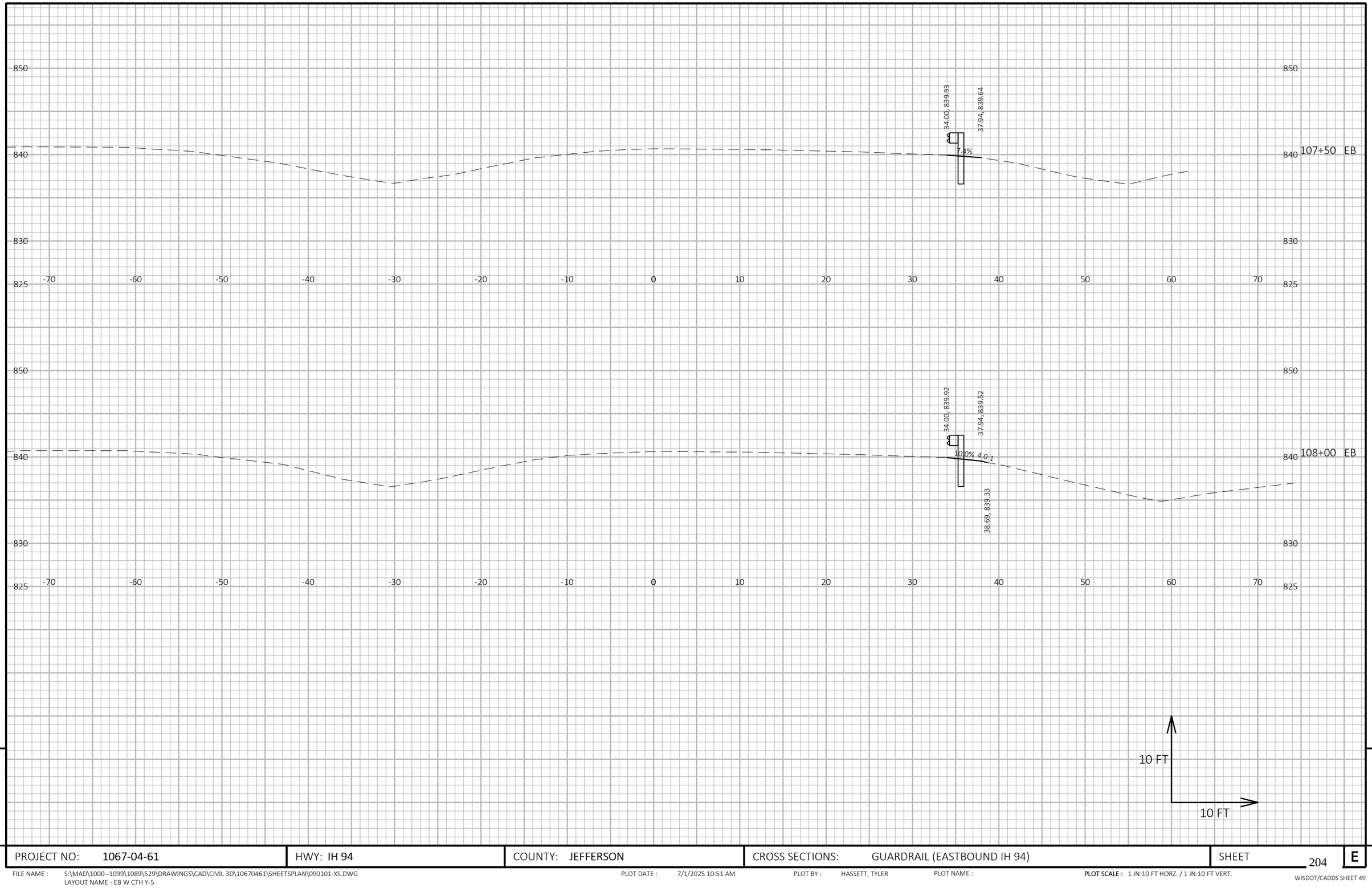
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 203	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W CTH Y-4

PLOT DATE : 7/1/2025 10:51 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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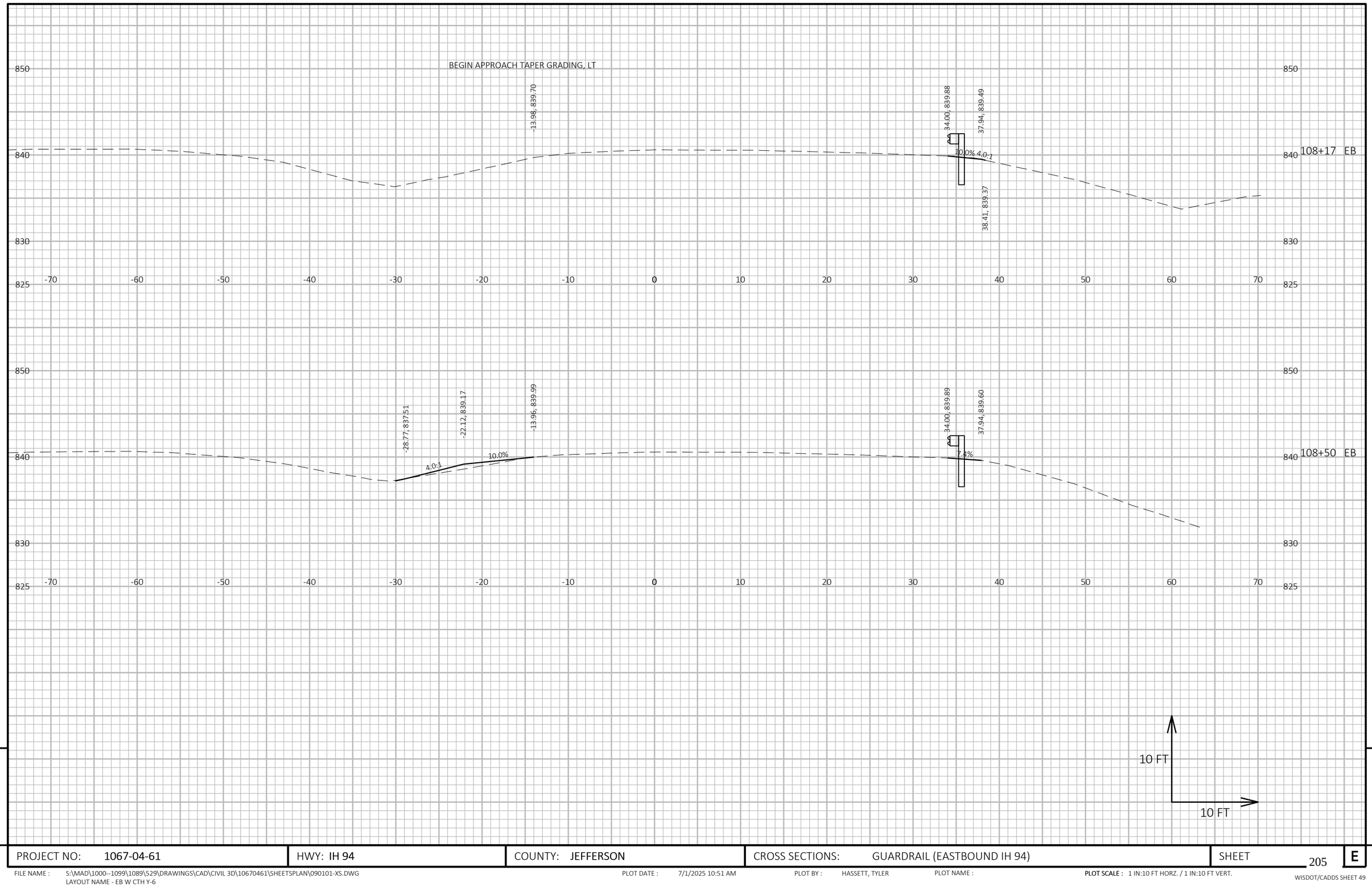
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FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W CTH Y-5

PLOT DATE : 7/1/2025 10:51 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

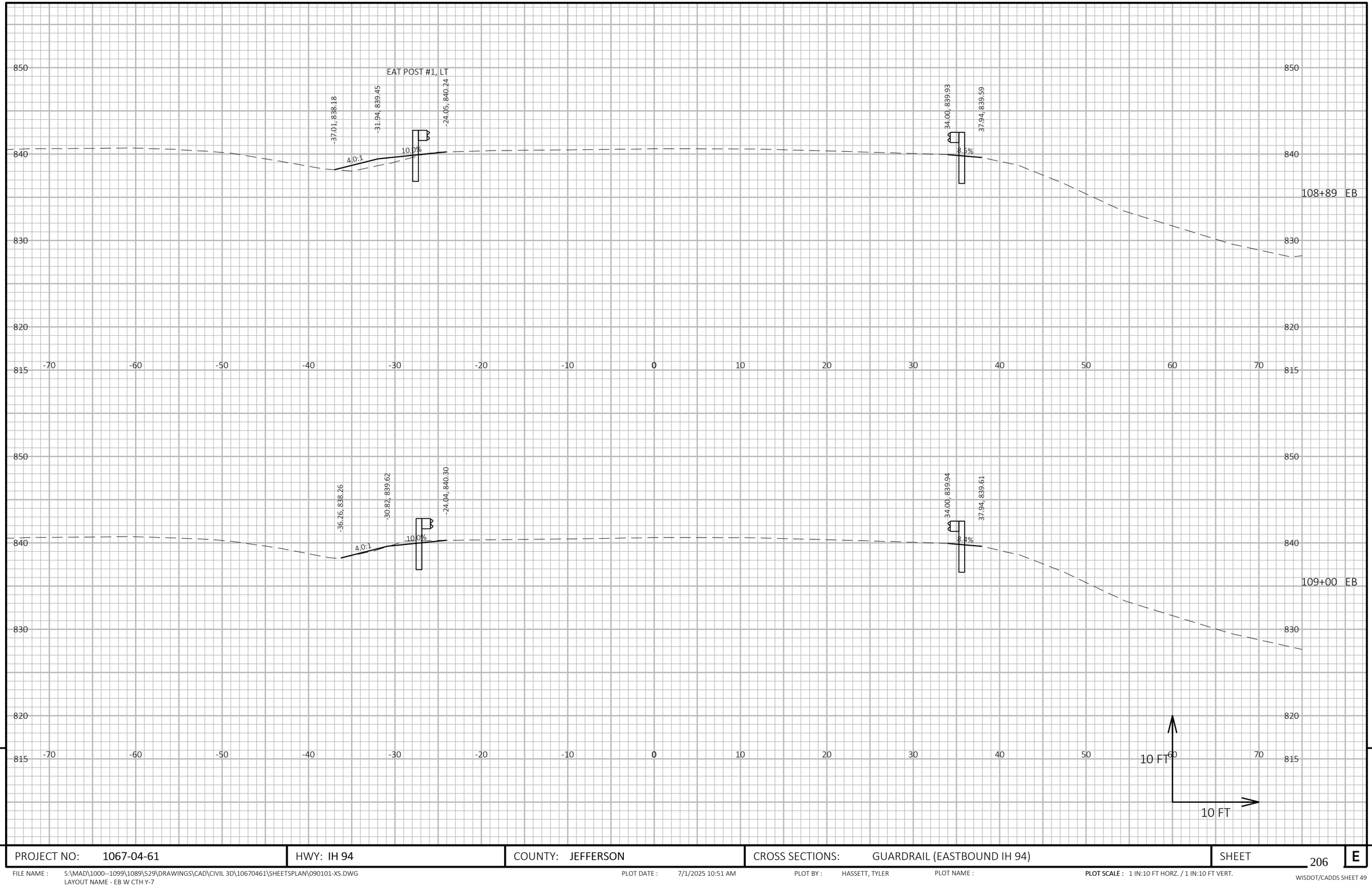
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 205	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W CTH Y-6

PLOT DATE : 7/1/2025 10:51 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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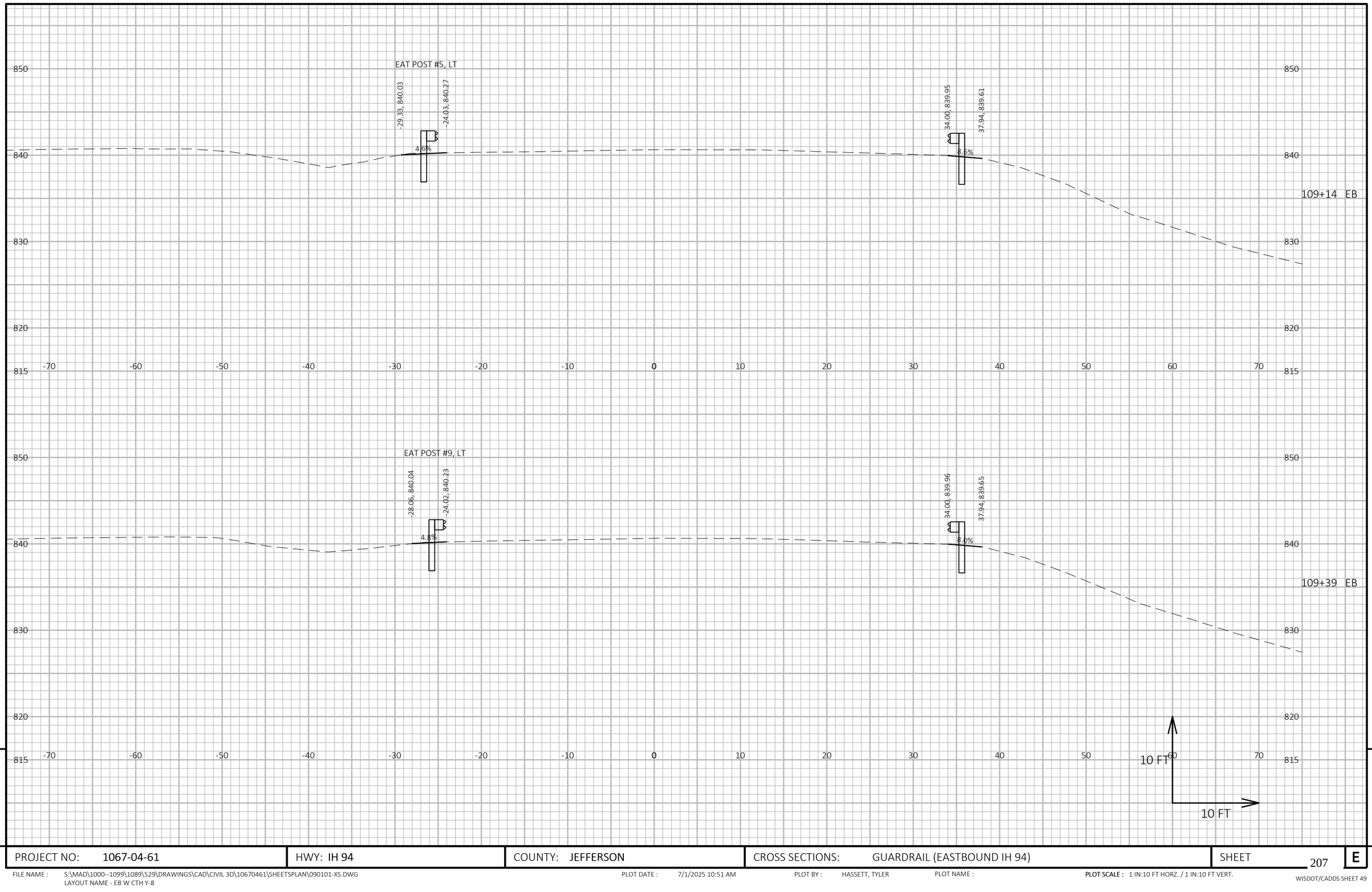
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 206	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W CTH Y-7

PLOT DATE : 7/1/2025 10:51 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

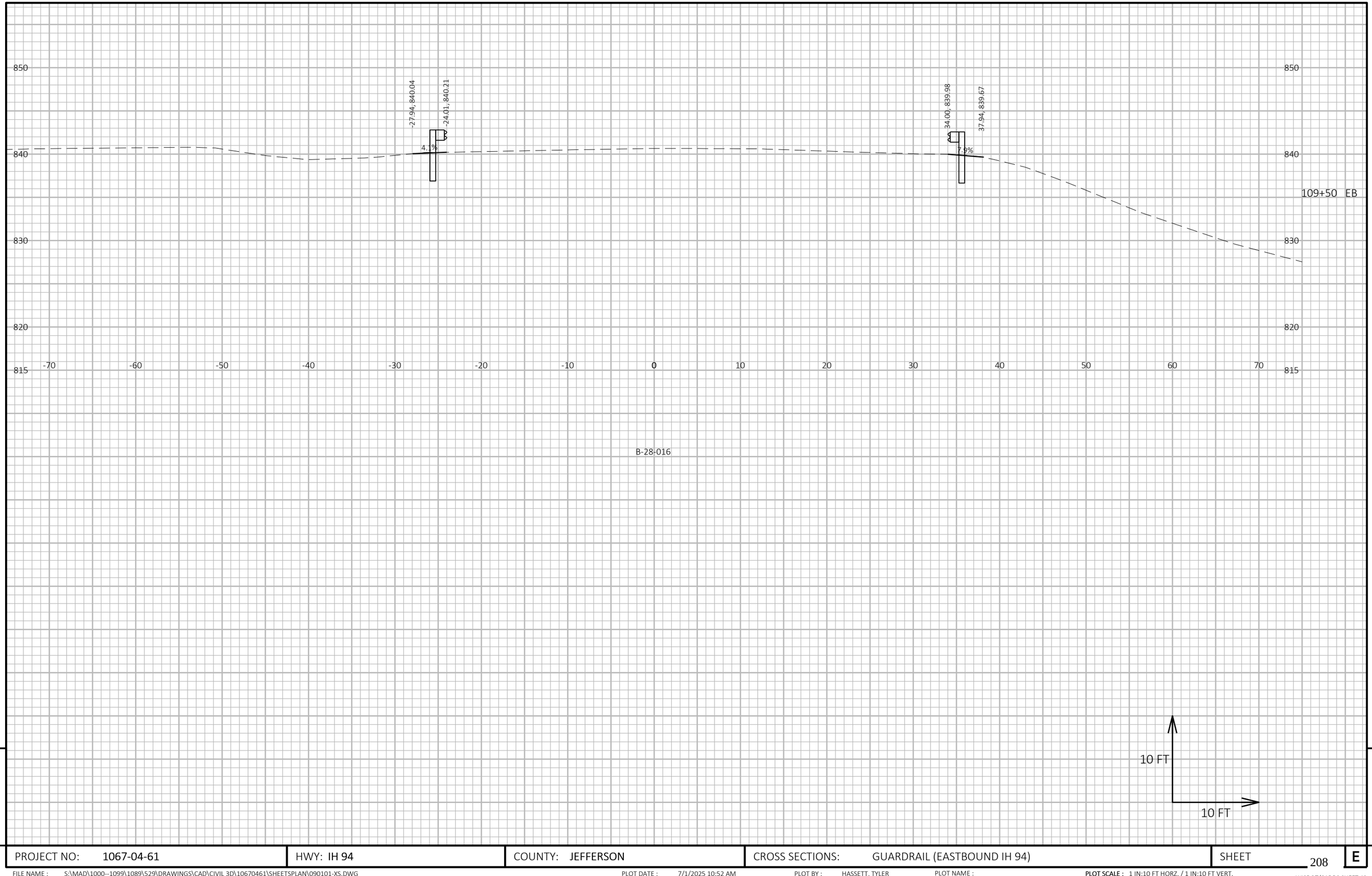
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 207	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W CTH Y-8

PLOT DATE : 7/1/2025 10:51 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 208	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W CTH Y-9

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

B-28-016

850
840
830
820
815

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

34.00, 839.49
37.94, 839.10
38.15, 839.01
10.0% 2.5:1

111+00 EB

850
840
830
820
815

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

34.00, 839.19
37.94, 838.80
38.10, 838.73
10.0% 2.5:1

111+50 EB

10 FT
10 FT

9

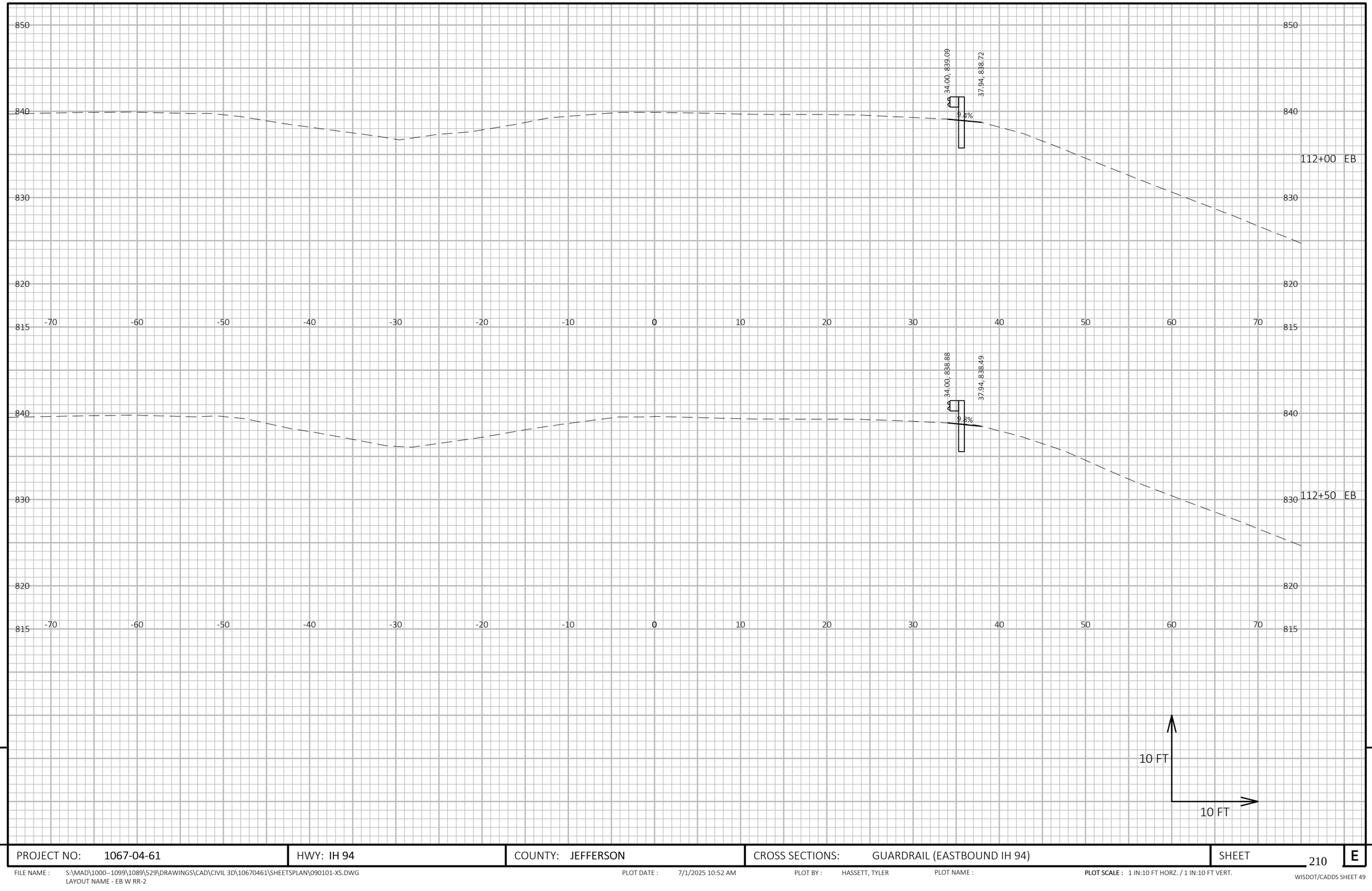
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 209	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W RR-1

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

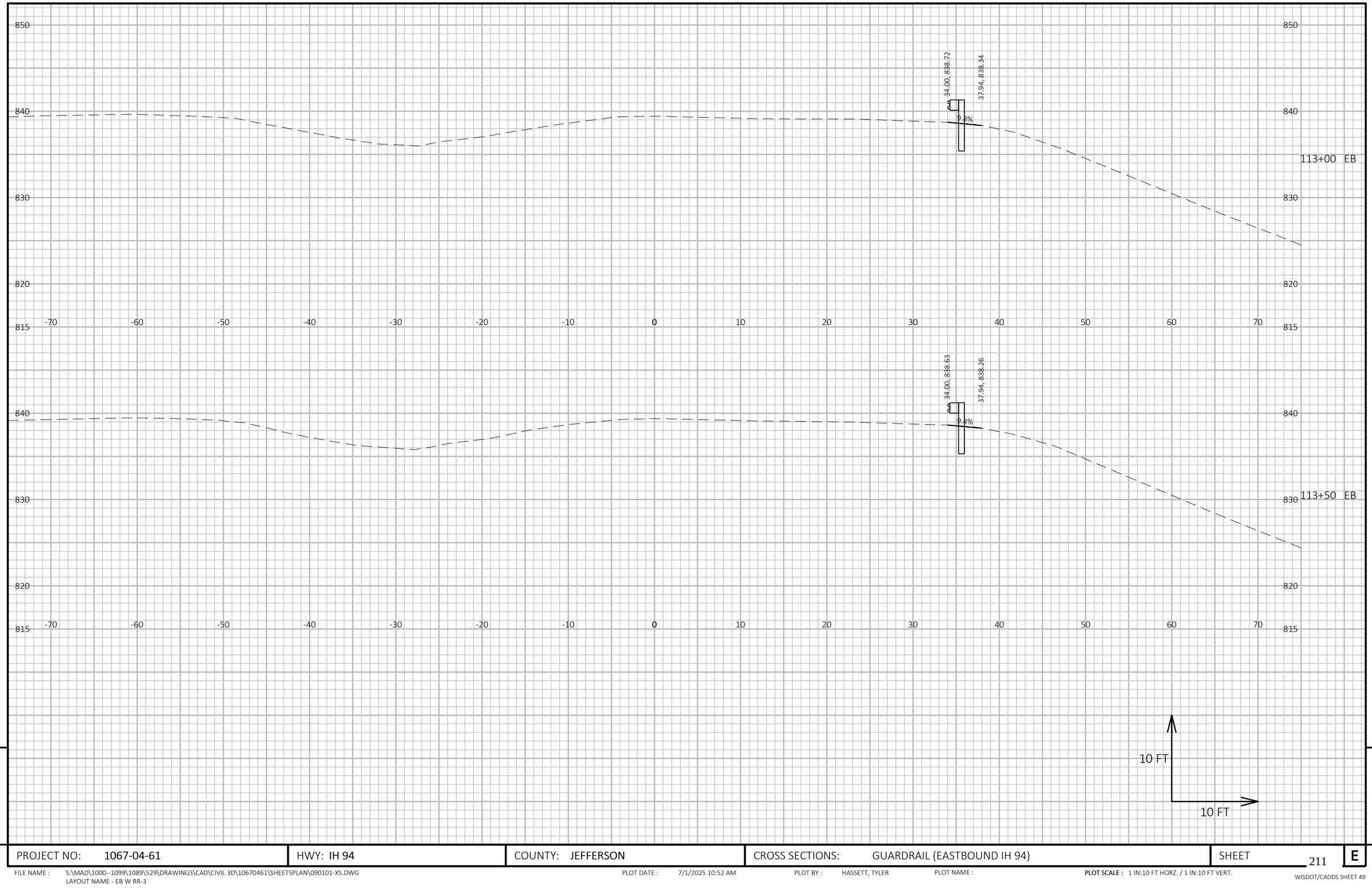
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 210	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W RR-2

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

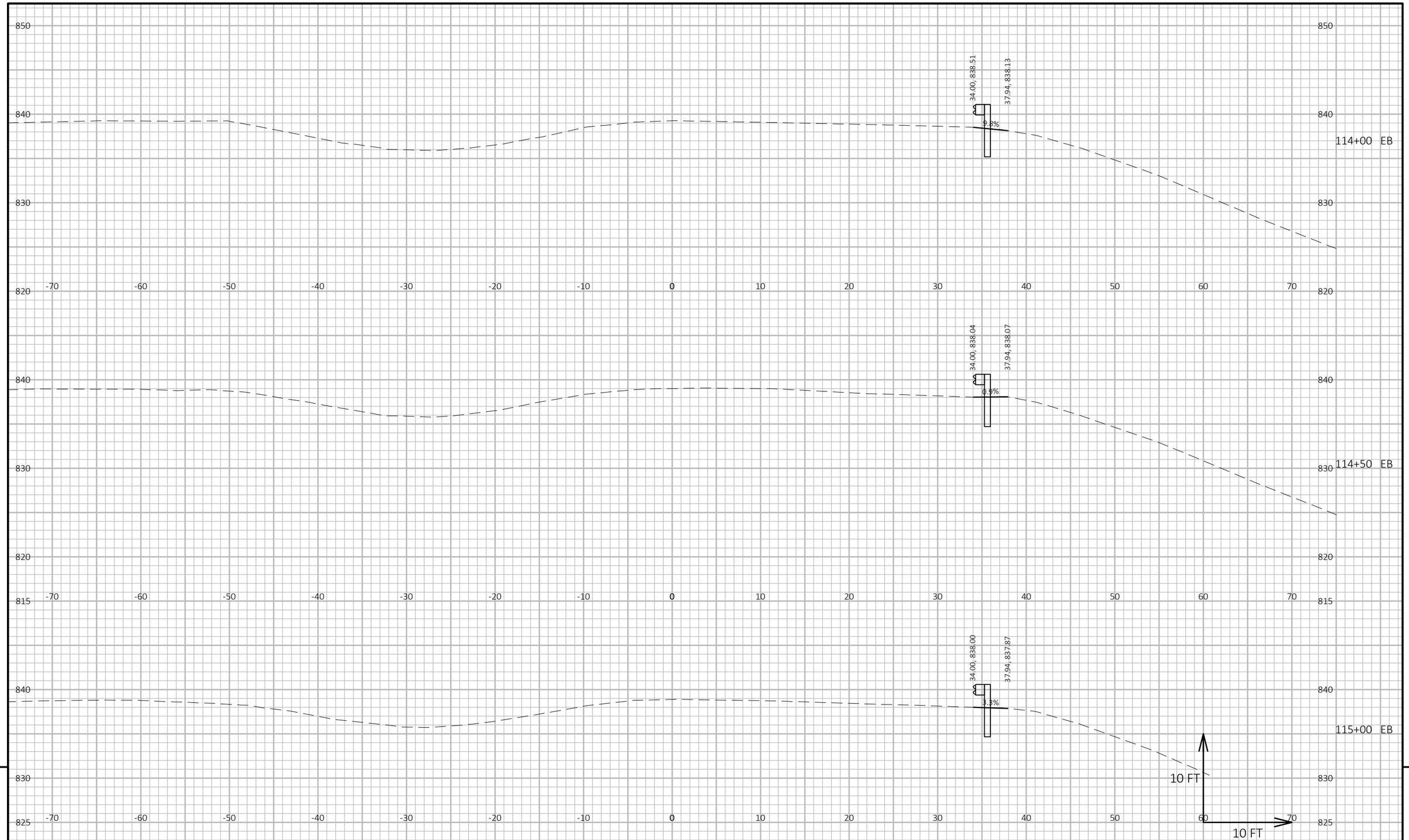
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 211	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W RR-3

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

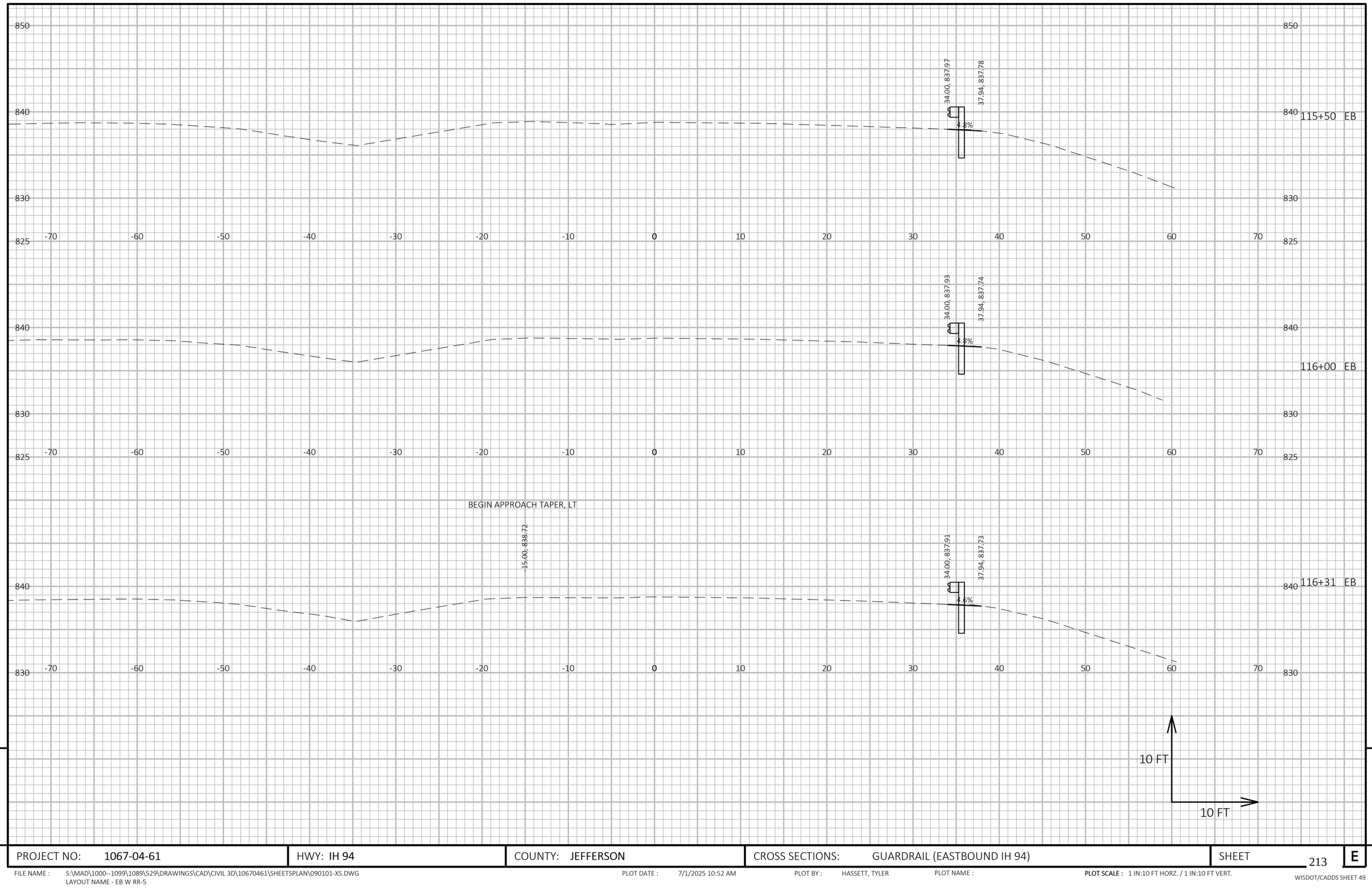
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 212	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W RR-4

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

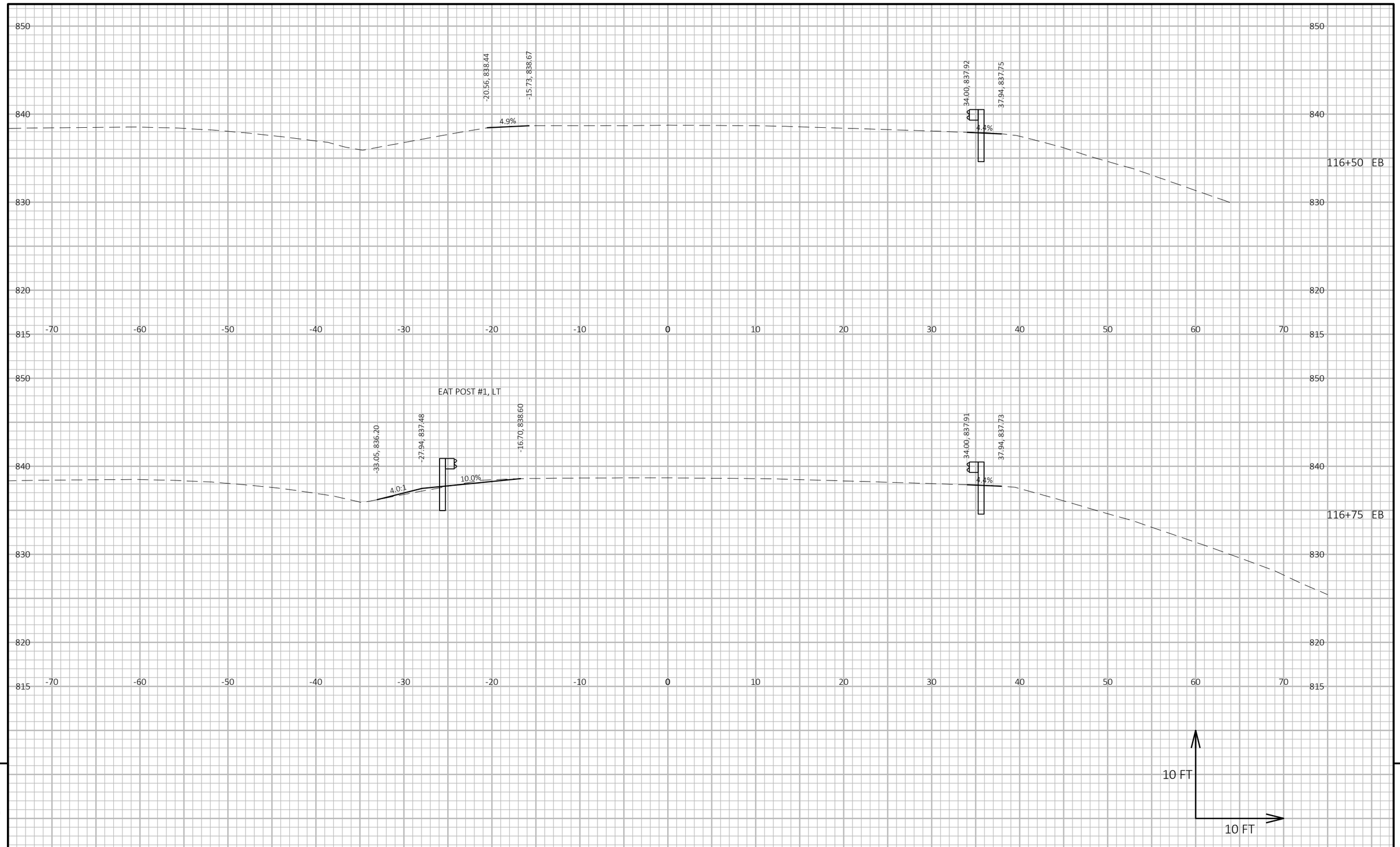
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 213	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W RR-5

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 214	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W RR-6

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST #5, LT

-32.98, 836.24

-27.94, 837.50

-17.65, 838.53

4.0:1

10.0%

34.20, 837.89

38.13, 837.72

4.8%

117+00 EB

EAT POST #9, LT

-30.00, 837.23

-27.94, 837.74

-24.01, 838.14

4.0:1

10.0%

34.76, 837.91

38.69, 837.67

6.0%

117+25 EB

840

830

820

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT

10 FT

9

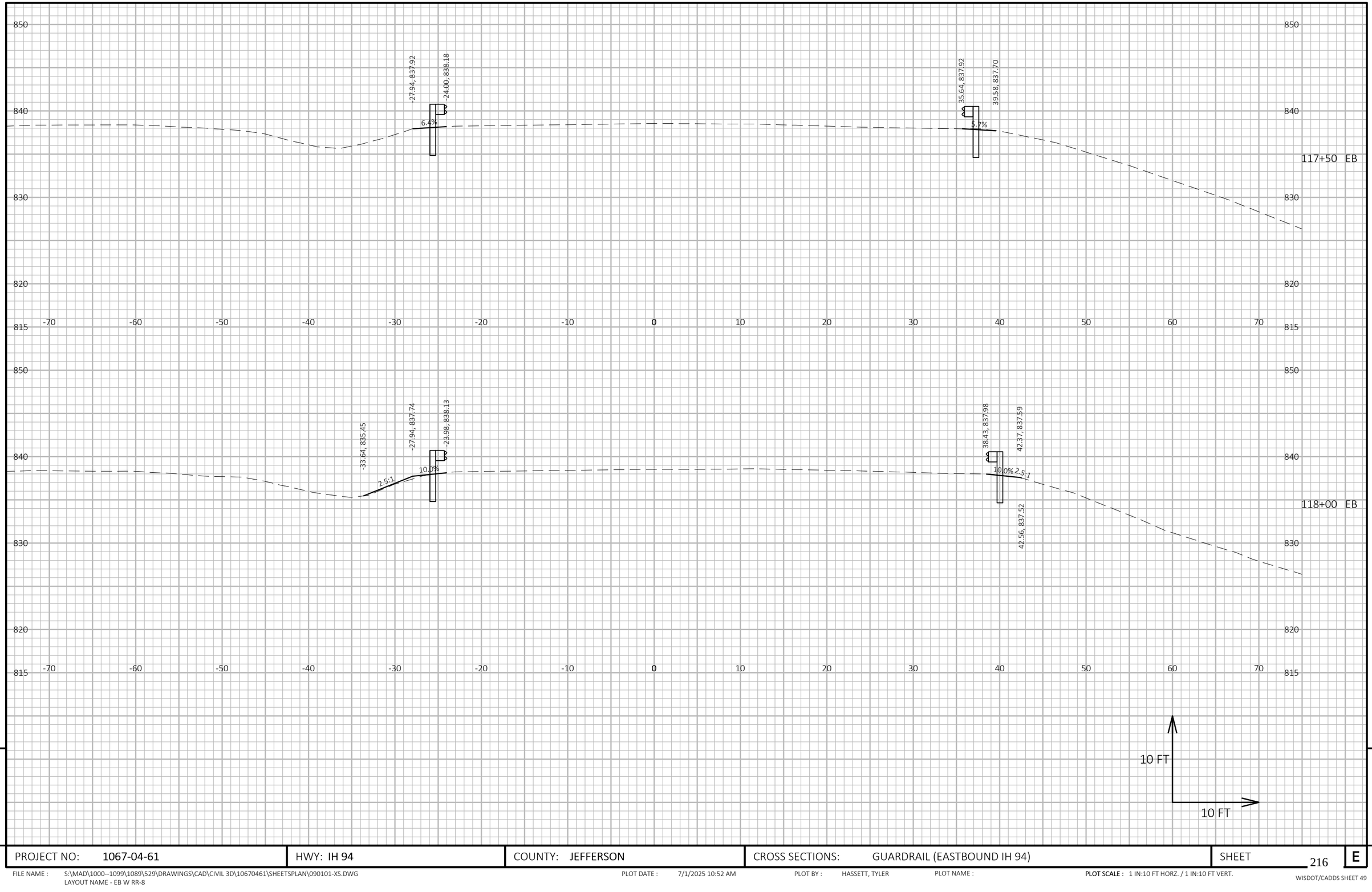
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 215	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W RR-7

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

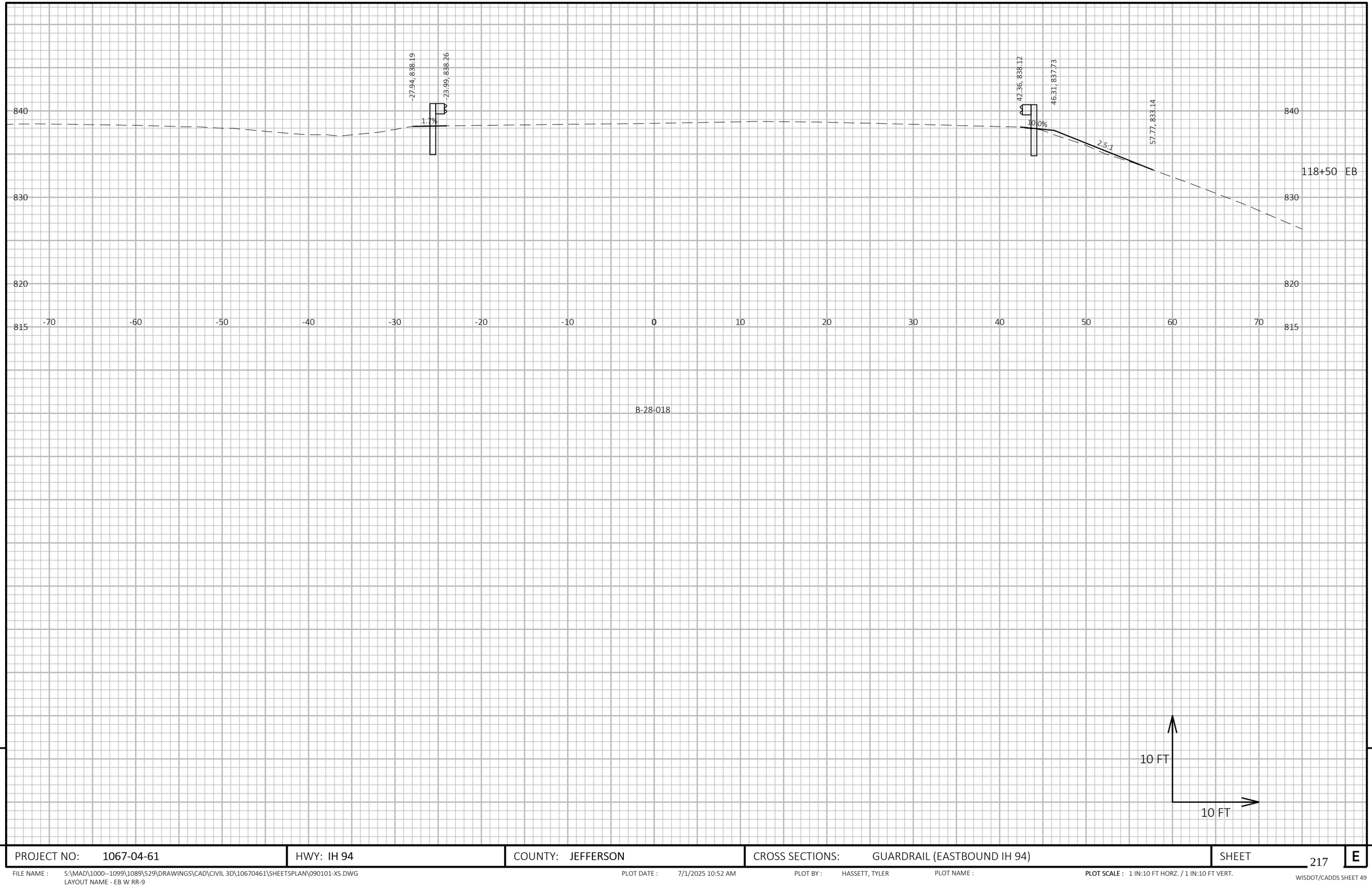
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 216	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W RR-8

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

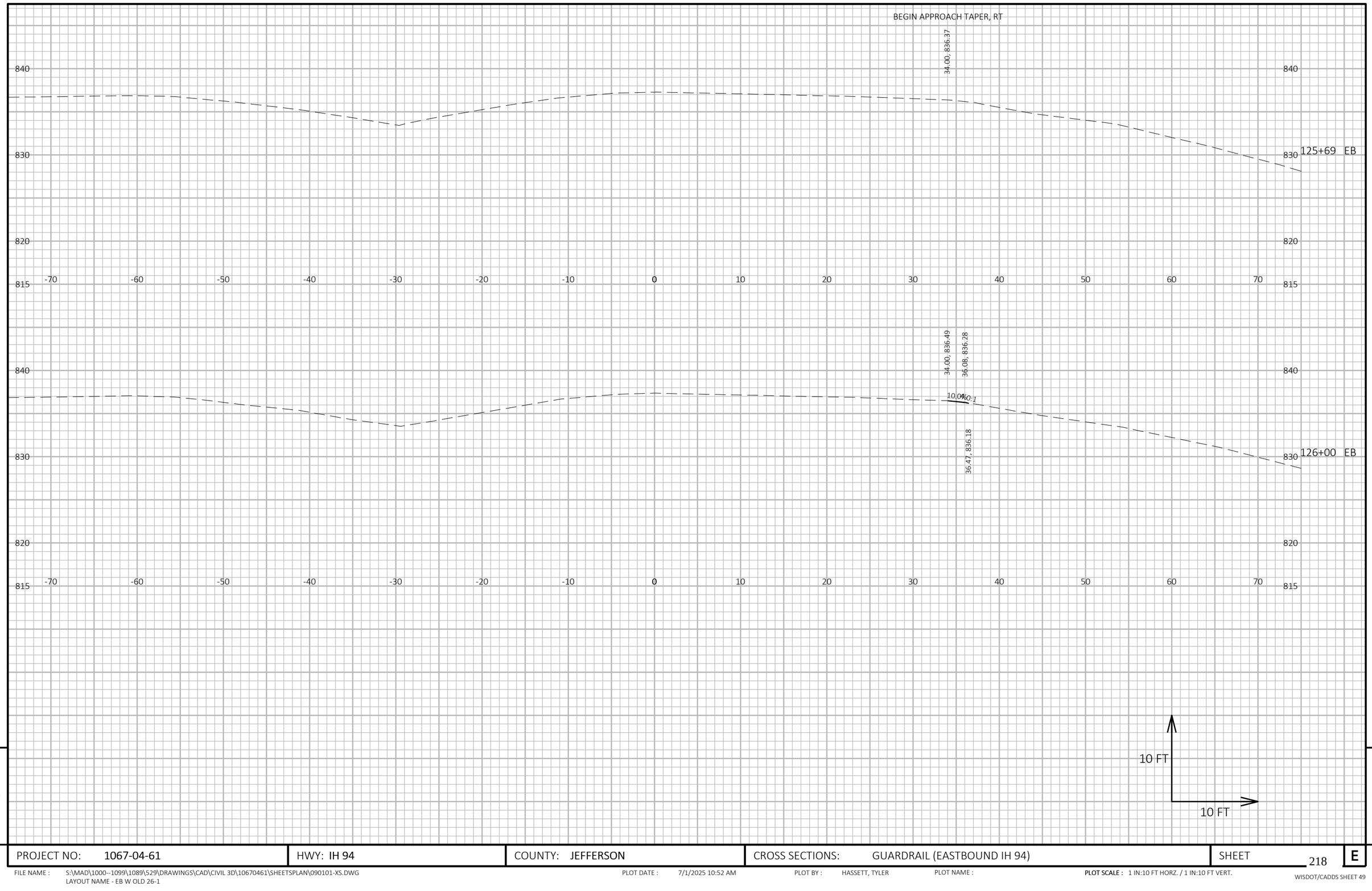
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 217	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W RR-9

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

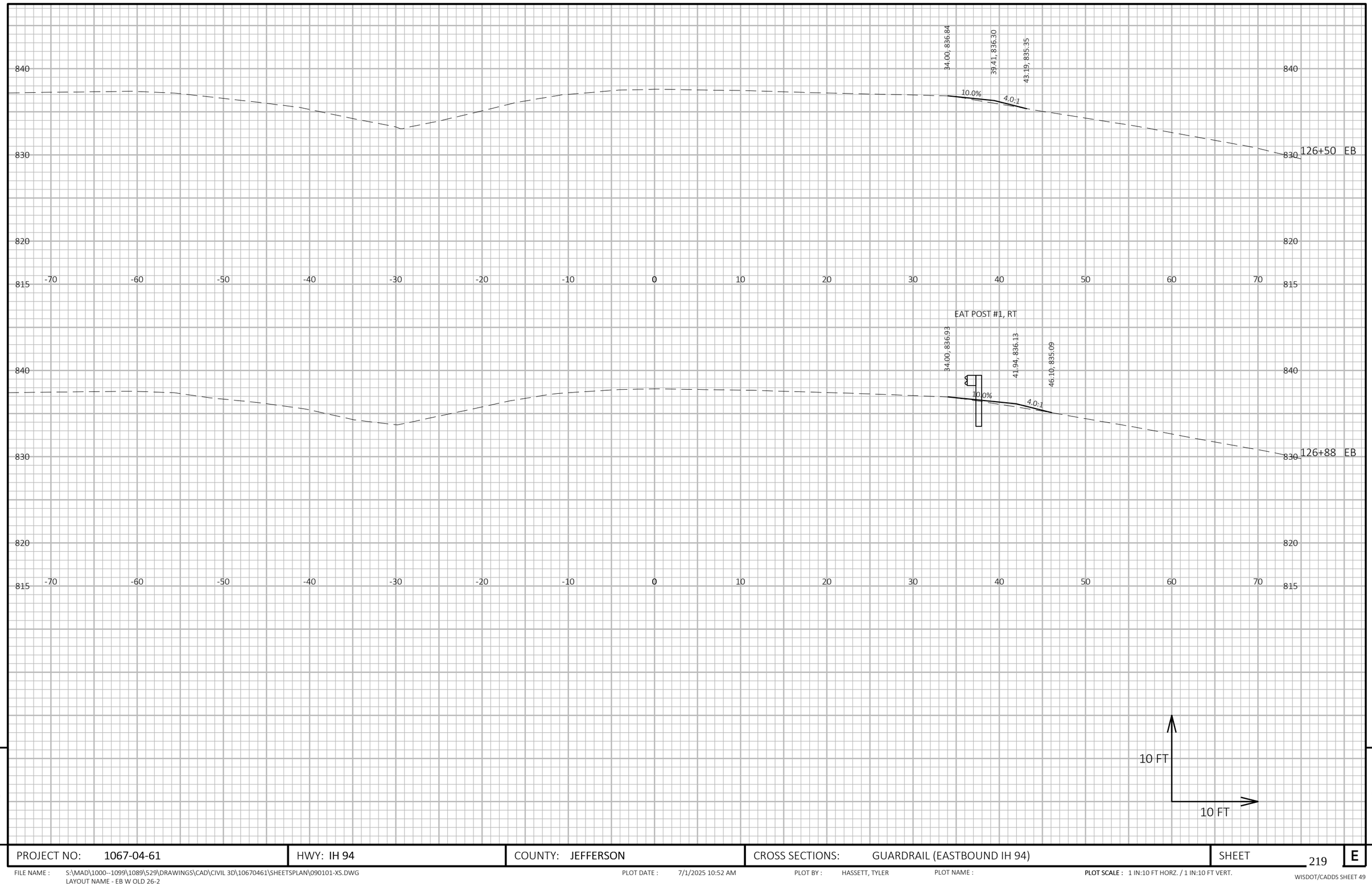
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 218	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W OLD 26-1

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

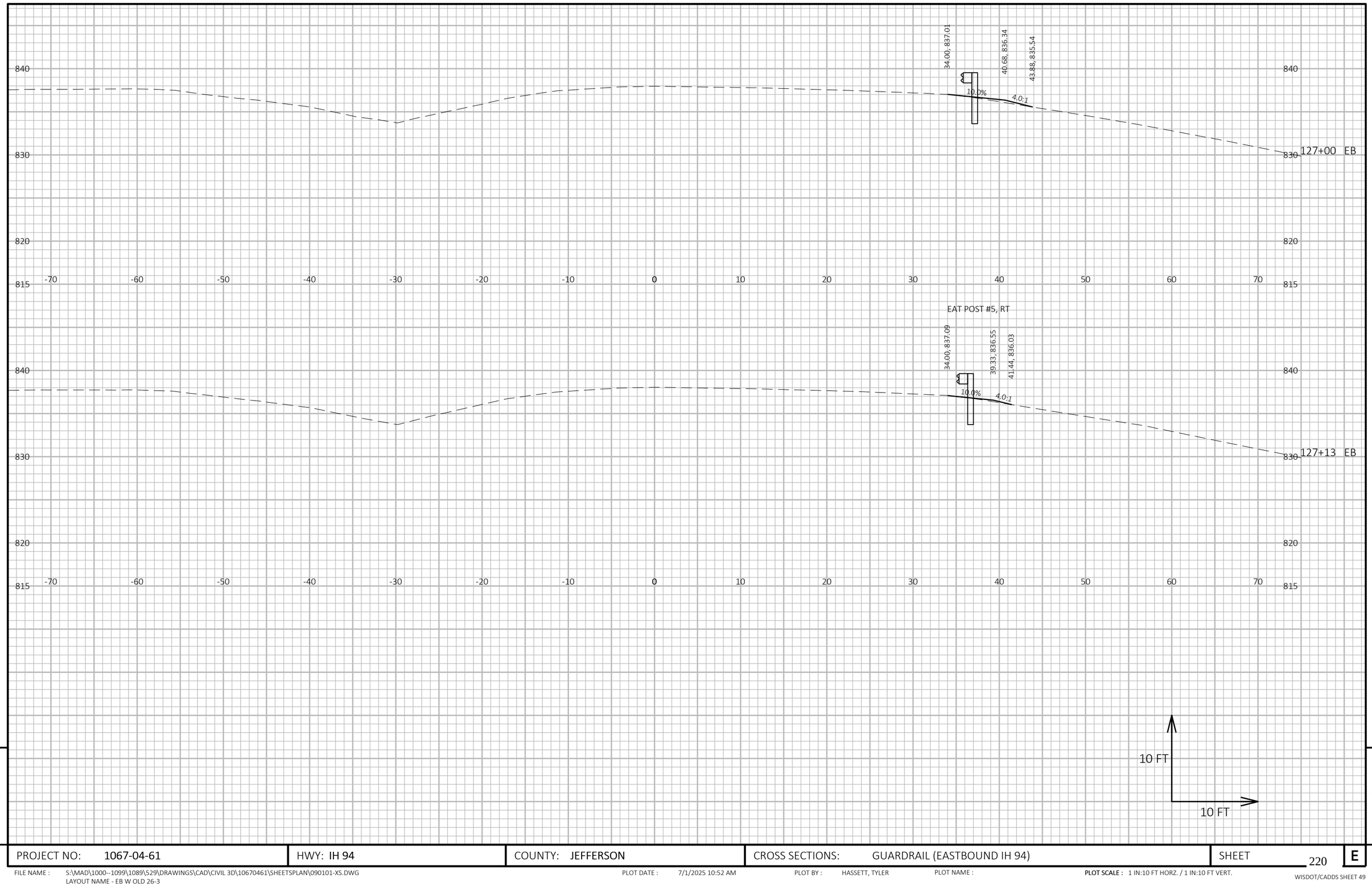
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 219	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W OLD 26-2

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 220	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W OLD 26-3

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST #9, RT

34.00, 837.24
38.06, 836.84
39.37, 836.51
10.0%
4.0:1

127+38 EB

34.00, 837.35
37.94, 836.96
39.48, 836.57
10.0%
4.0:1

127+50 EB

34.00, 837.84
37.94, 837.44
10.0%
4.0:1
38.05, 837.42

128+00 EB

10 FT
10 FT

9

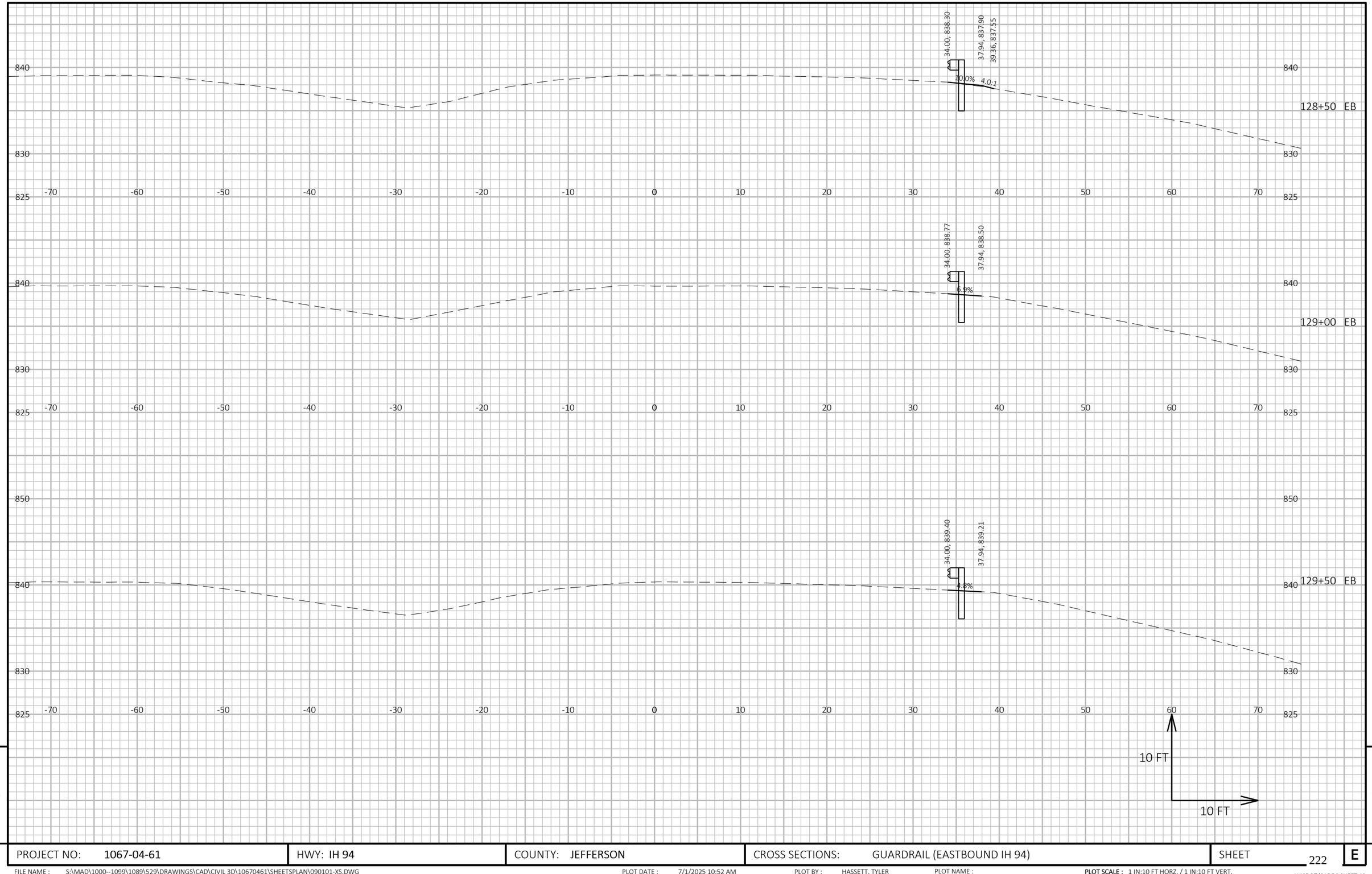
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 221	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W OLD 26-4

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

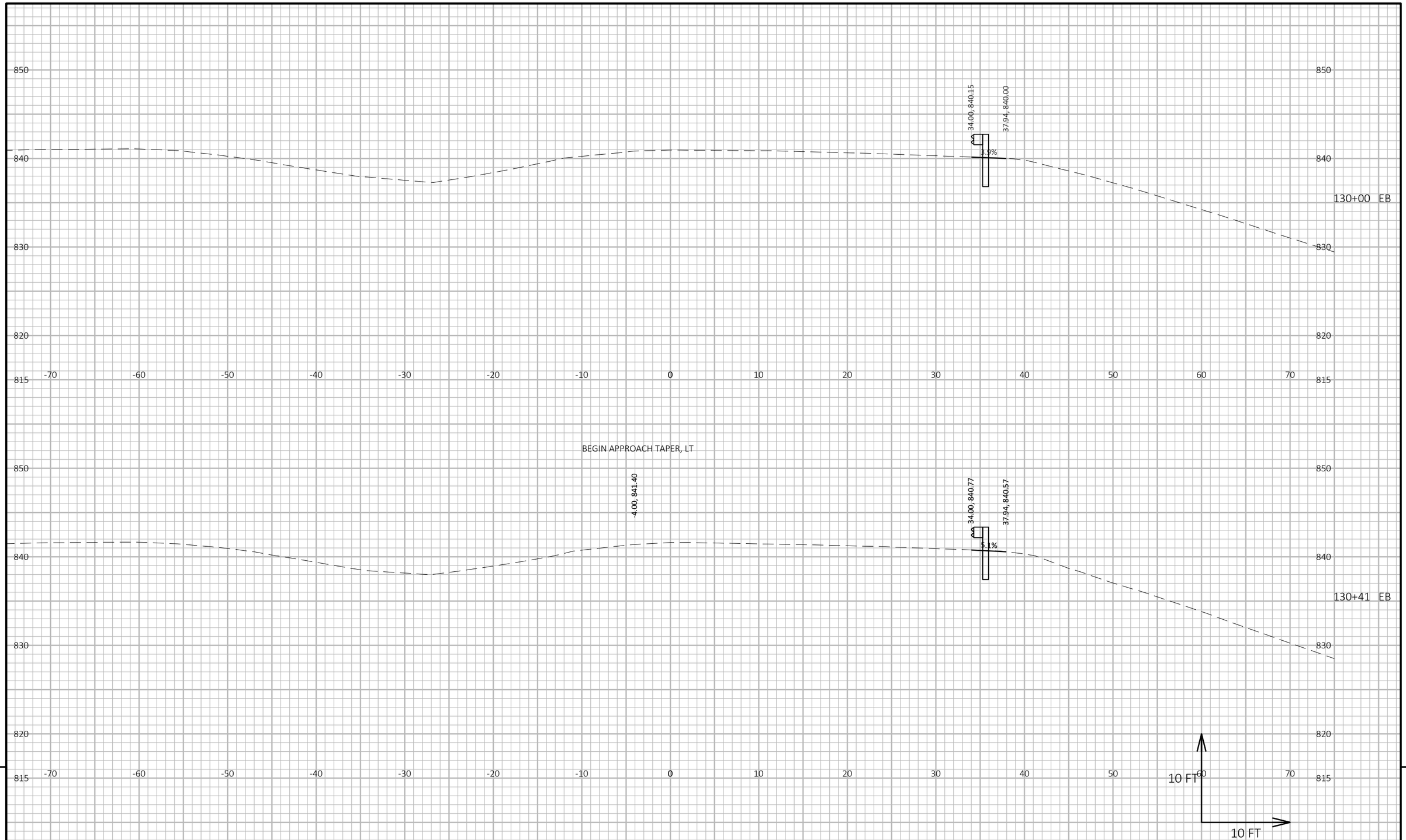
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 222	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W OLD 26-5

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

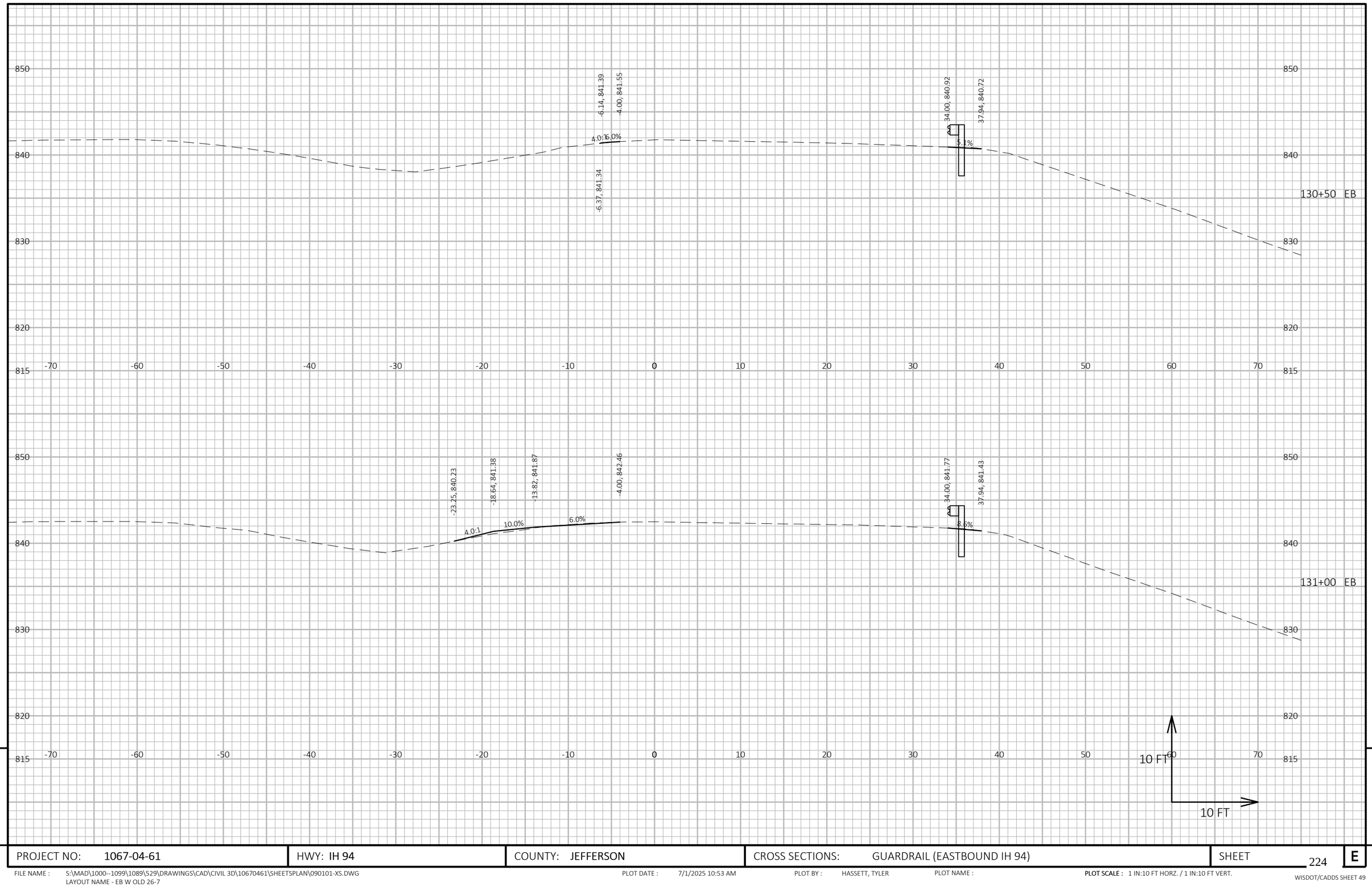
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 223	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W OLD 26-6

PLOT DATE : 7/1/2025 10:52 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

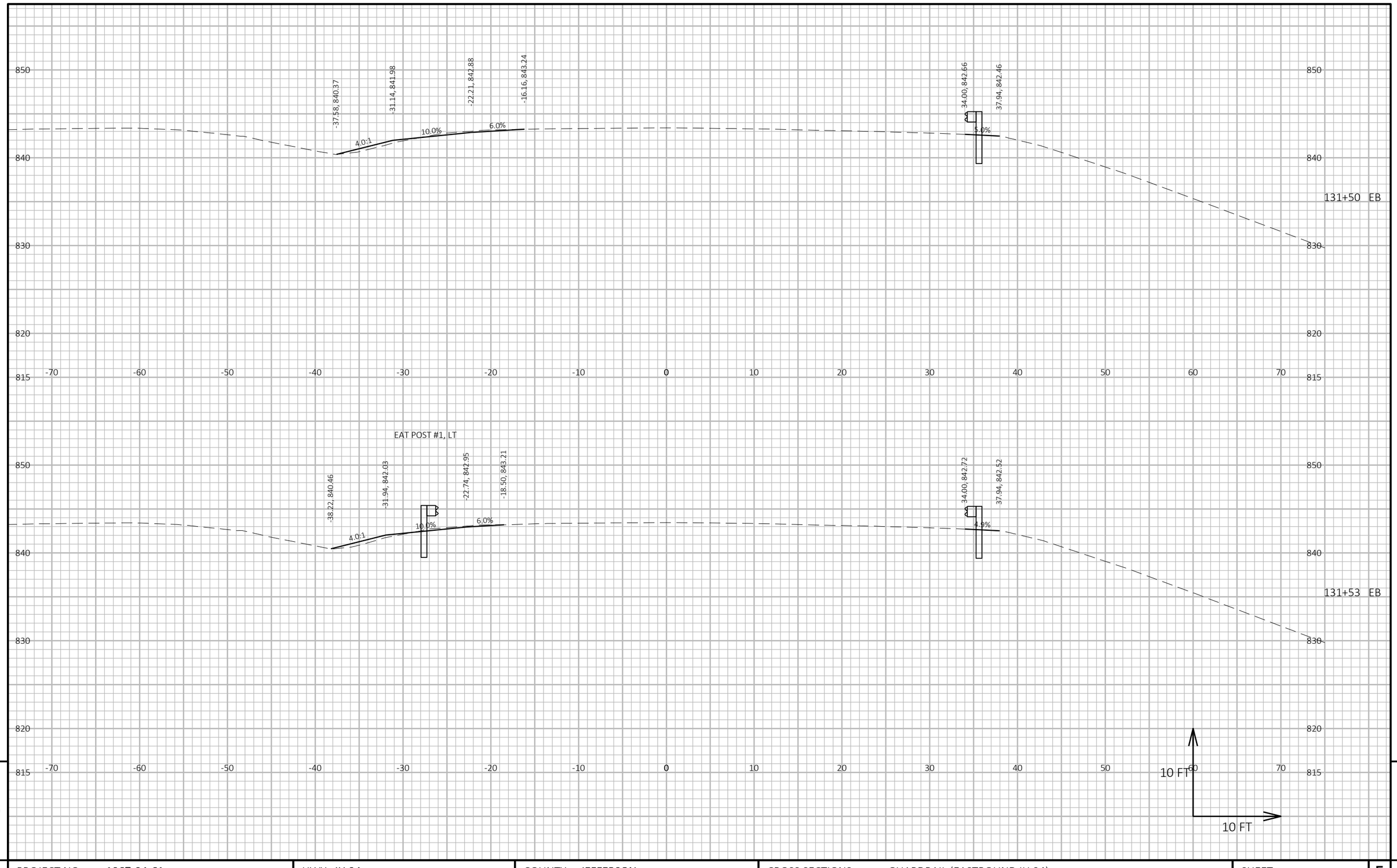
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 224	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W OLD 26-7

PLOT DATE : 7/1/2025 10:53 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 225	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W OLD 26-8

PLOT DATE : 7/1/2025 10:53 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST #5, LT

-29.33, 843.04

-24.00, 843.45

7.8%

34.00, 843.17

37.94, 842.89

7.0%

131+78 EB

-28.22, 843.53

-24.00, 843.83

7.1%

34.00, 843.55

37.94, 843.30

6.3%

132+00 EB

850
840
830
825

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT

10 FT

9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 226	E

EAT POST #9, LT

-28.06, 843.61

-24.00, 843.88

6.0%

34.00, 843.61

37.94, 843.36

6.1%

850

840

830

825

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

132+03 EB

B-28-111

10 FT

10 FT

9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 227	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W OLD 26-10

PLOT DATE : 7/1/2025 10:53 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

BEGIN APPROACH TAPER, RT

34.00, 854.45

139+23 EB

34.00, 854.82

35.79, 854.67

8.1%

139+50 EB

34.00, 855.61

39.13, 855.26

6.9%

140+00 EB

EAT POST #1, RT

34.00, 856.29

41.94, 855.50

10.0%

140+42 EB

10 FT

10 FT

860

850

845

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

9

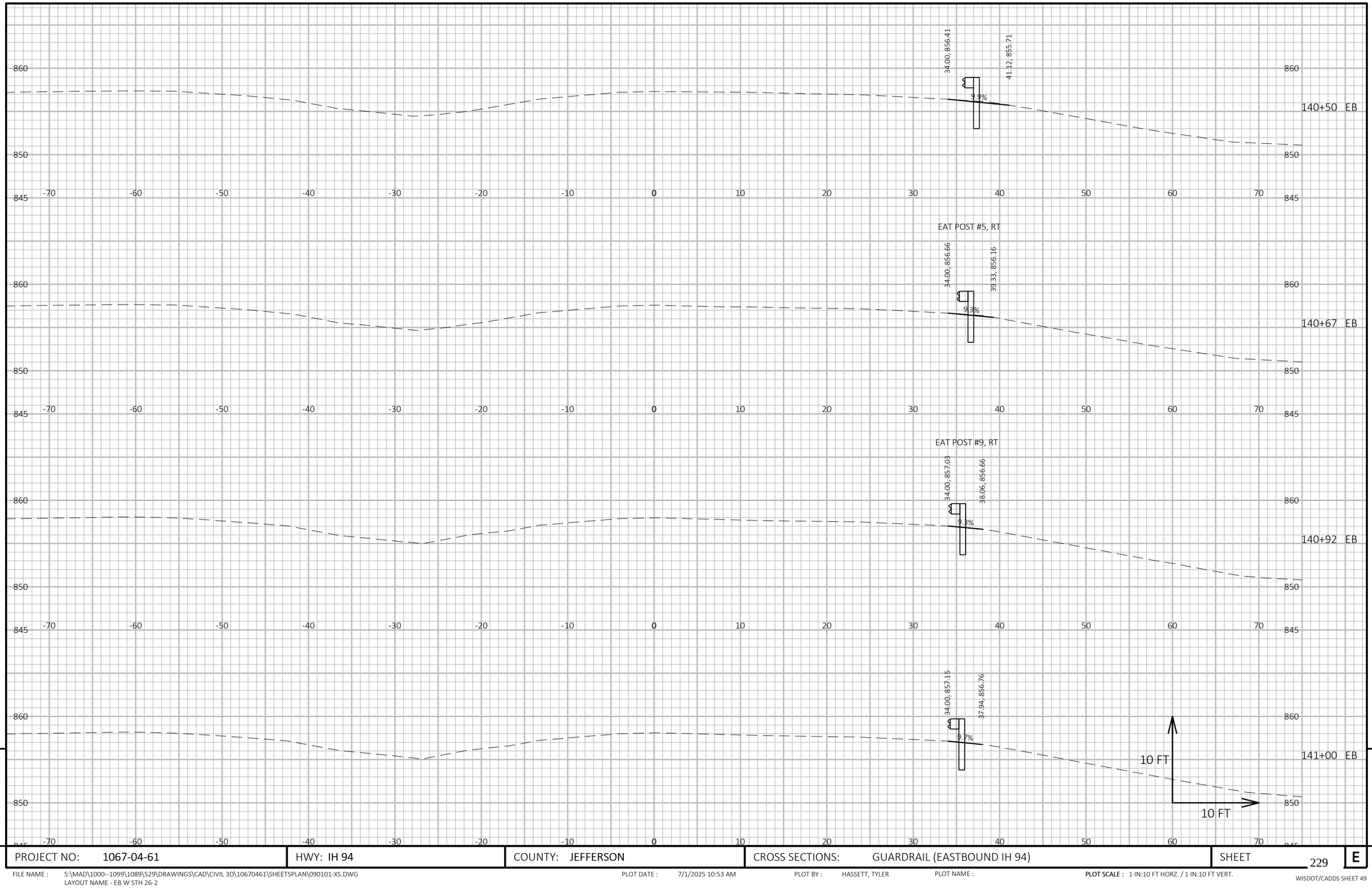
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 228	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W STH 26-1

PLOT DATE : 7/1/2025 10:53 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

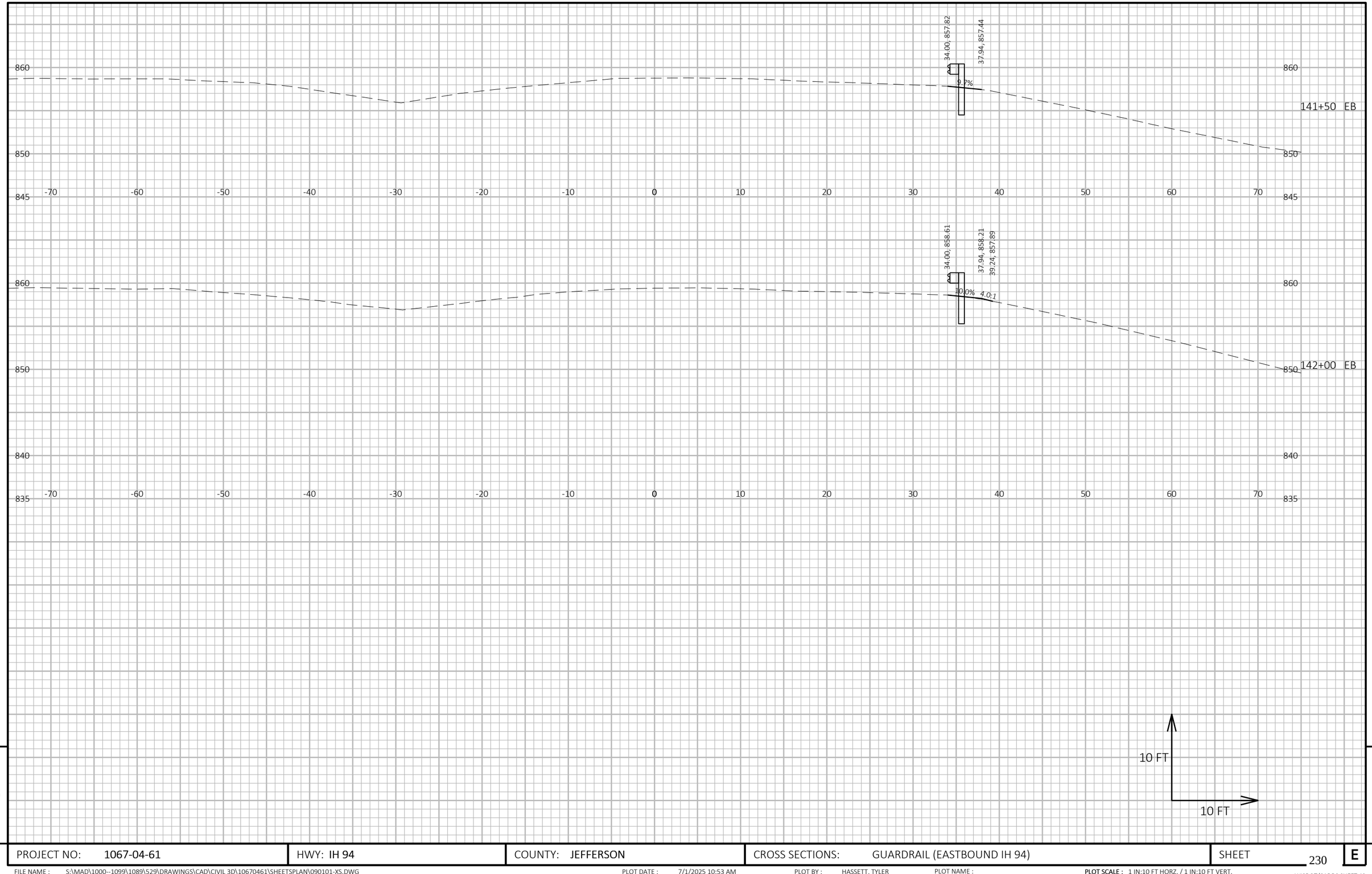


9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 229	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W STH 26-2
PLOT DATE : 7/1/2025 10:53 AM
PLOT BY : HASSETT, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

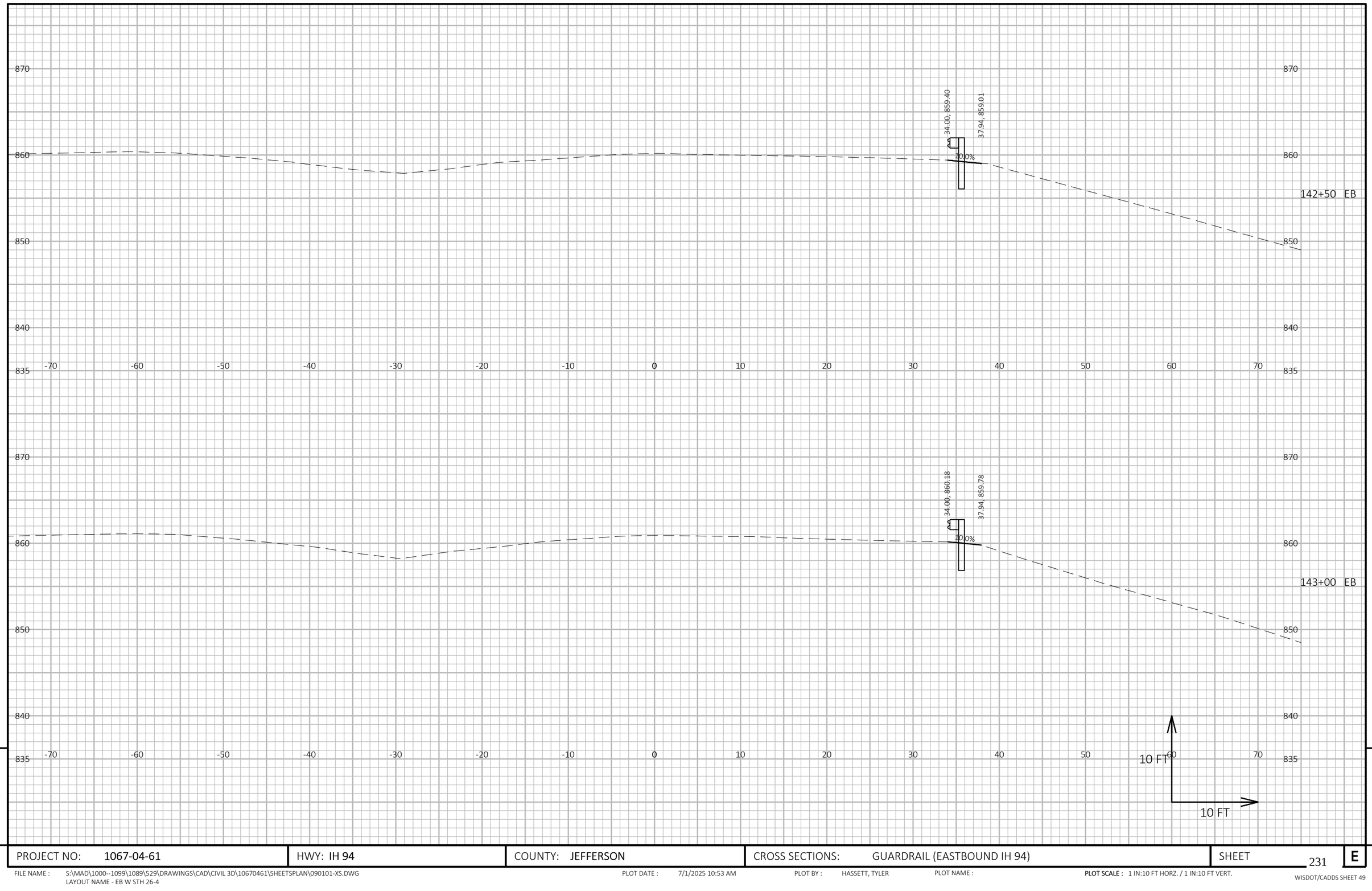
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 230	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W STH 26-3

PLOT DATE : 7/1/2025 10:53 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

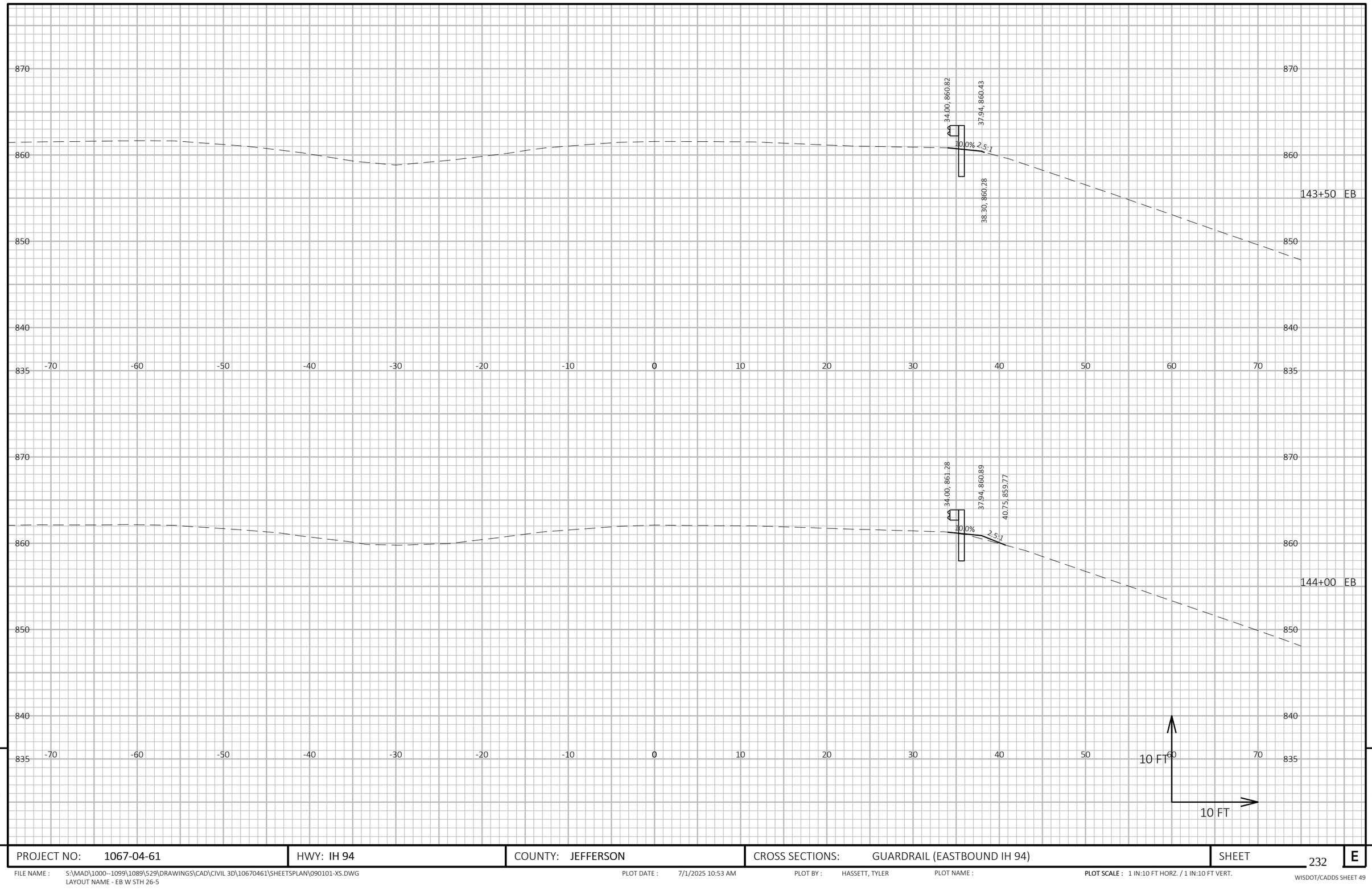
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 231	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W STH 26-4

PLOT DATE : 7/1/2025 10:53 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

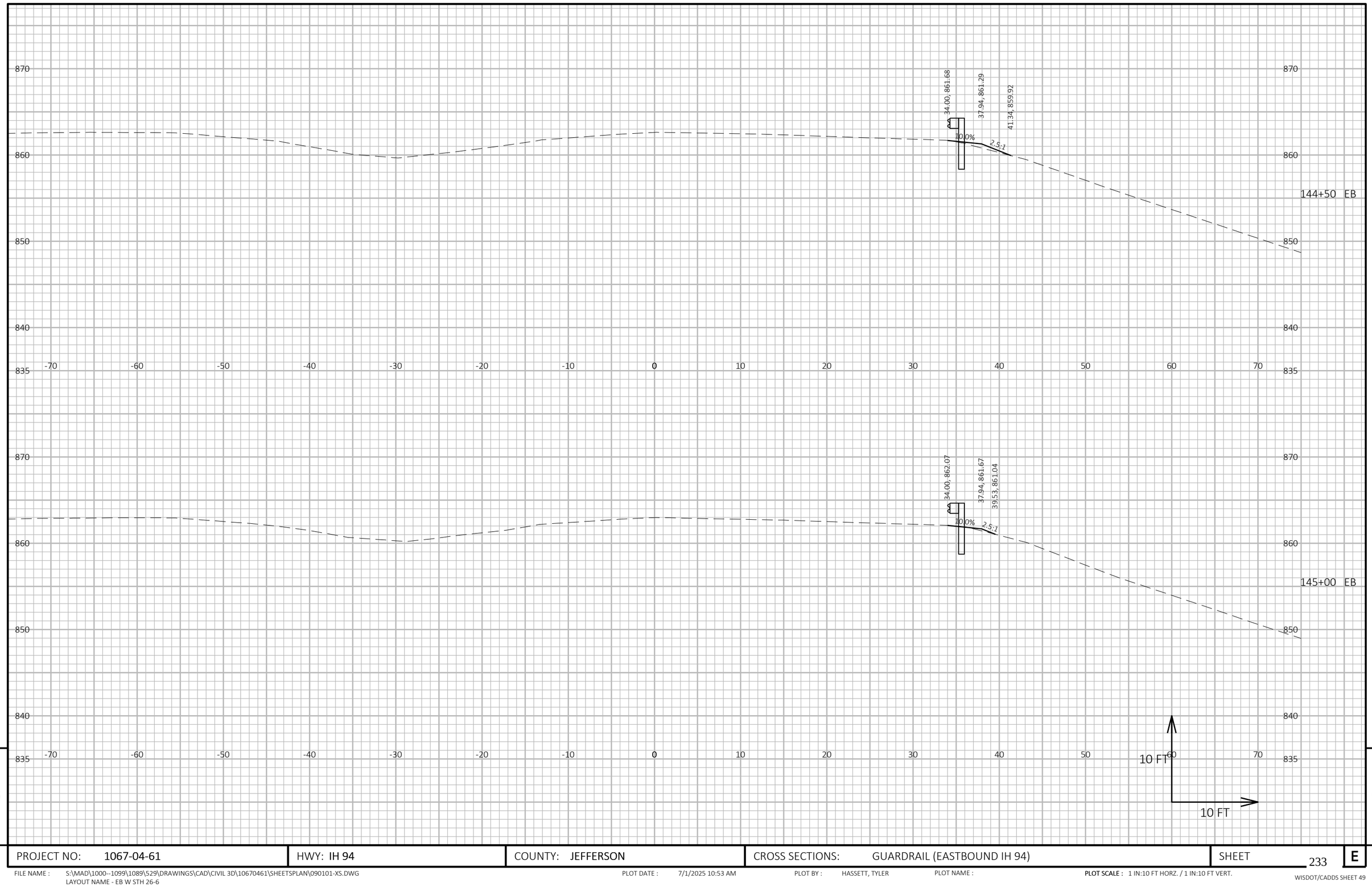
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 232	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W STH 26-5

PLOT DATE : 7/1/2025 10:53 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

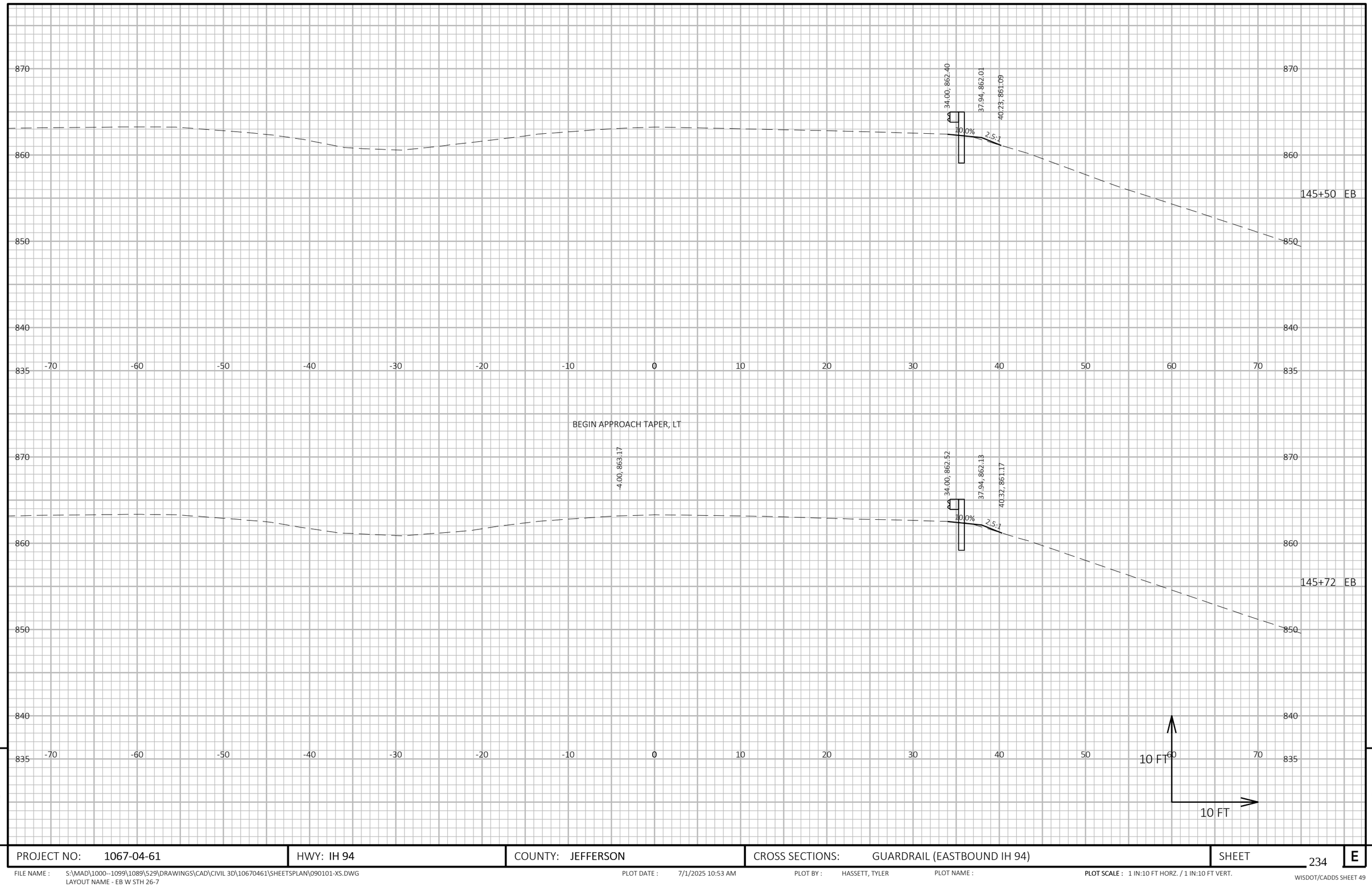
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 233	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W STH 26-6

PLOT DATE : 7/1/2025 10:53 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

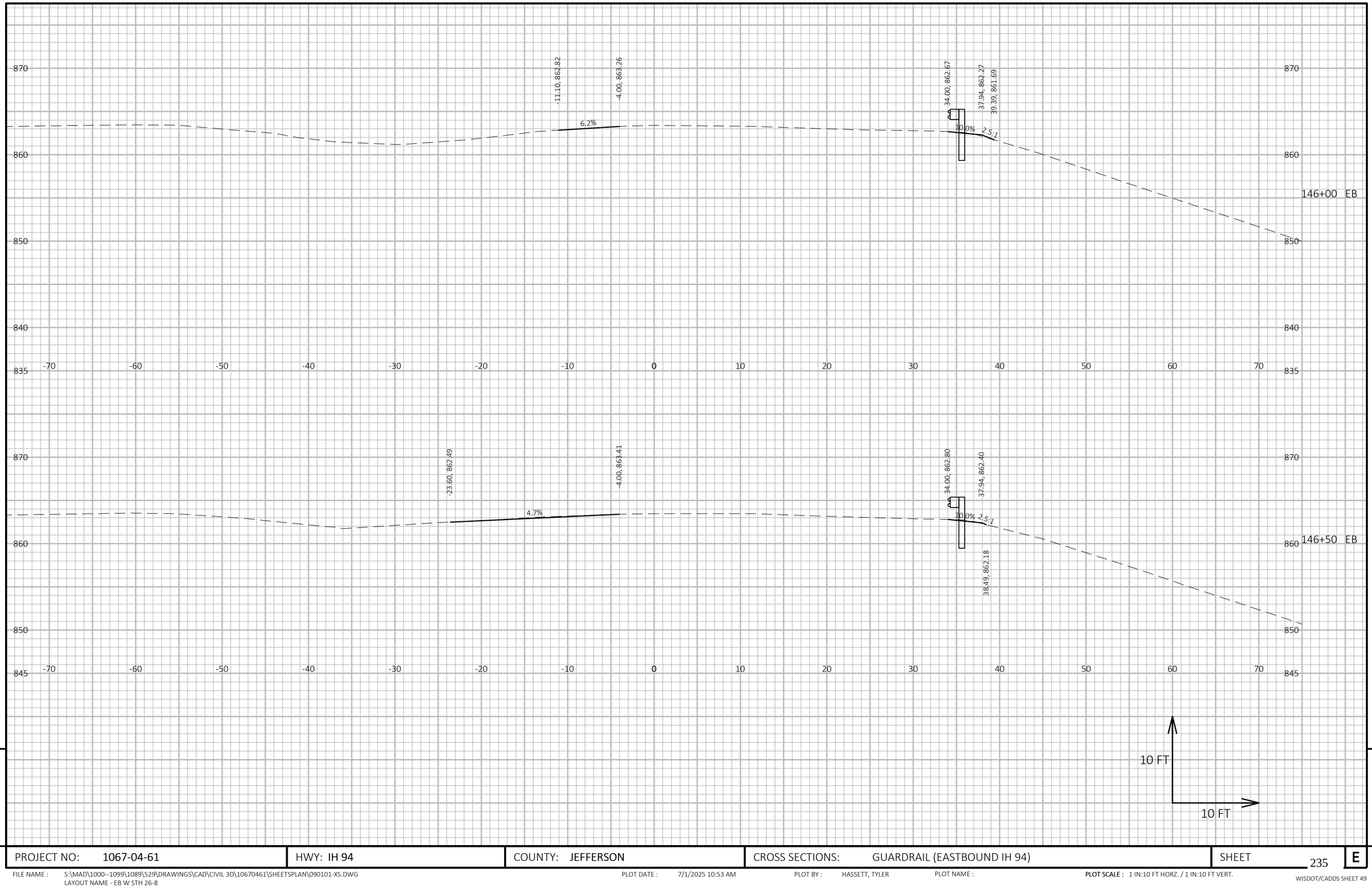
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 234	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W STH 26-7

PLOT DATE : 7/1/2025 10:53 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

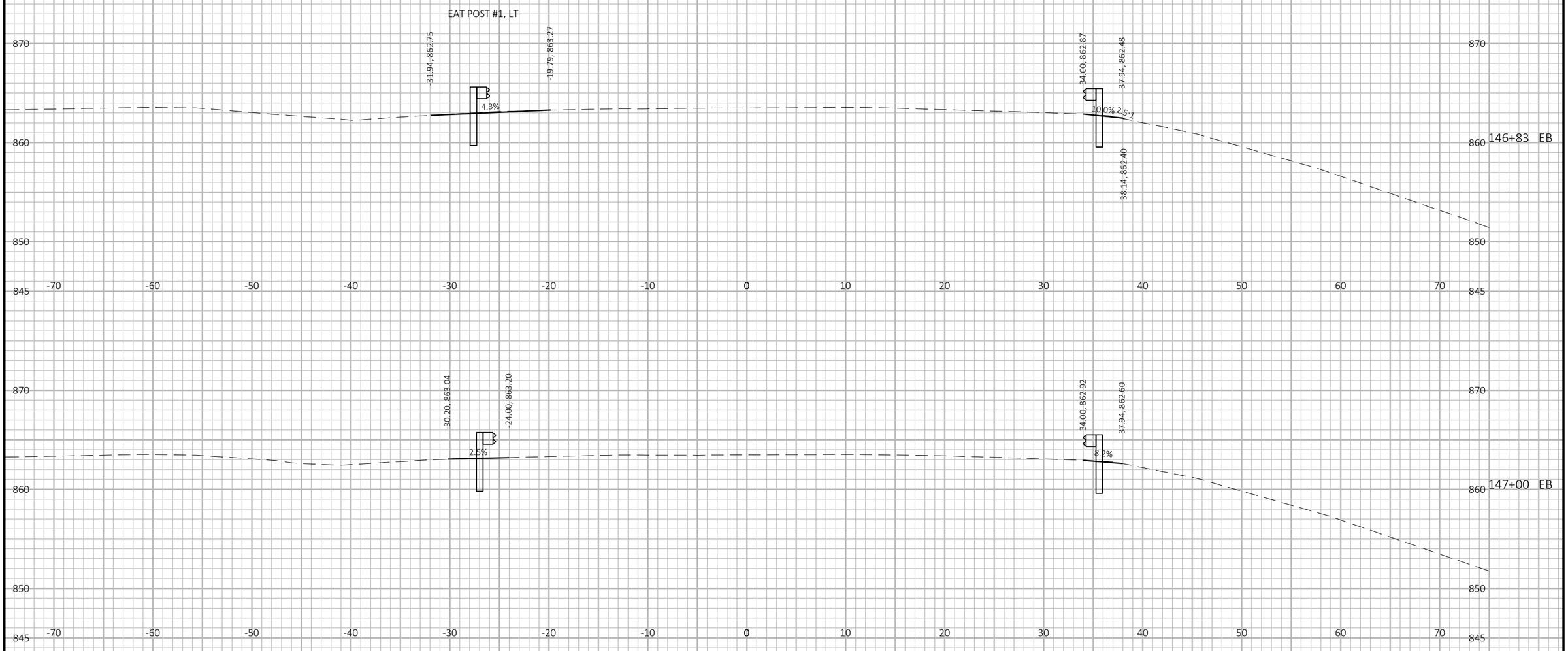
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 235	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W STH 26-8

PLOT DATE : 7/1/2025 10:53 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST #1, LT



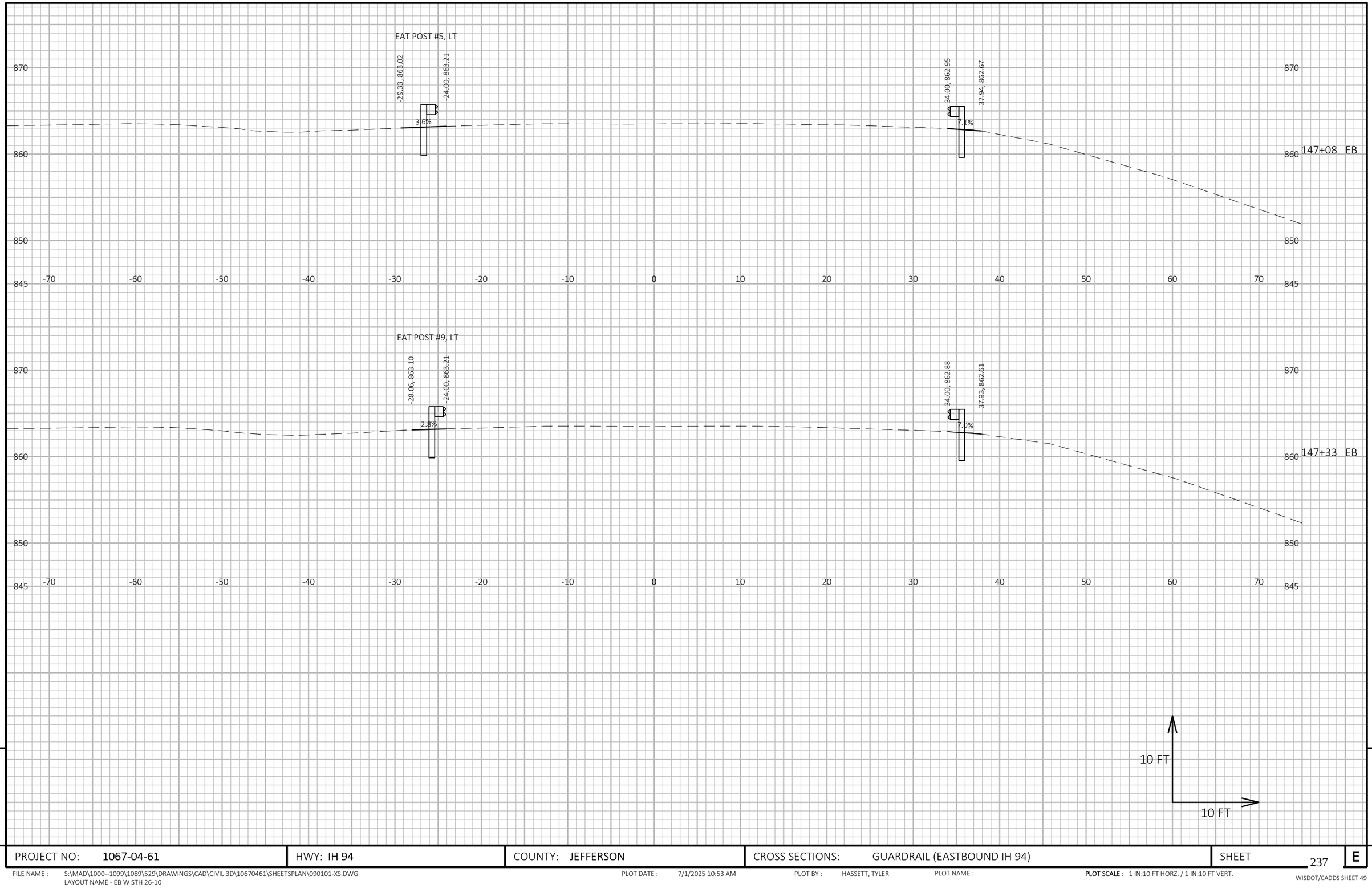
10 FT

10 FT

9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 236	E



9

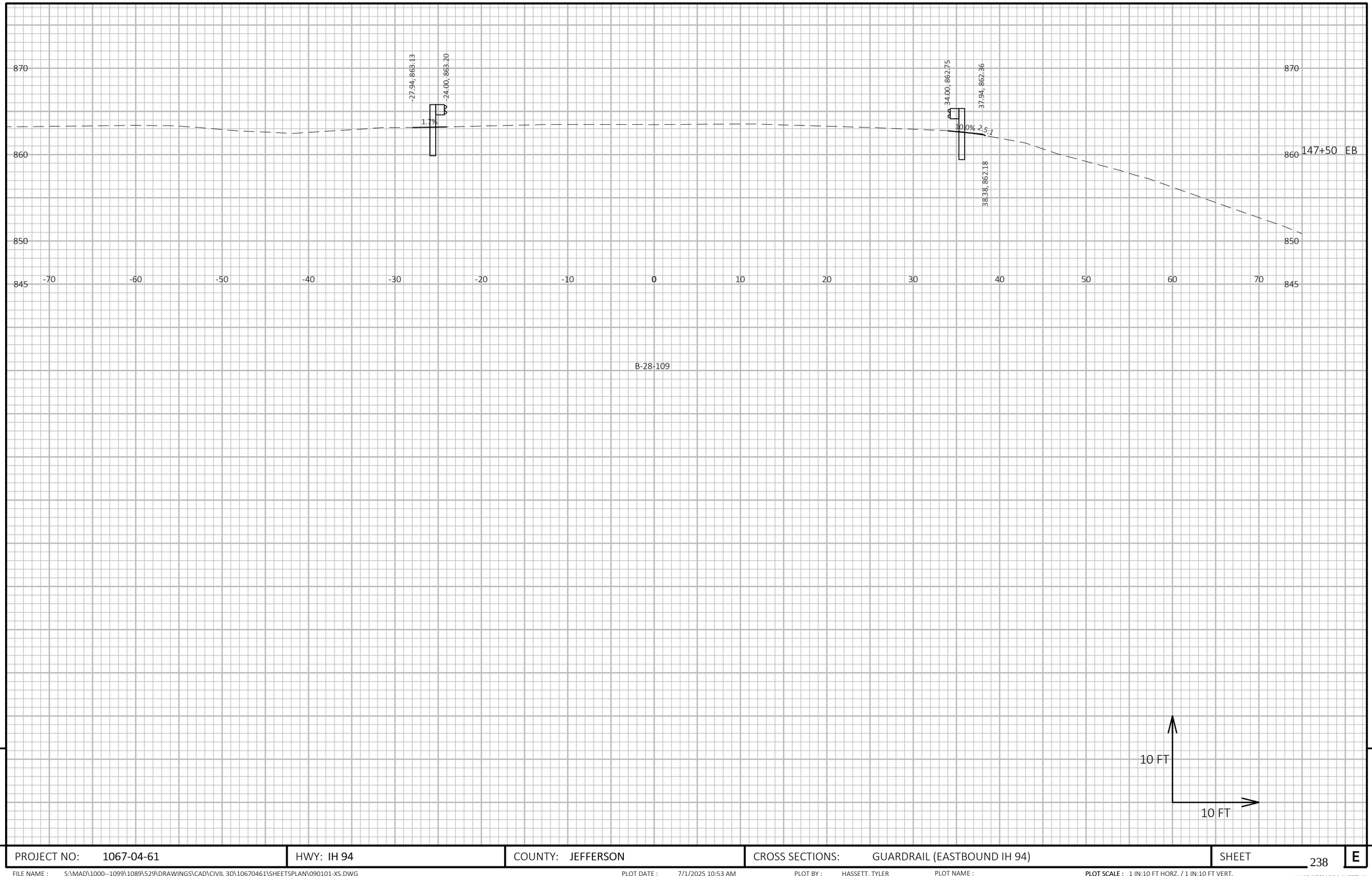
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 237	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W STH 26-10

PLOT DATE : 7/1/2025 10:53 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

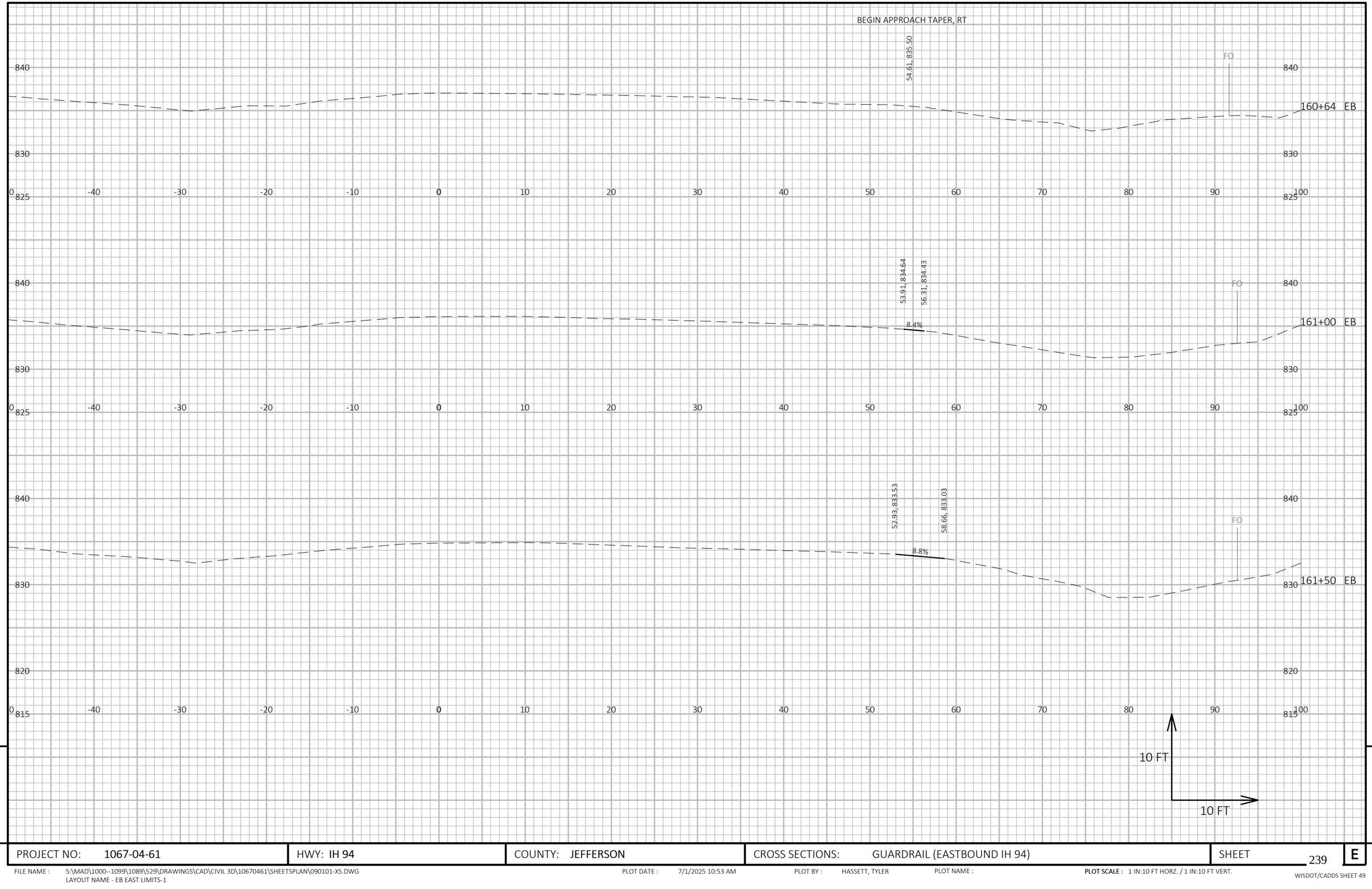
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 238	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB W STH 26-11

PLOT DATE : 7/1/2025 10:53 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 239	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB EAST LIMITS-1

PLOT DATE : 7/1/2025 10:53 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST #1, RT

52.28, 832.87

60.21, 832.07

10.0%

FO

161+83 EB

51.95, 832.43

58.13, 831.85

9.0%

FO

162+00 EB

840

830

820

815

0 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100

10 FT

10 FT

9

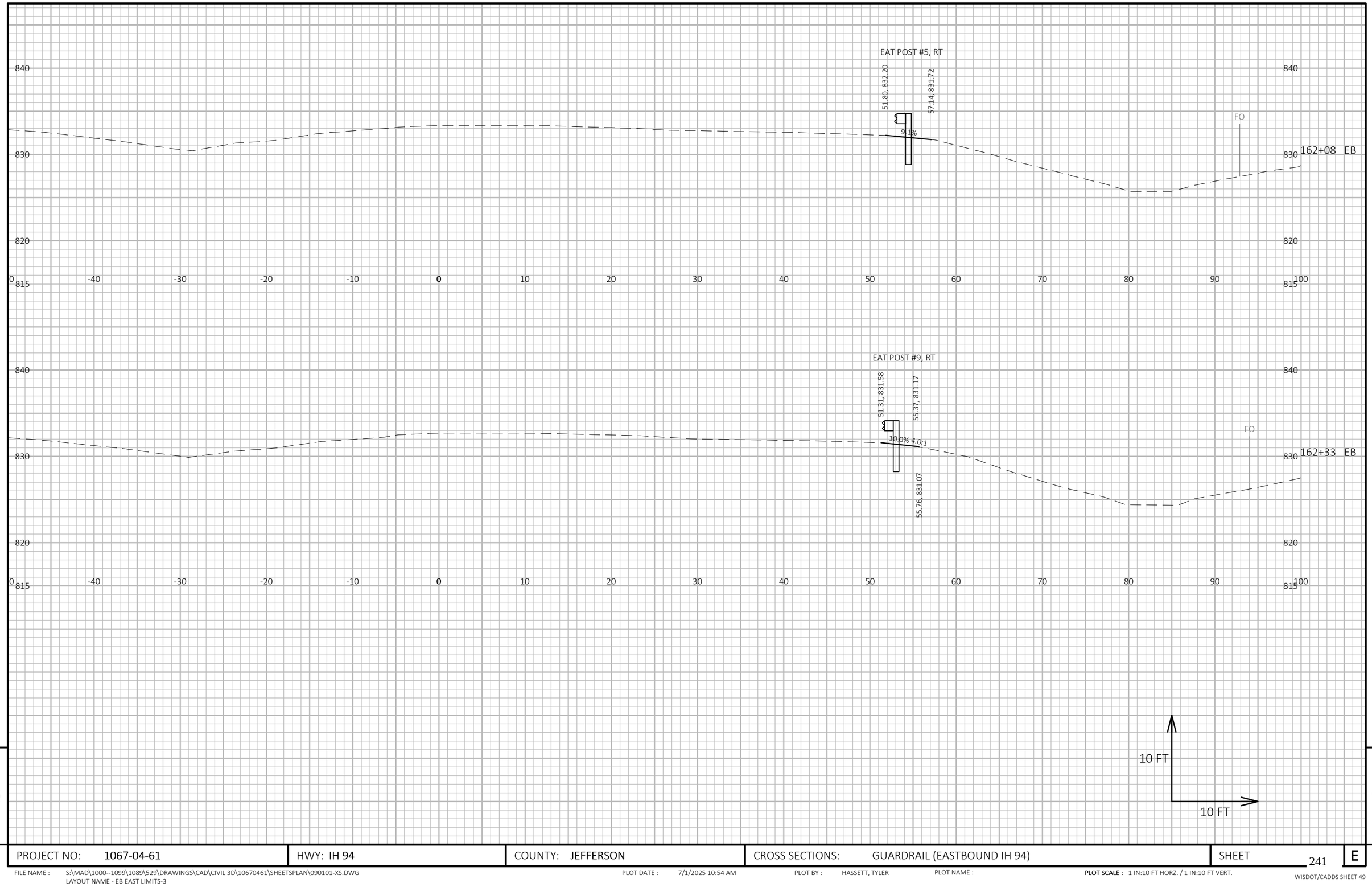
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 240	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB EAST LIMITS-2

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

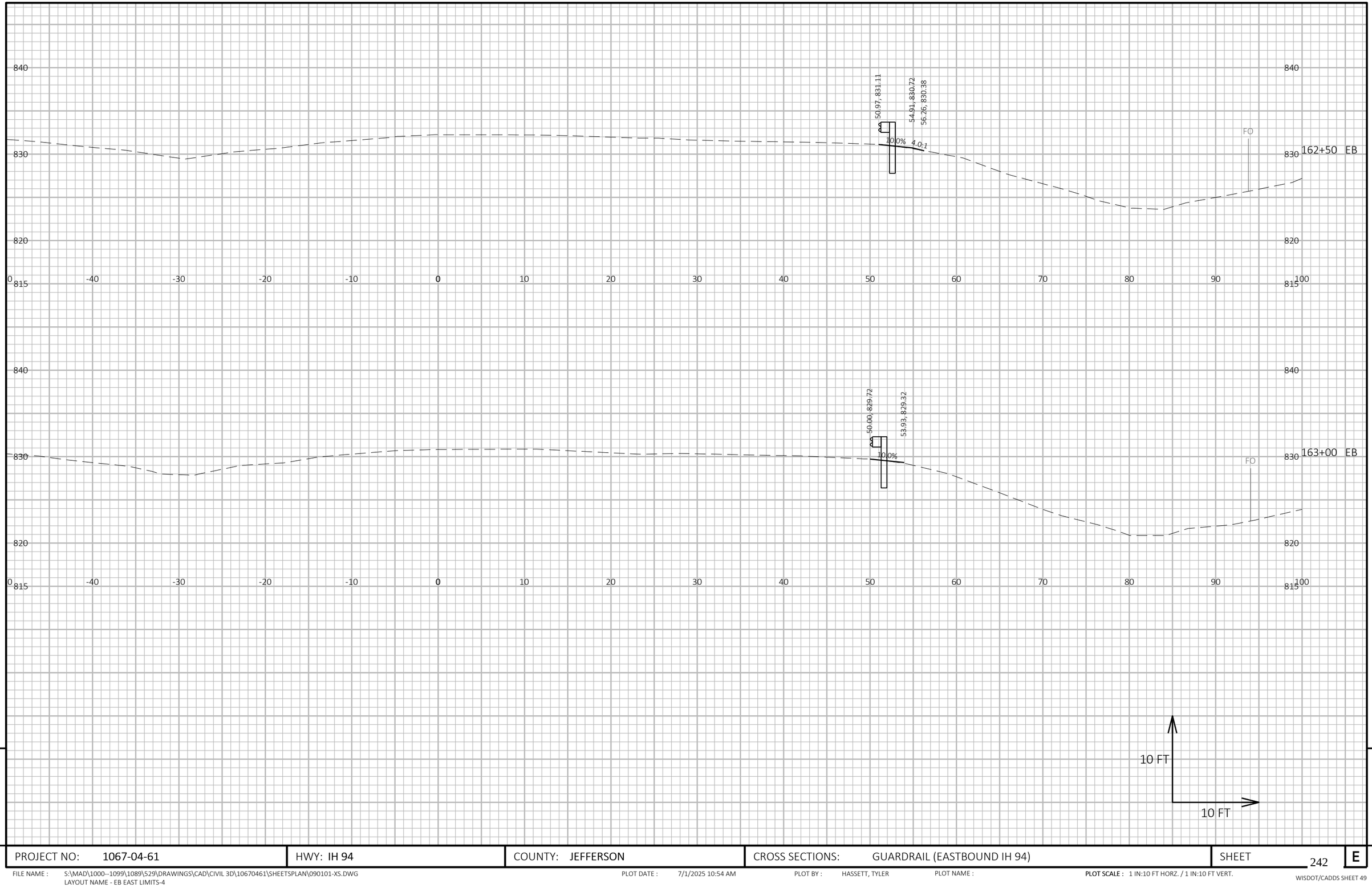
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 241	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB EAST LIMITS-3

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

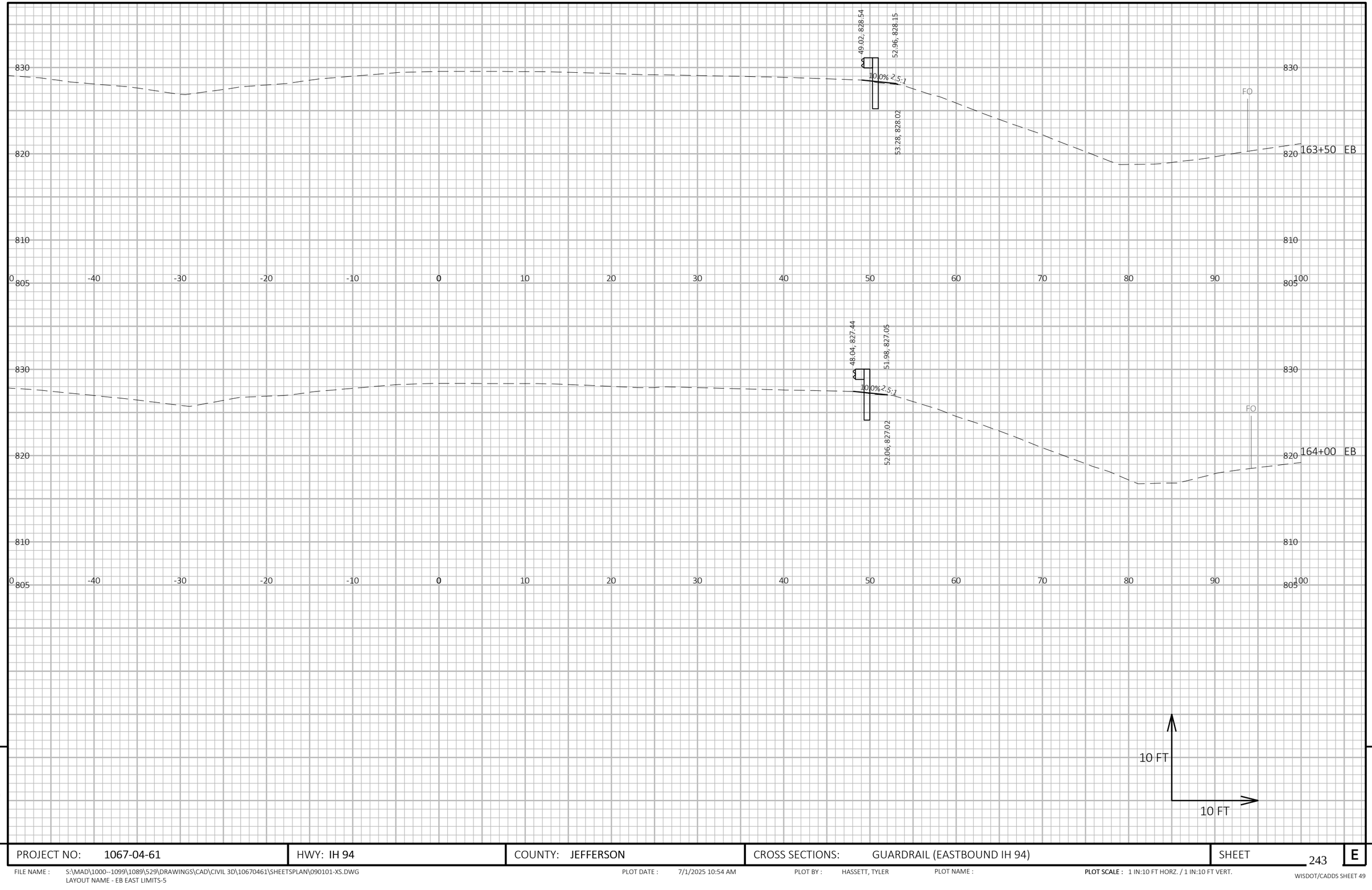
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 242	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB EAST LIMITS-4

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

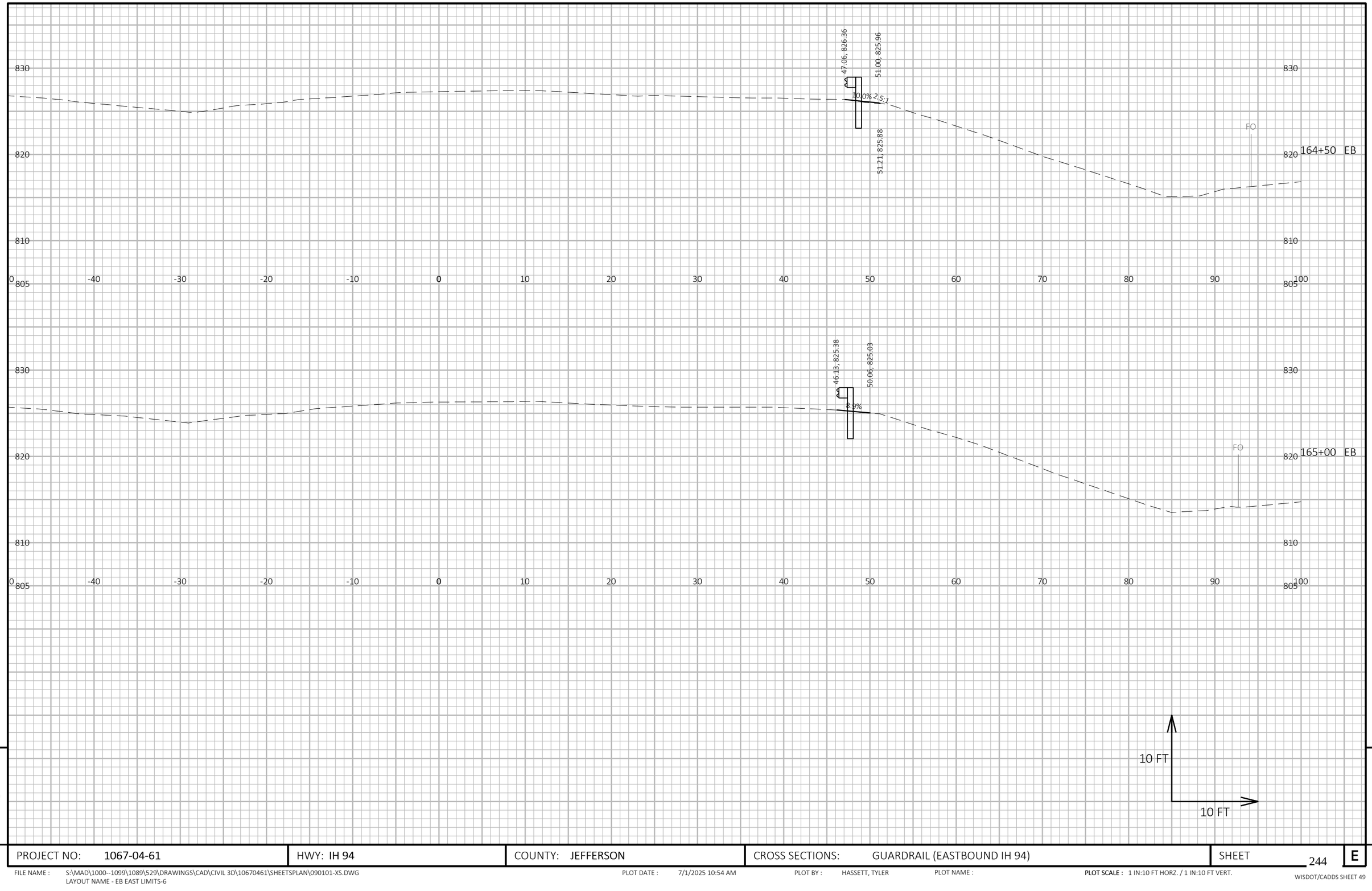
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 243	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB EAST LIMITS-5

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

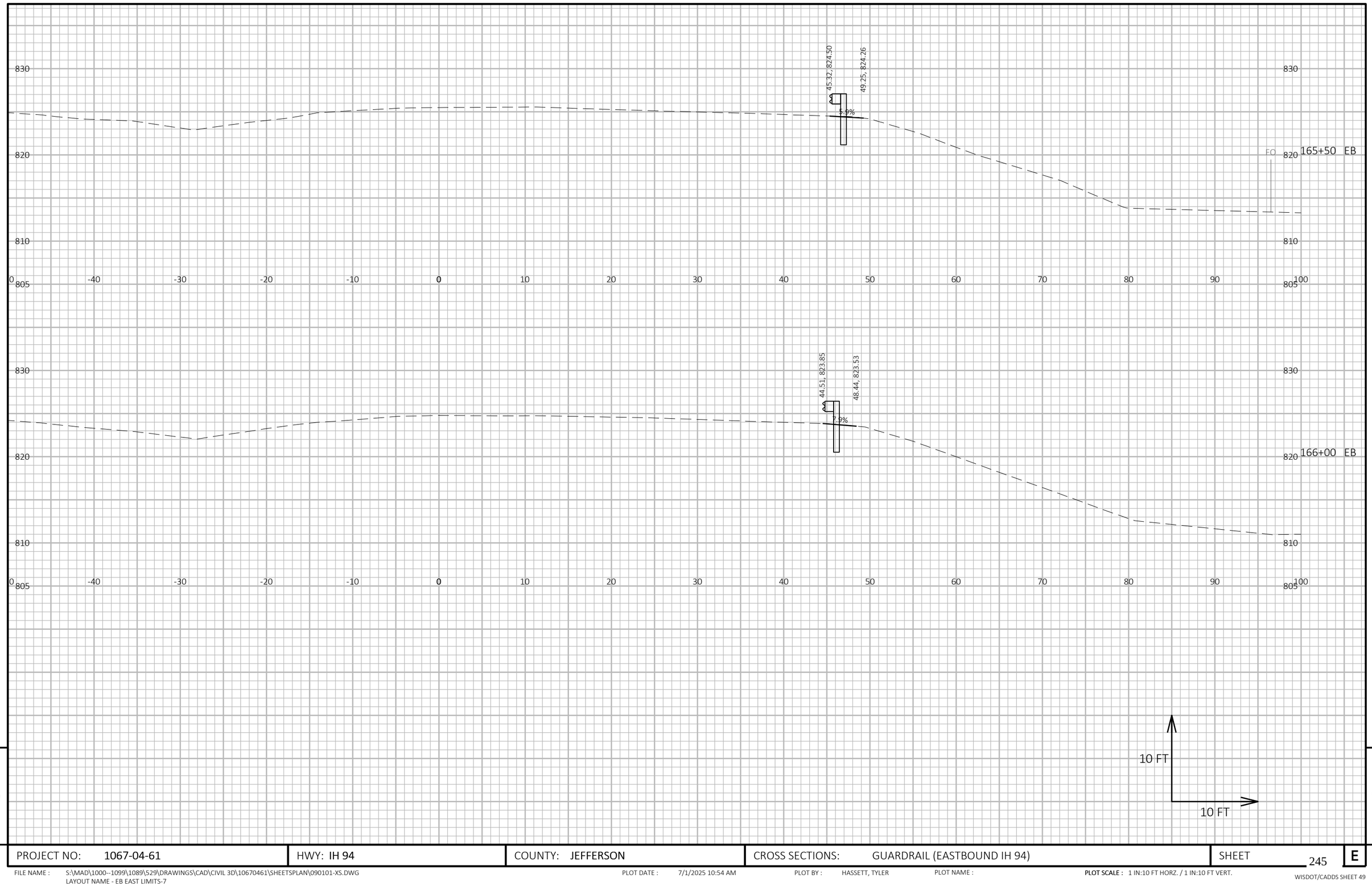
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 244	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB EAST LIMITS-6

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

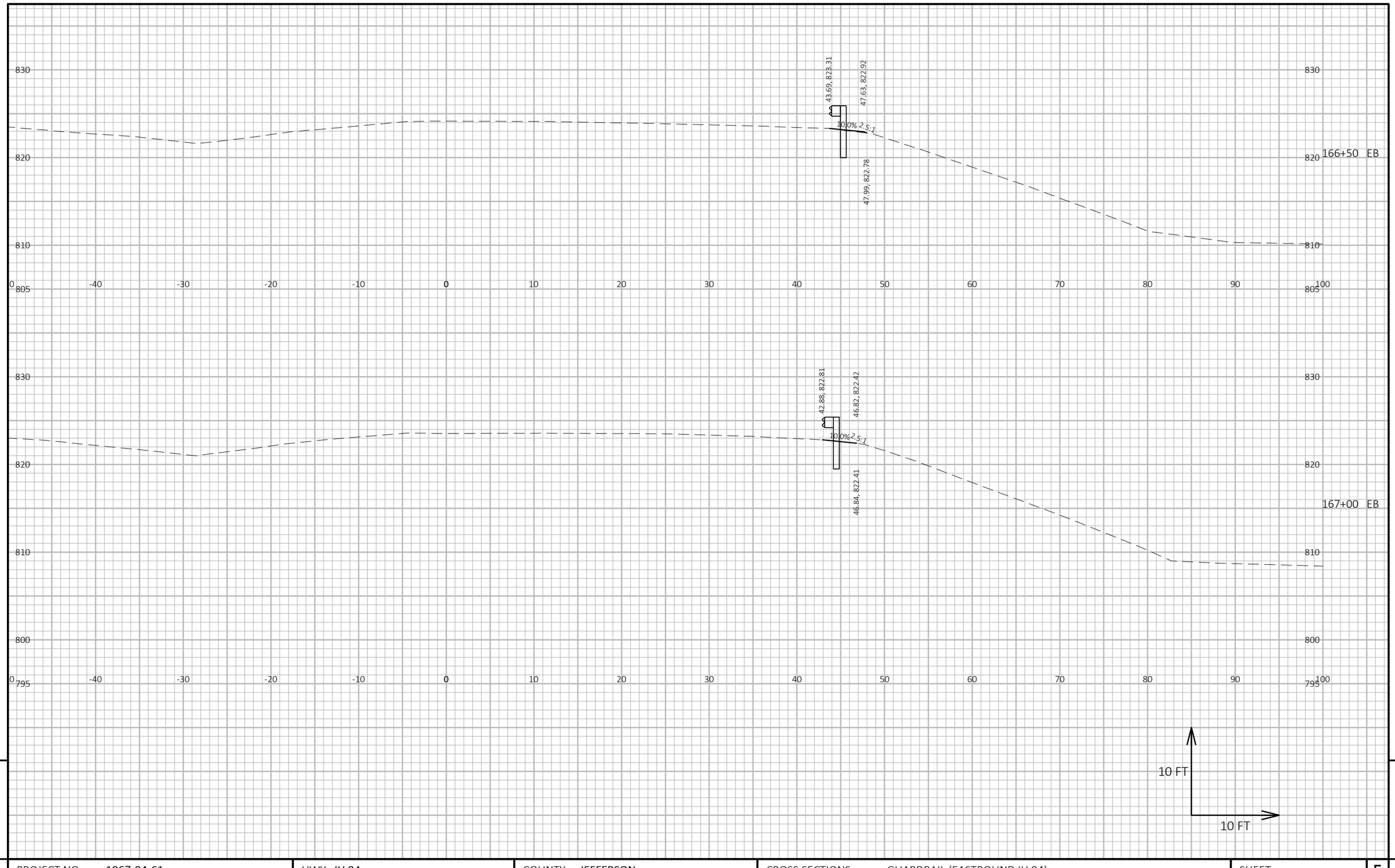
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 245	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB EAST LIMITS-7

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

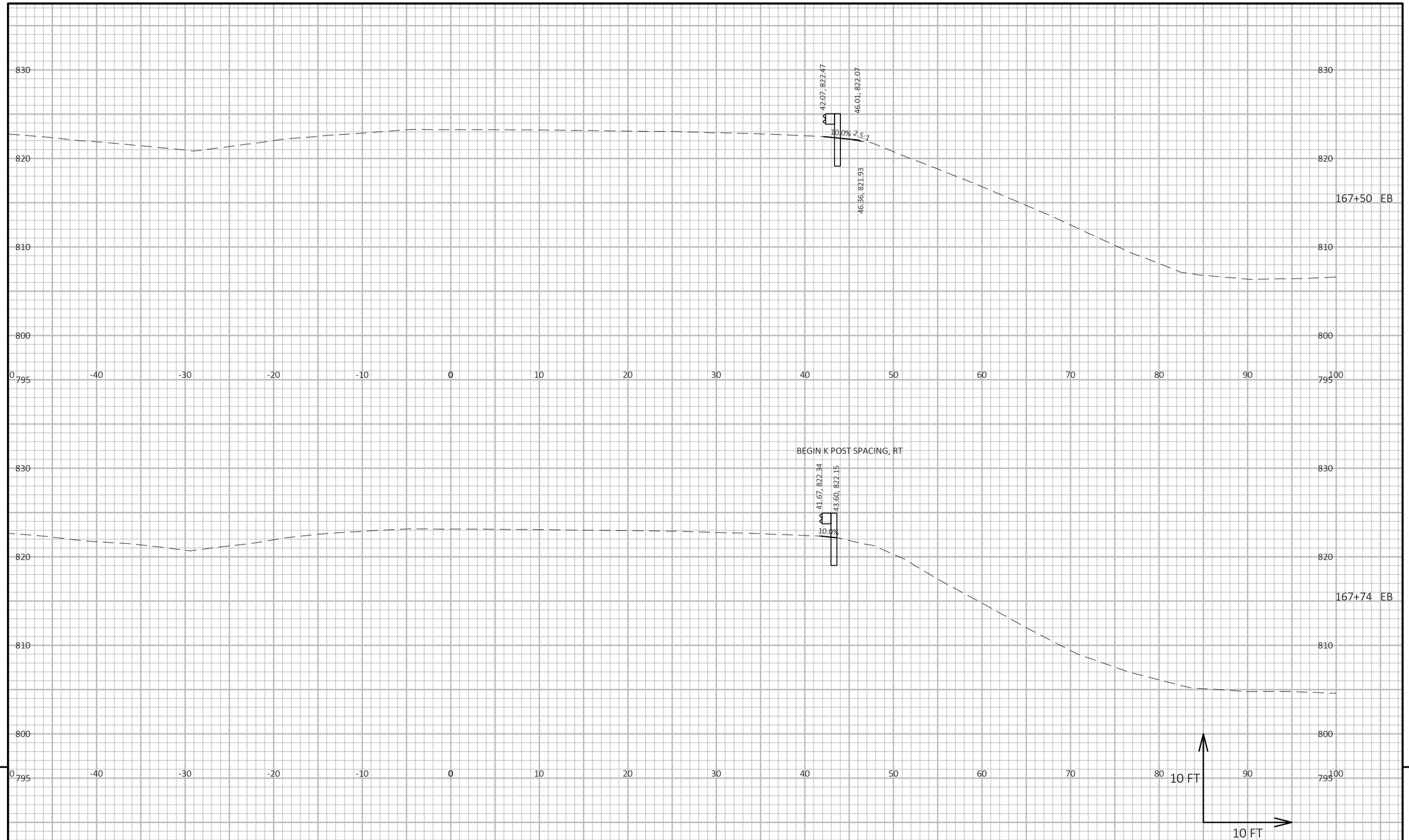
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 246	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB EAST LIMITS-8

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

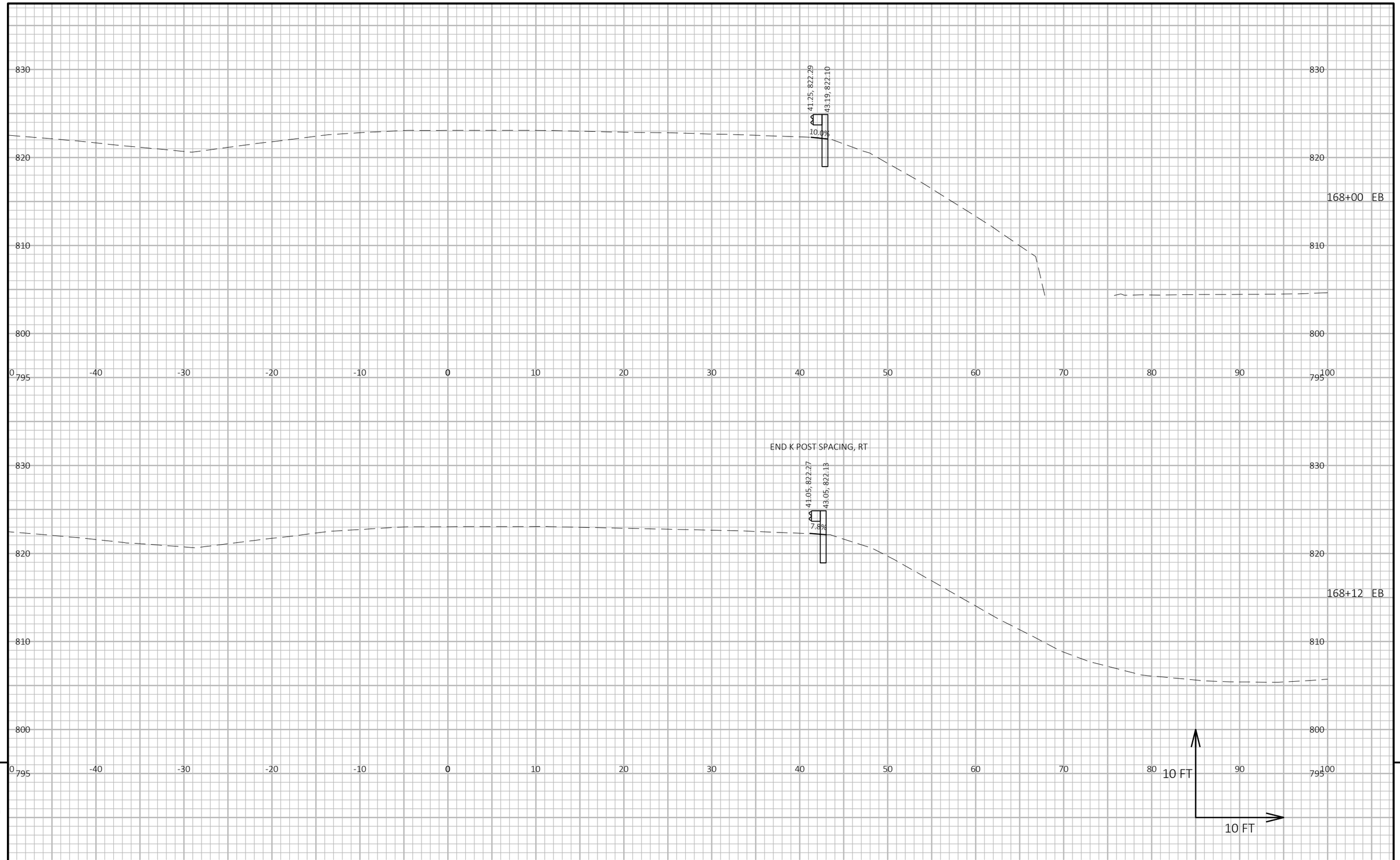
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 247	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB EAST LIMITS-9

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

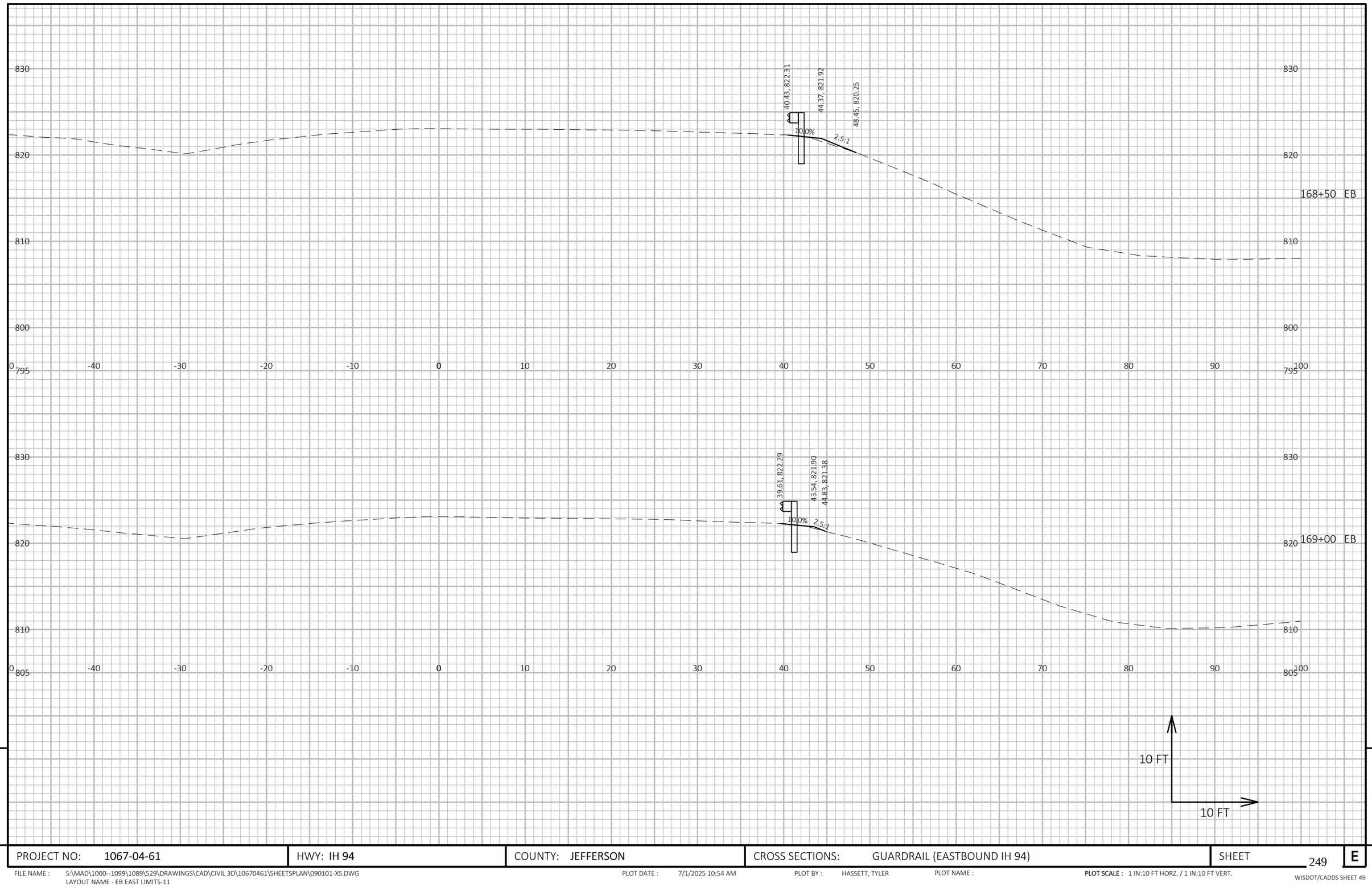
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 248	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB EAST LIMITS-10

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



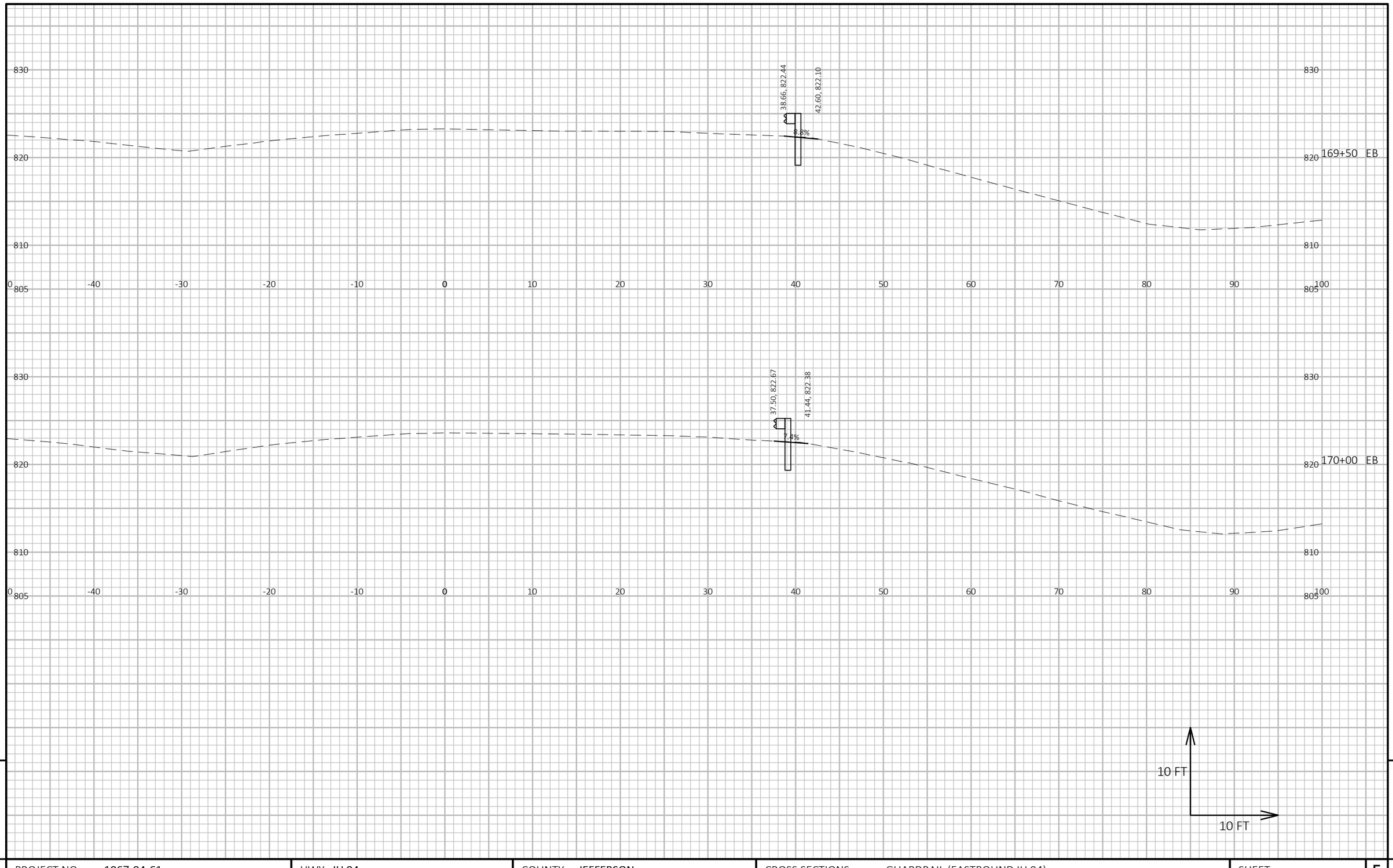
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9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 249	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB EAST LIMITS-11

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 250	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB EAST LIMITS-12

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END TYPE 2 TERMINAL, RT

37.45, 822.68

41.39, 822.39

7.2%

830
820
810
805

0 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100

170+02 EB



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (EASTBOUND IH 94)	SHEET 251	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - EB EAST LIMITS-13

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END TYPE 2 TERMINAL, LT

-37.94, 840.35

-34.00, 840.74

10.0%

105+47 WB

105+50 WB

850
840
830
825

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT

10 FT

9

9

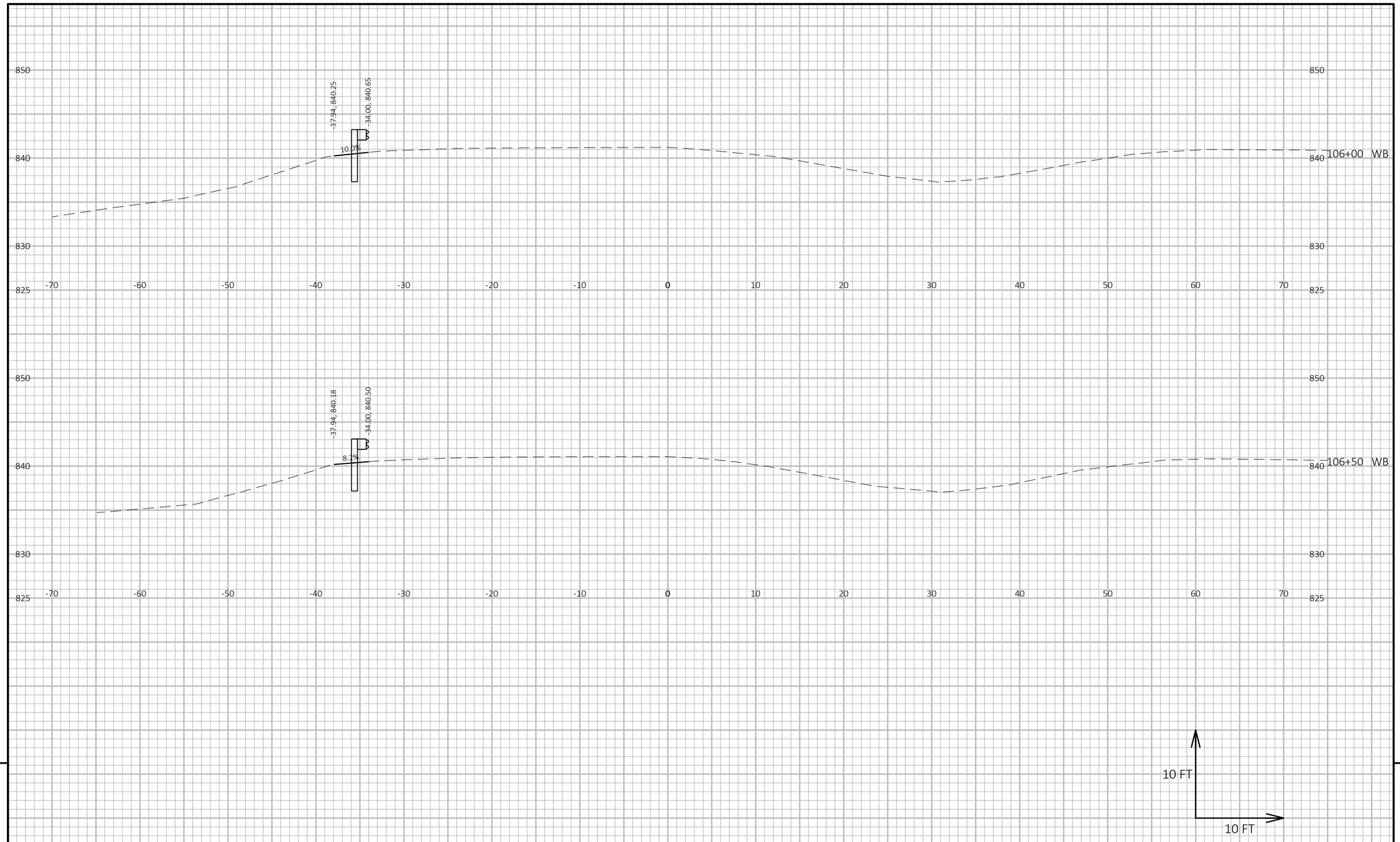
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 252	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB W CTH Y-1

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

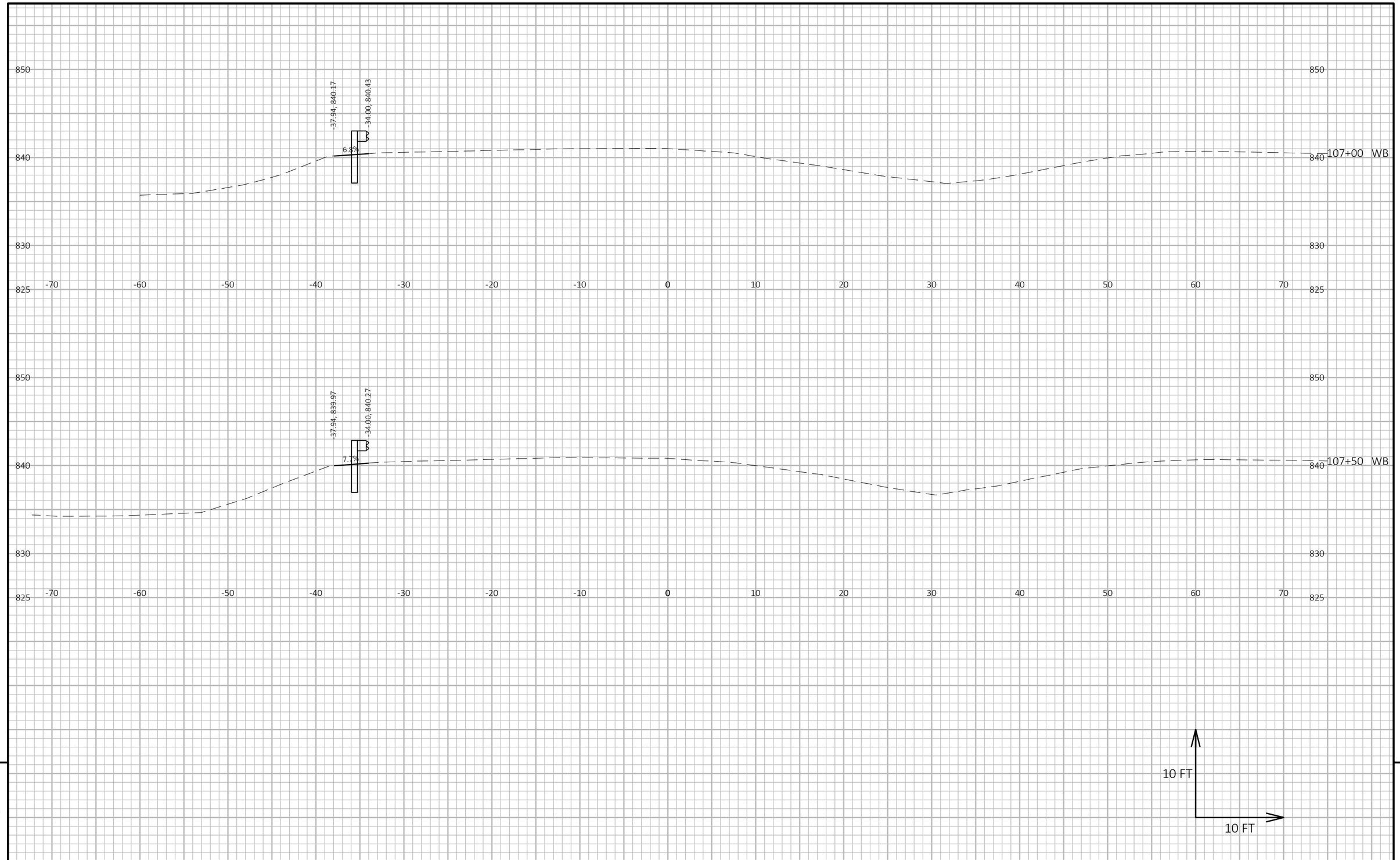
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 253	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB W CTH Y-2

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

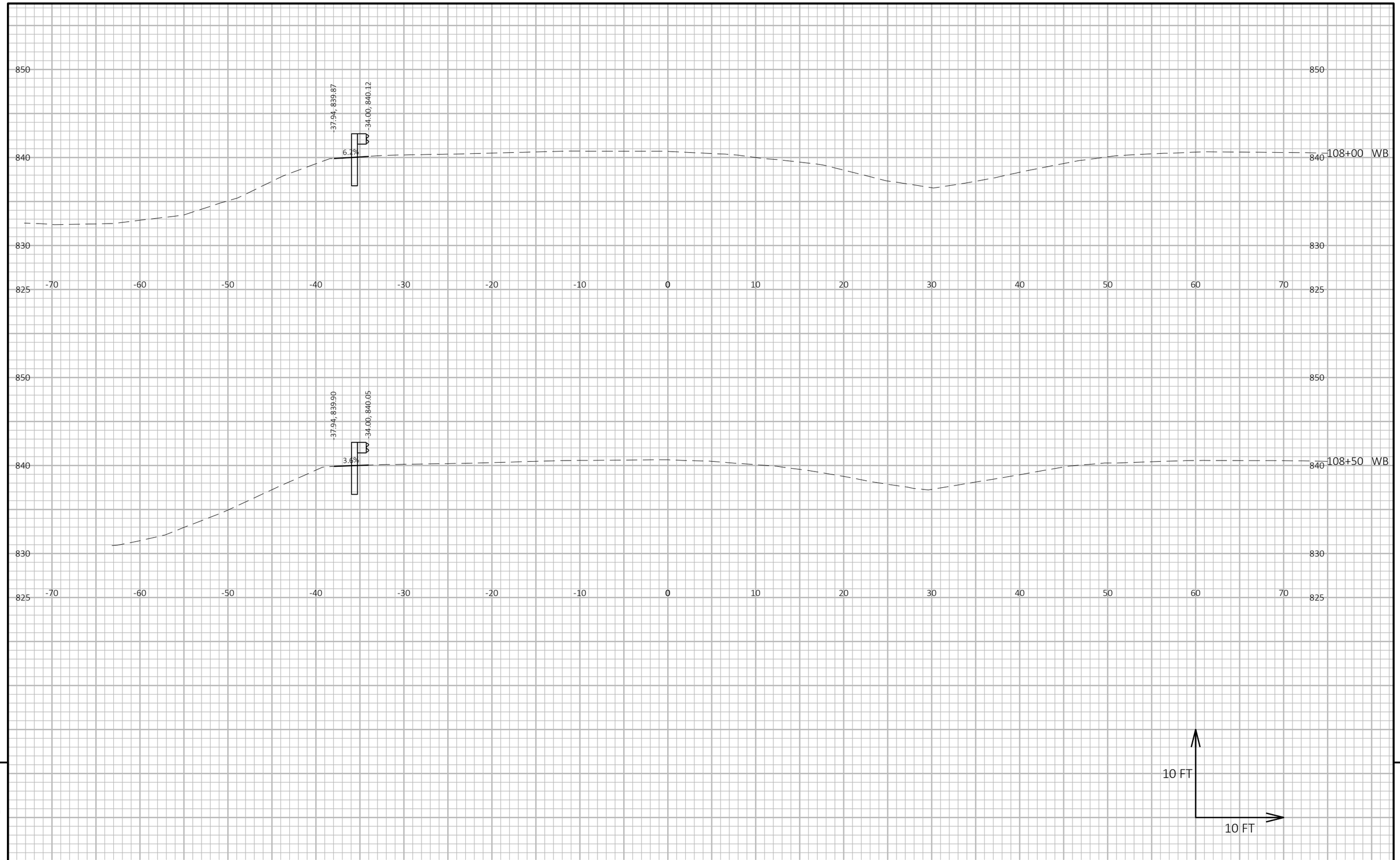
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 254	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB W CTH Y-3

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

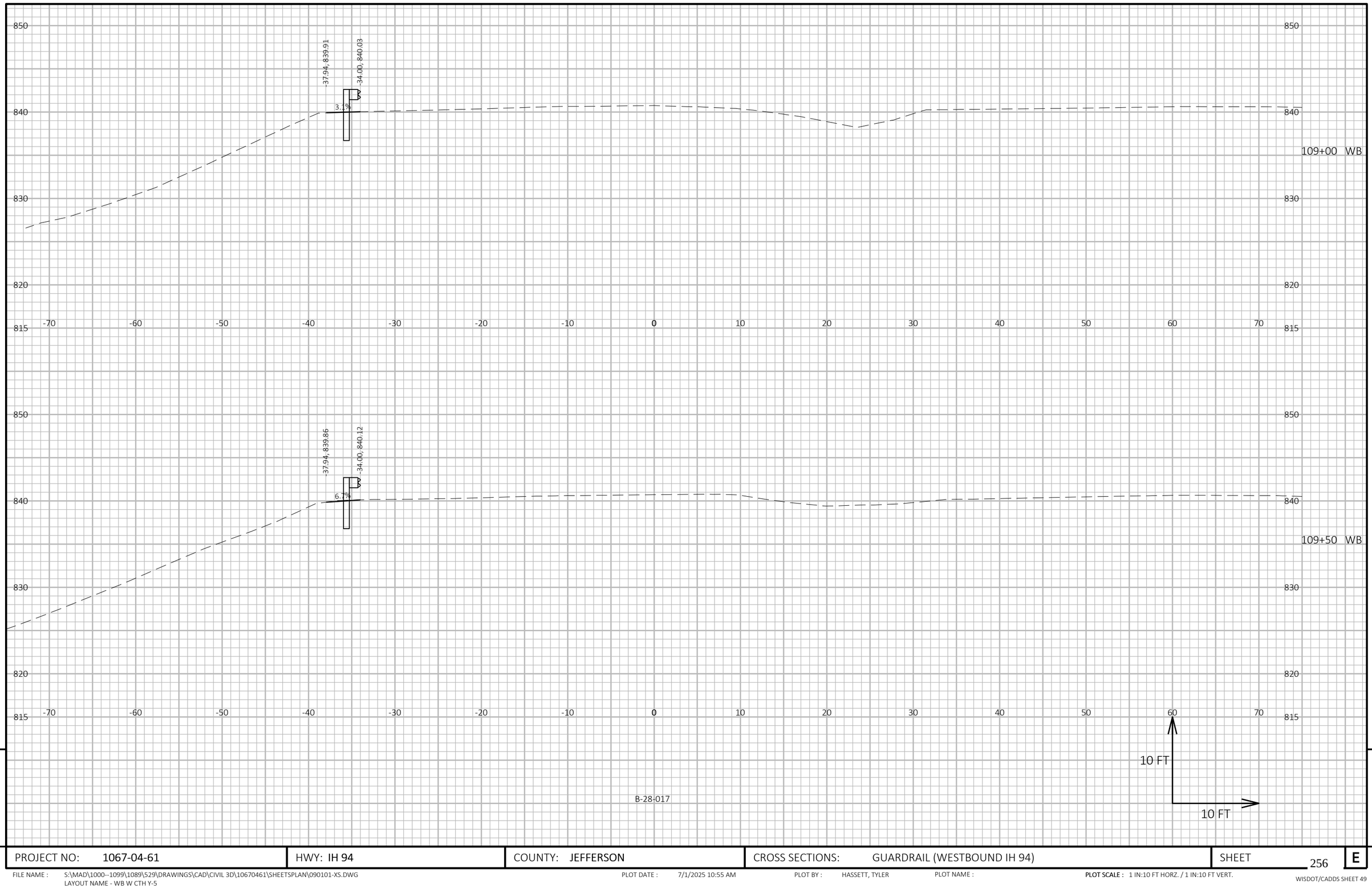
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 255	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB W CTH Y-4

PLOT DATE : 7/1/2025 10:54 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

B-28-017

9

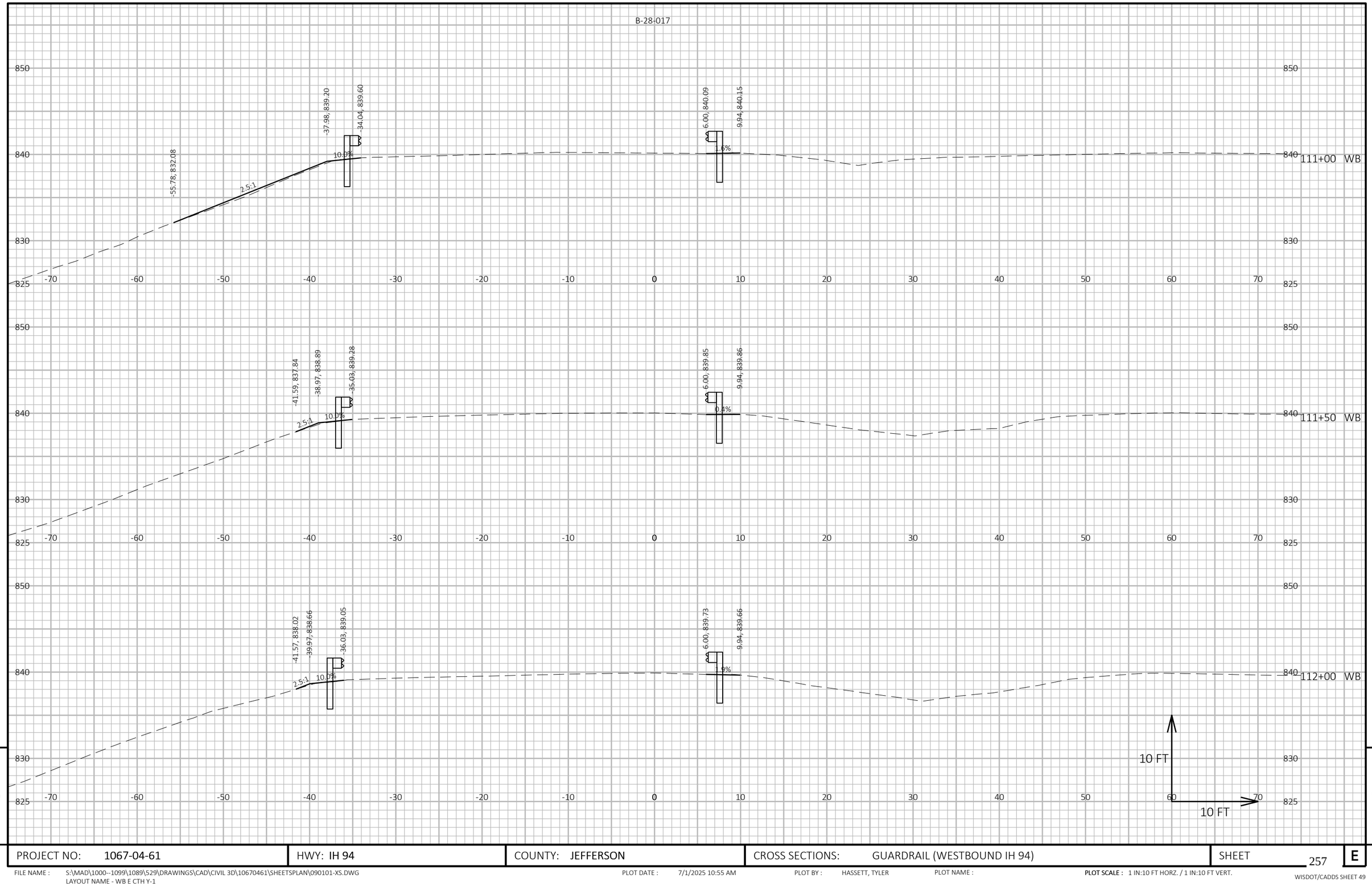
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 256	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB W CTH Y-5

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

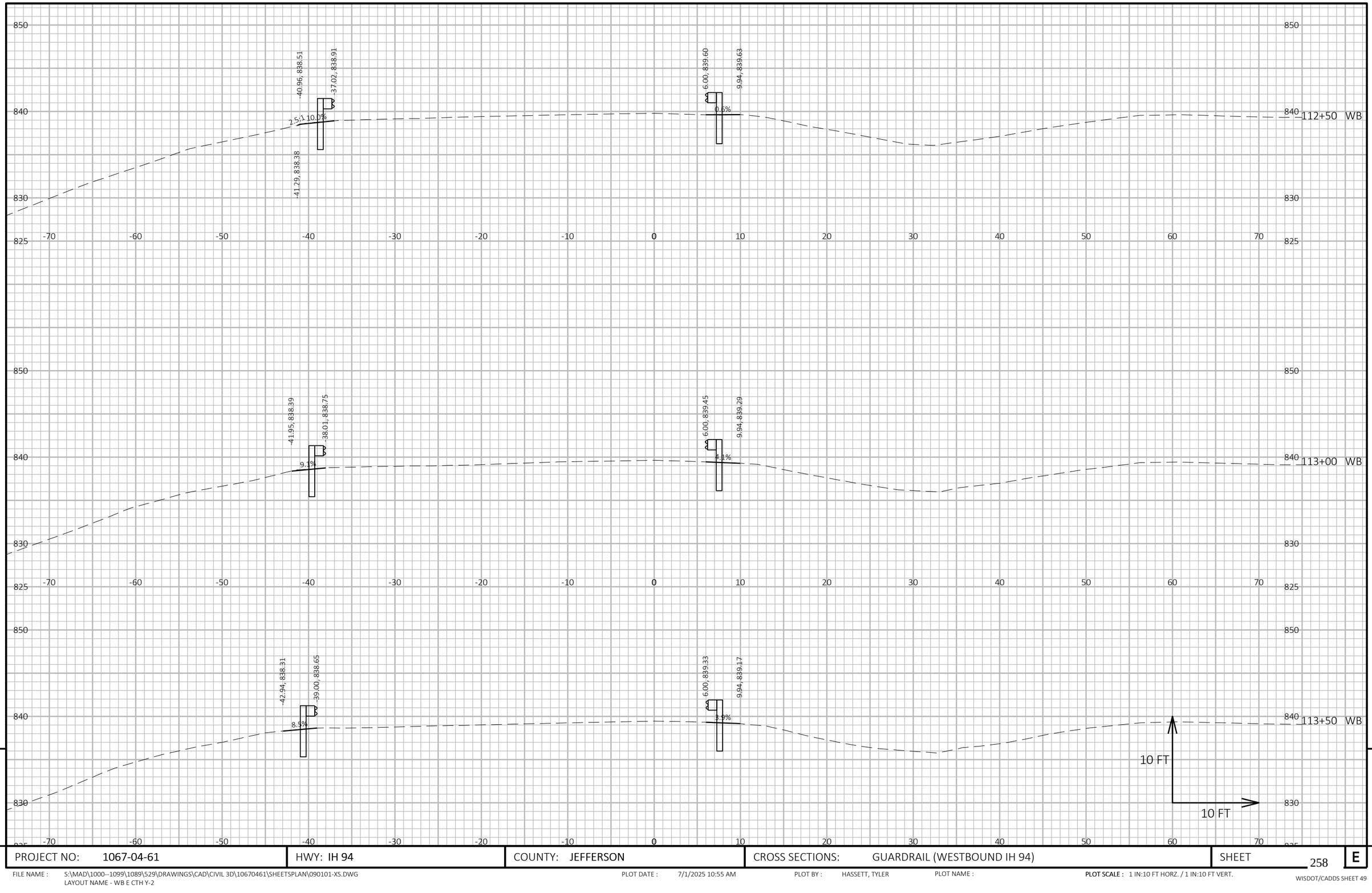
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 257	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E CTH Y-1

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

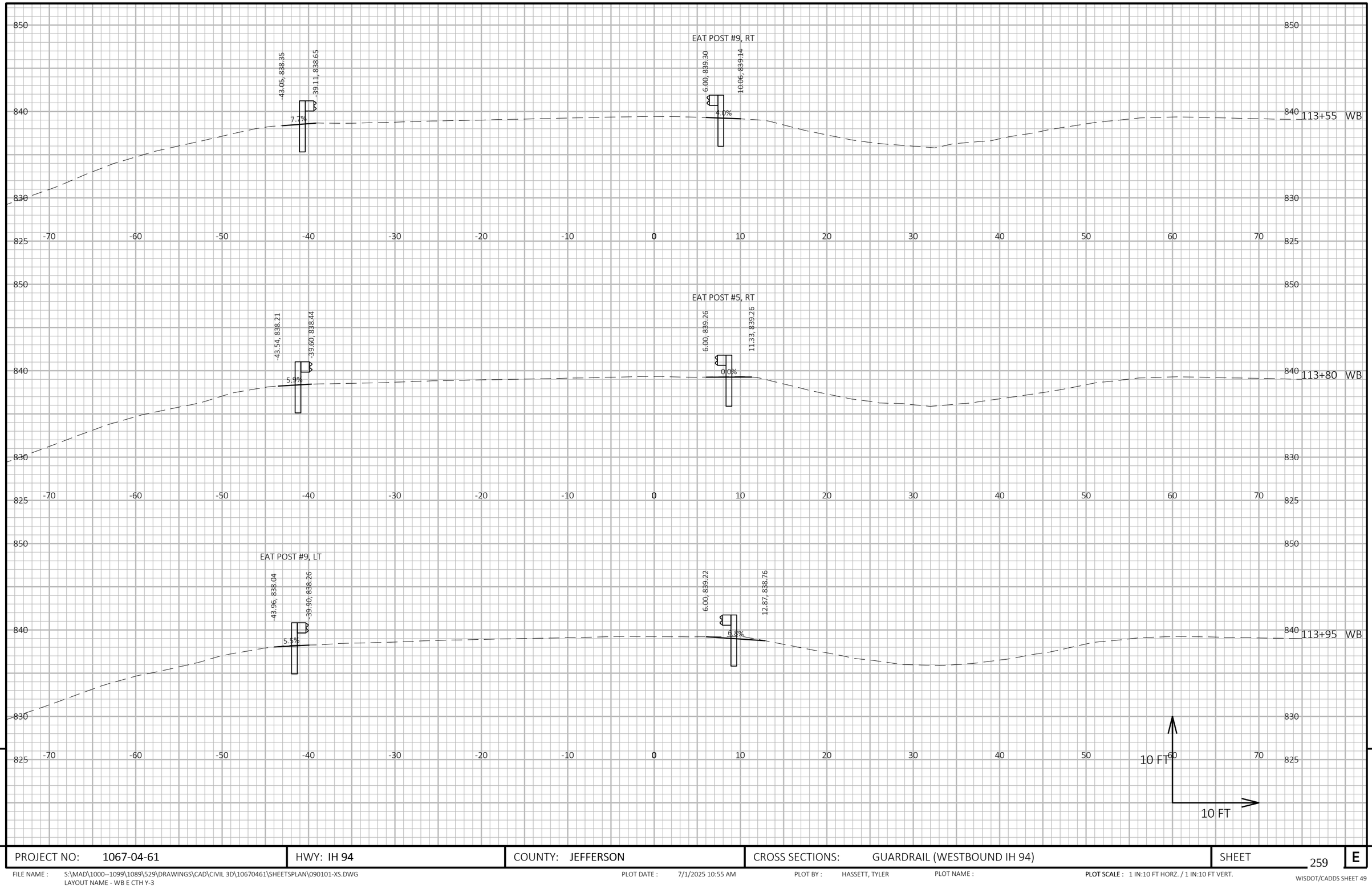
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 258	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E CTH Y-2

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

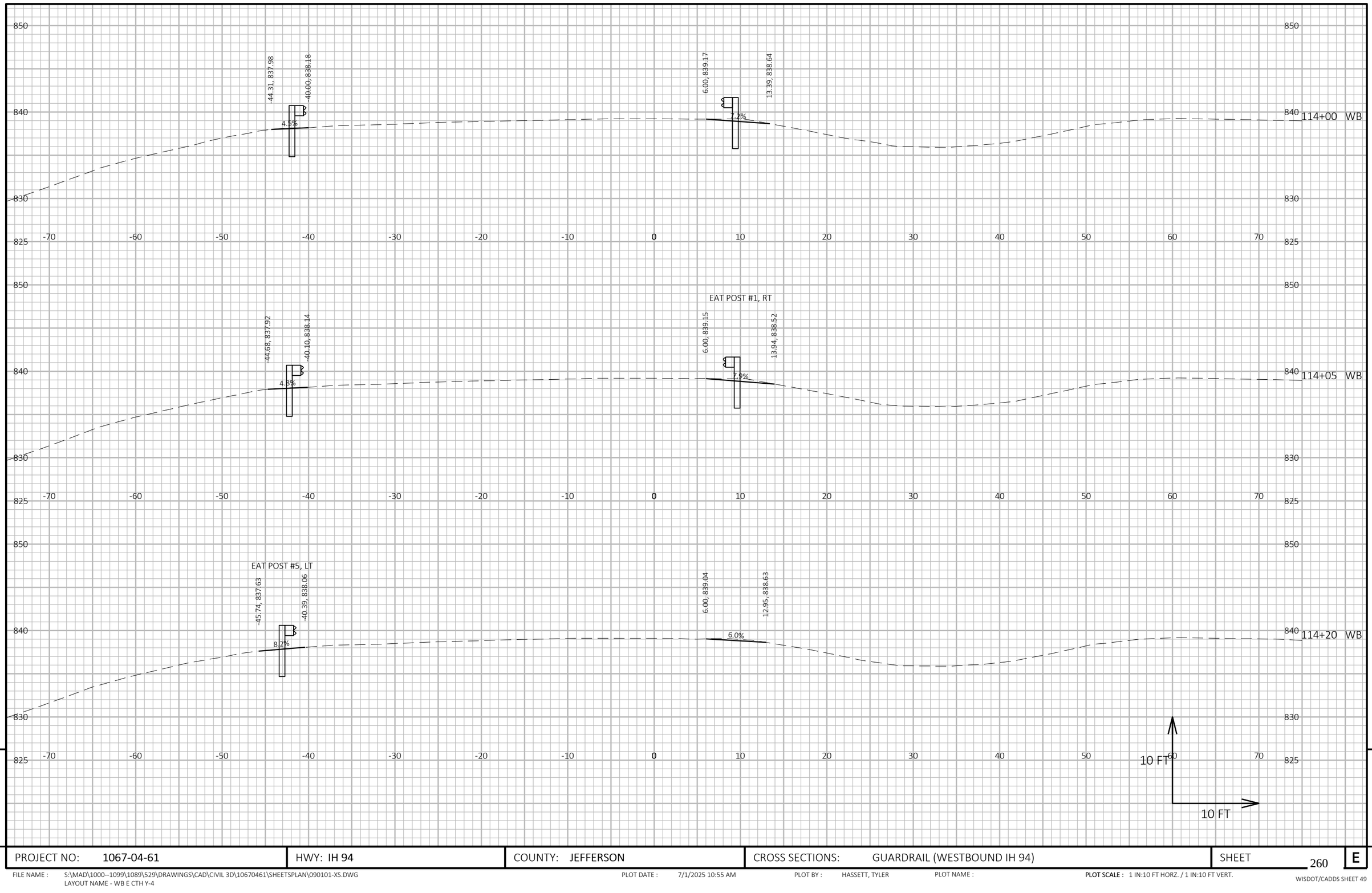
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 259	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E CTH Y-3

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 260	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E CTH Y-4

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST #1, LT

-48.82, 837.02

-40.89, 837.80

9.8%

6.00, 838.83

11.29, 838.68

2.8%

114+45 WB

-48.59, 837.05

-40.99, 837.75

9.2%

6.00, 838.78

10.95, 838.66

2.5%

114+50 WB

-46.25, 837.14

-41.98, 837.46

7.6%

6.00, 838.54

7.62, 838.47

4.3%

115+00 WB

10 FT

10 FT

9

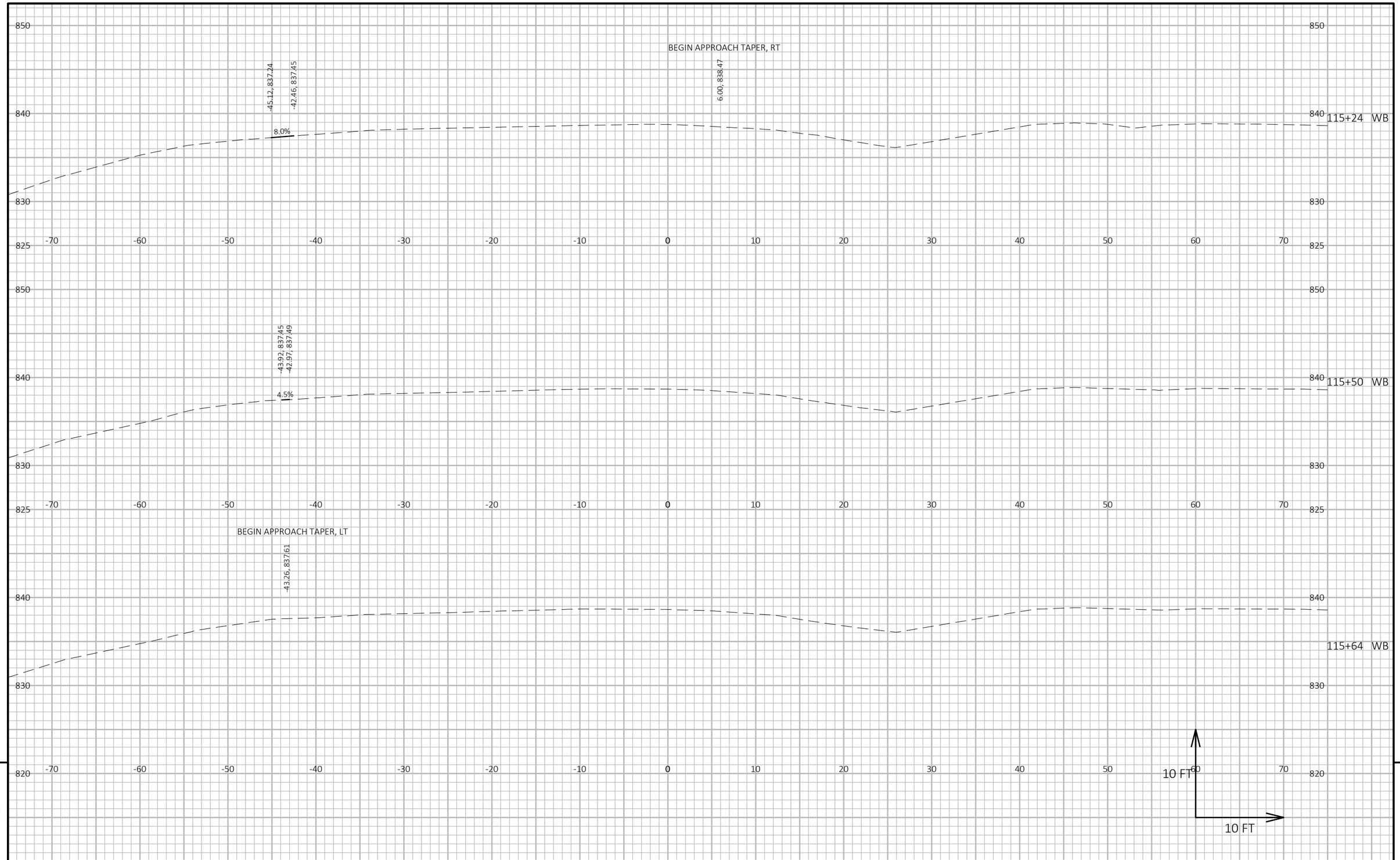
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 261	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E CTH Y-5

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



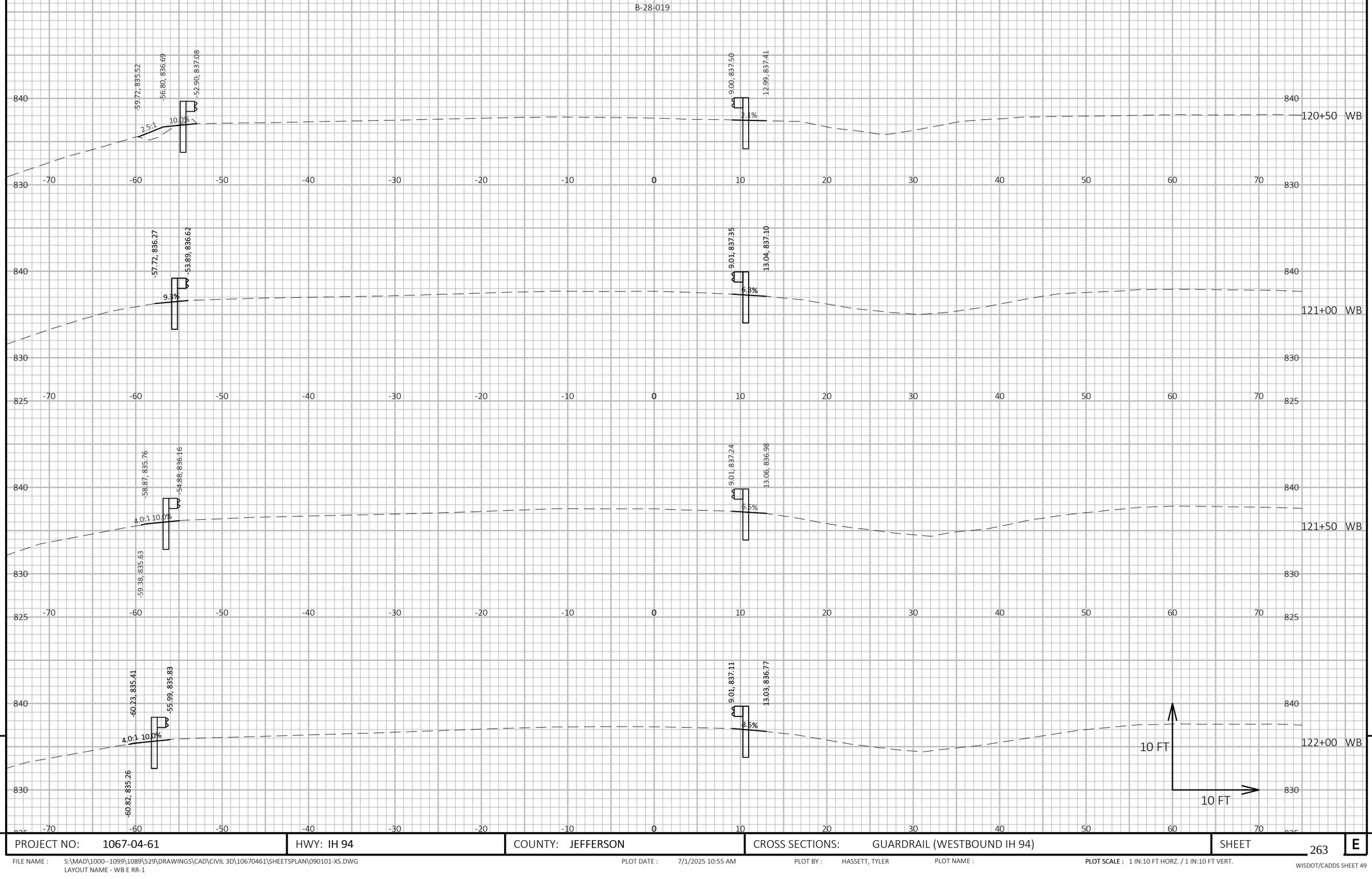
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 262	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E CTH Y-6

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

B-28-019



9

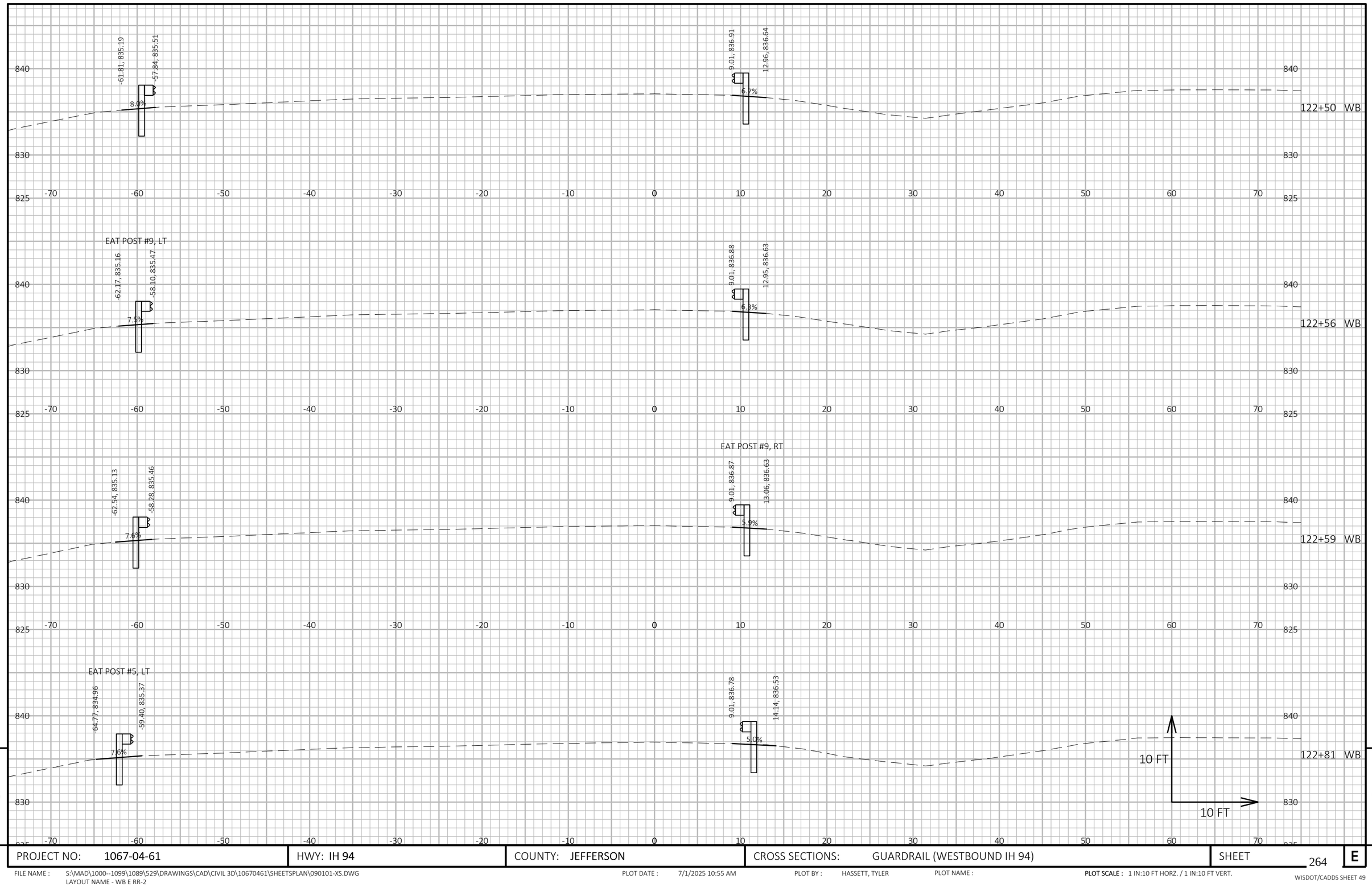
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 263	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E RR-1

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 264	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E RR-2

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST #5, RT

-65.36, 834.92
-59.61, 835.35
7.5%
9.01, 836.77
14.33, 836.51
4.9%
122+84 WB

-67.98, 834.55
-60.56, 835.29
4.0:1
10.0%
9.00, 836.73
15.98, 836.32
5.8%
123+00 WB

-68.60, 834.40

EAT POST #1, LT

-70.80, 833.99
-68.85, 834.48
-60.91, 835.27
4.0:1
10.0%
9.00, 836.71
16.55, 836.25
6.1%
123+05 WB

EAT POST #1, RT

-69.98, 834.17
-68.84, 834.46
-61.16, 835.22
4.0:1
10.0%
9.00, 836.70
16.93, 836.23
5.9%
123+09 WB

10 FT
10 FT

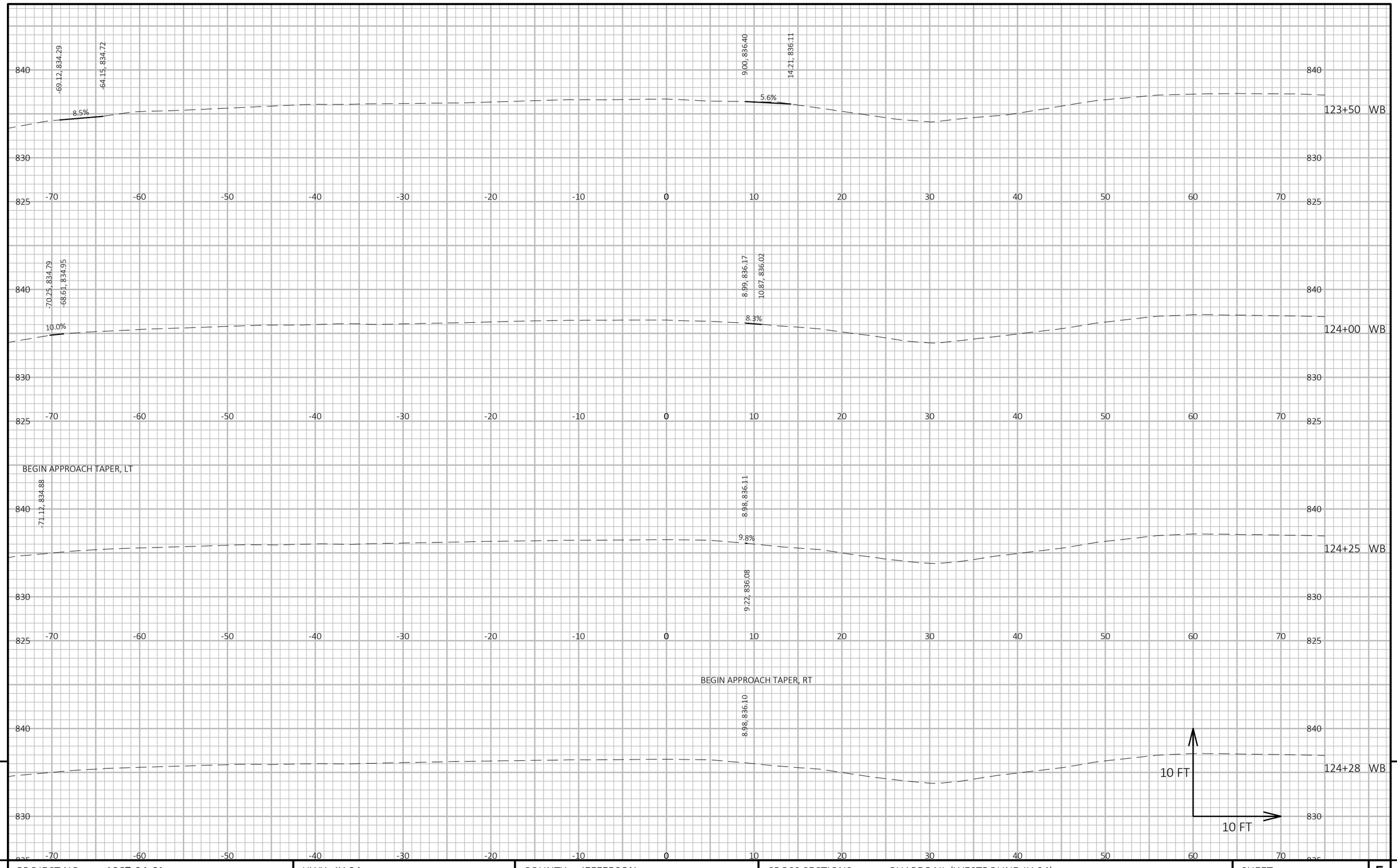
840
830
825
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

9 9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 265	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E RR-3

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

9

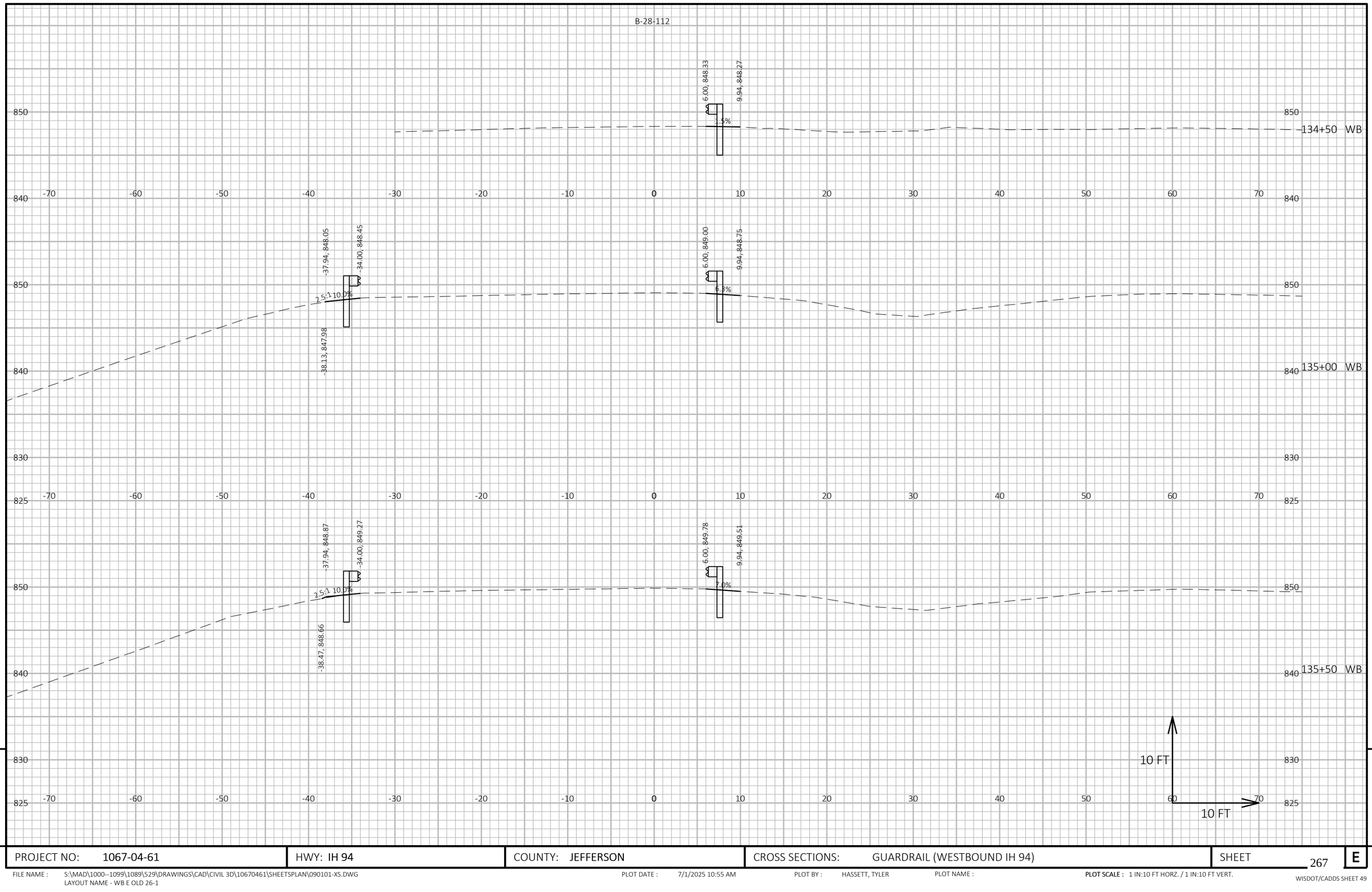
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 266	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E RR-4

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

B-28-112



9

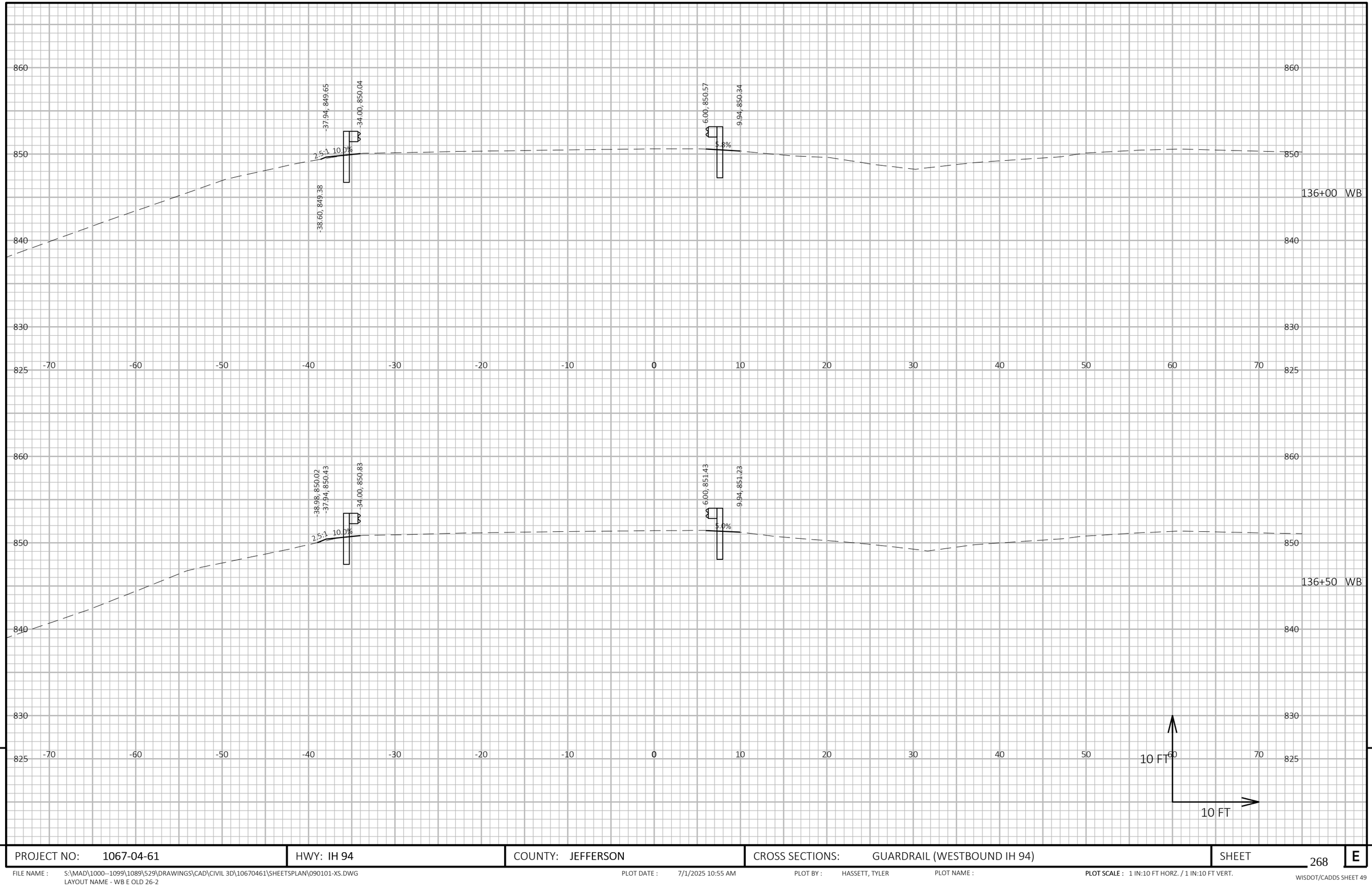
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 267	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E OLD 26-1

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

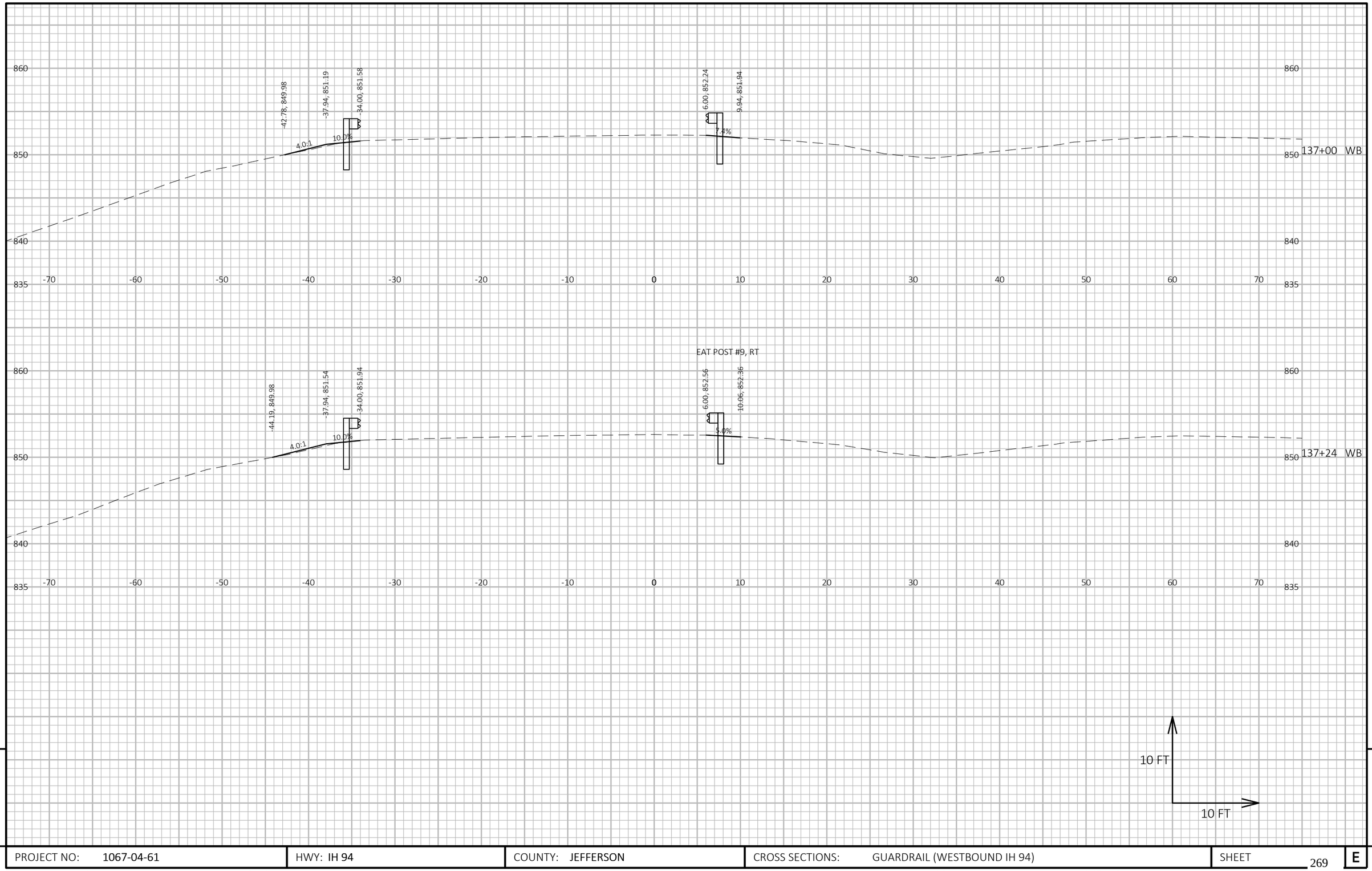
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 268	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E OLD 26-2

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 269	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E OLD 26-3

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST #5, RT

-41.15, 851.09
-37.94, 851.89
-34.00, 852.28
6.00, 852.85
11.33, 852.47
4.0:1
10.0%
7.1%

137+49 WB

-41.09, 851.11
-37.94, 851.90
-34.00, 852.29
6.00, 852.87
11.42, 852.48
4.0:1
10.0%
7.1%

137+50 WB

860
850
840
835
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT
10 FT

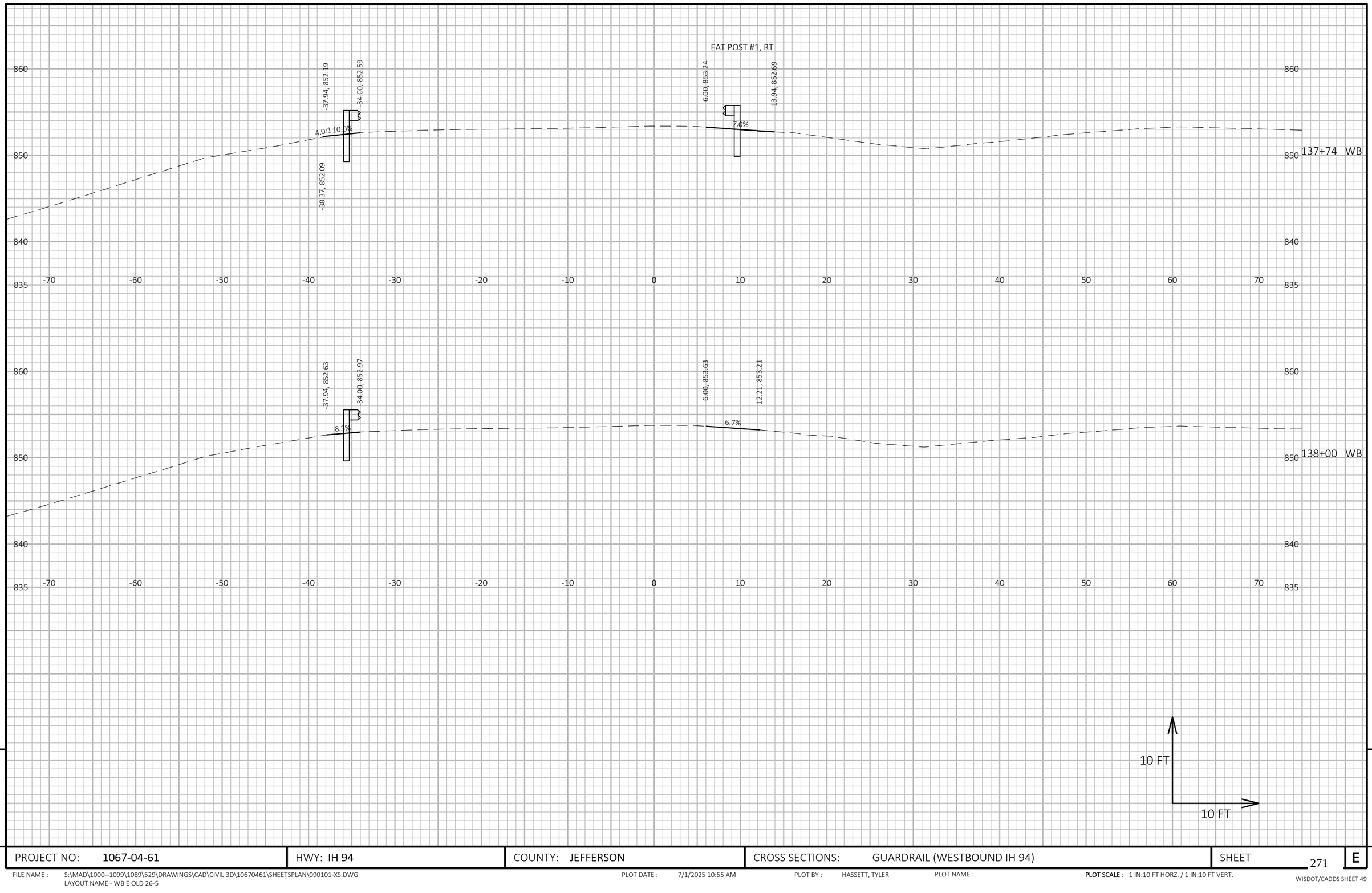
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 270	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E OLD 26-4

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

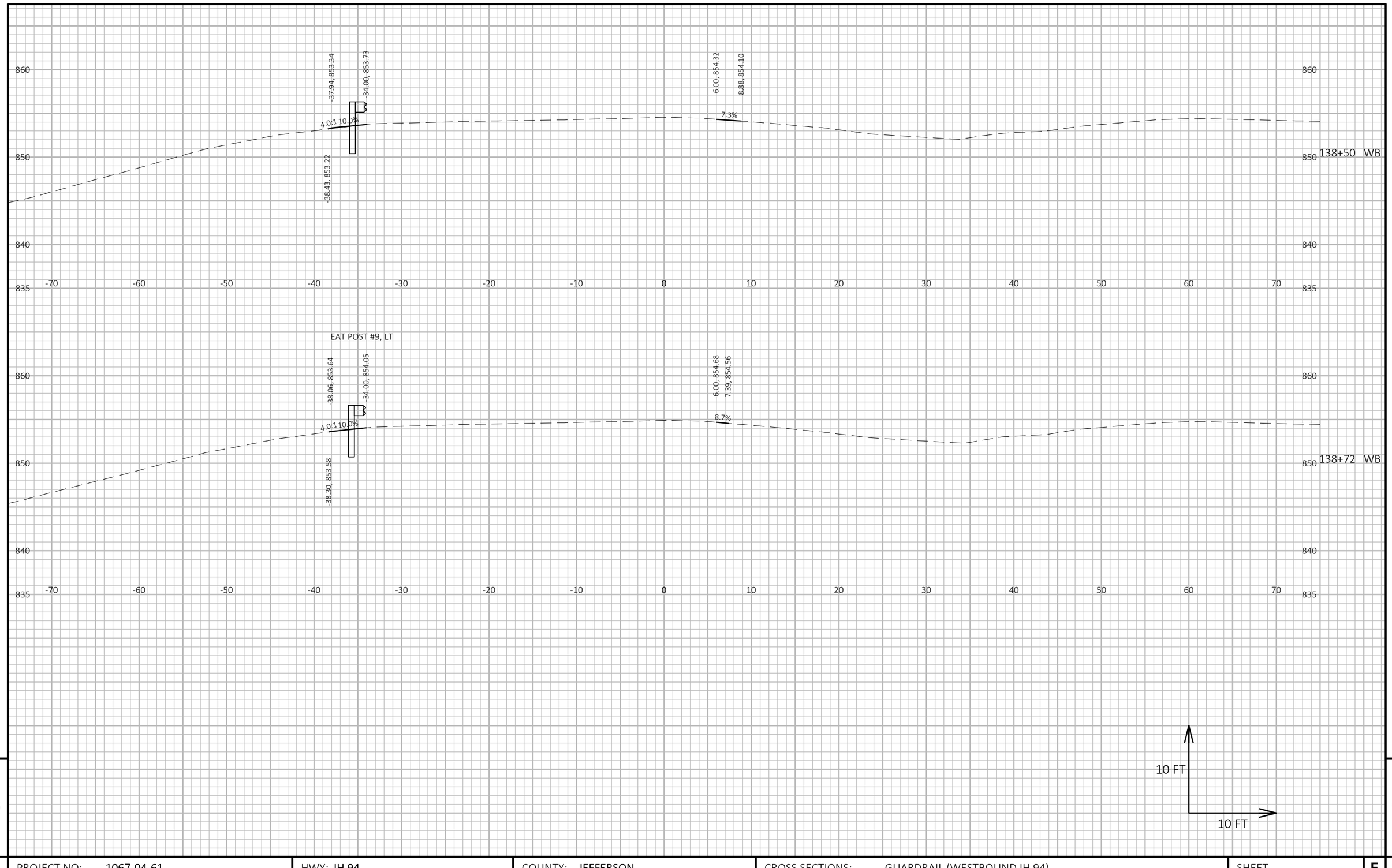
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 271	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E OLD 26-5

PLOT DATE : 7/1/2025 10:55 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 272	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E OLD 26-6
PLOT DATE : 7/1/2025 10:56 AM
PLOT BY : HASSETT, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

BEGIN APPROACH TAPER, RT

-39.12, 853.78

-34.00, 854.29

6.00, 855.02

4.0:1 10.0%

-39.22, 853.75

138+93 WB

EAT POST #5, LT

-39.33, 853.80

-34.00, 854.34

4.0:1 10.0%

-39.45, 853.78

138+97 WB

860
850
840
835

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT

10 FT

9

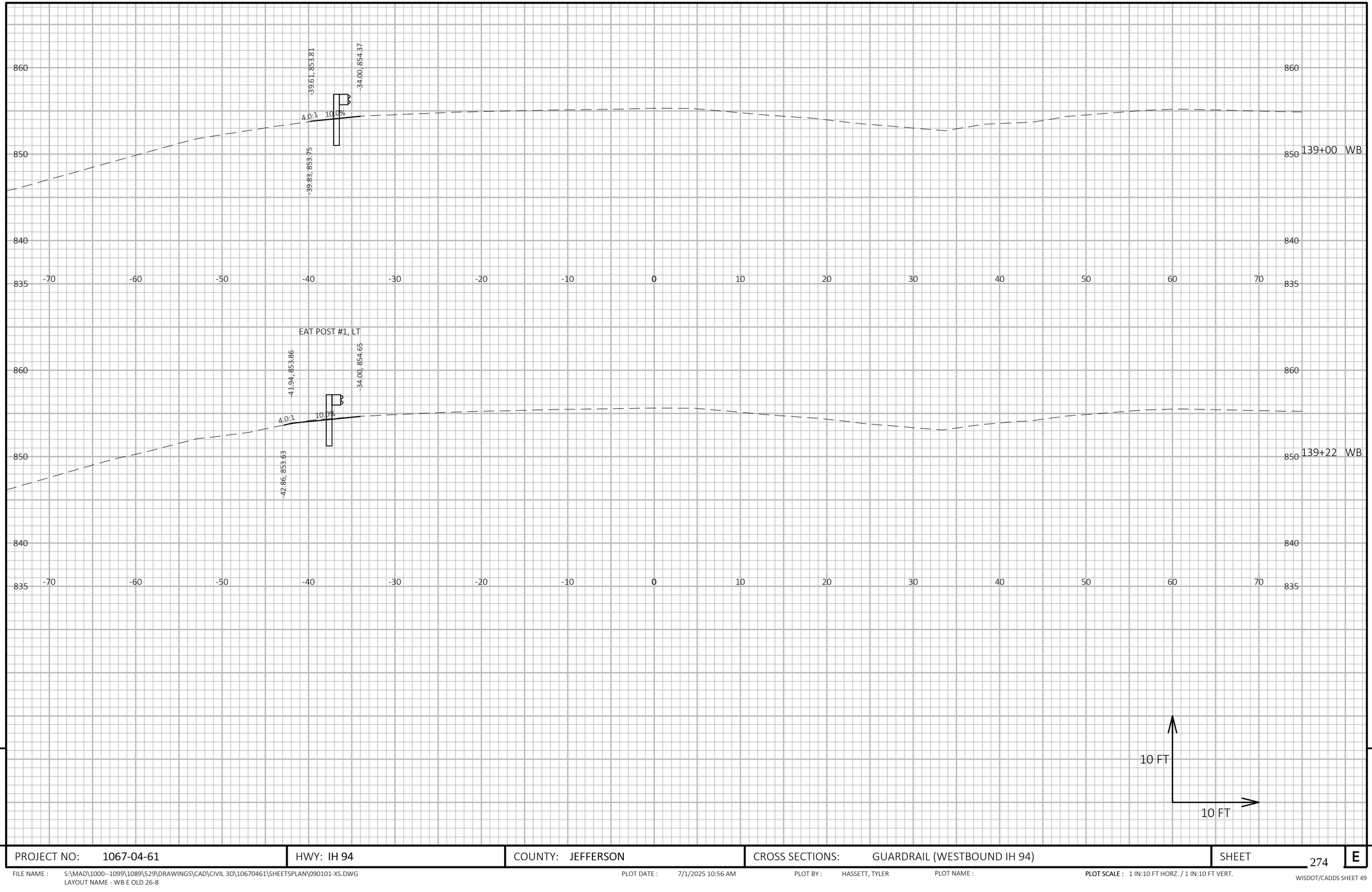
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 273	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E OLD 26-7

PLOT DATE : 7/1/2025 10:56 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

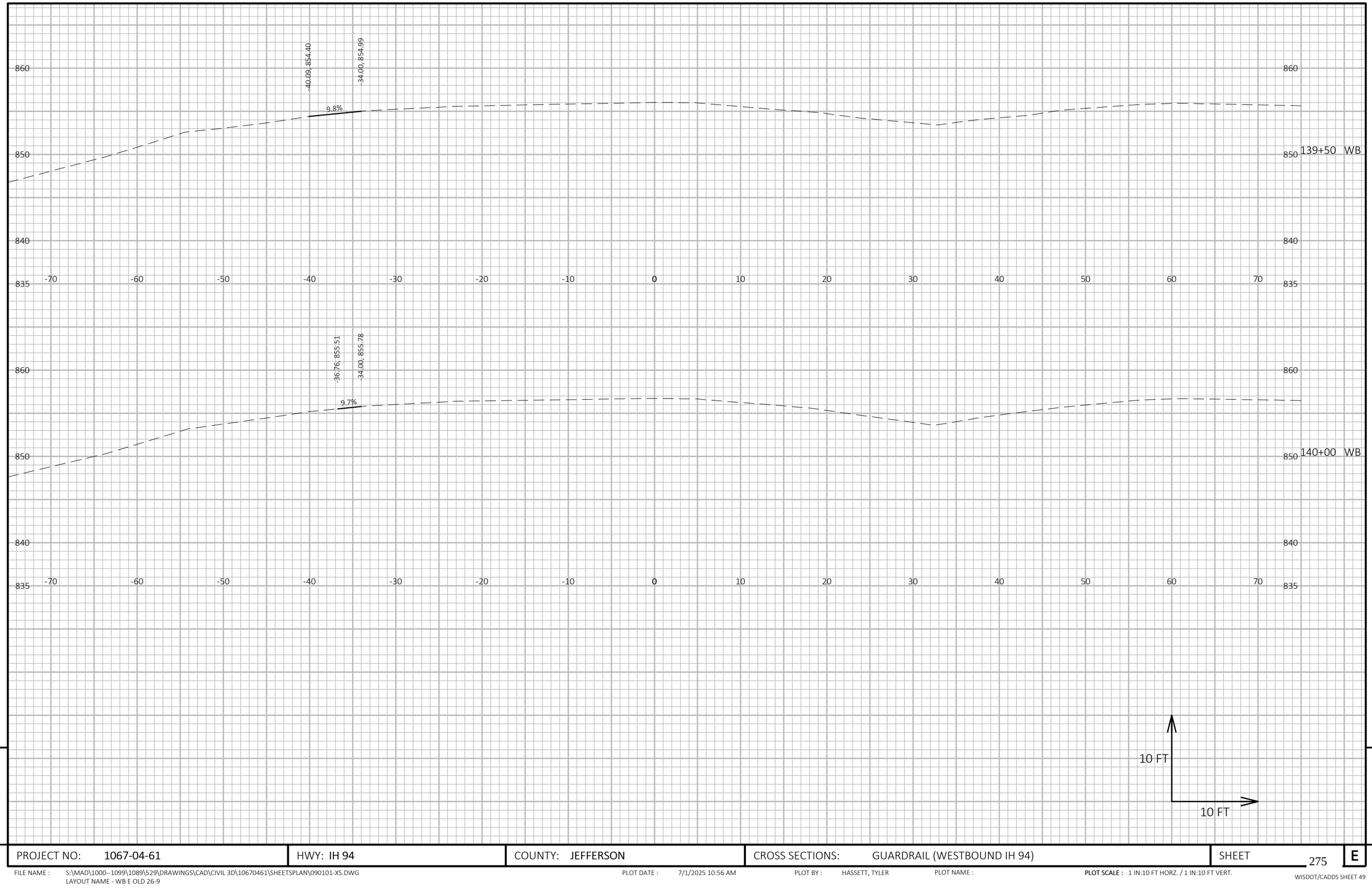
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 274	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E OLD 26-8

PLOT DATE : 7/1/2025 10:56 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 275	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E OLD 26-9

PLOT DATE : 7/1/2025 10:56 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

BEGIN APPROACH TAPER, LT

-34.00, 856.47

860
850
840
835

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

860
850
840
835

140+41 WB

10 FT

10 FT

9

9

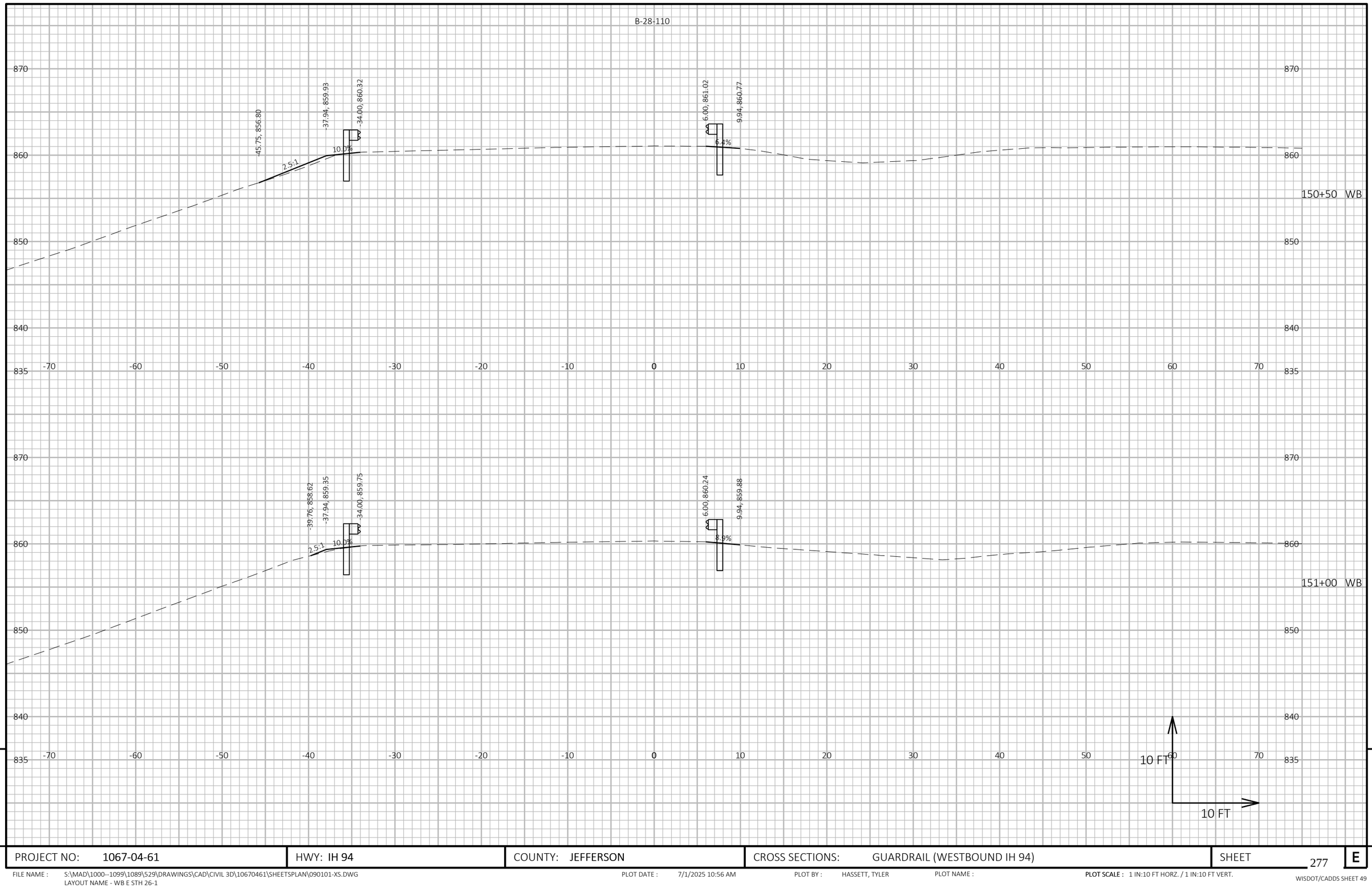
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 276	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E OLD 26-10

PLOT DATE : 7/1/2025 10:56 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

B-28-110



9

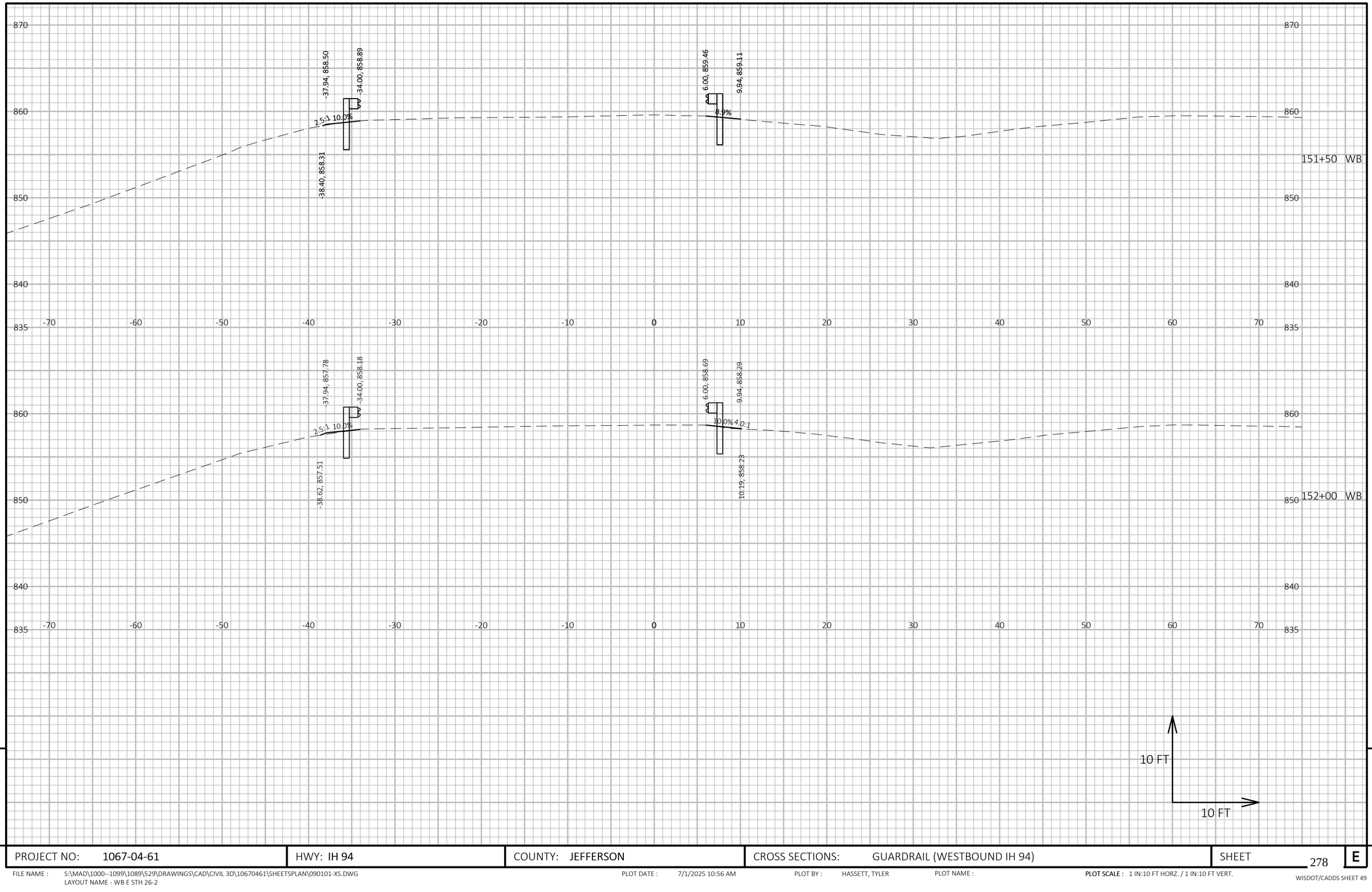
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 277	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E STH 26-1

PLOT DATE : 7/1/2025 10:56 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

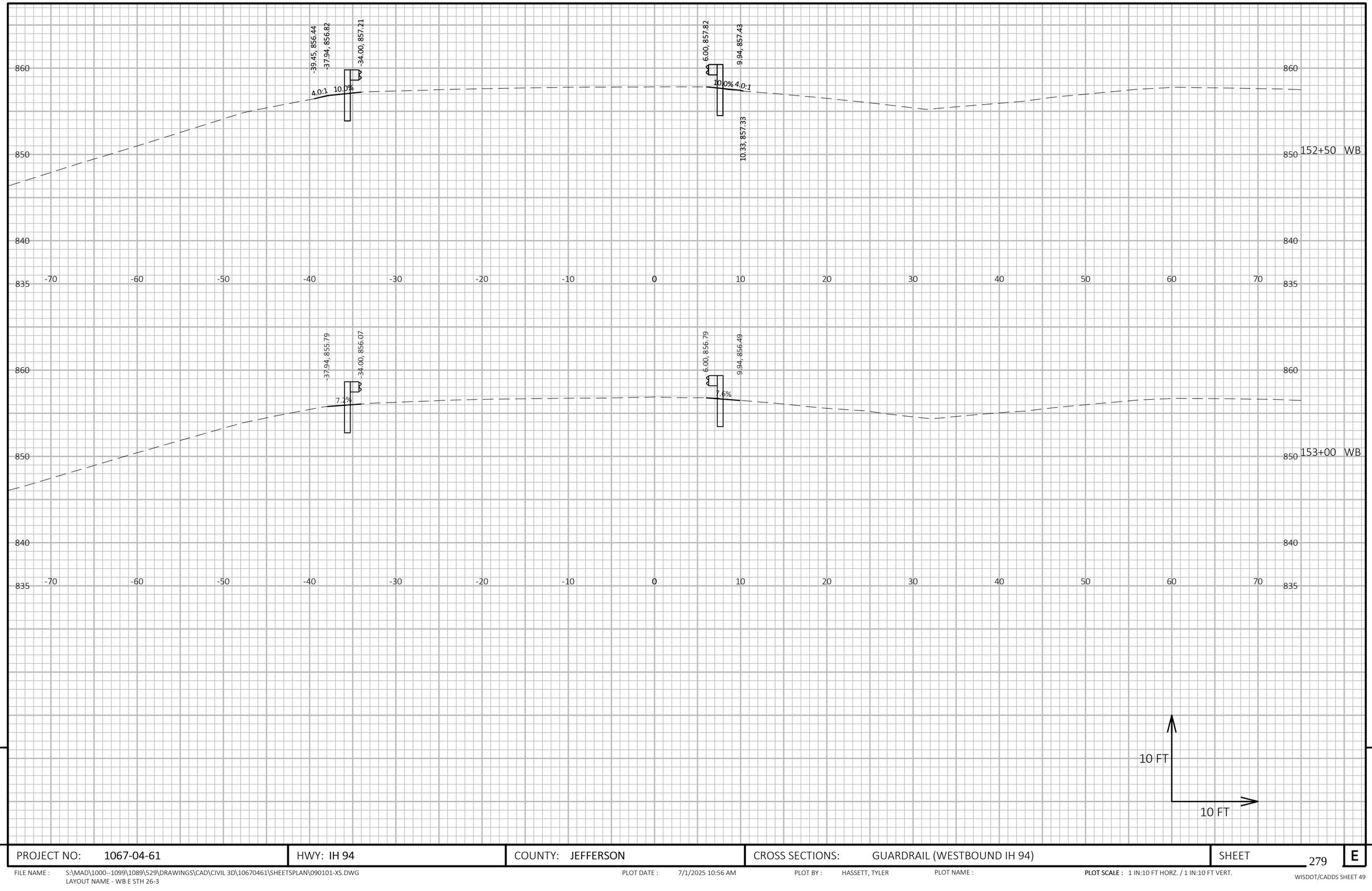
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 278	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E STH 26-2

PLOT DATE : 7/1/2025 10:56 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 279	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E STH 26-3

PLOT DATE : 7/1/2025 10:56 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST #9, RT

-37.94, 855.73

-34.00, 856.02

7.4%

6.00, 856.74

10.06, 856.43

7.6%

153+02 WB

EAT POST #5, RT

-37.94, 855.14

-34.00, 855.51

9.5%

6.00, 856.13

11.33, 855.79

6.4%

153+27 WB

860
850
840
835

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT

10 FT

9

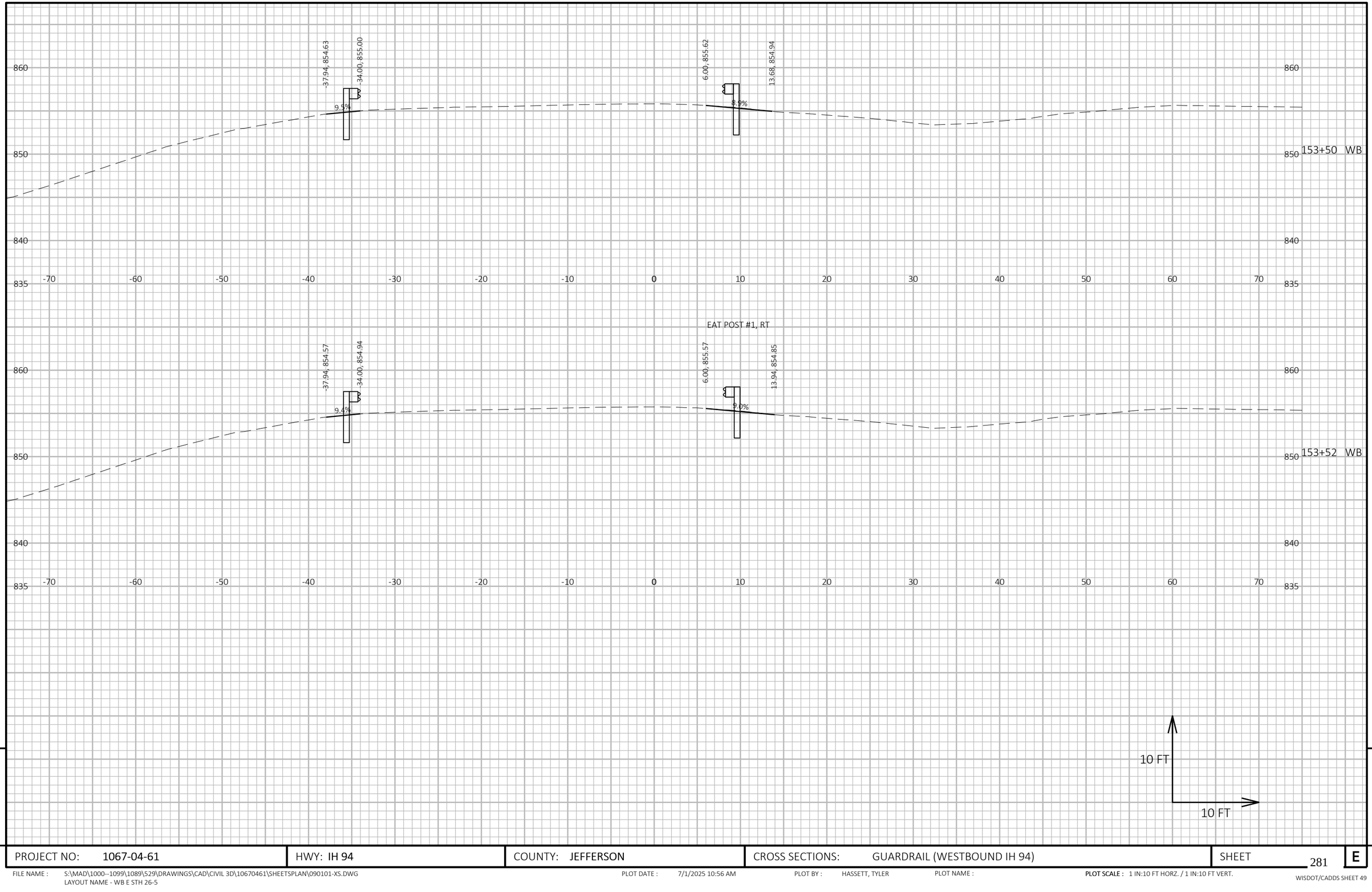
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 280	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E STH 26-4

PLOT DATE : 7/1/2025 10:56 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

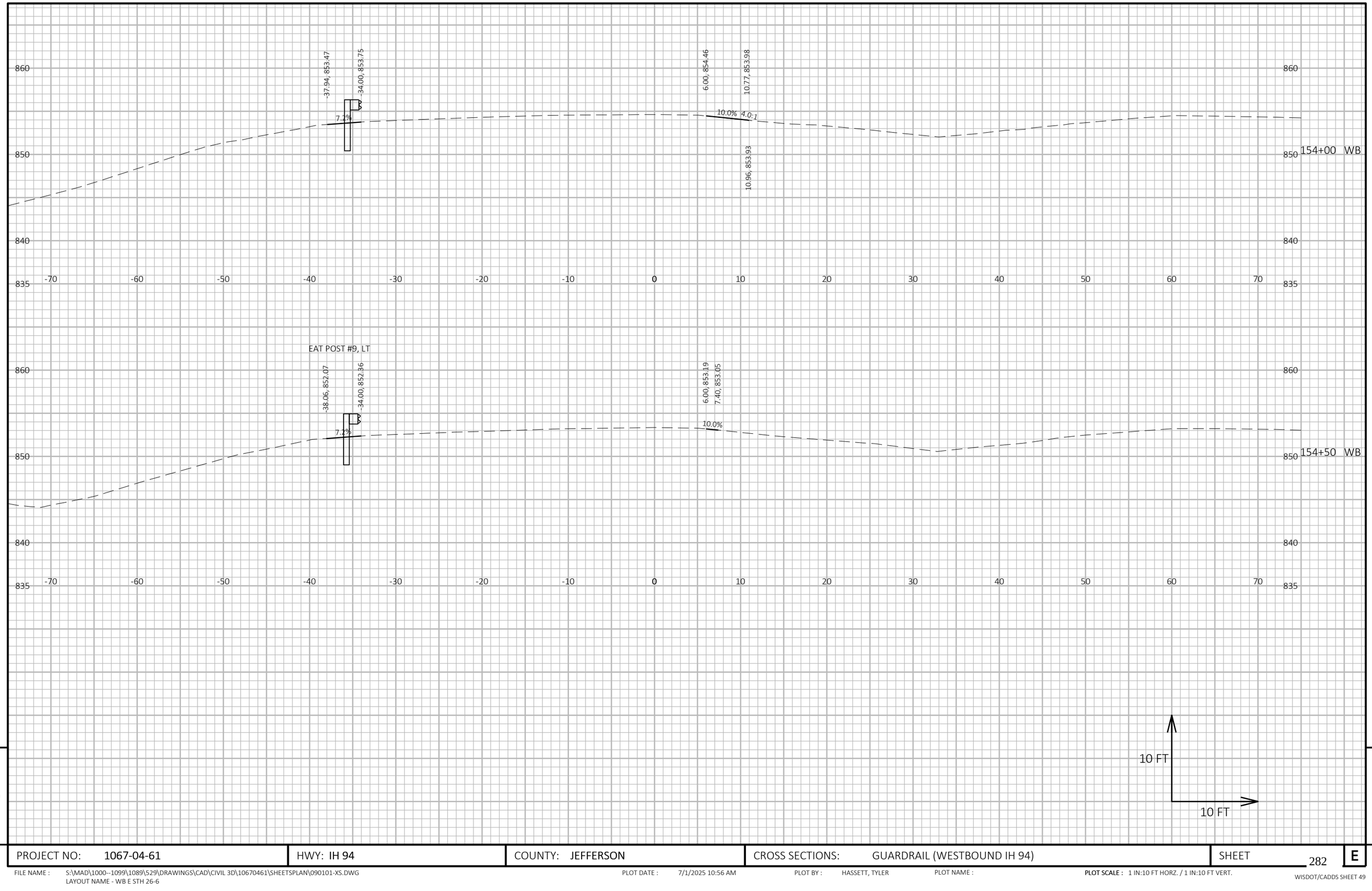
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 281	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E STH 26-5

PLOT DATE : 7/1/2025 10:56 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 282	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E STH 26-6

PLOT DATE : 7/1/2025 10:56 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

BEGIN APPROACH TAPER, RT

-39.13, 851.40

-34.00, 851.78

6.00, 852.65

7.5%

154+72 WB

EAT POST #5, LT

-39.33, 851.28

-34.00, 851.68

7.4%

154+75 WB

860
850
840
835

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT

10 FT

9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 283	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E STH 26-7

PLOT DATE : 7/1/2025 10:56 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST #1, LT

-45.41, 849.34
-41.94, 850.21
-34.00, 851.00
4.0:1
10.0%

155+00 WB

-38.63, 849.19
-34.00, 849.61
9.0%

155+50 WB

-35.30, 848.06
-34.00, 848.19
9.6%

156+00 WB

10 FT
10 FT

860
850
840
835
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 284	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E STH 26-8

PLOT DATE : 7/1/2025 10:56 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

860
850
840
835

BEGIN APPROACH TAPER, LT

-3400, 847.66

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

156+20 WB

10 FT

10 FT

9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 285	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB E STH 26-9

PLOT DATE : 7/1/2025 10:56 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END TYPE 2 TERMINAL, LT

-37.94, 823.77

-34.00, 824.06

7.4%

167+30 WB

-37.94, 823.68

-34.00, 823.94

6.6%

167+50 WB

830
820
810
805

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT

10 FT

9

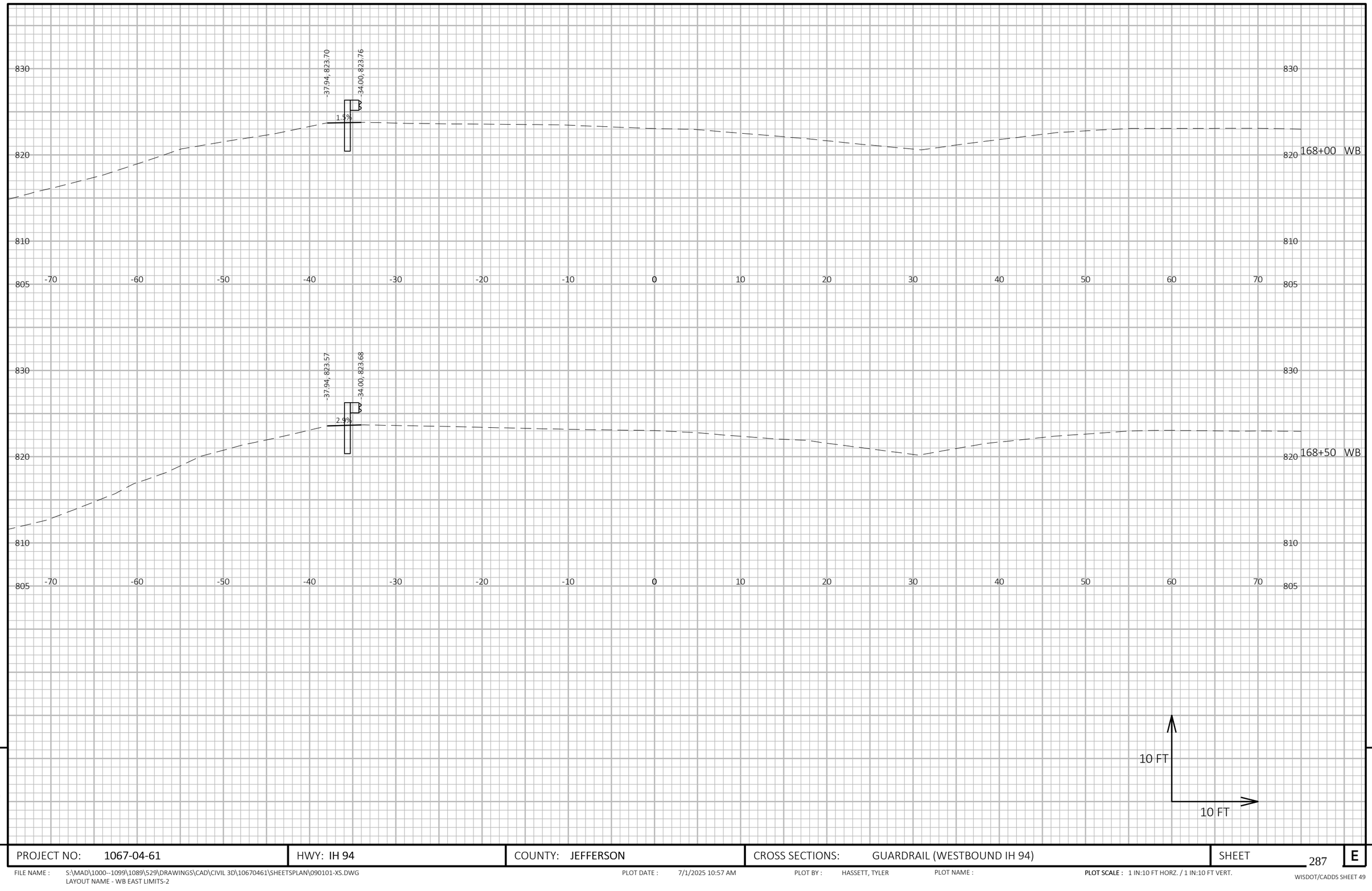
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 286	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB EAST LIMITS-1

PLOT DATE : 7/1/2025 10:56 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

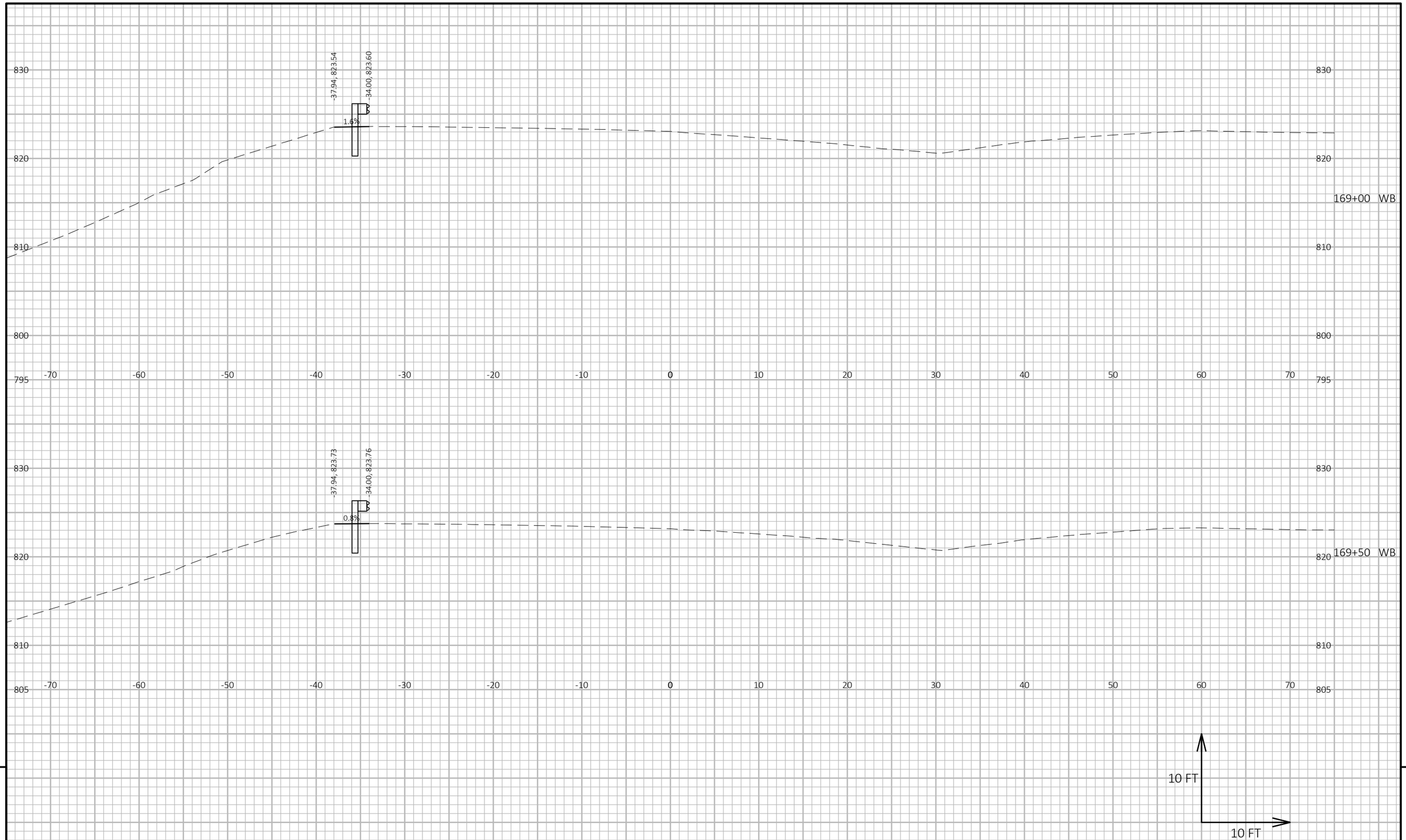
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 287	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB EAST LIMITS-2

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

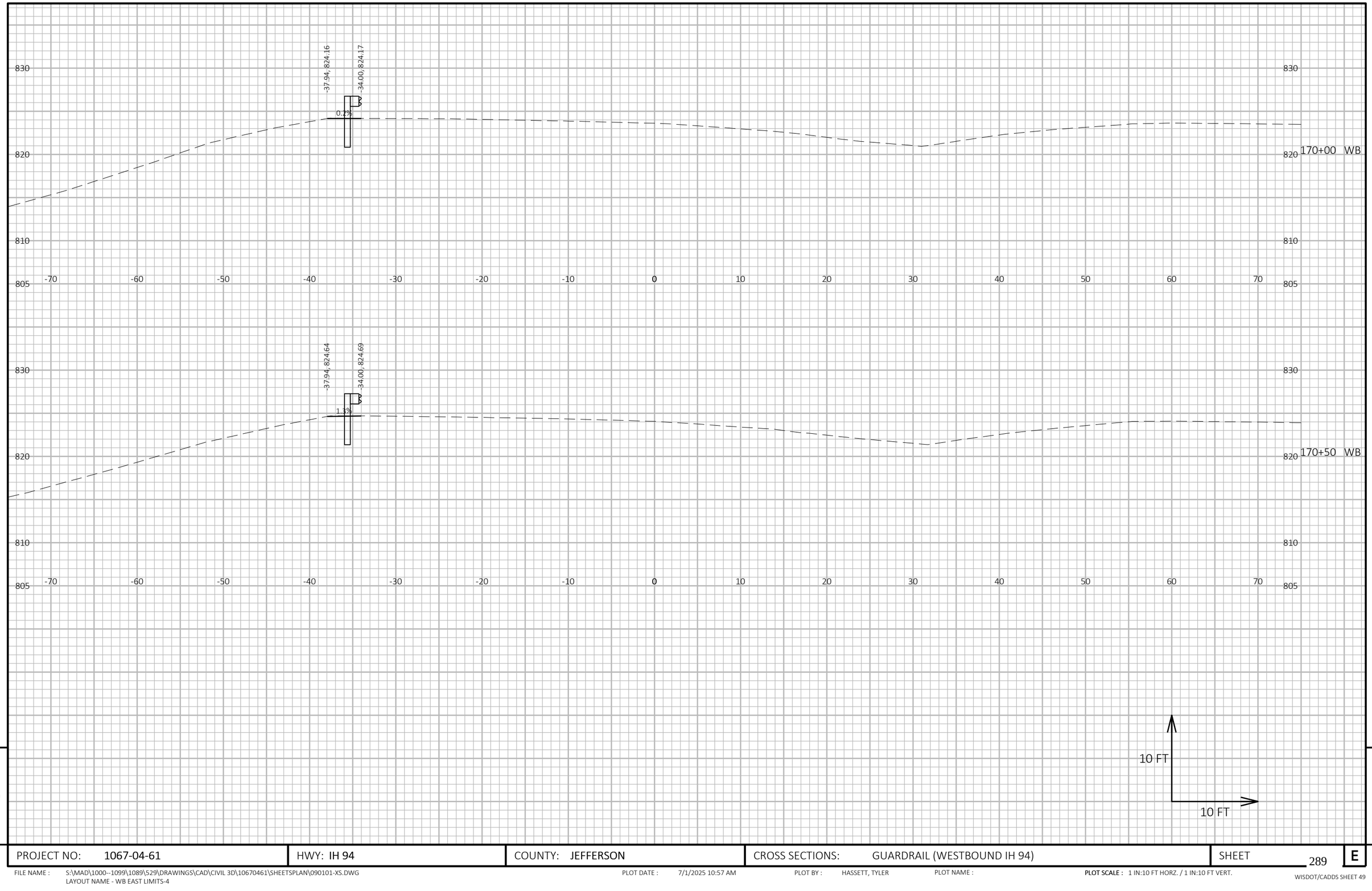
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 288	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB EAST LIMITS-3

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

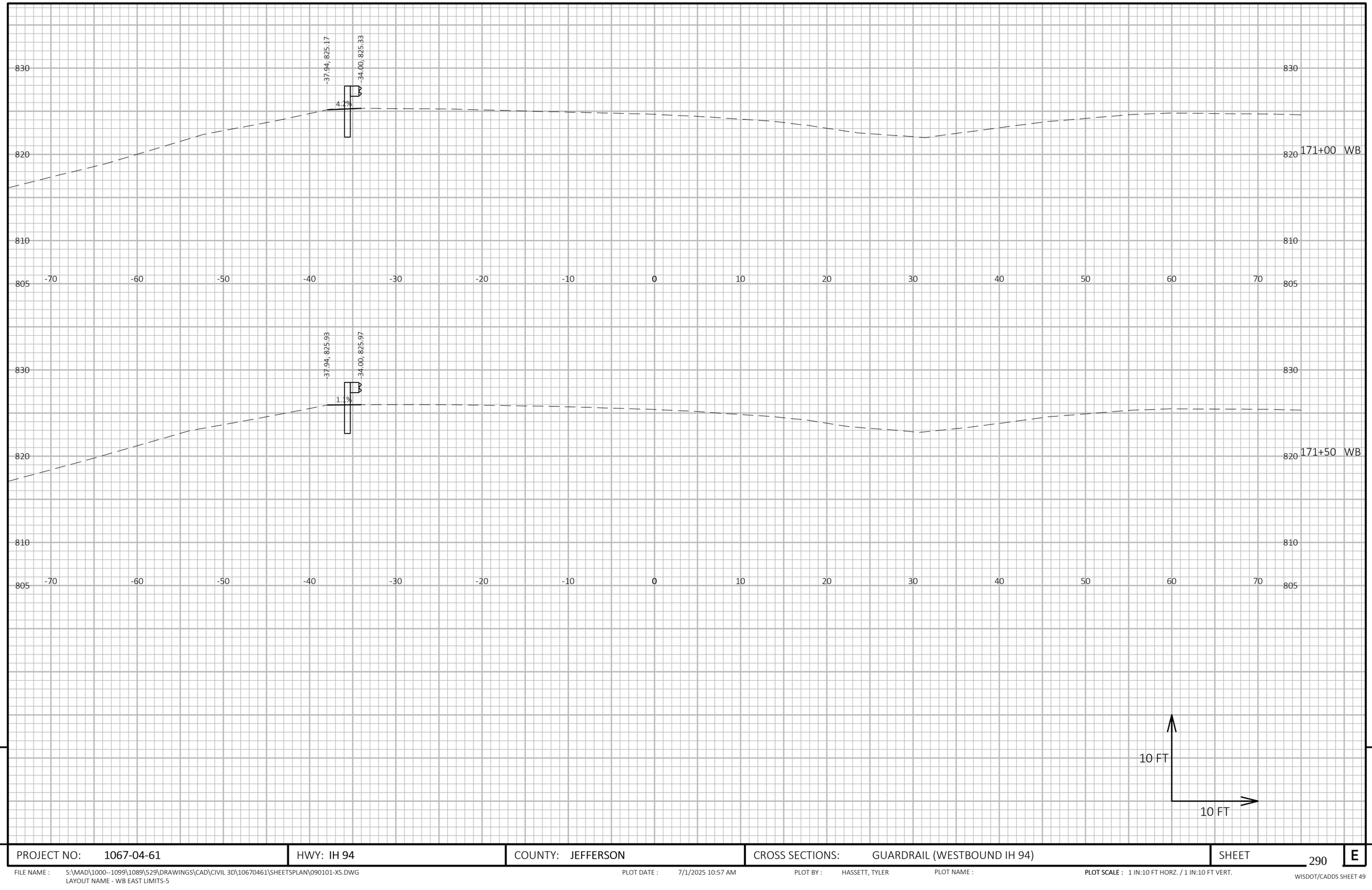
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 289	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB EAST LIMITS-4

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

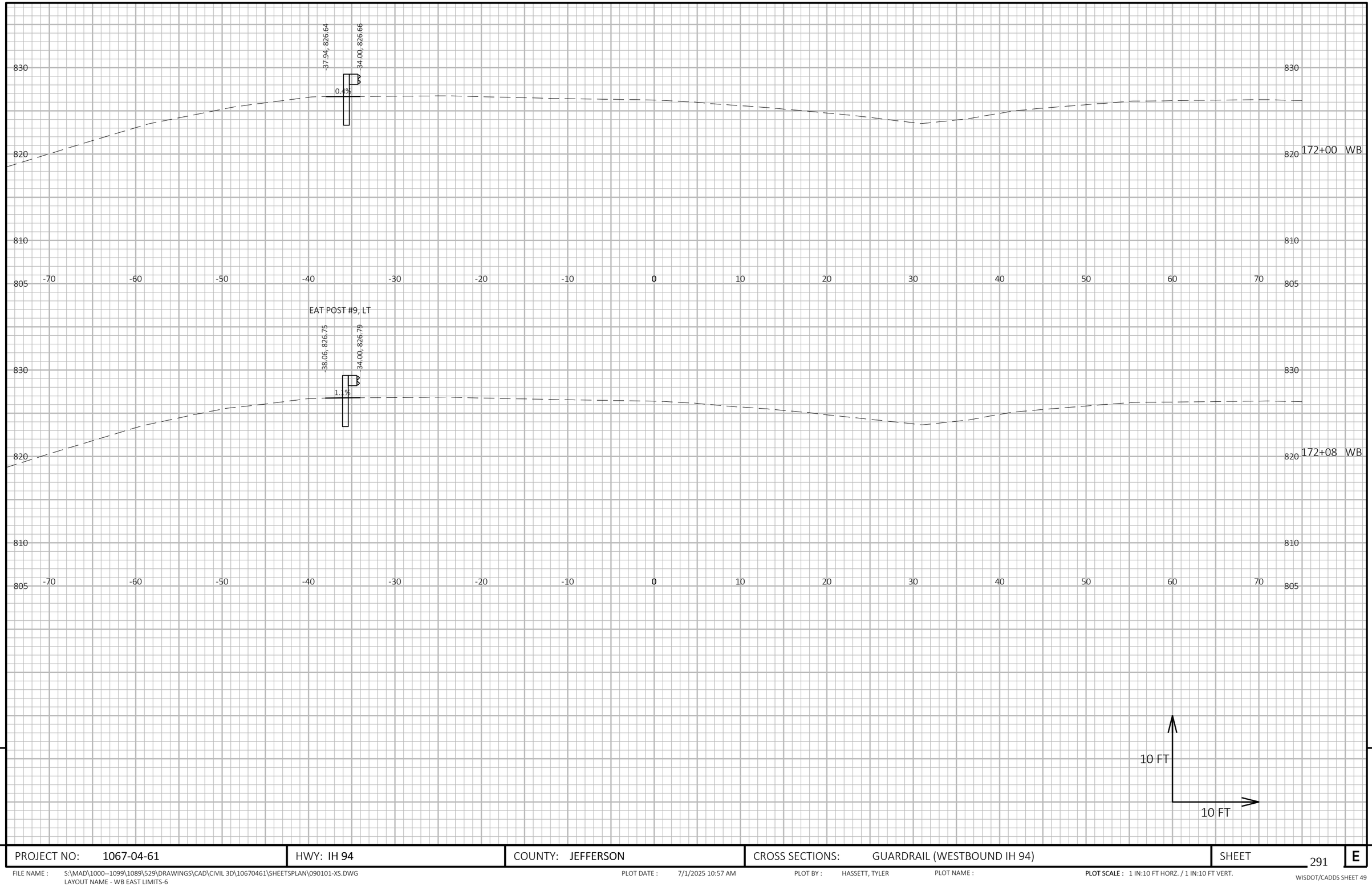
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 290	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB EAST LIMITS-5

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 291	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB EAST LIMITS-6

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST #5, LT

-39.33, 826.90

-34.00, 827.12

4.0%

830

820

810

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

830

820

810

172+33 WB

-41.10, 826.88

-34.00, 827.31

6.1%

830

820

810

805

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

830

820

810

805

172+50 WB

10 FT

10 FT

9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 292	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB EAST LIMITS-7

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST #1, LT

-41.94, 826.91

-34.00, 827.43

6.5%

172+58 WB

-39.13, 827.99

-34.00, 828.30

6.0%

173+00 WB

10 FT

10 FT

9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 293	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB EAST LIMITS-8

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

-35.79, 829.37
-34.00, 829.47
5.8%
173+50 WB
BEGIN APPROACH TAPER, LT
-34.00, 830.18
173+77 WB
830
820
810
840
805
-70
-60
-50
-40
-30
-20
-10
0
10
20
30
40
50
60
70
10 FT
10 FT

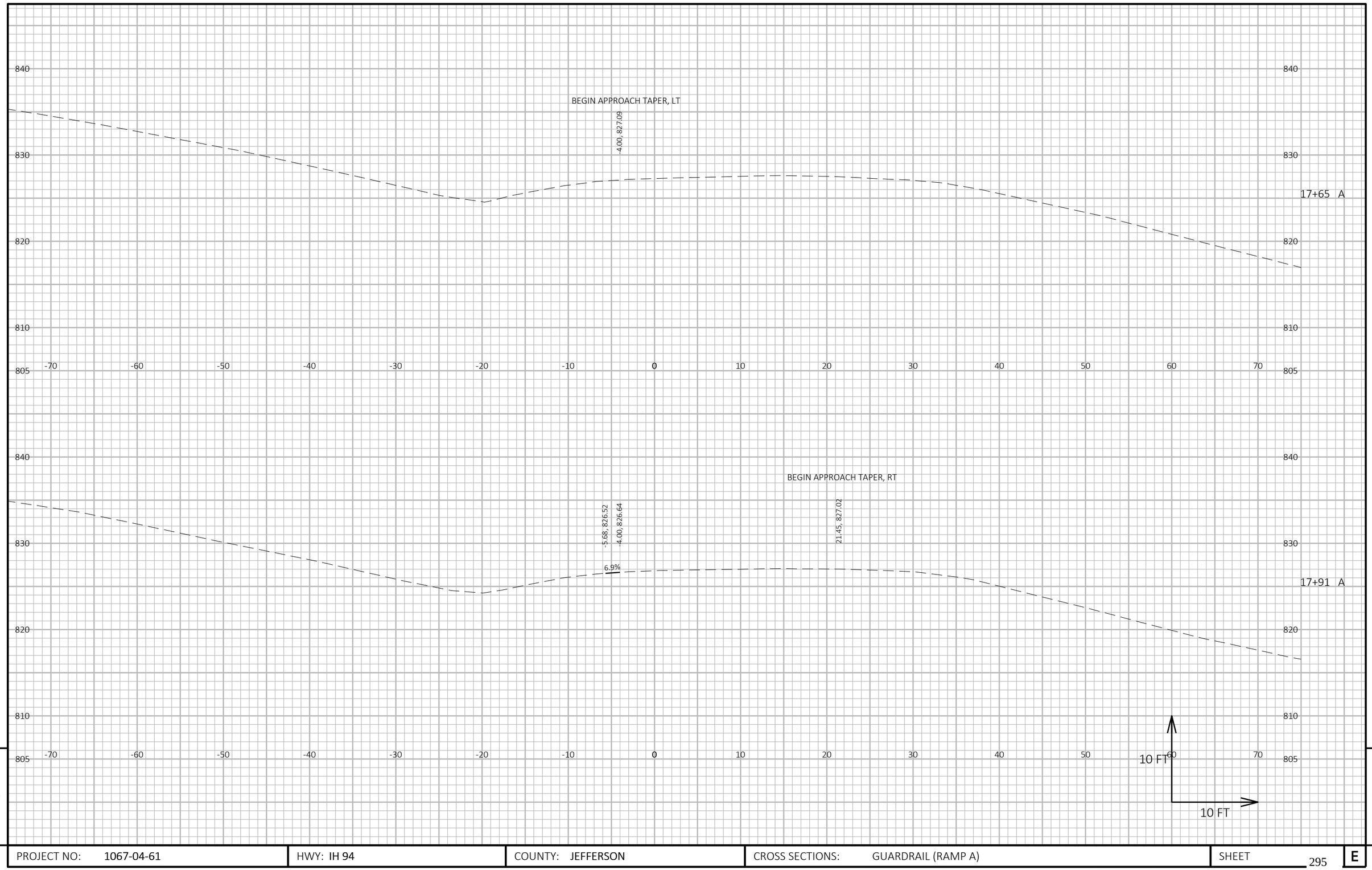
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (WESTBOUND IH 94)	SHEET 294	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - WB EAST LIMITS-9

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

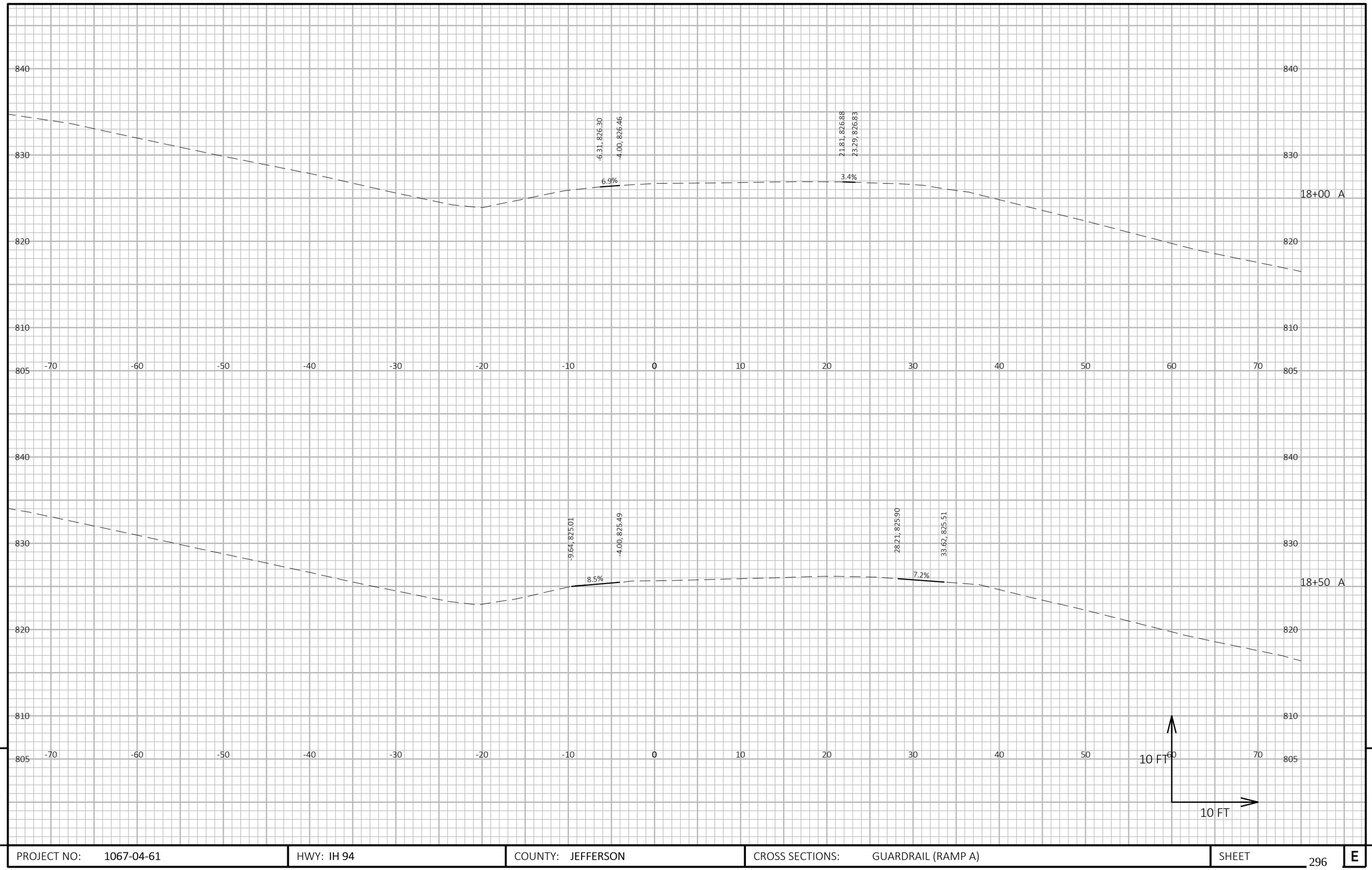
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP A)	SHEET 295	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP A-1

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

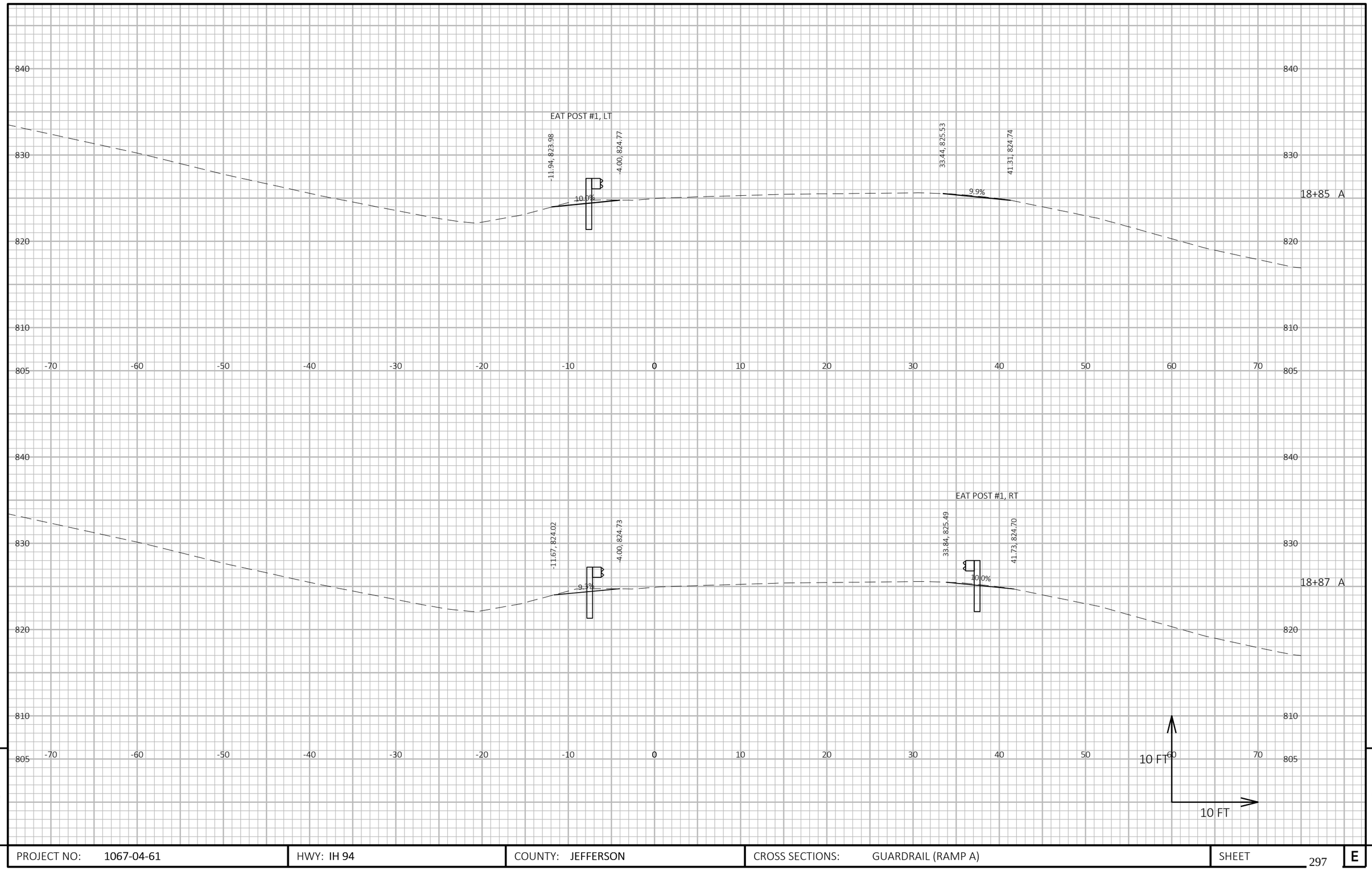
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP A)	SHEET 296	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP A-2

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

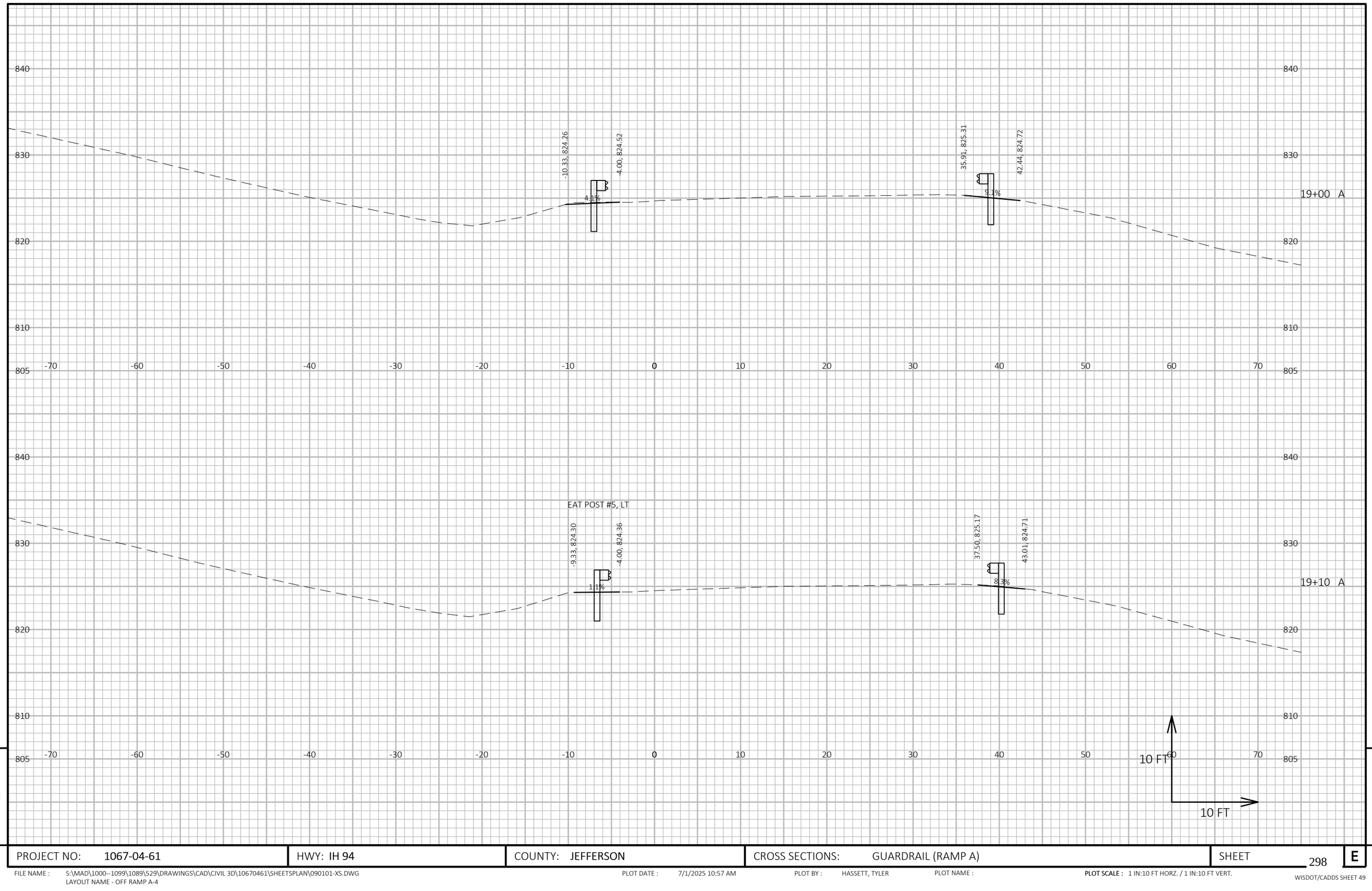
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP A)	SHEET 297	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP A-3

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

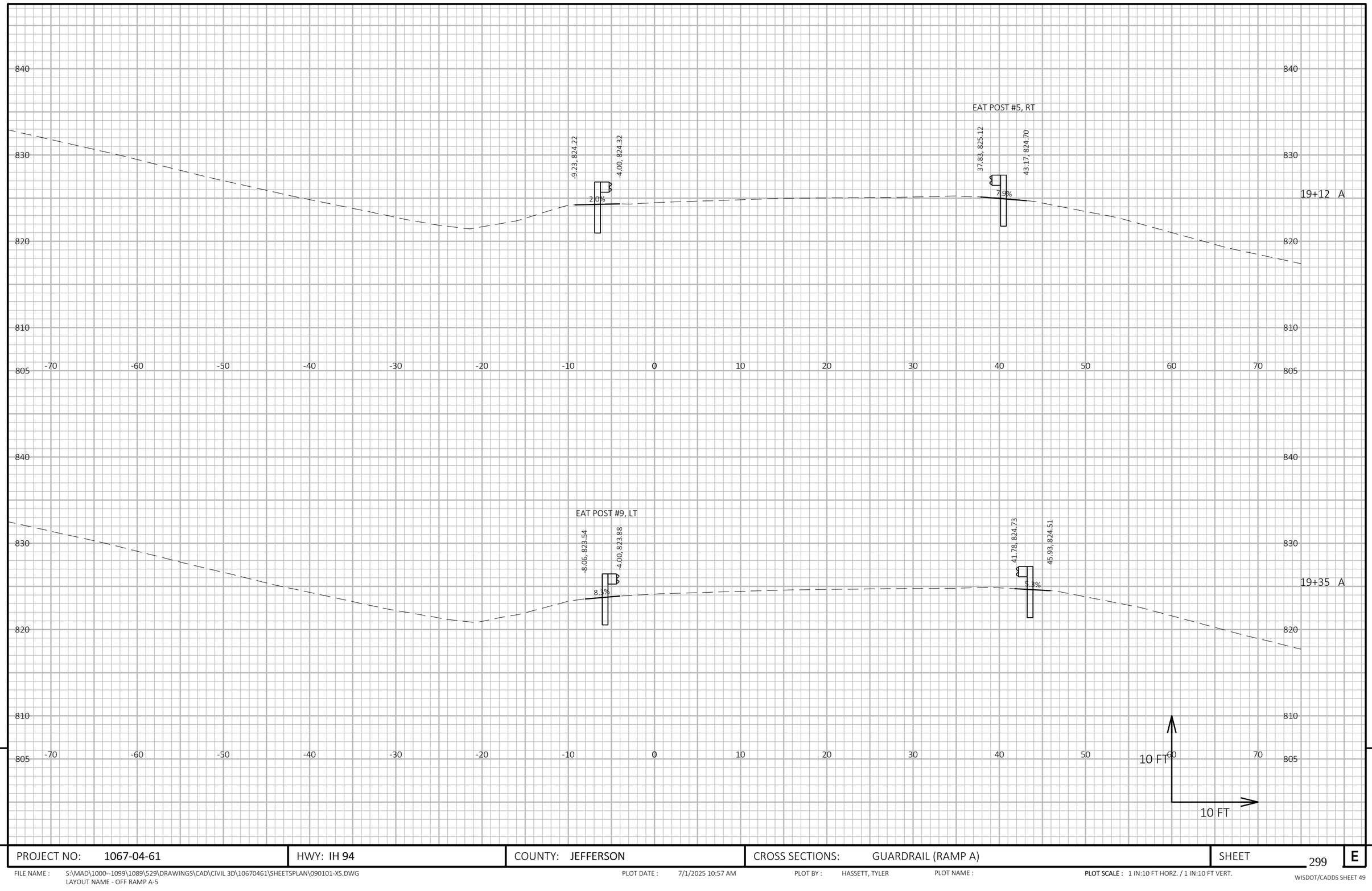
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP A)	SHEET 298	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP A-4

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

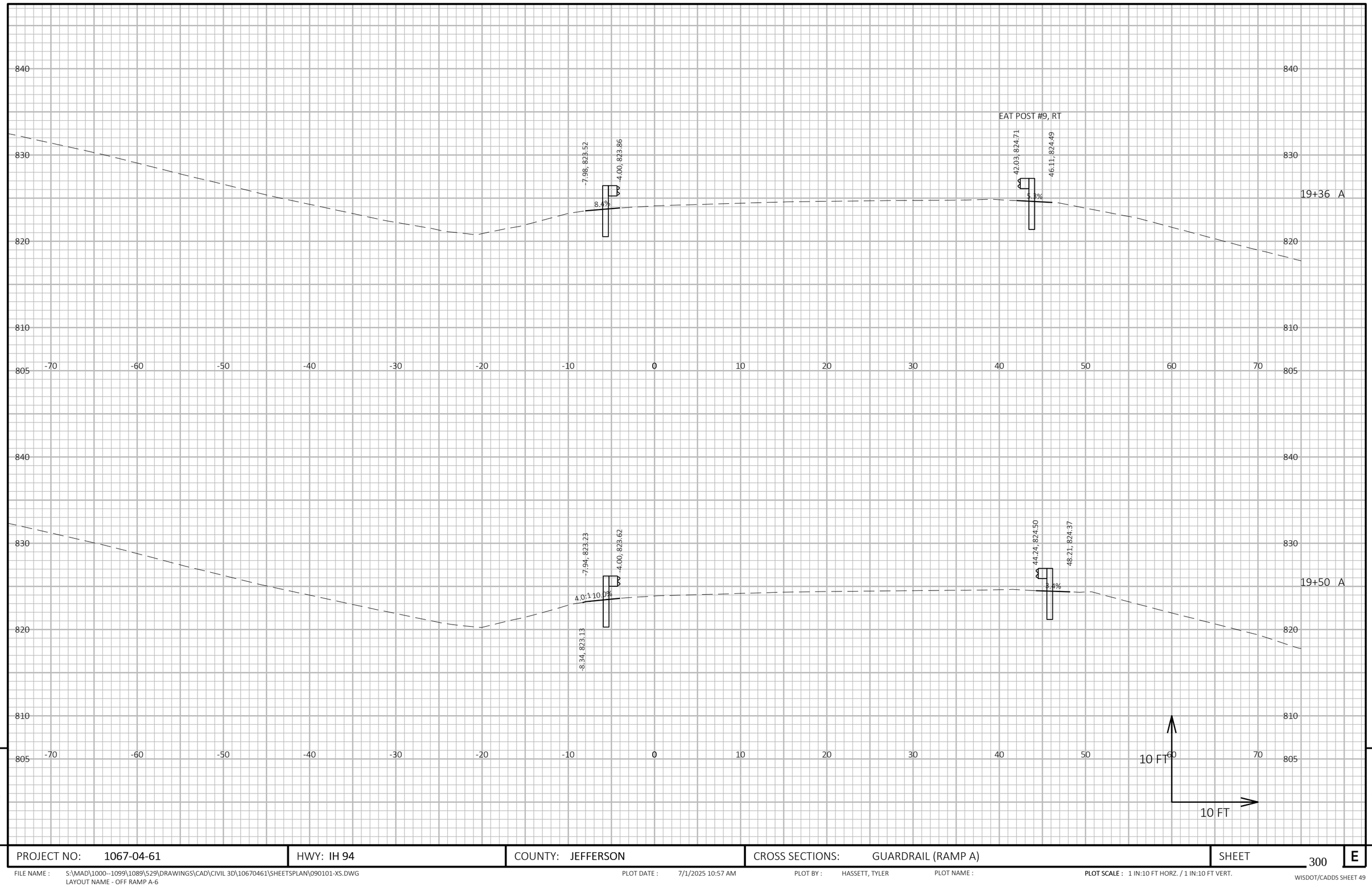
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP A)	SHEET 299	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP A-5

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

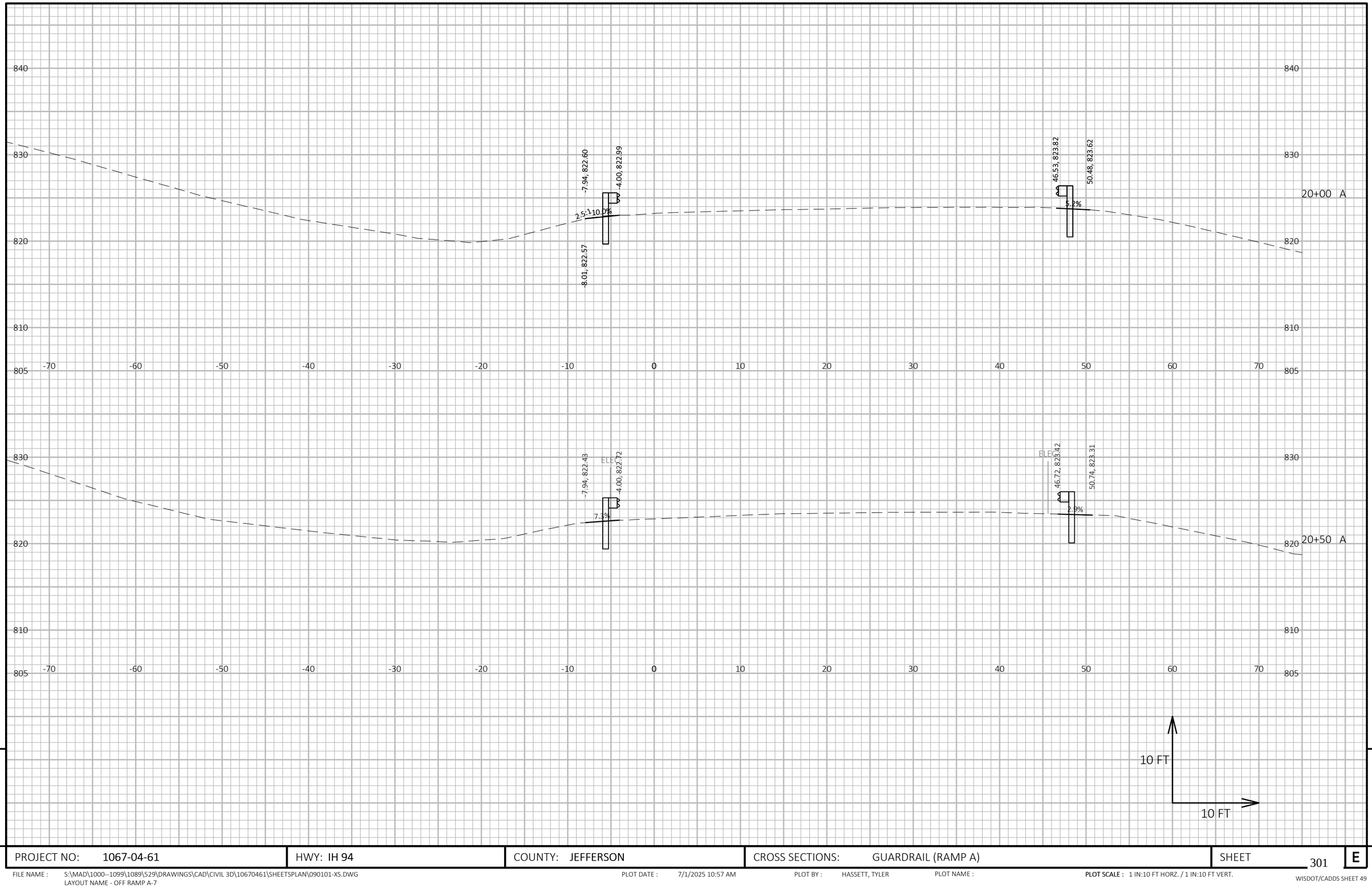
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP A)	SHEET 300	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP A-6

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

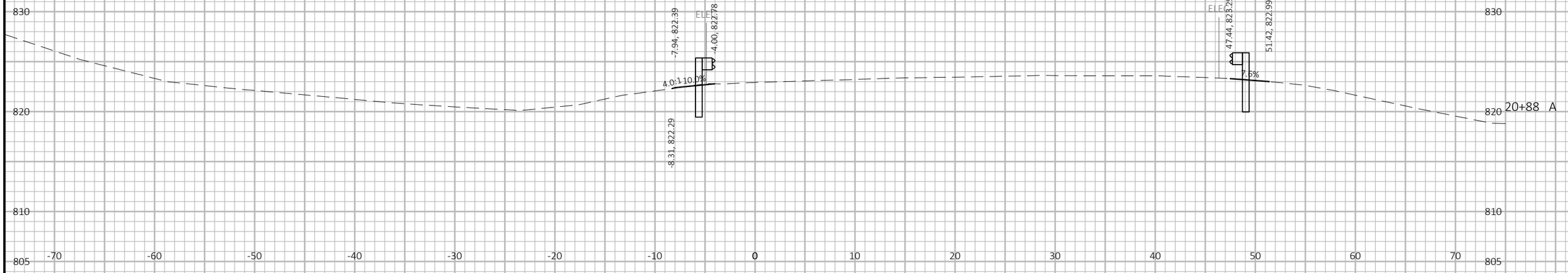
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP A)	SHEET 301	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP A-7

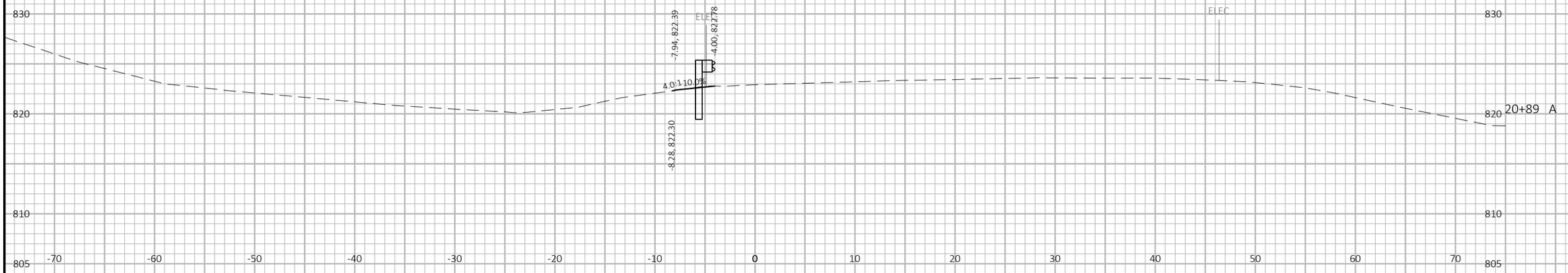
PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

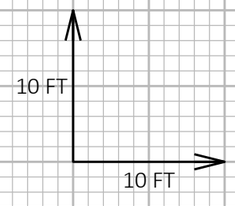
WISDOT/CADDS SHEET 49

END TYPE 2 TERMINAL, RT



END TYPE 2 TERMINAL, LT





9

9

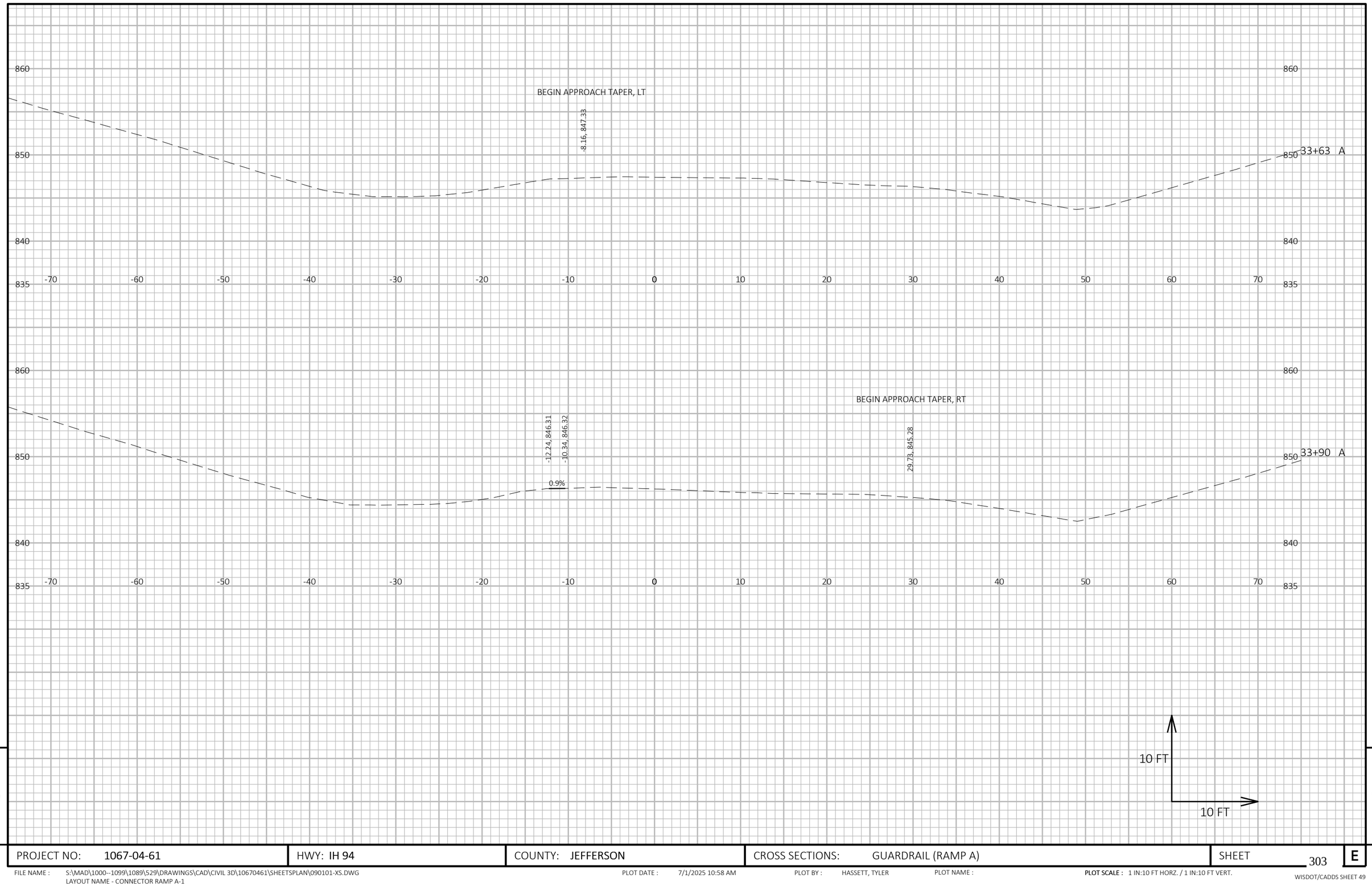
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP A)	SHEET 302	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP A-8

PLOT DATE : 7/1/2025 10:57 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

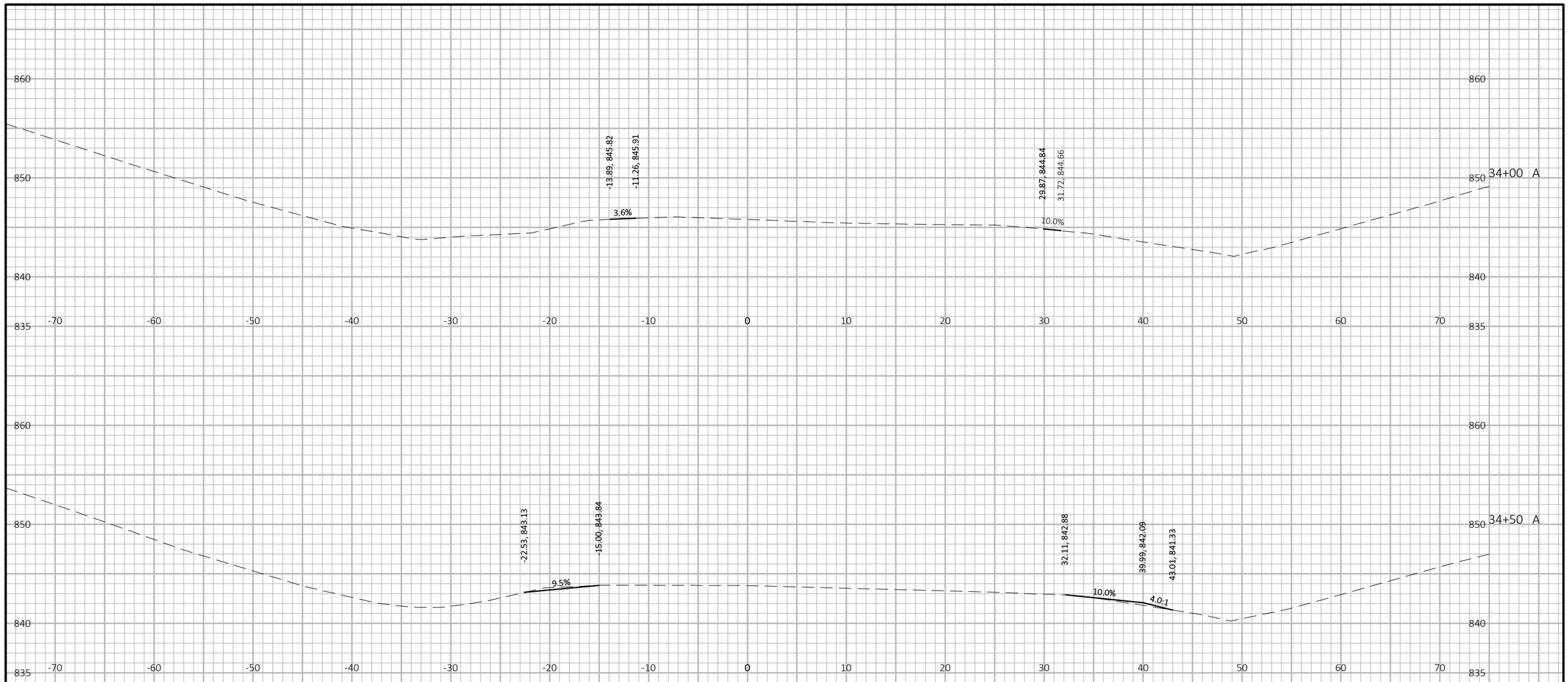
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP A)	SHEET 303	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - CONNECTOR RAMP A-1

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

9

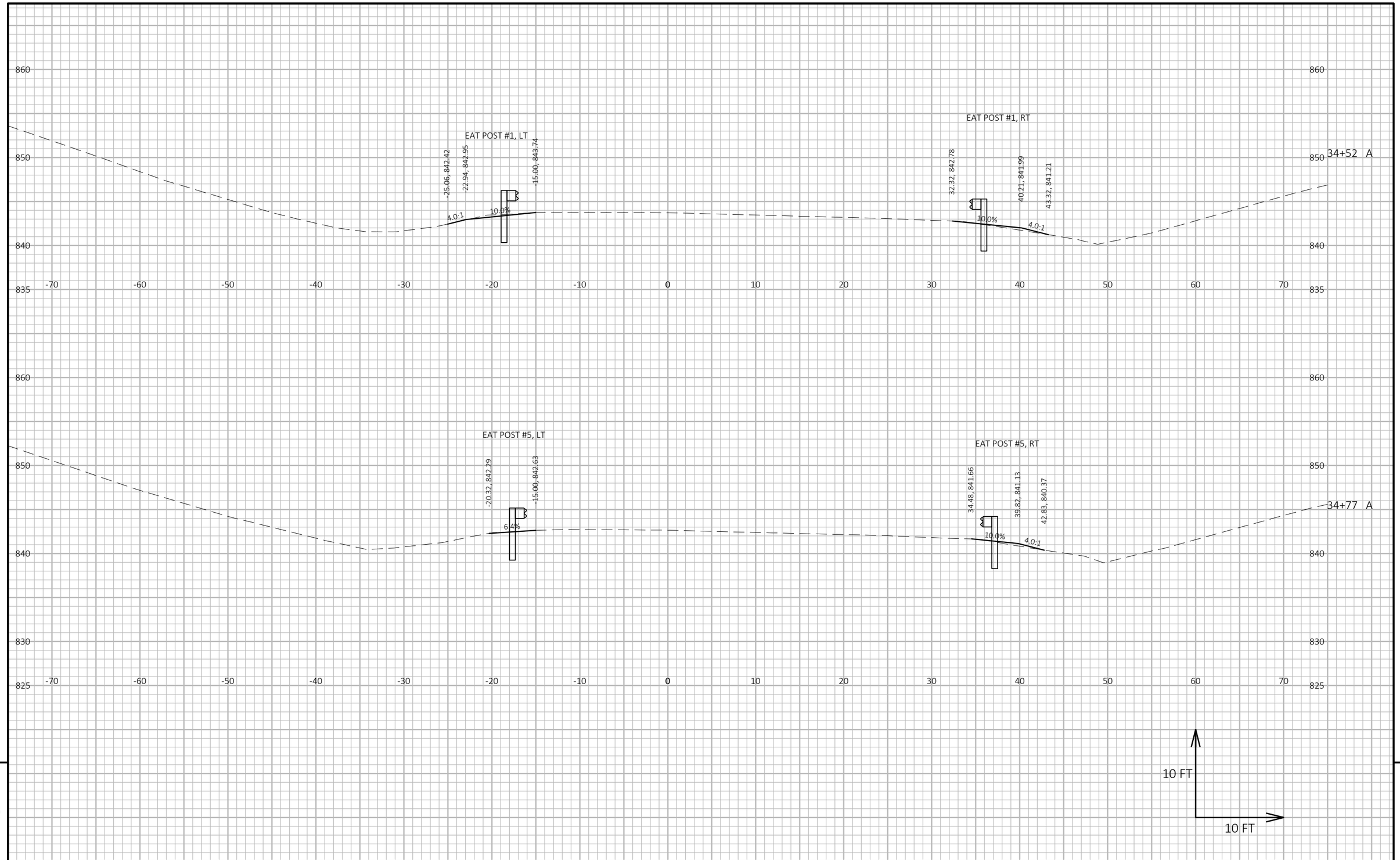
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP A)	SHEET 304	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - CONNECTOR RAMP A-2

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

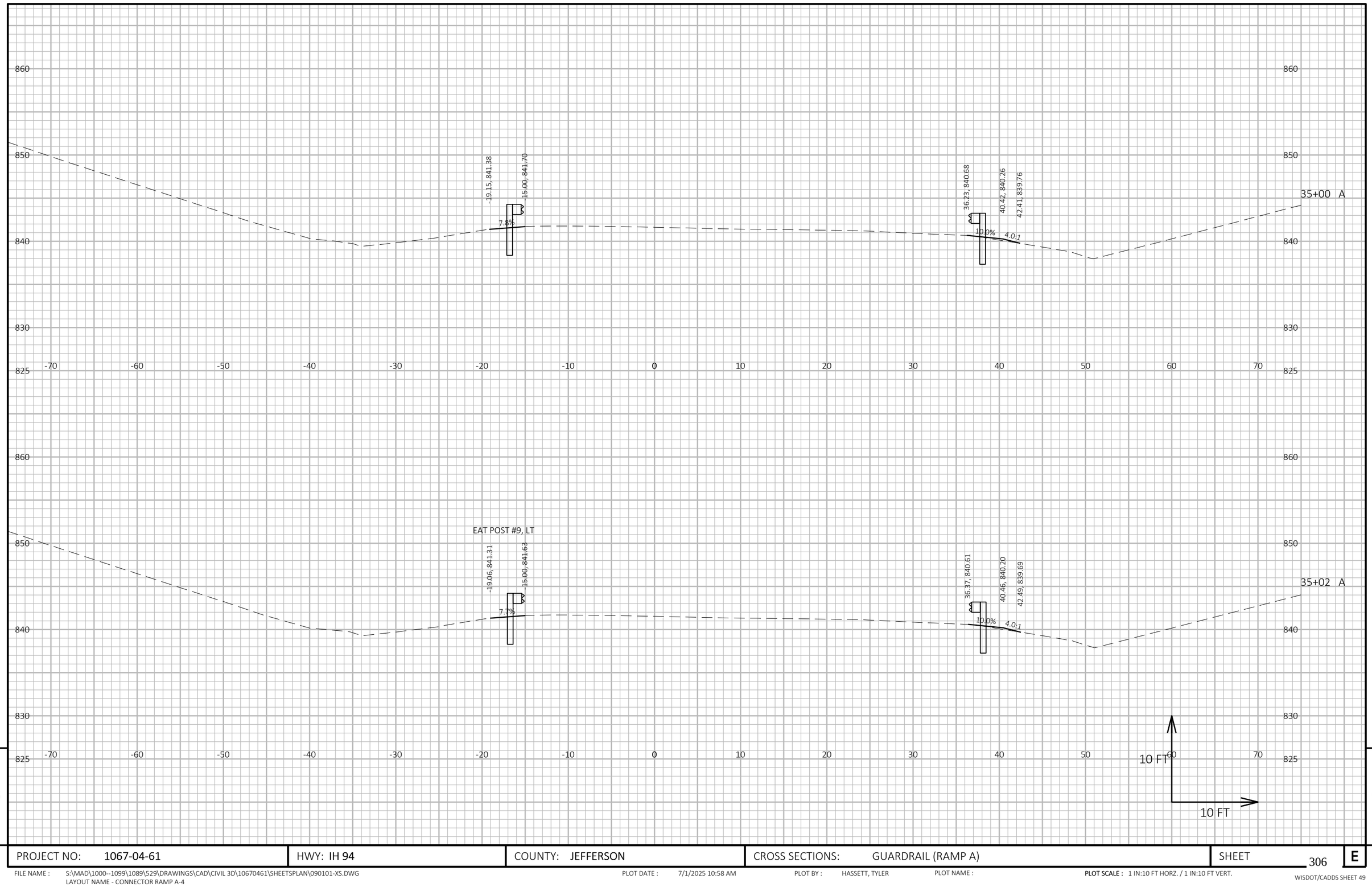
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP A)	SHEET 305	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - CONNECTOR RAMP A-3

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

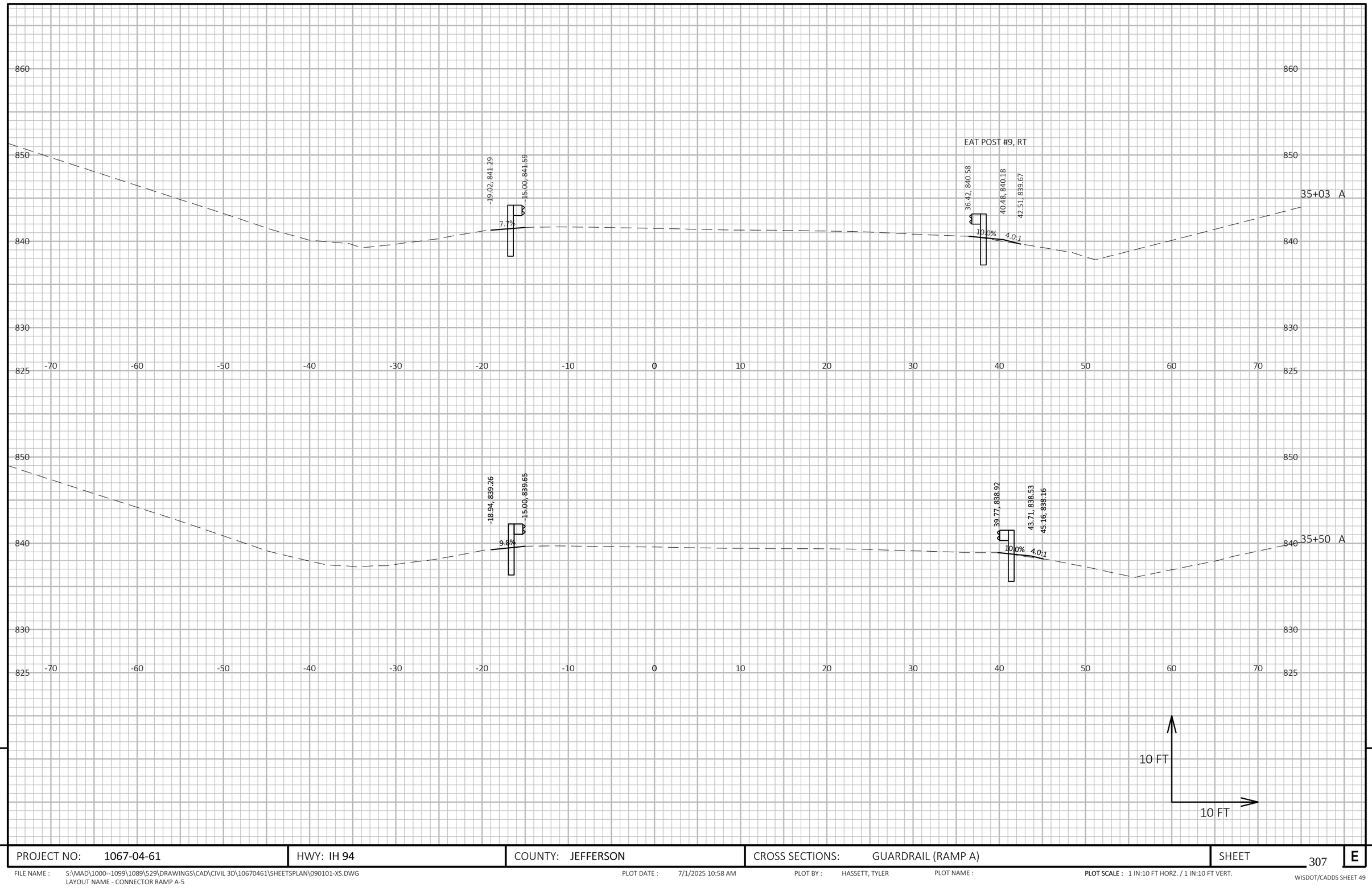
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP A)	SHEET 306	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - CONNECTOR RAMP A-4

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

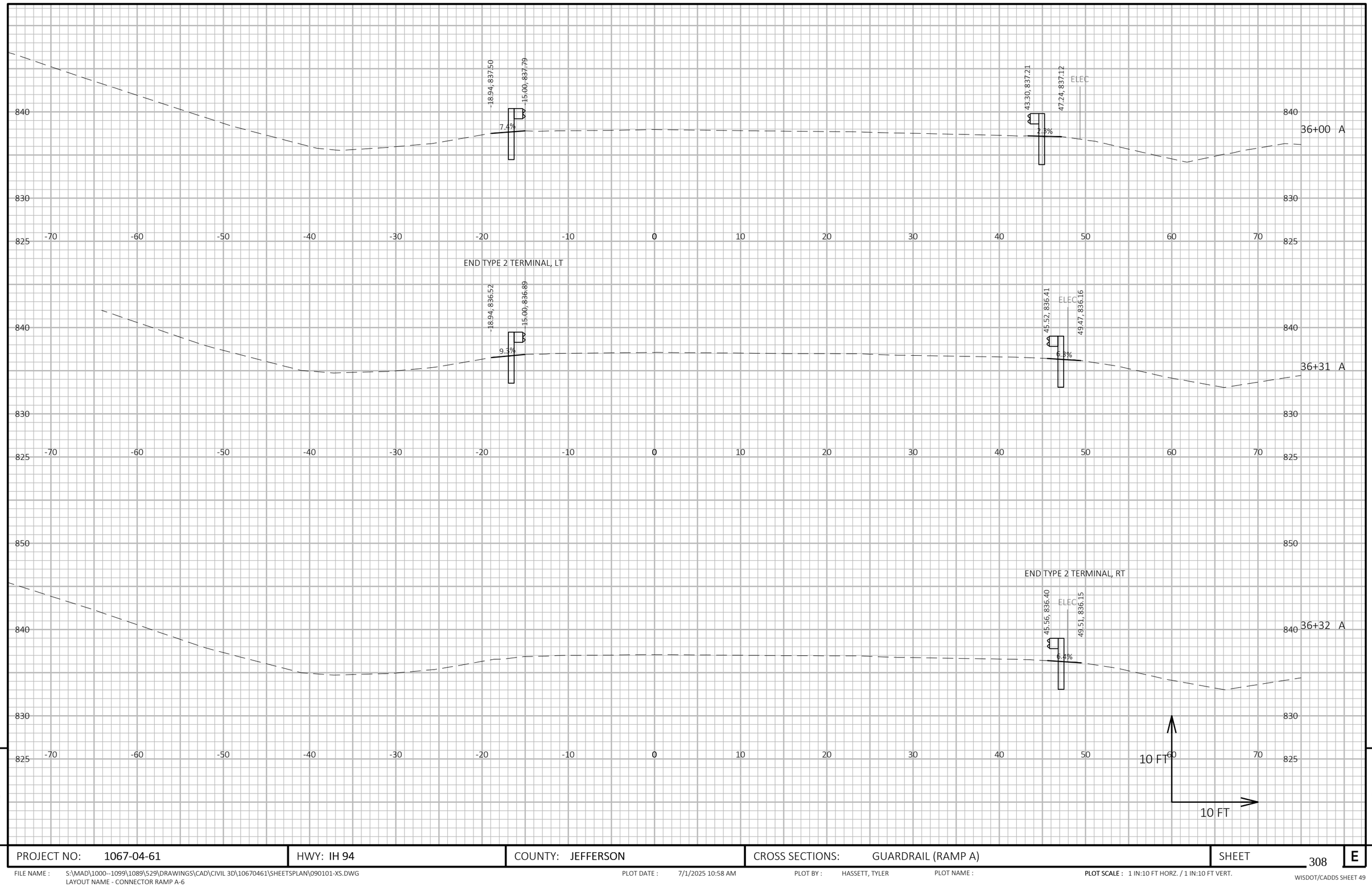
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP A)	SHEET 307	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - CONNECTOR RAMP A-5

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP A)	SHEET 308	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - CONNECTOR RAMP A-6

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END TYPE 2 TERMINAL, LT

-58.28, 840.90

-54.33, 841.27

9.4%

44+92 B

END TYPE 2 TERMINAL, RT

-58.21, 840.93

-54.27, 841.31

9.7%

3.00, 842.60

6.94, 842.45

9.8%

44+93 B

10 FT

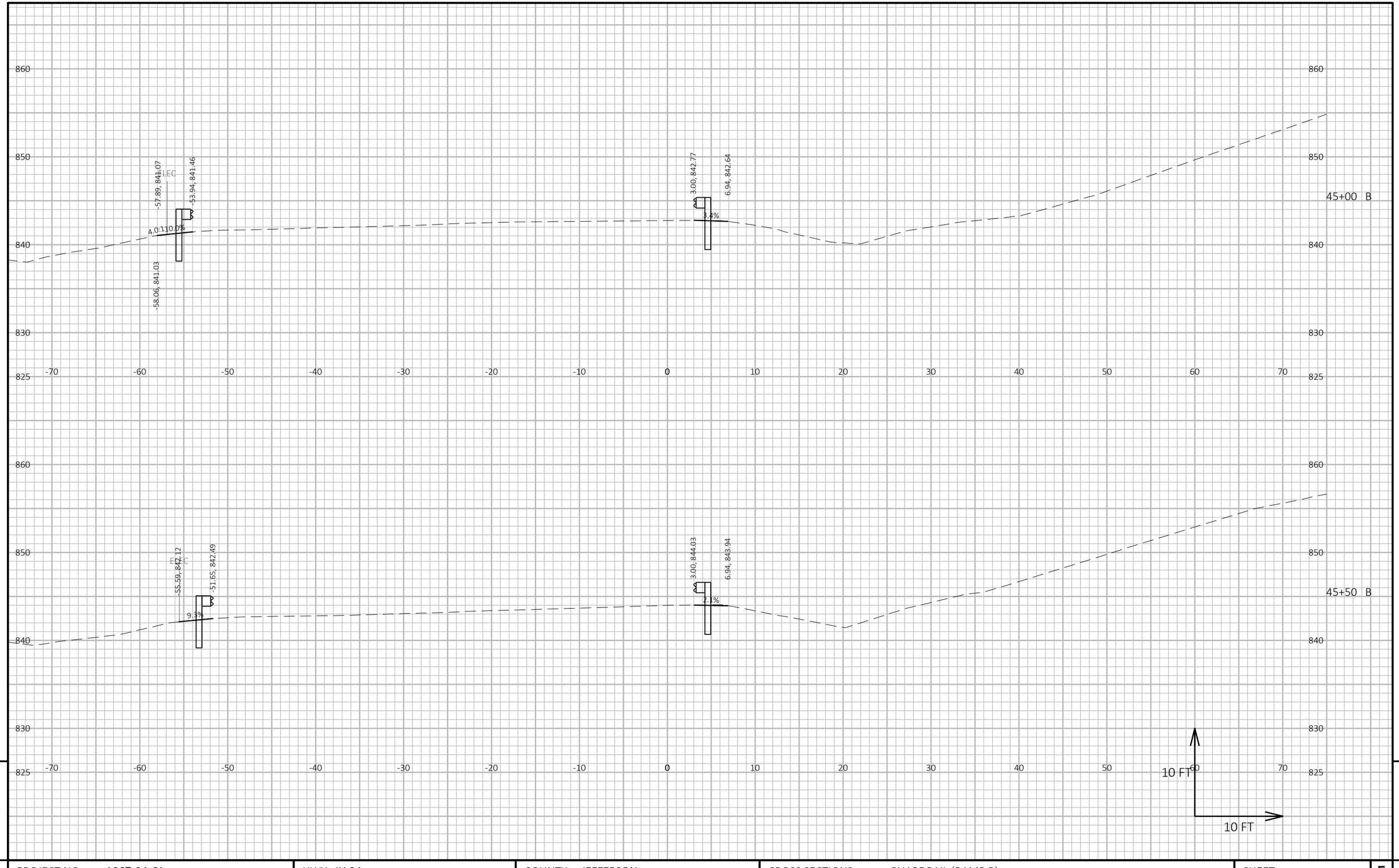
10 FT

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP B)	SHEET 309	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP B-1

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

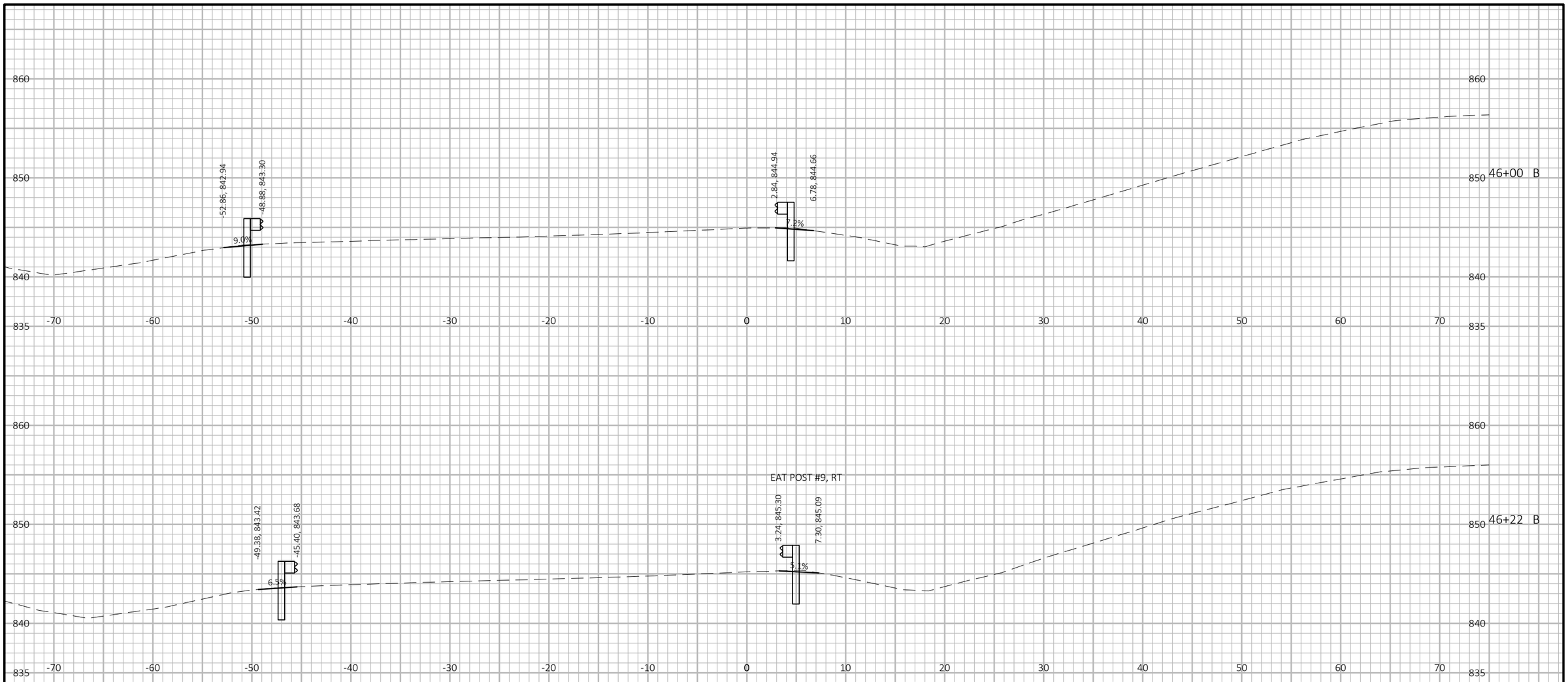


PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP B)	SHEET 310	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP B-2

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP B)	SHEET 311	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP B-3

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST #9, LT

-48.87, 843.48

-44.83, 843.74

6.5%

3.30, 845.36

7.56, 845.16

2.9%

46+26 B

EAT POST #5, RT

-46.66, 843.76

-41.82, 844.07

6.8%

3.63, 845.71

8.97, 845.39

5.9%

46+47 B

860
850
840
835

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT

10 FT

9

9

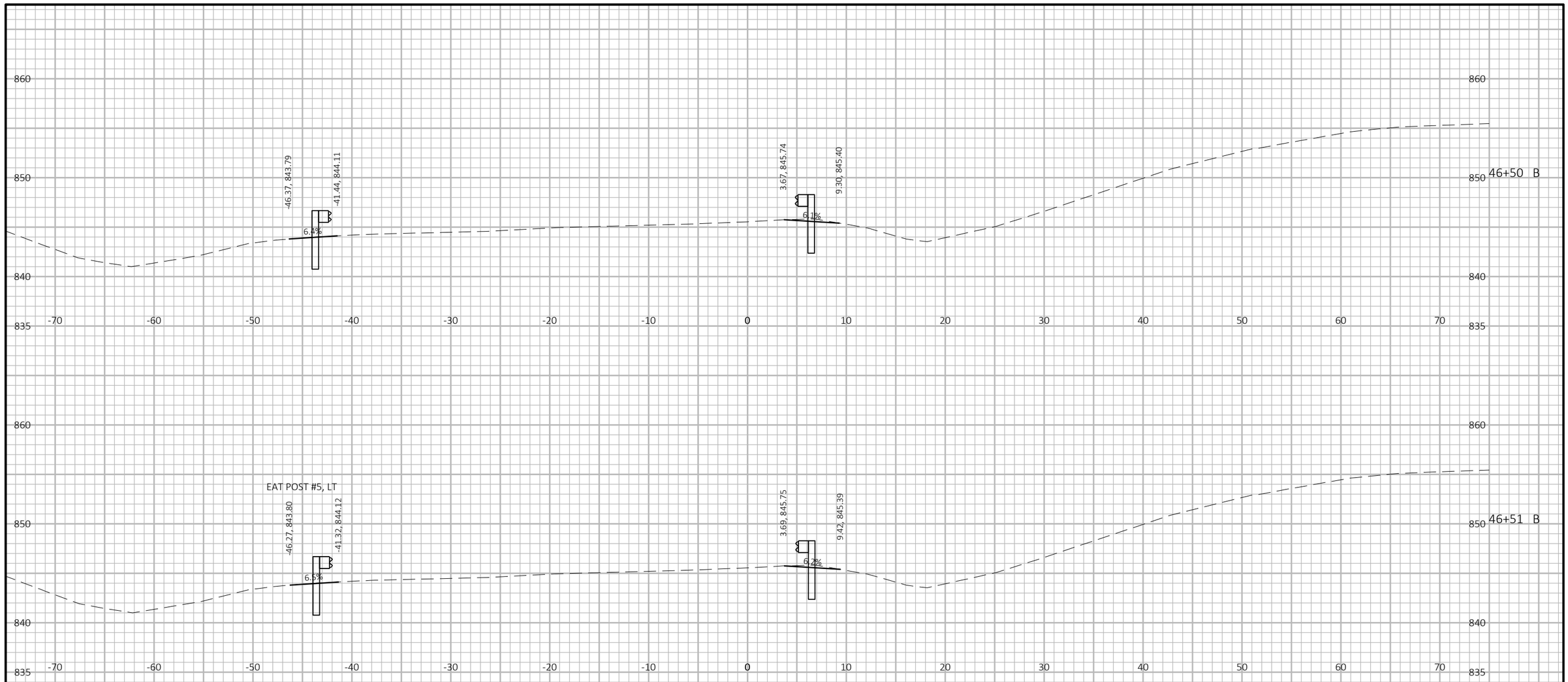
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP B)	SHEET 312	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP B-4

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

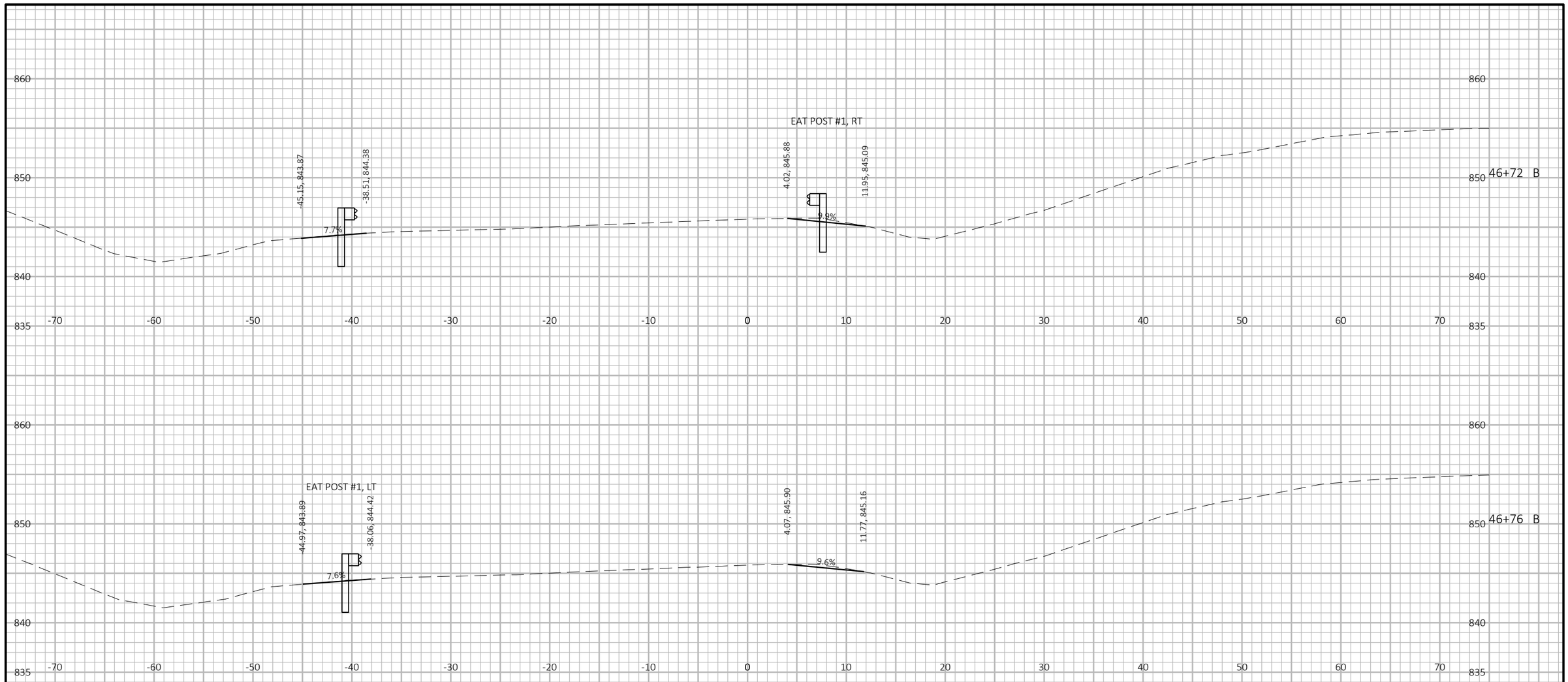
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP B)	SHEET 313	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP B-5

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

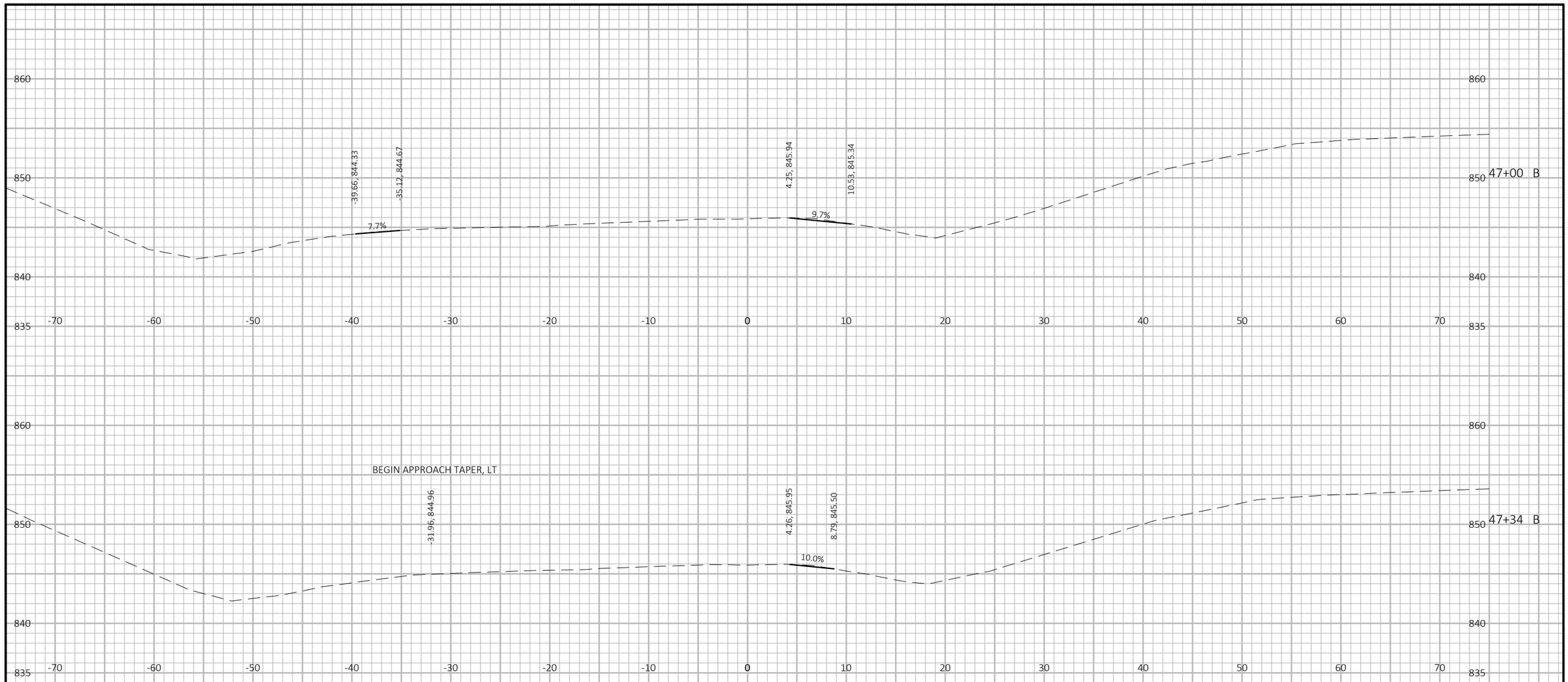
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP B)	SHEET 314	E

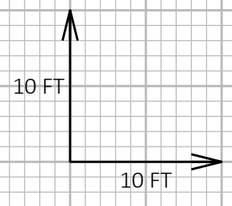
FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP B-6

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





9

9

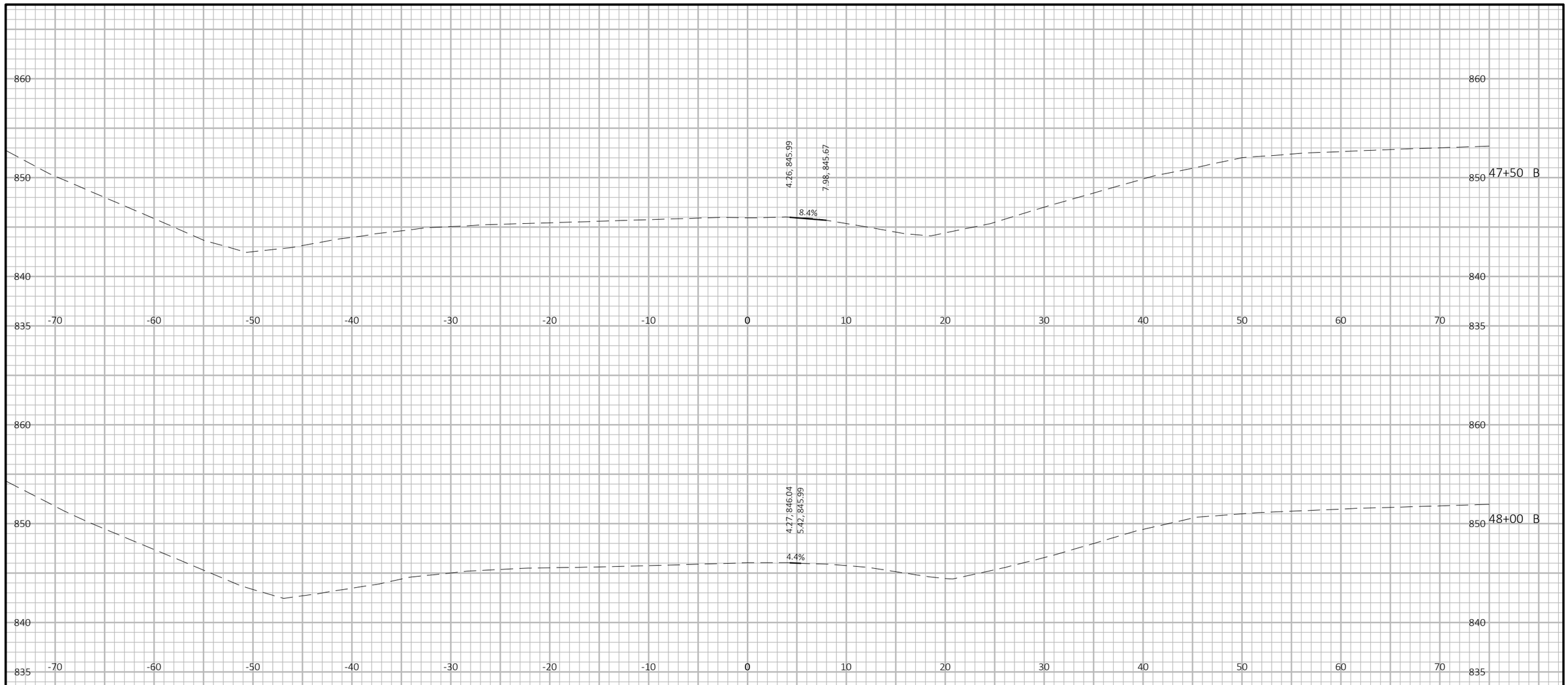
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP B)	SHEET 315	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP B-7

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

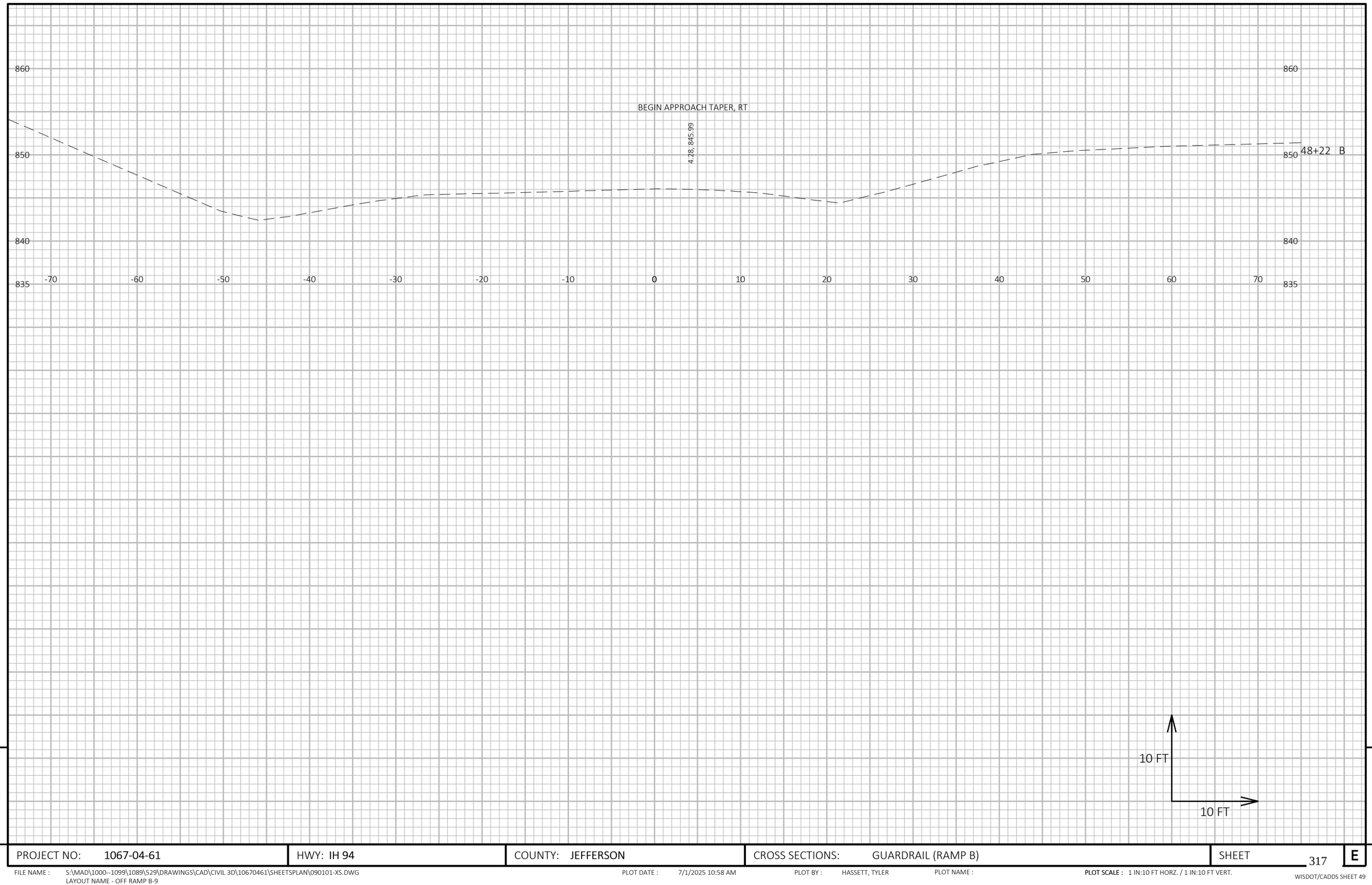
PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP B)	SHEET 316	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP B-8

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

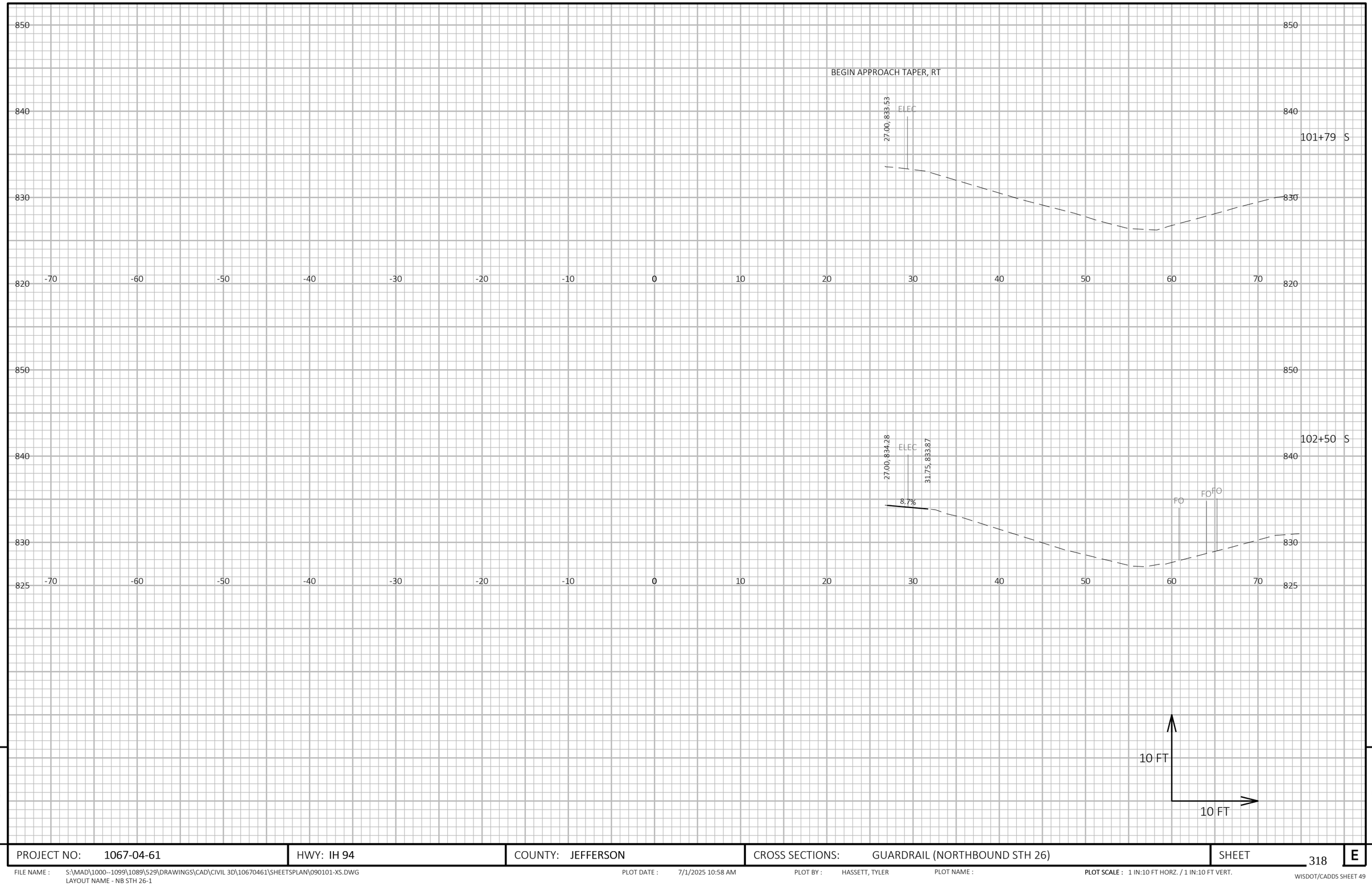
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (RAMP B)	SHEET 317	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - OFF RAMP B-9

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

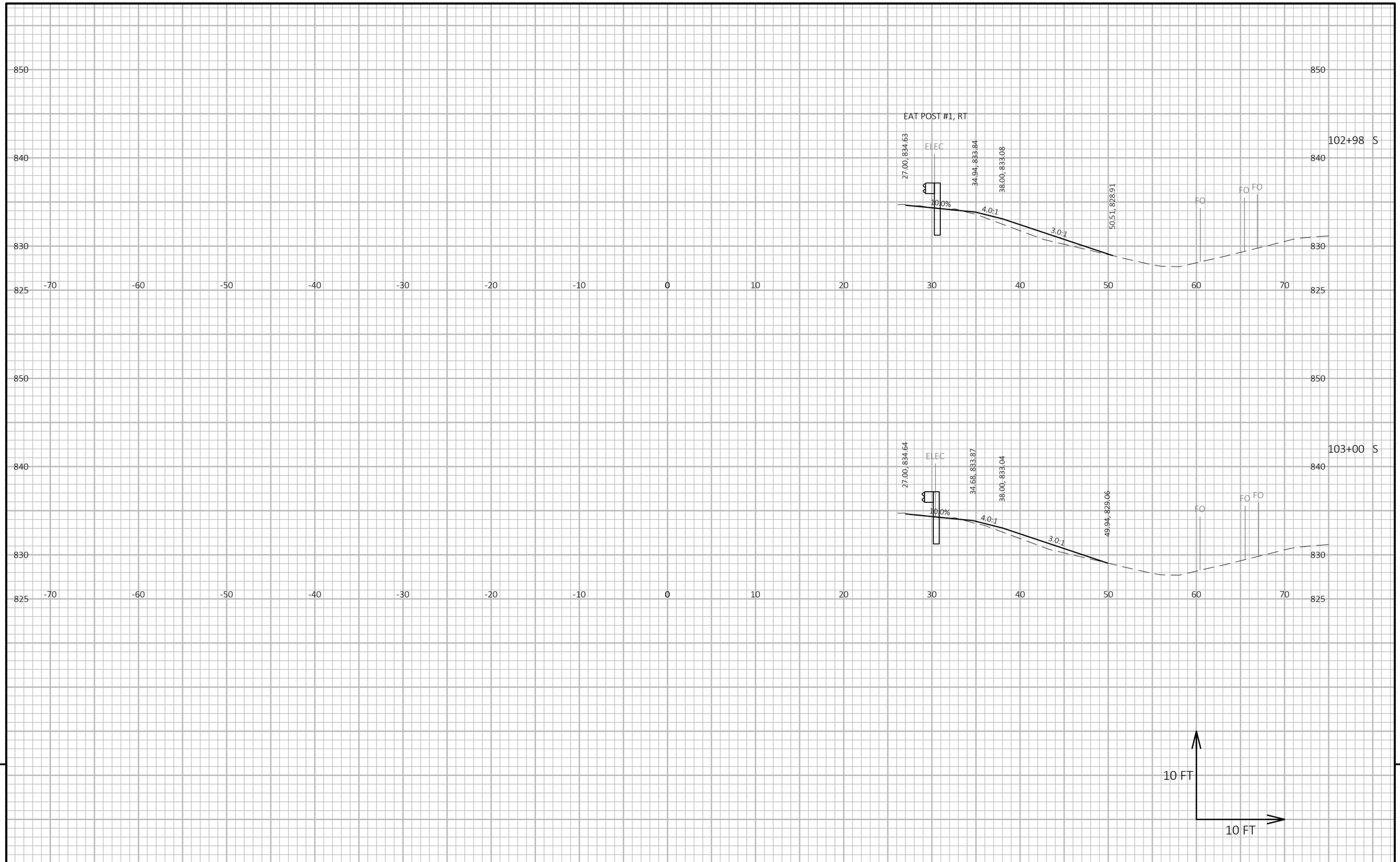
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (NORTHBOUND STH 26)	SHEET 318	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - NB STH 26-1

PLOT DATE : 7/1/2025 10:58 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

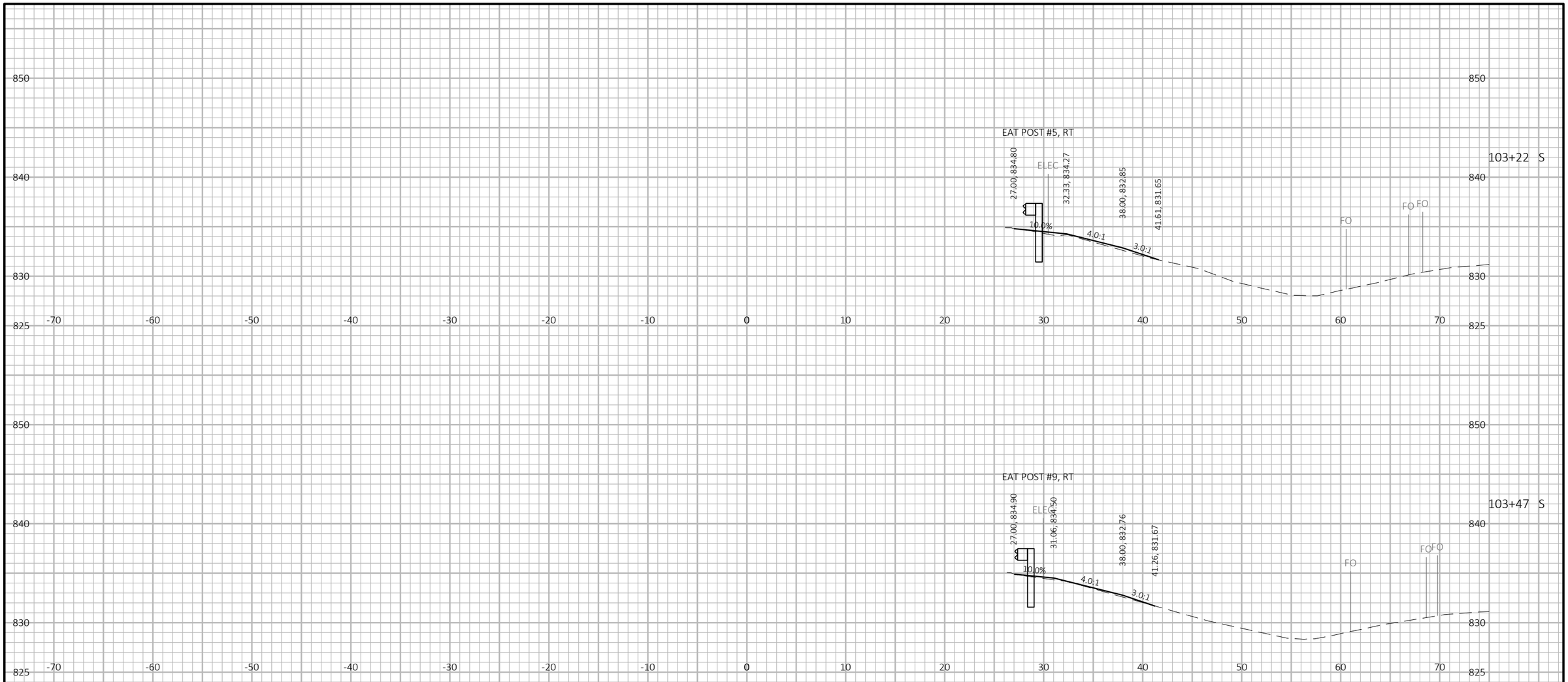
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (NORTHBOUND STH 26)	SHEET 319	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - NB STH 26-2

PLOT DATE : 7/1/2025 10:59 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

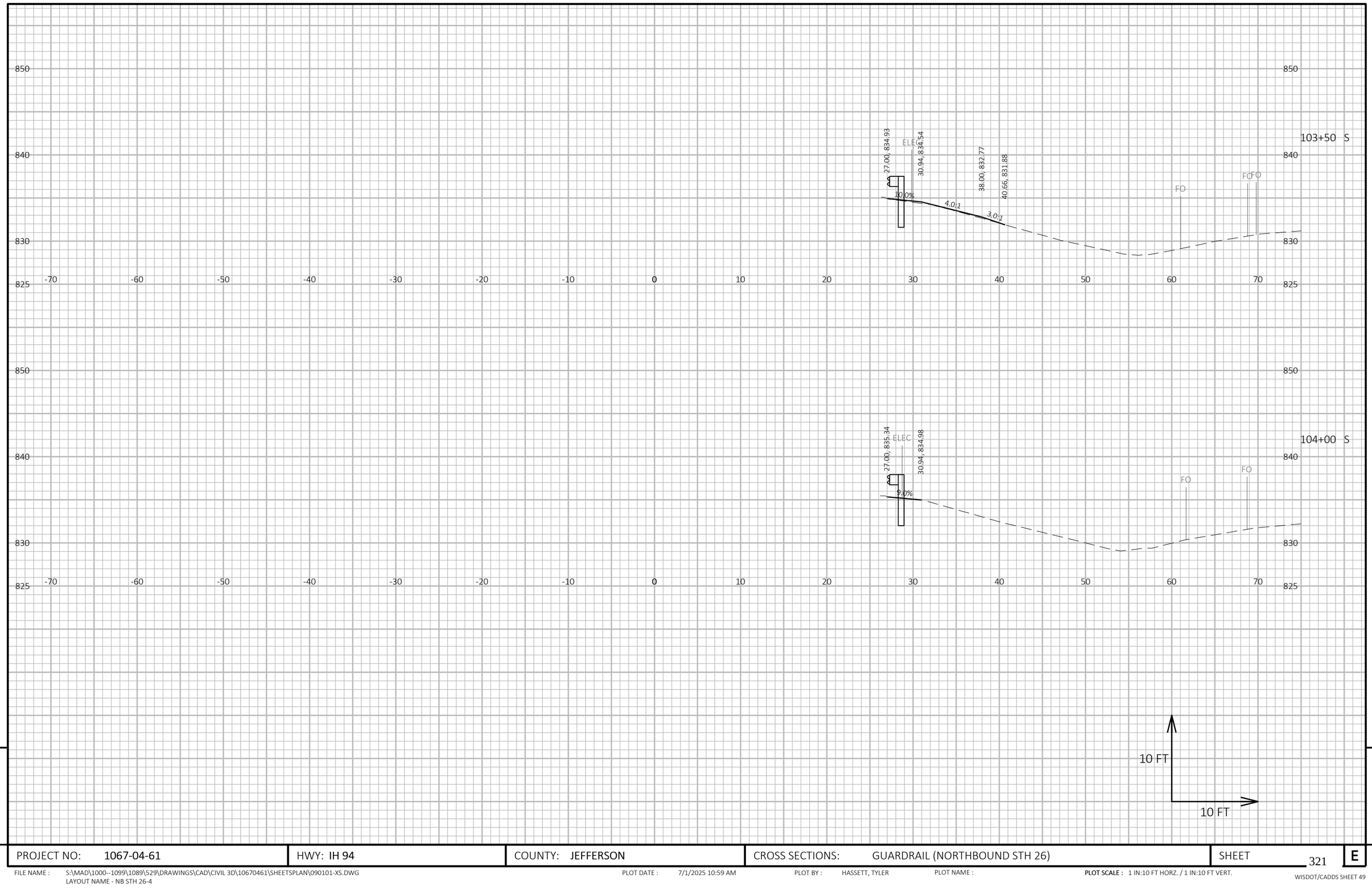
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (NORTHBOUND STH 26)	SHEET 320	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - NB STH 26-3

PLOT DATE : 7/1/2025 10:59 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

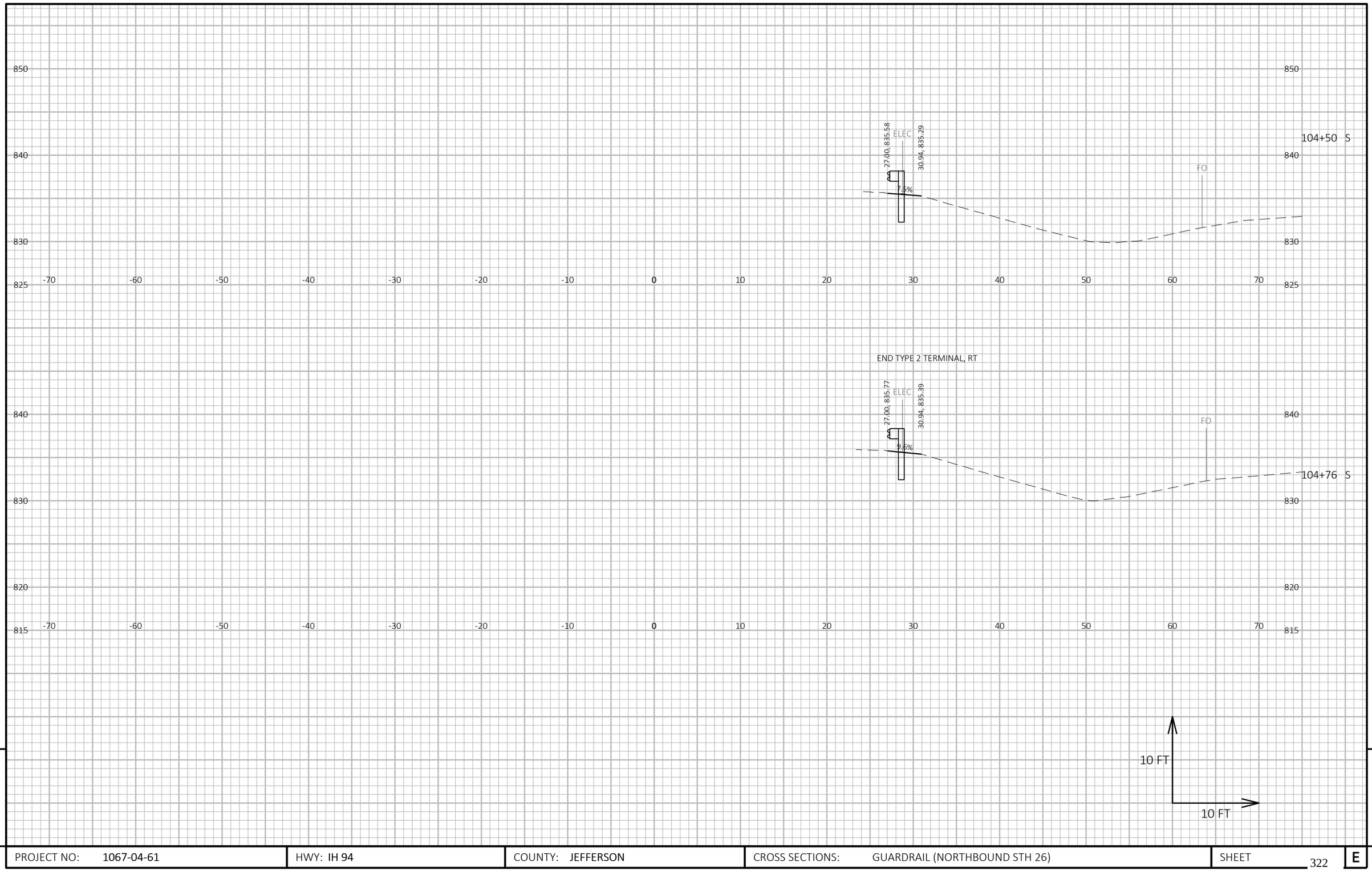
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (NORTHBOUND STH 26)	SHEET 321	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - NB STH 26-4

PLOT DATE : 7/1/2025 10:59 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (NORTHBOUND STH 26)	SHEET 322	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - NB STH 26-5

PLOT DATE : 7/1/2025 10:59 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END TYPE 2 TERMINAL, LT

-112.04, 839.02 EC

-109.04, 839.28

8.8%

840

830

820

112+98 S

-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0

850

-112.05, 839.05 EC

-109.03, 839.29

8.1%

840

830

825

113+00 S

10 FT

10 FT

9

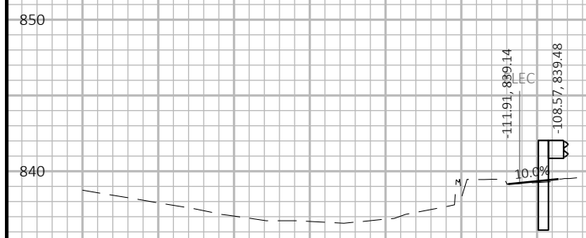
9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (SOUTHBOUND STH 26)	SHEET 323	E

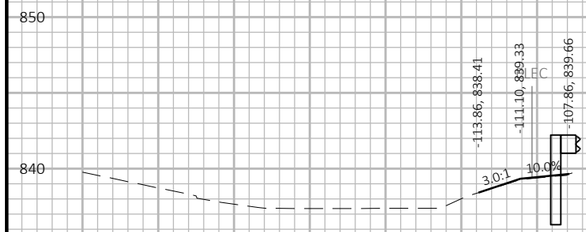
FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - SB STH 26-1

PLOT DATE : 7/1/2025 10:59 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

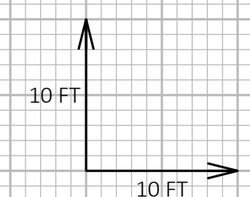
WISDOT/CADDS SHEET 49



113+50 S



114+00 S



PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (SOUTHBOUND STH 26)	SHEET 324	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - SB STH 26-2

PLOT DATE : 7/1/2025 10:59 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

114+50 S

-109.78, 839.65
EC
-106.21, 840.00
9.8%

850
840
830
825
-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0

EAT POST #9, LT

-108.26, 839.83
EC
-104.21, 840.22
9.6%

114+83 S

10 FT
10 FT

9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (SOUTHBOUND STH 26)	SHEET 325	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - SB STH 26-3

PLOT DATE : 7/1/2025 10:59 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

850
840
830
825
-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0

-107.85, 839.89
ELEC
-102.97, 840.35
9.4%

115+00 S

EAT POST #5, LT
-107.61, 839.94
ELEC
-102.24, 840.45
9.4%

115+09 S

10 FT
10 FT

9

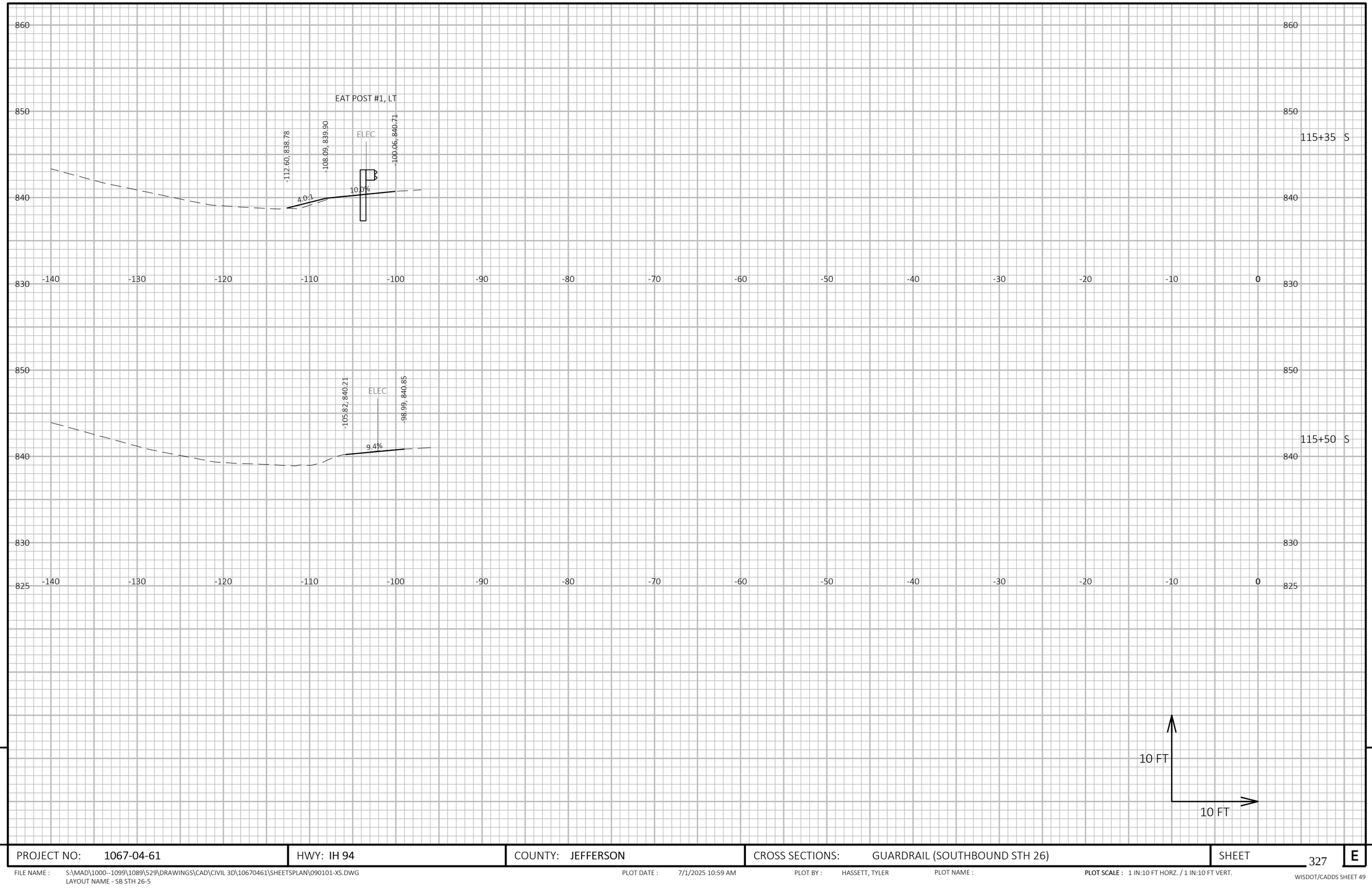
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (SOUTHBOUND STH 26)	SHEET 326	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - SB STH 26-4

PLOT DATE : 7/1/2025 10:59 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

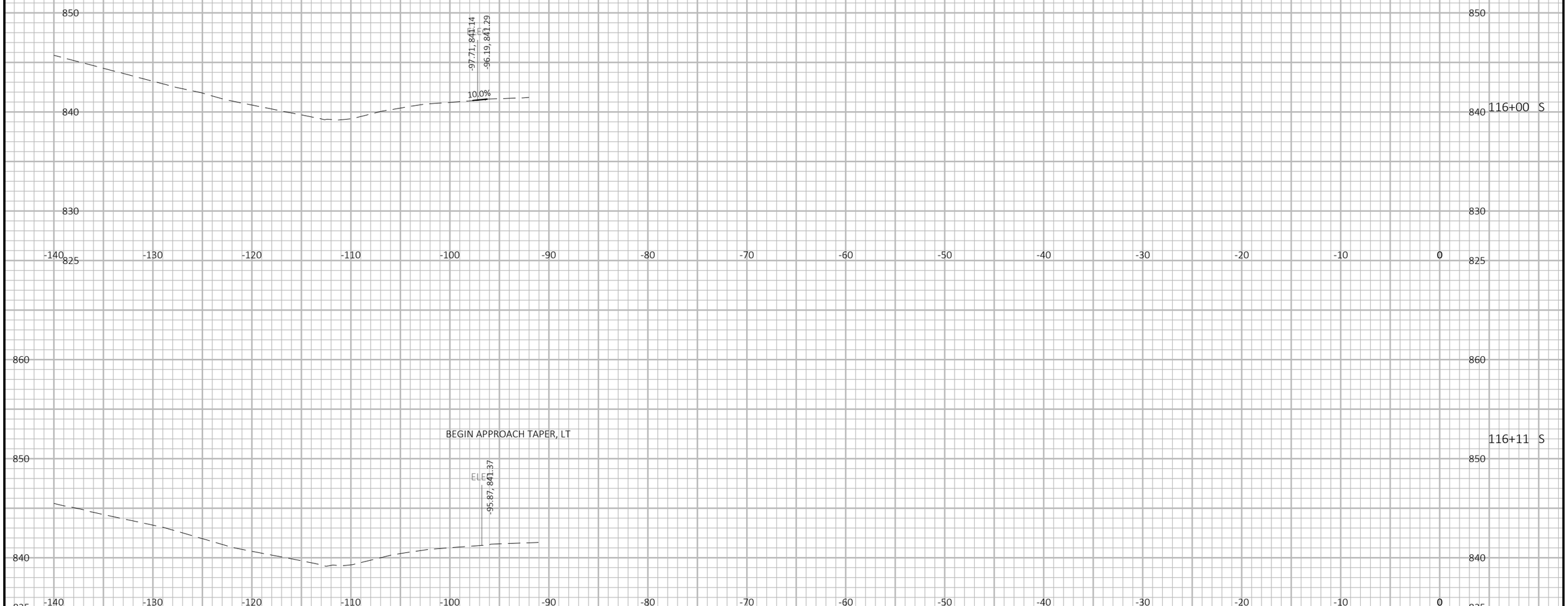
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PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (SOUTHBOUND STH 26)	SHEET 327	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - SB STH 26-5

PLOT DATE : 7/1/2025 10:59 AM PLOT BY : HASSETT, TYLER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1067-04-61	HWY: IH 94	COUNTY: JEFFERSON	CROSS SECTIONS: GUARDRAIL (SOUTHBOUND STH 26)	SHEET 328	E

FILE NAME : S:\MAD\1000--1099\1089\529\DRAWINGS\CAD\CIVIL 3D\10670461\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - SB STH 26-6

PLOT DATE : 7/1/2025 10:59 AM PLOT BY : HASSETT, TYLER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov