

MAD

PROJECT ID:

5695-00-73

COUNTY:

LAFAYETTE

NOVEMBER 2026

ORDER OF SHEETS

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

TOTAL SHEETS = 74



DESIGN DESIGNATION 5695-00-03

A.A.D.T.	2027	=	290
A.A.D.T.	2047	=	320
D.H.V.		=	32
D.D.		=	50/50
T.		=	10.0%
DESIGN SPEED		=	50 MPH
ESALS		=	95,000

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

EXISTING CULVERT

PROPOSED CULVERT
(Box or Pipe)

COMBUSTIBLE FLUIDS

MARSH AREA

WOODED OR SHRUB AREA

PROFILE

GRADE LINE

ORIGINAL GROUND
MARSH OR ROCK PROFILE
(To be noted as such)

SPECIAL DITCH

GRADE ELEVATION

CULVERT (Profile View)

UTILITIES

ELECTRIC

FIBER OPTIC

GAS

SANITARY SEWER

STORM SEWER

TELEPHONE

WATER

UTILITY PEDESTAL

POWER POLE

TELEPHONE POLE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

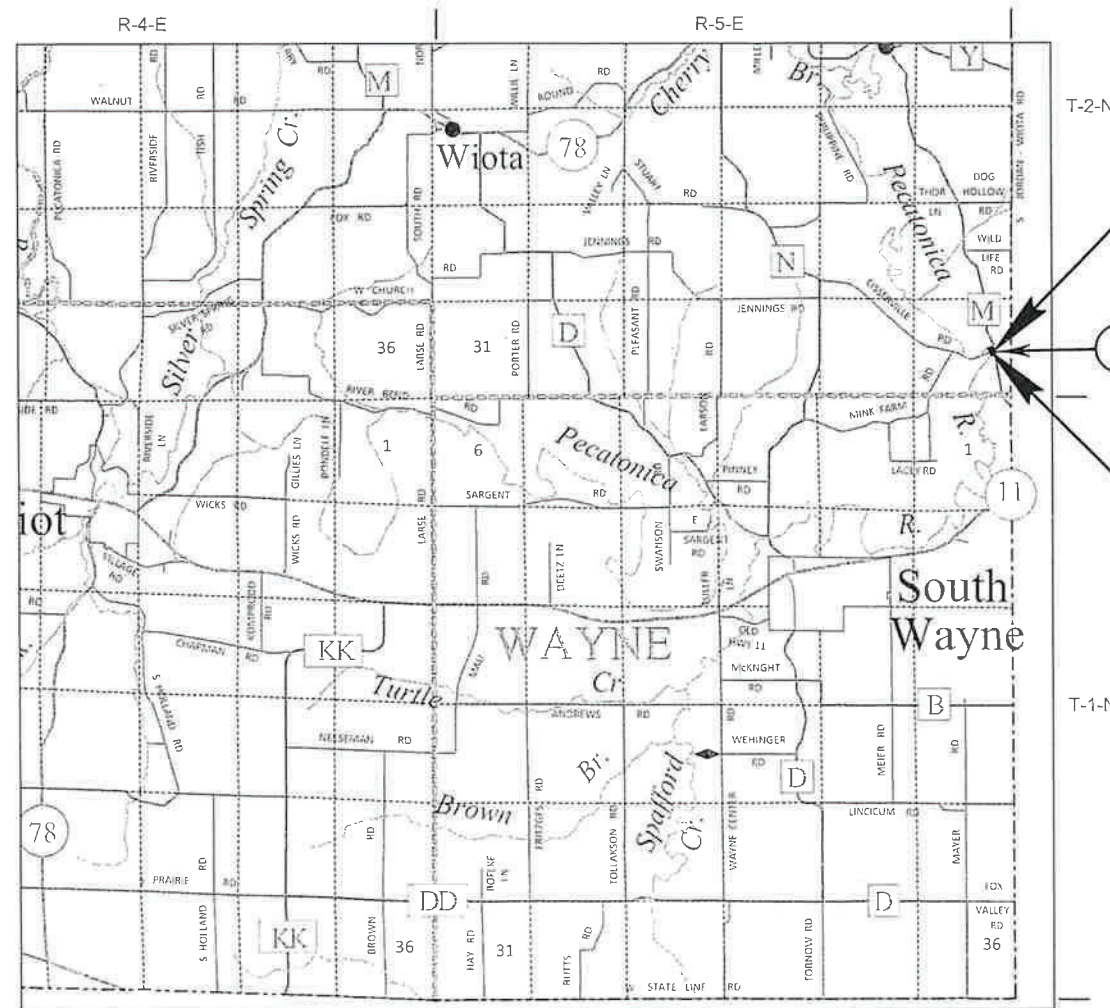
TOWN OF WIOTA, CISSERVILLE ROAD

E BRANCH PECATONICA BR B-33-0145

LOCAL STREET
LAFAYETTE COUNTY

STATE PROJECT NUMBER

5695-00-73



END PROJECT
STA 11+25.00
Y=137,722.906
X=557,325.093

BEGIN PROJECT
STA 8+25.00
Y=137,602.944
X=557,050.122

1 STRUCTURE B-33-0145

LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.057 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), LAFAYETTE 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 12A.

STATE PROJECT

5695-00-73

FEDERAL PROJECT

PROJECT

WISC 2027028

CONTRACT

1

ACCEPTED FOR

LAFAYETTE COUNTY

Date: 7/16/26 Dan Rath Commissioner
(Signature and Title of Official)

ORIGINAL PLANS PREPARED BY

SEH Short Elliott Hendrickson Inc.
329 Jay Street, Suite 301
La Crosse, WI 54601-4007
608.782.3161 main | 888.908.8166 fax
Building a Better World for All of Us™ www.sehinc.com



7/9/2026 [Signature]
(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor SEH
Designer SEH
Project Manager DONALD CARPENTER, PE
Regional Examiner SWR
Regional Supervisor DELLA KOENIG, PE

APPROVED FOR THE DEPARTMENT

7/29/2026 [Signature]
DATE: (Signature)

STANDARD ABBREVIATIONS

ABUT	ABUTMENT	HYD	HYDRANT
AC	ACRE	ID	INSIDE DIAMETER
AGG	AGGREGATE	INV	INVERT
AECPRC	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE	IP	IRON PIPE ON PIN
AECPCS	APRON ENDWALL FOR CULVERT PIPE CORRUGATED STEEL	LHF	LEFT-HAND FORWARD
ASPH	ASPHALTIC	L	LENGTH OF CURVE
AVG	AVERAGE	LF	LINEAR FOOT
ADT	AVERAGE DAILY TRAFFIC	LC	LONG CHORD OF CURVE
BF	BACK FACE	LS	LUMP SUM
BM	BENCH MARK	MH	MANHOLE
BR	BRIDGE	MOR	MID POINT OF RADIUS
CE	COMMERCIAL ENTRANCE	NC	NORMAL CROWN
C/L	CENTER LINE	NO	NUMBER
Δ	CENTRAL ANGLE OR DELTA	OBLIT	OBLITERATE
COB	CENTER OF BARRIER	PAVT	PAVEMENT
CONC	CONCRETE	PE	PRIVATE ENTRANCE
CPRC	CULVERT PIPE REINFORCED CONCRETE	PVRC	POINT OF VERTICAL REVERSE CURVE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL	QOR	QUARTER POINT OF RADIUS
CR	CREEK	R	RADIUS
CY	CUBIC YARD	REQ'D	REQUIRED
C&G	CURB AND GUTTER	RES	RESIDENCE OR RESIDENTIAL
D	DEGREE OF CURVE	RHF	RIGHT-HAND FORWARD
DHV	DESIGN HOUR VOLUME	R/W	RIGHT-OF-WAY
DISCH	DISCHARGE	R	RIVER
DG	DITCH GRADE	RDWY	ROADWAY
DWY	DRIVEWAY	R/L	REFERENCE LINE
X	EAST GRID COORDINATE	SALV	SALVAGED
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL	SAN	SANITARY SEWER
EOR	END POINT OF RADIUS	SF	SQUARE FEET
EL	ELEVATION	SY	SQUARE YARD
ENT	ENTRANCE	SDD	STANDARD DETAIL DRAWINGS
ESALS	EQUIVALENT SINGLE AXLE LOADS	STA	STATION
EXC	EXCAVATION	SS	STORM SEWER
EBS	EXCAVATION BELOW SUBGRADE	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
EXIST	EXISTING	SE	SUPERELEVATION RATE
FC	FACE OF CURB	TC	TOP OF CURB
FF	FACE TO FACE	T OR TN	TOWN
FERT	FERTILIZE	T	TRUCKS (PERCENT OF)
FE	FIELD ENTRANCE	TYP	TYPICAL
FL	FLOW LINE	VAR	VARIABLE
FO	FIBER OPTIC	VC	VERTICAL CURVE
CWT	HUNDREDWEIGHT	Y	NORTH GRID COORDINATE
		YD	YARD

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 1.1 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.7 ACRES

DNR AREA LIAISON:

DNR SOUTH CENTRAL REGION HEADQUARTERS
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
TELEPHONE: 608.235.2955
ATTENTION: ANDY BARTA
EMAIL: ANDREW.BARTA@WISCONSIN.GOV

COUNTY CONTACT:

LAFAYETTE COUNTY HIGHWAY DEPARTMENT
12016 HILL STREET
P.O. BOX 100
DARLINGTON, WI 53530
TELEPHONE: 608.776.4919
ATTENTION: DAN RIELLY
EMAIL: DAN.RIELLY@LAFAYETTECOUNTYWI.ORG

UTILITY CONTACT LIST:

ELECTRICITY - DISTRIBUTION
ALLIANT ENERGY
1915 STATE ROAD 69 S
MONROE, WI 53566
ATTENTION: BETSI BASS
PHONE: 608.328.5323
EMAIL: BETSIBASS@ALLIANTENERGY.COM

COMMUNICATION LINE
TDS TELECOM
837 16TH AVENUE
MONROW, WI 53566
ATTENTION: DOUG DRANE
PHONE: 608.426.2115
EMAIL: DOUG.DRANE@TDSTELECOM.COM

WISDOT CONTACT:

WISCONSIN DEPT OF TRANSPORTATION
SOUTHWEST REGION
2101 WRIGHT STREET
MADISON, WI 53704-2583
TELEPHONE: 608.246.5317
ATTENTION: DONALD CARPENTER
EMAIL: DONALD2.CARPENTER@DOT.WI.GOV

DESIGN CONTACT:

SHORT ELLIOTT HENDRICKSON INC
329 JAY STREET
SUITE 301
LA CROSSE, WI 54601
TELEPHONE: 608.498.4804
ATTENTION: ALEIGHA BURG
EMAIL: ABURG@SEHINC.COM

GENERAL NOTES:

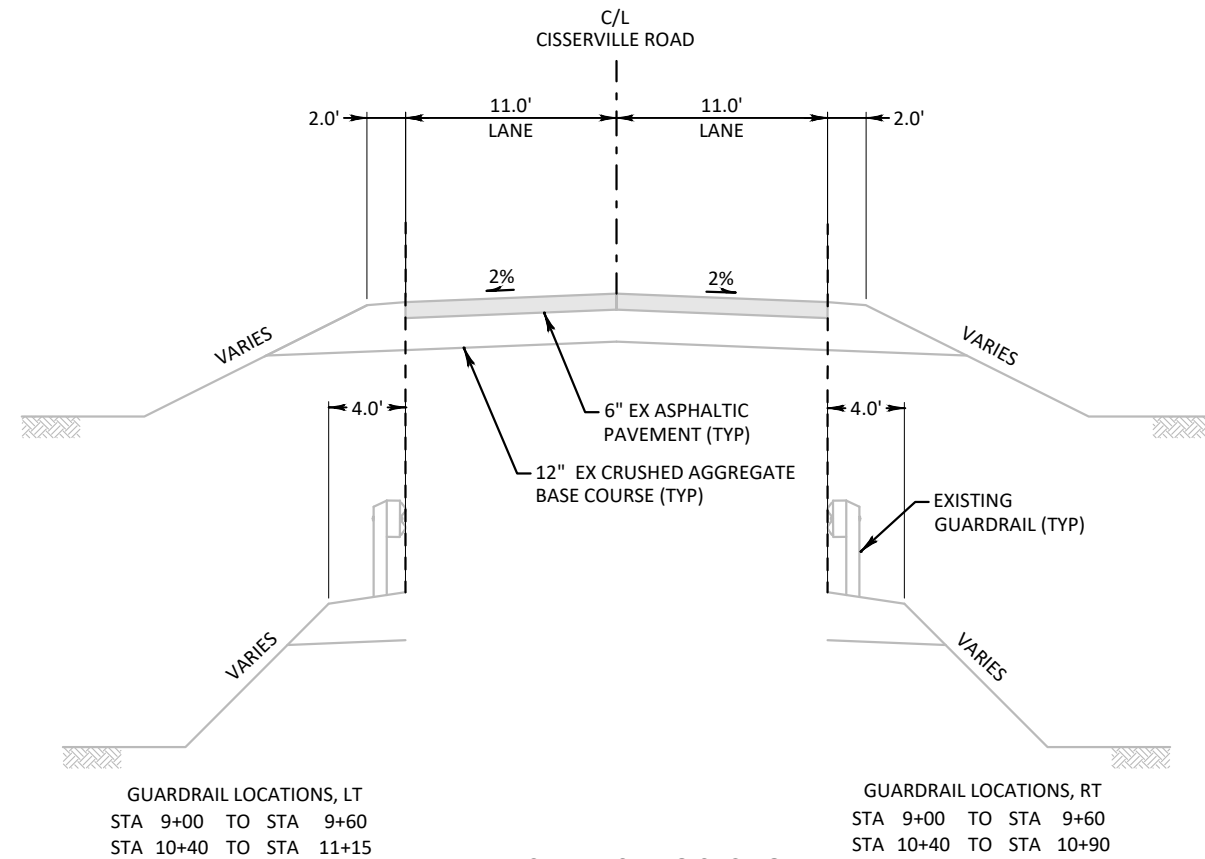
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.
- WETLANDS, WATERWAYS, AND OTHER ENVIRONMENTALLY SENSITIVE AREAS SHALL BE PROTECTED AT ALL TIMES. DO NOT STORE EQUIPMENT OR MATERIALS NEAR THESE SITES UNLESS APPROVED BY THE ENGINEER.
- DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE SALVAGE TOPSOILED, EROSION MATTED, AND SEEDED.
- FERTILIZER SHALL NOT BE USED WITHIN 20 FEET OF NAVIGABLE WATERWAYS OR WETLANDS.
- A CONVERSION FACTOR OF 2.0 TONS/CY IS USED TO ESTIMATE QUANTITIES FOR BASE AGGREGATE DENSE.
- HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.



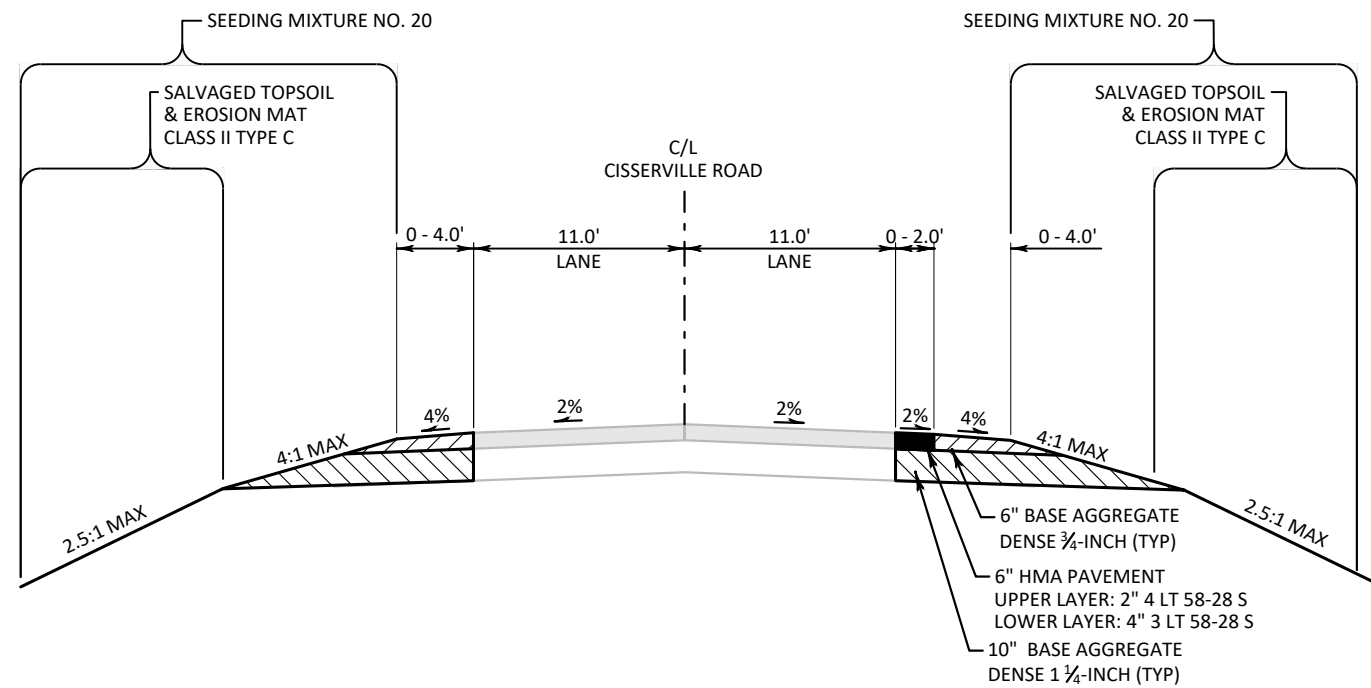
Dial 811 or (800)242-8511
www.DiggersHotline.com



PROJECT NO: 5695-00-73	HWY: LOCAL STREET	COUNTY: LAFAYETTE	PROJECT OVERVIEW	SHEET 3	E
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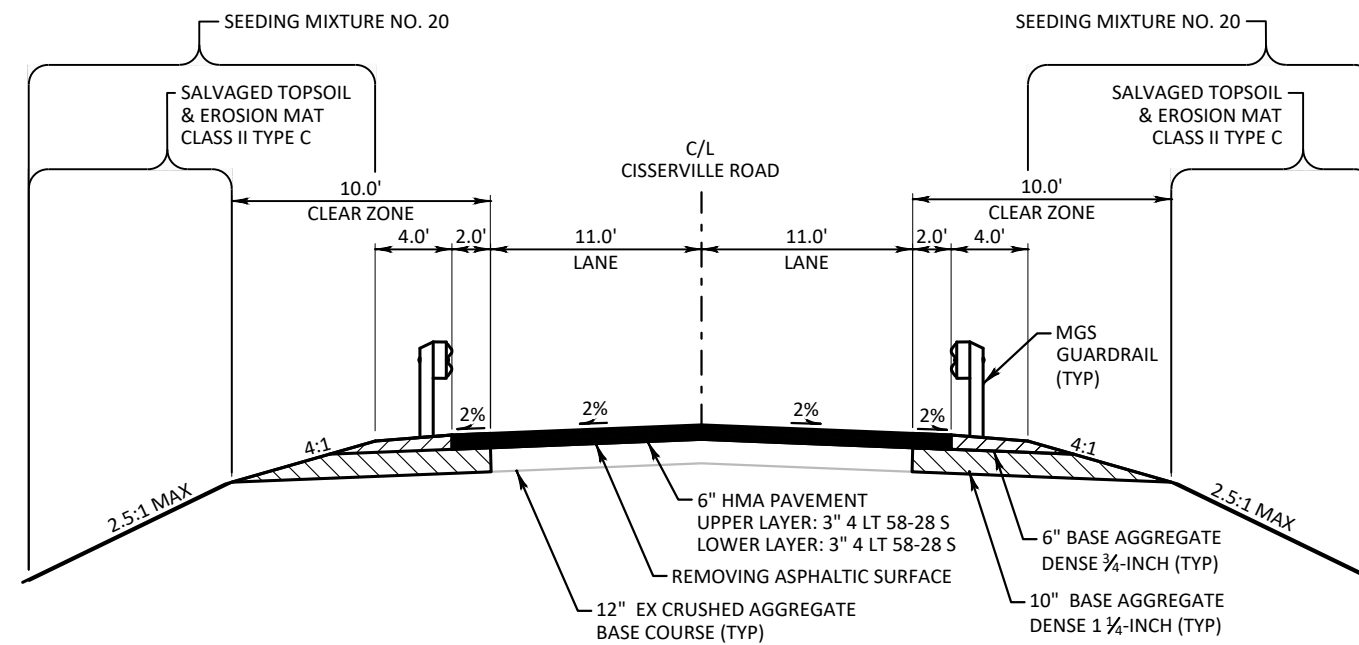


TYPICAL EXISTING SECTION
CISSEVILLE RD
STA 8+25.00 TO STA 11+25.00



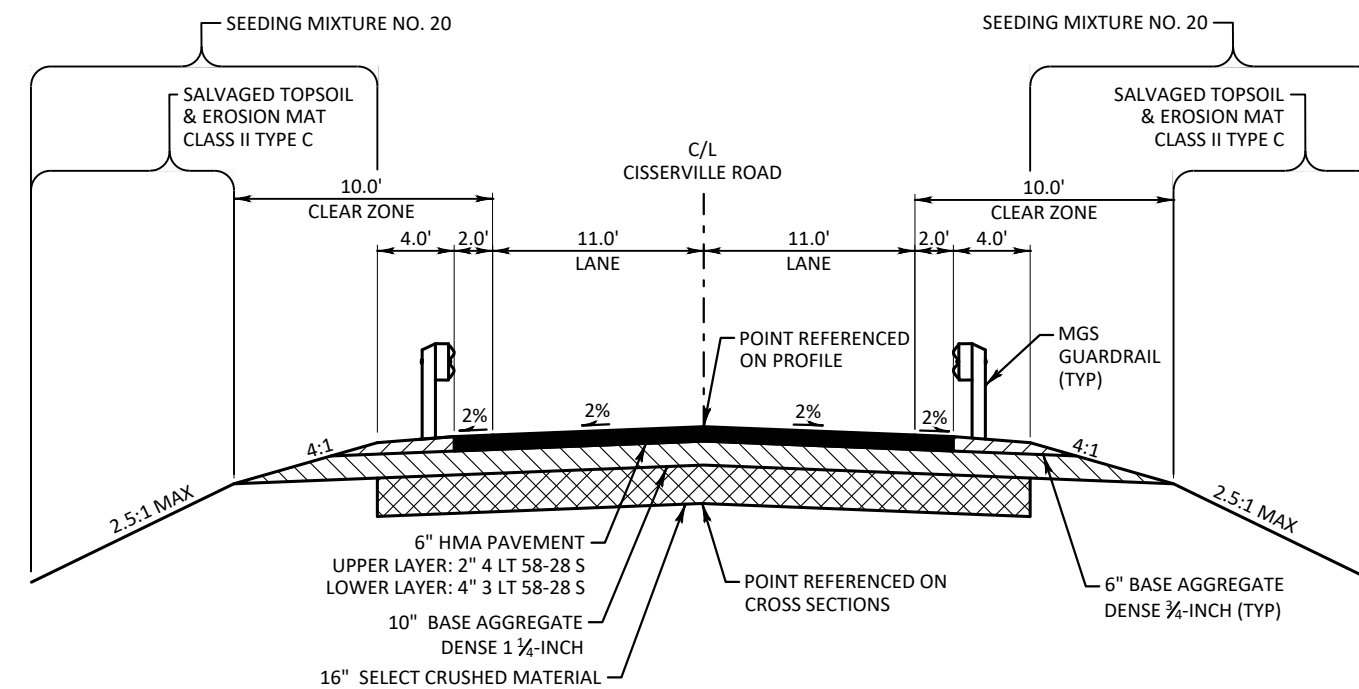
TYPICAL PROPOSED SECTION
CISSEVILLE RD - SHOULDER, LT
STA 7+32.05 TO STA 8+25.00

TYPICAL PROPOSED SECTION
CISSEVILLE RD - SHOULDER, RT
STA 6+57.22 TO STA 8+25.00



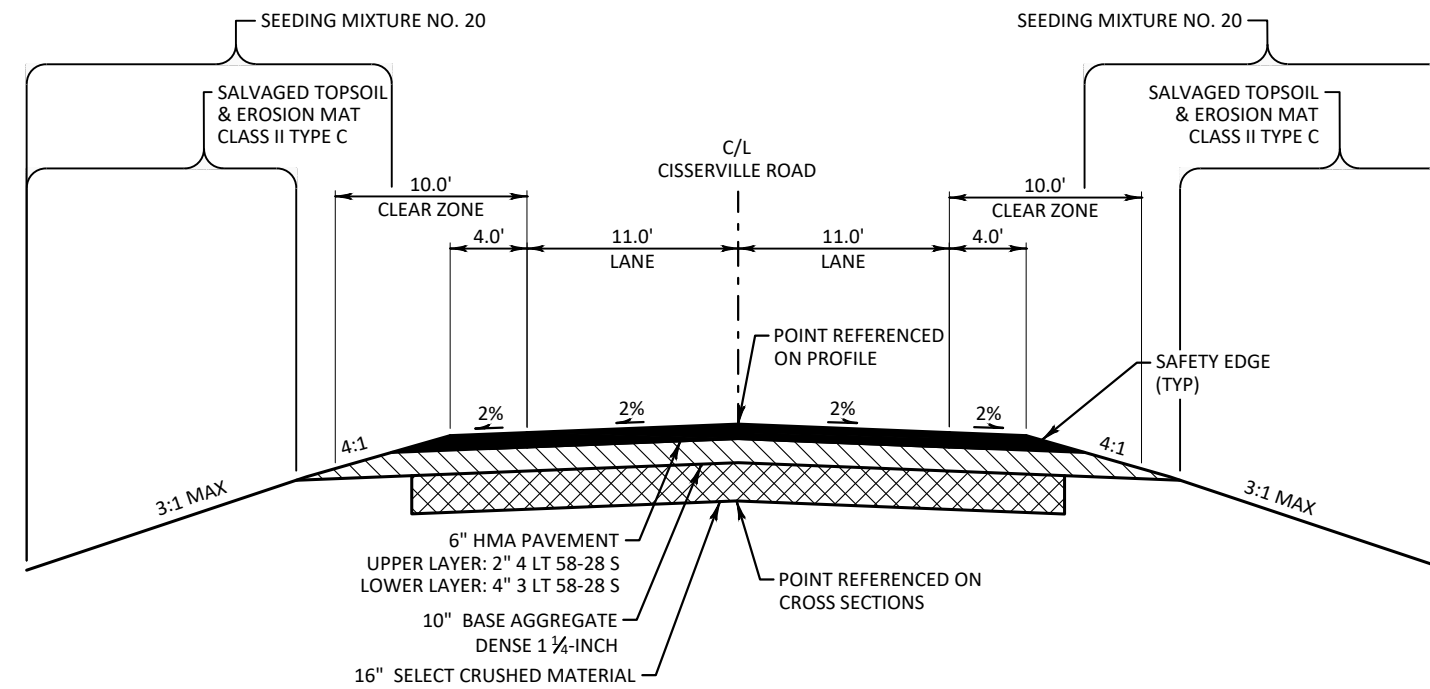
TYPICAL PROPOSED SECTION
CISSERVILLE RD - PAVEMENT REPLACEMENT
STA 8+25.00 TO STA 9+00.00

GUARDRAIL EAT POST LOCATIONS, LT	
POST NO.	STATION
1	8+62.85
5	8+89.40
9	9+15.94

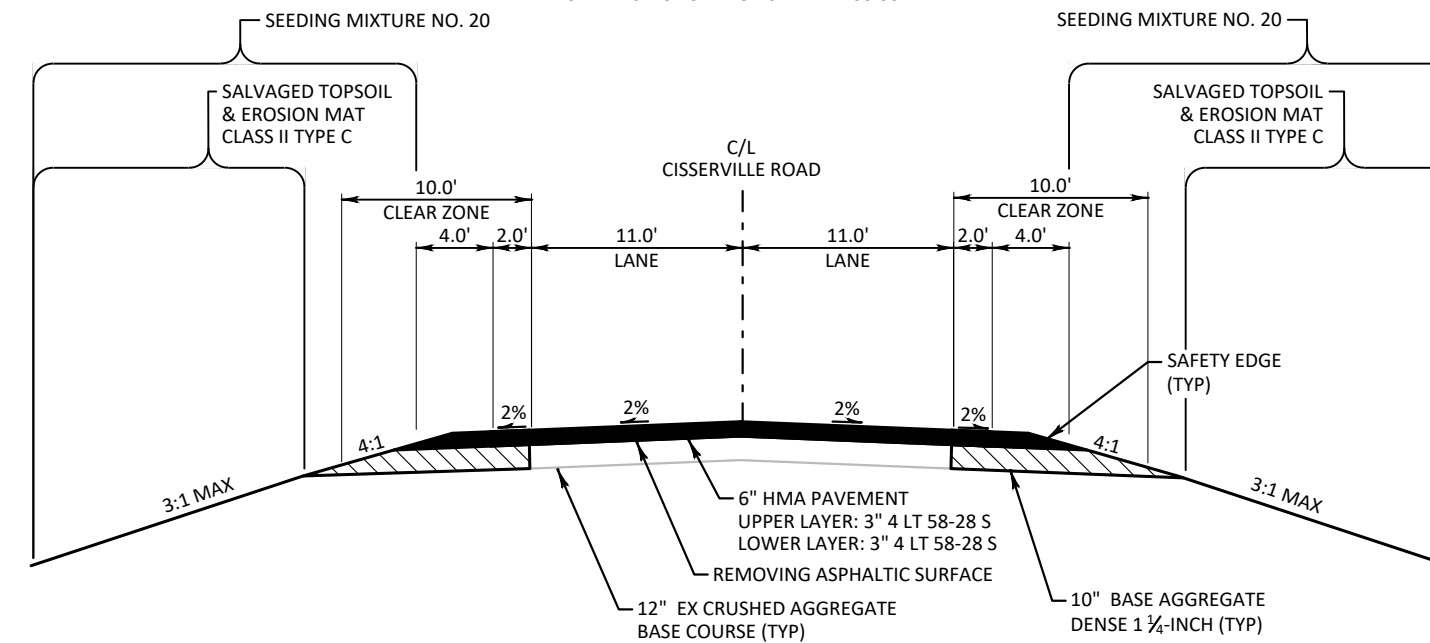


TYPICAL PROPOSED SECTION
CISSERVILLE RD - RECONSTRUCT
STA 9+00.00 TO STA 9+50.71

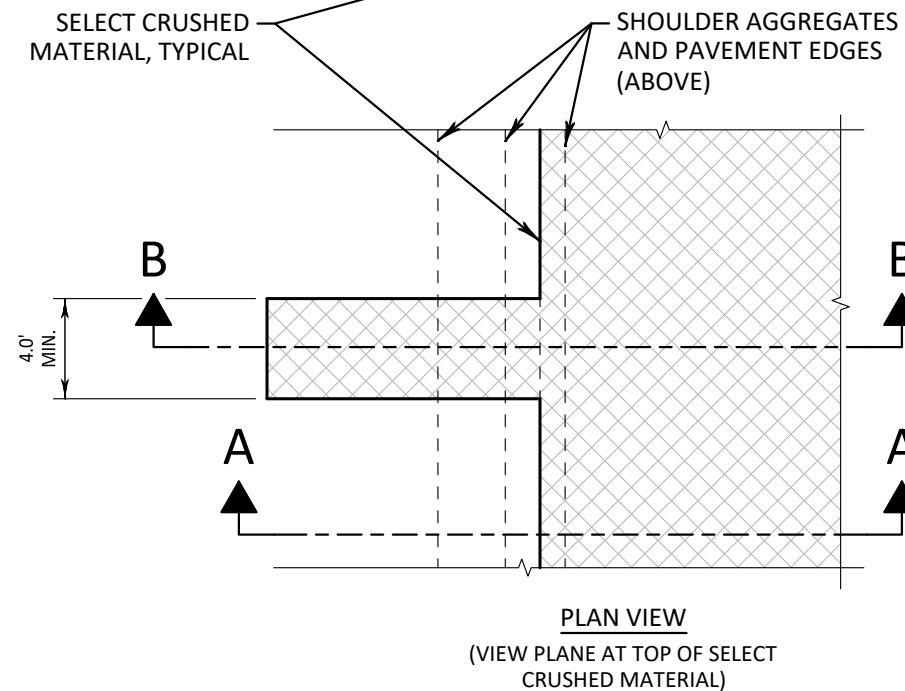
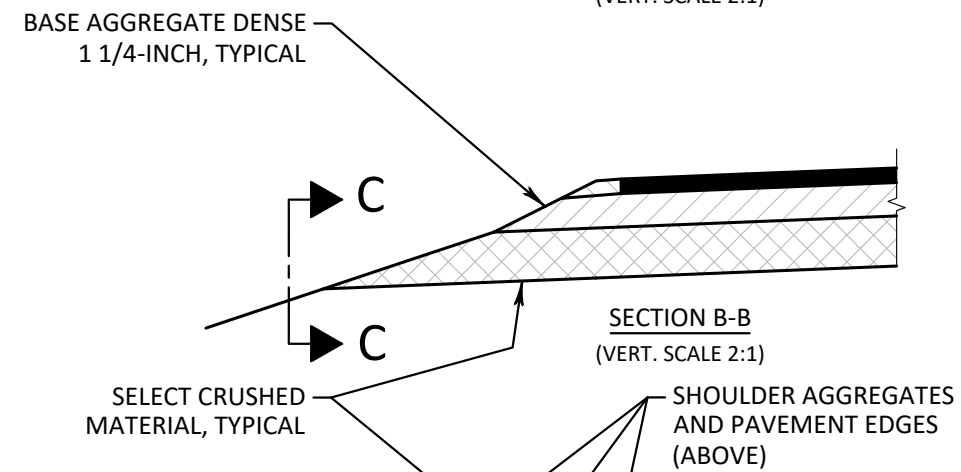
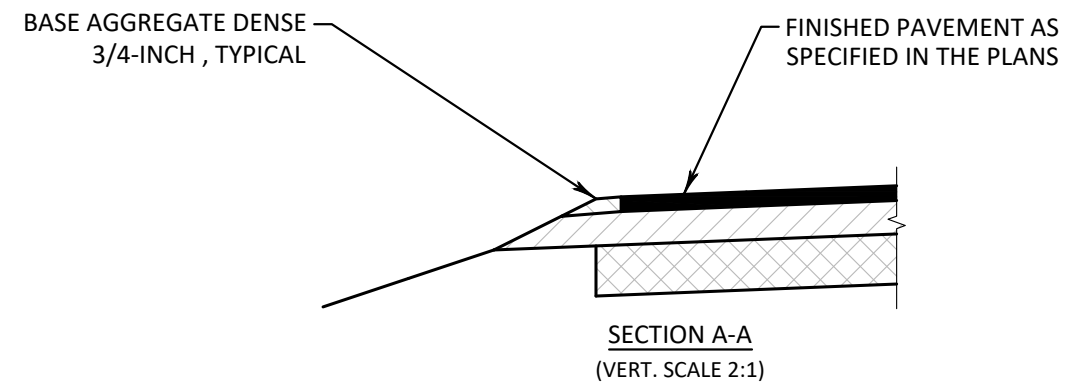
GUARDRAIL EAT POST LOCATIONS, RT	
POST NO.	STATION
1	8+05.21
5	8+31.76
9	8+58.30

**TYPICAL PROPOSED SECTION**

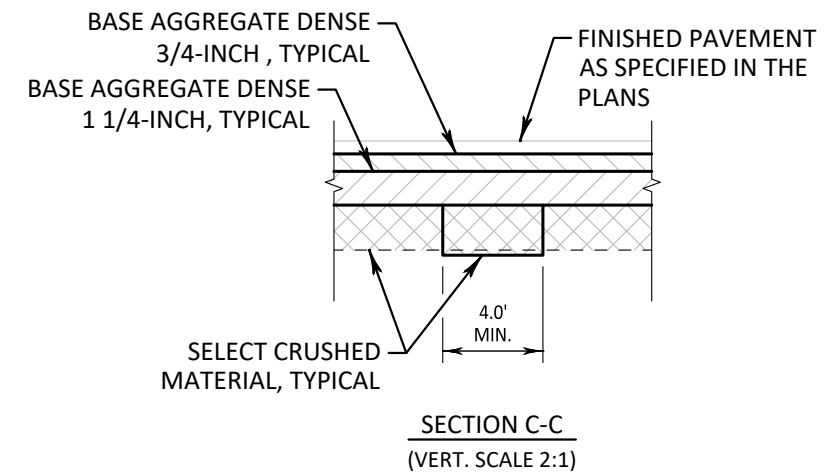
CISSERVILLE RD - RECONSTRUCT
STA 10+49.29 TO STA 11+00.00

**TYPICAL PROPOSED SECTION**

CISSERVILLE RD - PAVEMENT REPLACEMENT
STA 11+00.00 TO STA 11+25.00



RELIEF TRENCH

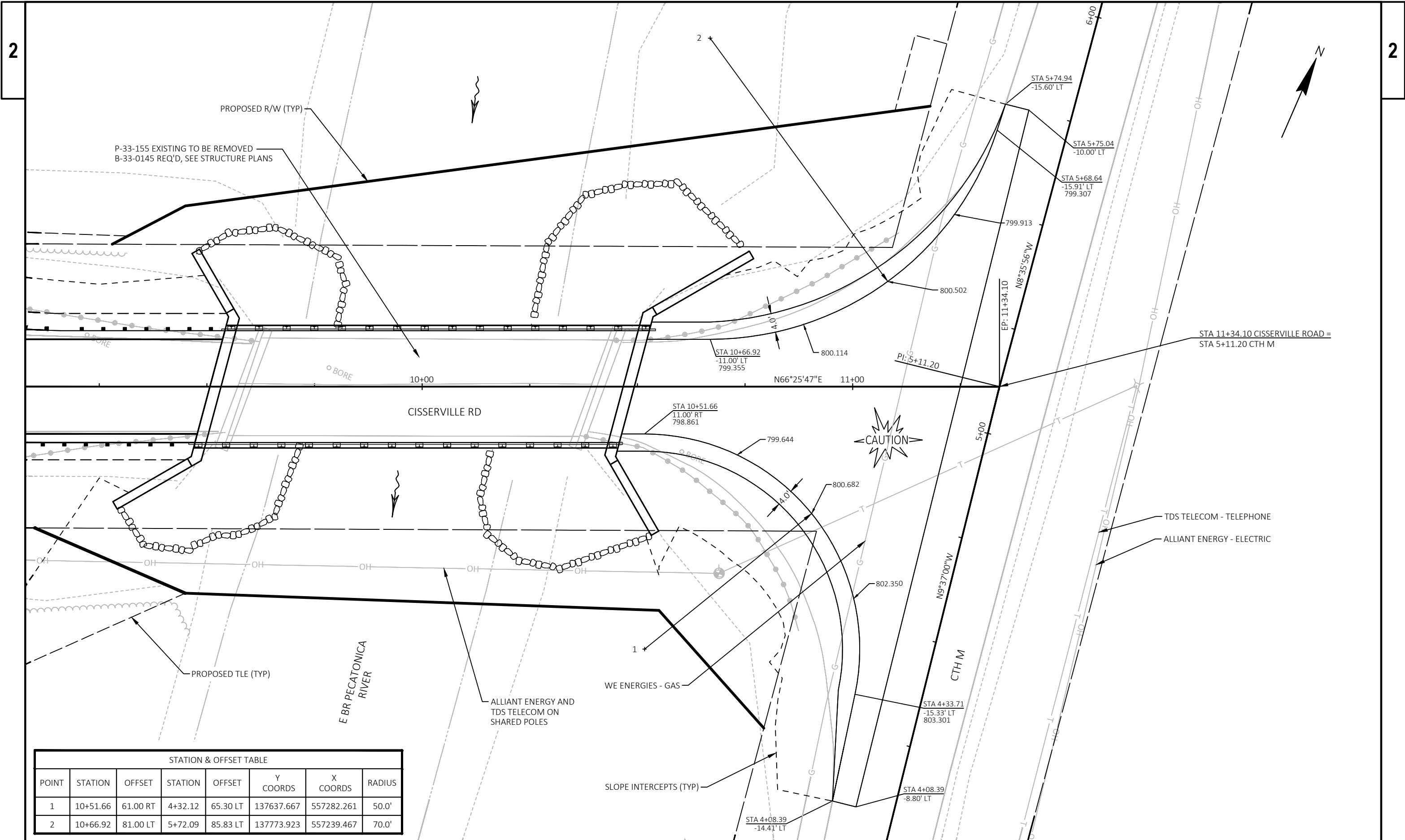


NOTE:

CONSTRUCT RELIEF TRENCHES AT 200'-300' INTERVALS
AND AT PROFILE SAG POINTS (LEFT AND RIGHT).

FINAL LOCATIONS TO BE APPROVED OR DETERMINED
BY THE ENGINEER IN THE FIELD.

MATERIALS AND LABOR FOR RELIEF TRENCH ARE
INCLUDED IN THE SELECT CRUSHED MATERIAL BID ITEM.



STATION & OFFSET TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
1	10+51.66	61.00 RT	4+32.12	65.30 LT	137637.667	557282.261	50.0'
2	10+66.92	81.00 LT	5+72.09	85.83 LT	137773.923	557239.467	70.0'

Estimate Of Quantities

5695-00-73

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	1.000	1.000
0004	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. P-33-155	EACH	1.000	1.000
0006	204.0110	Removing Asphaltic Surface	SY	465.000	465.000
0008	204.0165	Removing Guardrail	LF	264.000	264.000
0010	205.0100	Excavation Common	CY	667.000	667.000
0012	205.0508.S	Excavation, Hauling, and Disposal of Potential Creosote Contaminated Soil	TON	104.000	104.000
0014	206.1001	Excavation for Structures Bridges (structure) 01. B-33-145	EACH	1.000	1.000
0016	208.0100	Borrow	CY	67.000	67.000
0018	210.1500	Backfill Structure Type A	TON	1,433.000	1,433.000
0020	213.0100	Finishing Roadway (project) 01. 5695-00-73	EACH	1.000	1.000
0022	305.0110	Base Aggregate Dense 3/4-Inch	TON	106.000	106.000
0024	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	453.000	453.000
0026	312.0110	Select Crushed Material	TON	612.000	612.000
0028	455.0605	Tack Coat	GAL	47.000	47.000
0030	460.2000	Incentive Density HMA Pavement	DOL	210.000	210.000
0032	460.5223	HMA Pavement 3 LT 58-28 S	TON	211.000	211.000
0034	460.5224	HMA Pavement 4 LT 58-28 S	TON	106.000	106.000
0036	502.0100	Concrete Masonry Bridges	CY	355.000	355.000
0038	502.3200	Protective Surface Treatment	SY	478.000	478.000
0040	503.0146	Prestressed Girder Type I 45W-Inch	LF	388.000	388.000
0042	505.0400	Bar Steel Reinforcement HS Structures	LB	6,210.000	6,210.000
0044	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	38,580.000	38,580.000
0046	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	8.000	8.000
0048	506.4000	Steel Diaphragms (structure) 01. B-33-145	EACH	6.000	6.000
0050	513.4061	Railing Tubular Type M	LF	202.000	202.000
0052	516.0500	Rubberized Membrane Waterproofing	SY	43.000	43.000
0054	550.1100	Piling Steel HP 10-Inch x 42 Lb	LF	1,525.000	1,525.000
0056	606.0300	Riprap Heavy	CY	349.000	349.000
0058	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	250.000	250.000
0060	614.2300	MGS Guardrail 3	LF	50.000	50.000
0062	614.2500	MGS Thrie Beam Transition	LF	78.800	78.800
0064	614.2610	MGS Guardrail Terminal EAT	EACH	2.000	2.000
0066	618.0100	Maintenance and Repair of Haul Roads (project) 01. 5695-00-73	EACH	1.000	1.000
0068	619.1000	Mobilization	EACH	1.000	1.000
0070	624.0100	Water	MGAL	13.000	13.000
0072	625.0500	Salvaged Topsoil	SY	1,793.000	1,793.000
0074	628.1504	Silt Fence	LF	806.000	806.000
0076	628.1520	Silt Fence Maintenance	LF	806.000	806.000
0078	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0080	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0082	628.2027	Erosion Mat Class II Type C	SY	1,625.000	1,625.000
0084	628.6005	Turbidity Barriers	SY	283.000	283.000
0086	630.0120	Seeding Mixture No. 20	LB	71.000	71.000
0088	630.0200	Seeding Temporary	LB	42.000	42.000
0090	630.0500	Seed Water	MGAL	3.000	3.000
0092	634.0612	Posts Wood 4x6-Inch x 12-FT	EACH	4.000	4.000
0094	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0096	638.2602	Removing Signs Type II	EACH	4.000	4.000
0098	638.3000	Removing Small Sign Supports	EACH	4.000	4.000

Estimate Of Quantities

5695-00-73					
Line	Item	Item Description	Unit	Total	Qty
0100	642.5001	Field Office Type B	EACH	1.000	1.000
0102	643.0300	Traffic Control Drums	DAY	995.000	995.000
0104	643.0420	Traffic Control Barricades Type III	DAY	1,224.000	1,224.000
0106	643.0705	Traffic Control Warning Lights Type A	DAY	1,904.000	1,904.000
0108	643.0900	Traffic Control Signs	DAY	1,292.000	1,292.000
0110	643.1050	Traffic Control Signs PCMS	DAY	21.000	21.000
0112	643.5000	Traffic Control	EACH	1.000	1.000
0114	645.0111	Geotextile Type DF Schedule A	SY	153.000	153.000
0116	645.0120	Geotextile Type HR	SY	593.000	593.000
0118	650.4500	Construction Staking Subgrade	LF	523.000	523.000
0120	650.5000	Construction Staking Base	LF	523.000	523.000
0122	650.6501	Construction Staking Structure Layout (structure) 01. B-33-0145	EACH	1.000	1.000
0124	650.9911	Construction Staking Supplemental Control (project) 01. 5695-00-73	EACH	1.000	1.000
0126	650.9920	Construction Staking Slope Stakes	LF	523.000	523.000
0128	690.0150	Sawing Asphalt	LF	287.000	287.000
0130	715.0502	Incentive Strength Concrete Structures	DOL	2,130.000	2,130.000
0132	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 10+00	EACH	1.000	1.000
0134	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0136	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000

3

CLEARING & GRUBBING			
CATEGORY	STATION	LOCATION	201.0205 GRUBBING STA
0010	8+00 TO 9+00	RT	1
ITEM TOTALS			1

REMOVALS				
CATEGORY	STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0165 REMOVING GUARDRAIL LF
0010	8+25 TO 9+62	LT/RT	185	118
	10+35 TO 11+25	LT/RT	280	146
ITEM TOTALS			465	264

EARTHWORK SUMMARY							
CATEGORY	STATION	LOCATION	205.0100 EXCAVATION COMMON (1) CY	AVAILABLE MATERIAL (2) CY	EXPANDED FILL (3) CY	MASS ORDINATE (4) +/-	208.0100 BORROW CY
0010	6+57 TO 9+25	LT/RT	423	372	439	-67	67
	10+49 TO 11+25	LT/RT	244	169	22	147	-
ITEM TOTALS			667	541	461	80	67

NOTES:
(1) UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN COMMON EXCAVATION.
(2) AVAILABLE MATERIAL DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION.
(3) EXPANSION FACTOR = 1.3
(4) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

3

BASE AGGREGATE ITEMS						
CATEGORY	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON	624.0100 WATER MGAL
0010	6+57 TO 9+51	LT & RT	106	310	389	9
	10+49 TO 11+25	LT & RT	-	143	217	4
UNDISTRIBUTED			-	-	6	-
ITEM TOTALS			106	453	612	13

SEE TRENCH DETAIL

HMA PAVEMENT					
CATEGORY	STATION	LOCATION	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	455.0605 TACK COAT GAL
0010	7+32 TO 9+51	LT & RT	90	45	20
	10+49 TO 11+25	LT & RT	121	61	27
ITEM TOTALS			211	106	47

GUARDRAIL ITEMS					
CATEGORY	STATION	LOCATION	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
0010	8+05 TO 9+47	RT	50	39.4	1
	8+63 TO 9+54	LT	-	39.4	1
ITEM TOTALS			50	78.8	2

MAINTENANCE AND REPAIR OF HAUL ROADS (5695-00-73)		
CATEGORY	STATION	618.0100 EACH
0030	PROJECT LENGTH	1
ITEM TOTAL		1

3

TOPSOIL AND SEEDING						
CATEGORY	STATION	LOCATION	625.0500	630.0120	630.0200	630.0500
			SALVAGED TOPSOIL	SEEDING MIXTURE NO. 20	TEMPORARY SEEDING	SEED WATER
			SY	LB	LB	MGAL
0010	6+57 TO 9+50	LT/RT	1173	47	28	1
	10+49 TO 11+25	LT/RT	321	12	7	1
	UNDISTRIBUTED		299	12	7	1
	ITEM TOTALS		1,793	71	42	3

EROSION CONTROL ITEMS						
CATEGORY	STATION TO STATION	LOCATION	628.1504	628.1520	628.2027	628.6005
			SILT	SILT FENCE	EROSION MAT	TURBIDITY
			FENCE	MAINTENANCE	CLASS II	BARRIERS
			LF	LF	SY	SY
0010	6+57 TO 9+50	LT/RT	521	521	1034	119
	10+49 TO 11+25	LT/RT	150	150	266	139
	UNDISTRIBUTED	LT/RT	135	135	325	26
	ITEM TOTALS		806	806	1,625	283

3

MOBILIZATIONS EROSION CONTROL			
CATEGORY	STATION	628.1905	628.1910
		MOBILIZATIONS EROSION CONTROL	MOBILIZATIONS EMERGENCY EROSION CONTROL
		EACH	EACH
0010			
	PROJECT LENGTH	3	2
	ITEM TOTALS	3	2

							PERMANENT SIGNING			
							634.0612 POSTS WOOD 4X6-INCH 12-FT EACH	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
CATEGORY	STATION	LOCATION	SIGN CODE	SIZE (INCH) (INCH)		MESSAGE				
0010	9+47	RT	W5-52-R	12	36	CLEARANCE STRIPER	1	3.00	1	1
	9+55	LT	W5-52-L	12	36	CLEARANCE STRIPER	1	3.00	1	1
	10+46	RT	W5-52-L	12	36	CLEARANCE STRIPER	1	3.00	1	1
	10+53	LT	W5-52-R	12	36	CLEARANCE STRIPER	1	3.00	1	1
ITEM TOTALS							4	12.00	4	4

TRAFFIC CONTROL ITEMS												
CATEGORY	PROJECT LOCATION	APPROX. SERVICE PERIOD DAYS	QTY.	643.0300	QTY.	643.0420	QTY.	643.0705	QTY.	643.0900	QTY.	643.1050
				TRAFFIC CONTROL DRUMS		TRAFFIC CONTROL BARRICADES TYPE III		TRAFFIC CONTROL WARNING LIGHTS TYPE A		TRAFFIC CONTROL SIGNS		TRAFFIC CONTROL SIGNS PCMS
				DAY		DAY		DAY		DAY		DAY
0010												
	PROJECT LENGTH	68	15	315	18	1,224	28	1,904	14	952	3	21
	CTH M SHOULDER	68	10	680	-	-	-	-	5	340	-	-
ITEM TOTALS				995		1,224		1,904		1,292		21

PROJECT NO: 5695-00-73

HWY: LOCAL STREET

COUNTY: LAFAYETTE

MISCELLANEOUS QUANTITIES

SHEET

12

E

CONSTRUCTION STAKING						
CATEGORY	STATION	LOCATION	650.4500	650.5000	650.6501	650.9911
			SUBGRADE	BASE	STRUCTURE	SUPPLEMENTAL
			LF	LF	LAYOUT (B-33-0145)	CONTROL (5695-00-73)
					EACH	EACH
0010	PROJECT LENGTH	LT/RT	-	-	1	1
	6+57 TO 9+50	LT/RT	293	293	-	-
	10+45 TO 11+25	RT	120	120	-	-
	10+53 TO 11+25	LT	110	110	-	-
ITEM TOTALS			523	523	1	1

SAWING			
CATEGORY	STATION	LOCATION	690.0150
0010			ASPHALT
	7+40 TO 8+25	RT	85
	8+25	LT/RT	22
	11+25	LT/RT	180
ITEM TOTALS			287

SPECIAL ITEMS			
CATEGORY	STATION	205.0508.S	999.2000.S
		EXCAVATION, HAULING, AND DISPOSAL OF POTENTIAL CREOSOTE CONTAMINATED SOIL	INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM STATION
0010		TON	01. 10+00
	PROJECT LENGTH	104	1
ITEM TOTALS		104	1

CONVENTIONAL SYMBOLS			
SECTION LINE		SECTION CORNER SYMBOL	
QUARTER LINE		SECTION CORNER MONUMENT	
SIXTEENTH LINE		GEODETIC SURVEY MONUMENT	
NEW REFERENCE LINE		NON-PERMITTED SIGN	
NEW R/W LINE		PERMITTED SIGN	
EXISTING R/W OR HE LINE		ACCESS RESTRICTED BY ACQUISITION	
PROPERTY LINE		NO ACCESS (BY STATUTORY AUTHORITY)	
LOT, TIE & OTHER MINOR LINES		ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)	
EXISTING CENTERLINE		NO ACCESS (NEW HIGHWAY)	
CORPORATE LIMITS		PARCEL NUMBER	
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)		PARALLEL OFFSETS	
TEMPORARY LIMITED EASEMENT AREA			
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)			
BUILDING		TO BE REMOVED	
BRIDGE		CULVERT	

CONVENTIONAL UTILITY SYMBOLS	
WATER	
GAS	
TELEPHONE	
OVERHEAD TRANSMISSION LINES	
ELECTRIC	
CABLE TELEVISION	
FIBER OPTIC	
SANITARY SEWER	
STORM SEWER	
ELECTRIC TOWER	

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

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

NOTES:

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

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

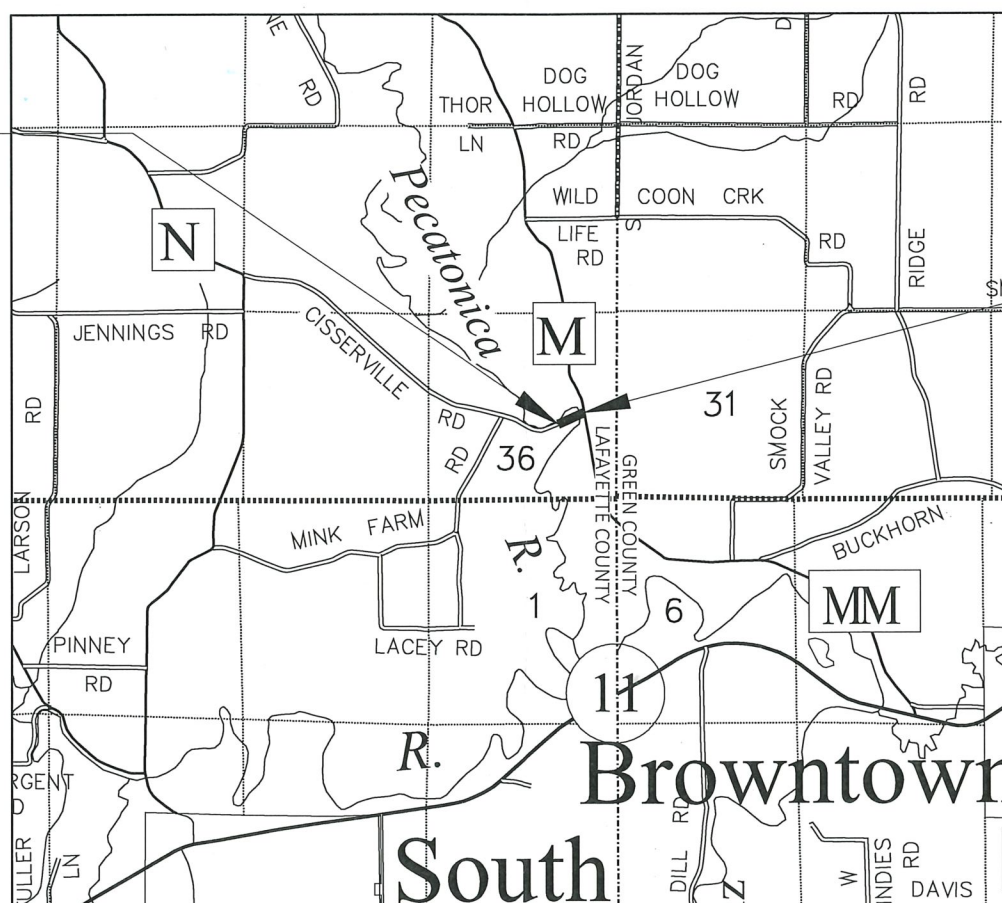
DIMENSIONING FOR THE NEW MEASURED RIGHT-OF-WAY IS ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

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

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

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE TOWN OF WIOTA.

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



BEGIN RELOCATION
STA 6+00.00
Y = 137512.972
X = 556843.894
409.921 FEET SOUTH AND
1406.878 FEET WEST OF THE
EAST QUARTER CORNER OF
SECTION 36, T2N, R5E

END RELOCATION
STA 11+34.10
Y = 137726.544
X = 557333.432
2442.594 FEET NORTH AND
916.468 FEET WEST OF THE
SOUTHEAST CORNER OF
SECTION 36, T2N, R5E

LAYOUT
SCALE 0 1.0 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.101 MI

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

R/W PROJECT NUMBER 5695-00-03	SHEET NUMBER 4.01	TOTAL SHEETS 2
FEDERAL PROJECT NUMBER N/A		
PLAT OF RIGHT OF WAY REQUIRED FOR TOWN OF WIOTA, CISSERVILLE ROAD E BRANCH PECATONICA BR B-33-0145		
CISSERVILLE ROAD	LAFAYETTE COUNTY	
CONSTRUCTION PROJECT NUMBER 5695-00-03		

RECEIVED
JAN 07 2026
LAFAYETTE COUNTY
CLERK

Carla Jacobson
Lafayette Co. Clerk

Original Plat Prepared by



(Signature) (Date)

REVISION DATE

ACCEPTED FOR

TOWN OF WIOTA
DATE: 1/7/26 (Signature)

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED			TLE ACRES
				NEW	EXISTING	TOTAL	
1	4.02	DANIEL J. & RUTHANN M. VOSBERG	FEE / TLE	0.04	0.54	0.58	0.16
2	4.02	TOWN OF WIOTA	FEE / TLE	0.06	0.17	0.23	0.01
3	4.02	EMIL A. & JACQUELINE B. MAURER	FEE	0.05	0.18	0.23	-
51	4.02	TDS TELECOM	RELEASE OF RIGHTS				
52	4.02	ALLIANT ENERGY	RELEASE OF RIGHTS				

R/W - COURSE TABLE		
COURSE	BEARING	DISTANCE
101-102	N 89° 58' 52" W	894.59'
102-114	S 80° 23' 00" W	34.79'
114-103	N 08° 35' 51" W	45.35'
103-104	N 65° 16' 35" W	36.62'
104-105	S 68° 30' 44" W	110.07'
105-106	S 89° 52' 15" W	38.15'
106-150	S 66° 40' 09" W	153.00'
150-306	S 66° 15' 54" W	112.01'
306-107	N 23° 34' 13" W	32.51'
107-108	N 23° 34' 13" W	33.49'
108-151	N 66° 15' 54" E	112.05'
151-109	N 66° 40' 09" E	170.95'
109-110	N 38° 47' 56" E	19.19'
110-111	N 58° 48' 05" E	174.56'
111-312	N 08° 35' 51" W	61.93'
312-112	N 81° 24' 09" E	32.38'
112-113	S 08° 35' 56" E	120.73'
113-102	S 09° 37' 00" E	135.54'

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
102	3+75.66'M	0.00'
114	3+75.66'M	34.80' LT
103	10+79.36	79.34' RT
	4+21.00'M	33.99' LT
104	10+55.00	52.00' RT
	4+41.66'M	64.22' LT
105	9+45.00	48.00' RT
106	9+10.00	32.82' RT
150	7+57.01	32.18' RT
107	6+45.00	0.00'
108	6+45.00	33.49' LT
151	7+57.05	33.82' LT
109	9+28.00	33.10' LT
110	9+45.00	42.00' LT
111	11+18.01	65.17' LT
	5+70.00'M	32.38' LT
112	6+31.93'M	0.00'
113	11+34.10	0.00'
	5+11.20'M	0.00'
306	6+45.00	32.51' RT
312	6+31.93'M	32.38' LT

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
303	9+00.00	68.00' RT
304	8+05.00	63.00' RT
307	8+10.00	33.59' LT
308	8+50.00	38.00' LT
309	9+31.63	35.00' LT
310	11+09.83	64.08' LT
	5+66.83'M	40.00' LT
311	5+85.00'M	40.00' LT
313	5+85.00'M	32.38' LT

SECTION LINE - COURSE TABLE		
COURSE	BEARING	DISTANCE
1436-101	S 00° 01' 08" W	330.28'
101-22	S 00° 01' 08" W	2308.66'
1436-22	S 00° 01' 08" W	2638.94'

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

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

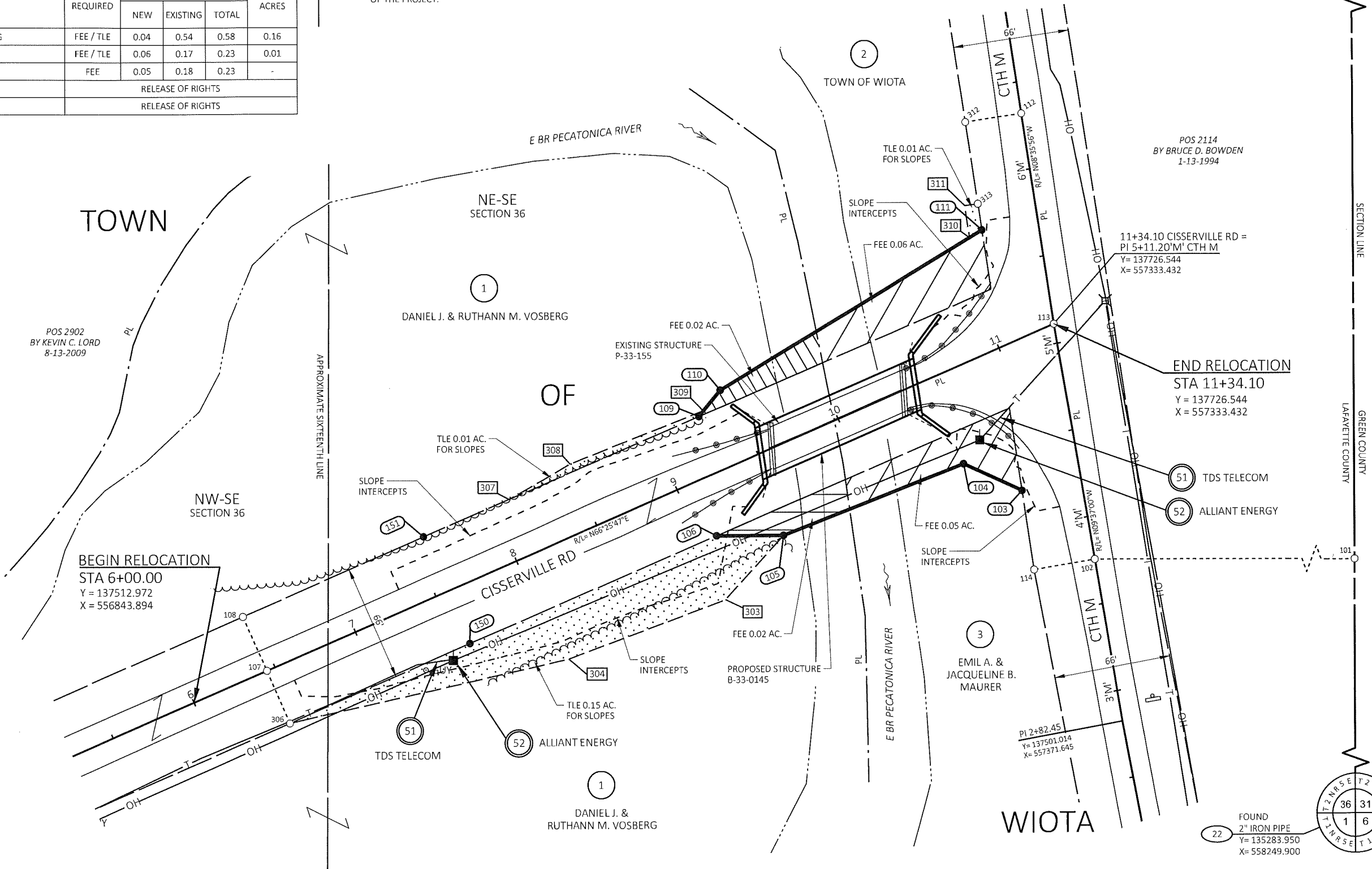
FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE TOWN OF WIOTA.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

HISTORICAL BASIS OF R/W	YEAR
POS 2902, BY KEVIN C. LORD	2009
POS 2114, BY BRUCE D. BOWDEN	1994
WI STATUTE 82.31(2)	

FOUND	3/4" REBAR
1436	Y= 137922.893 X= 558250.772

FOUND	2" IRON PIPE
22	Y= 135283.950 X= 558249.900



REVISION DATE

DATE 1/05/26

SCALE, FEET

HWY: CISSERVILLE ROAD

R/W PROJECT NUMBER: 5695-00-03

PLAT SHEET 4.02

GRID FACTOR N/A

COUNTY: LAFAYETTE

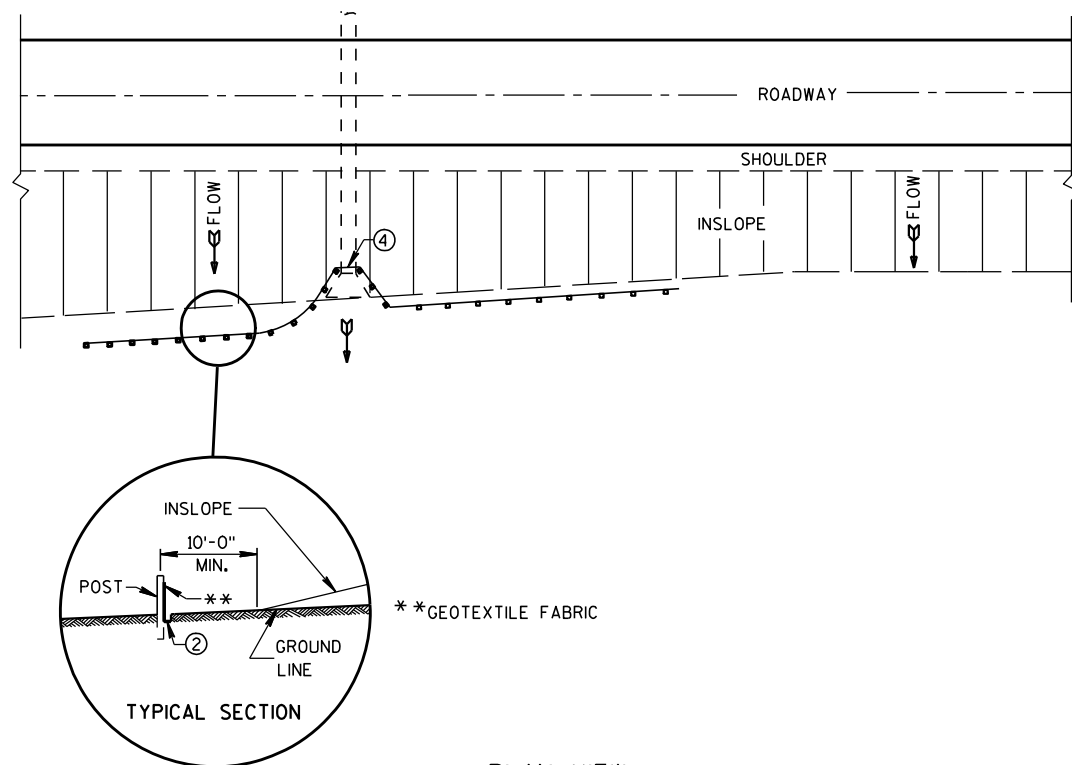
CONSTRUCTION PROJECT NUMBER: 5695-00-03

PS&E SHEET

E

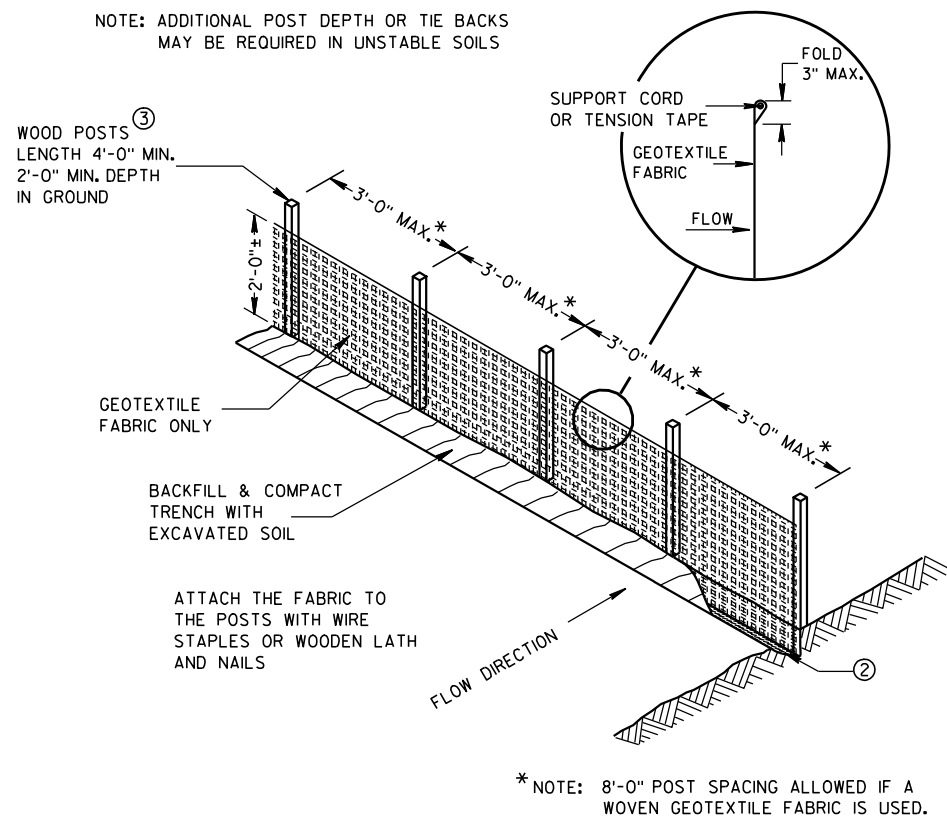
Standard Detail Drawing List

08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
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)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15C02-10A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-10B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-12	SIGNING AND MARKING FOR TWO LANE BRIDGES
15C11-11B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D28-06	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

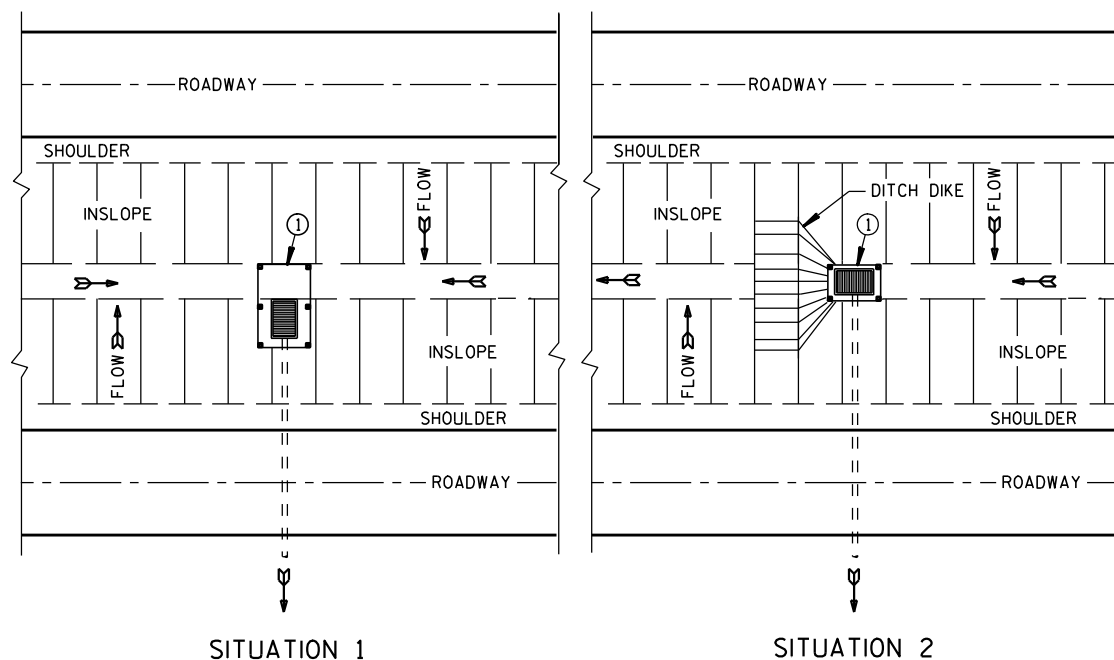


TYPICAL APPLICATION OF SILT FENCE

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

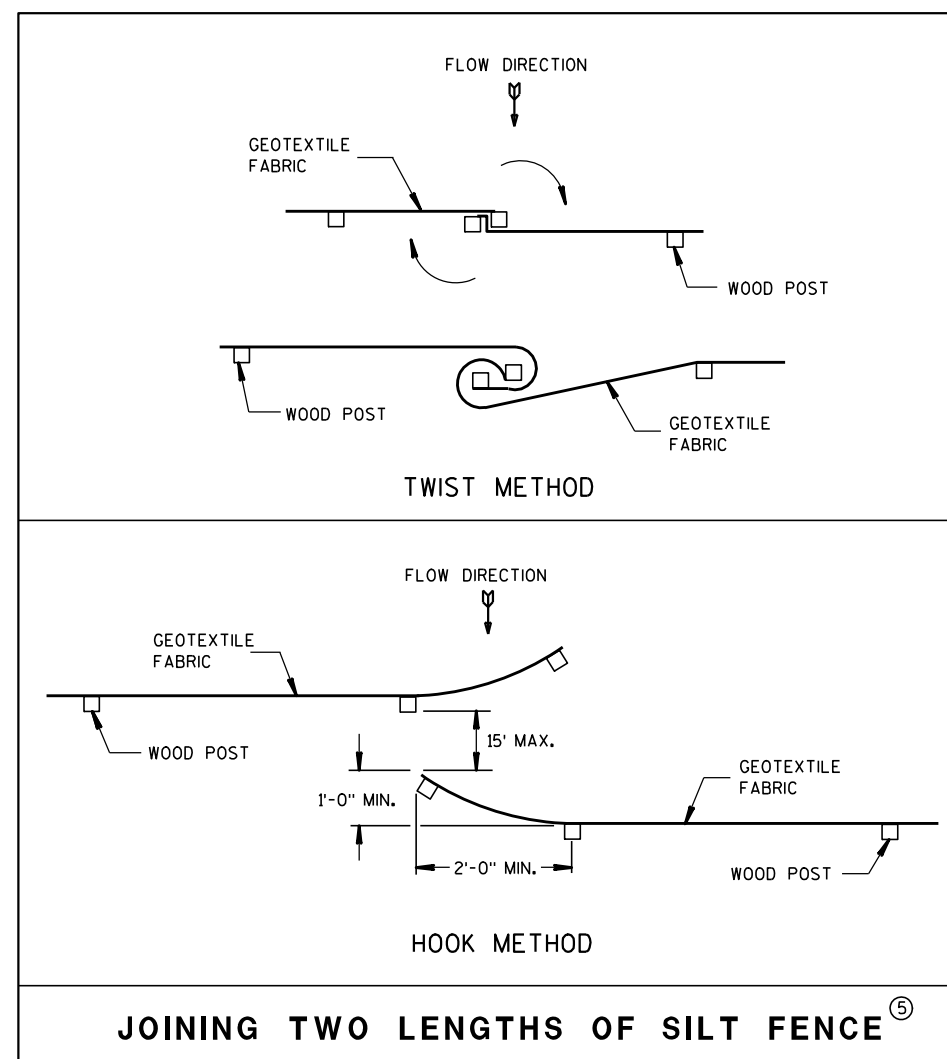


SILT FENCE



PLAN VIEW

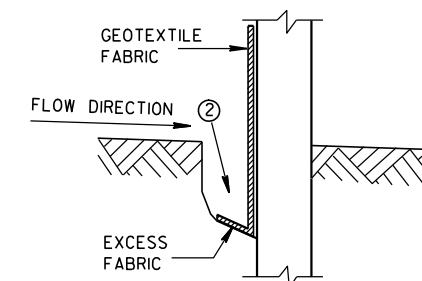
SILT FENCE AT MEDIAN SURFACE DRAINS



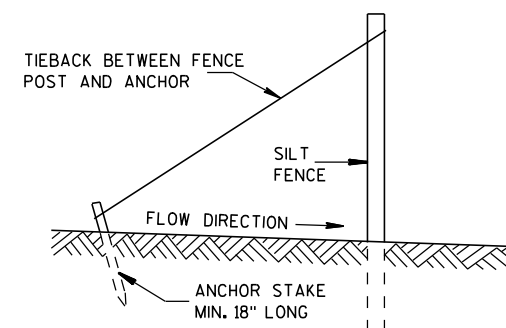
GENERAL NOTES

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 1 1/8" X 1 1/8" 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 TIE BACK (WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-29-05

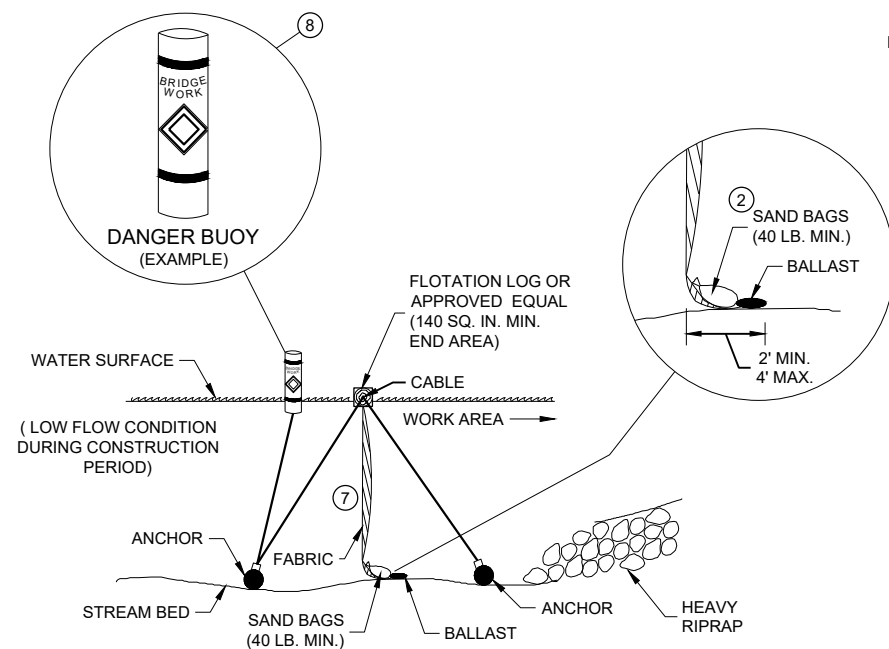
DATE

/S/ Beth Conn

CHIEF ROADWAY DEVELOPER

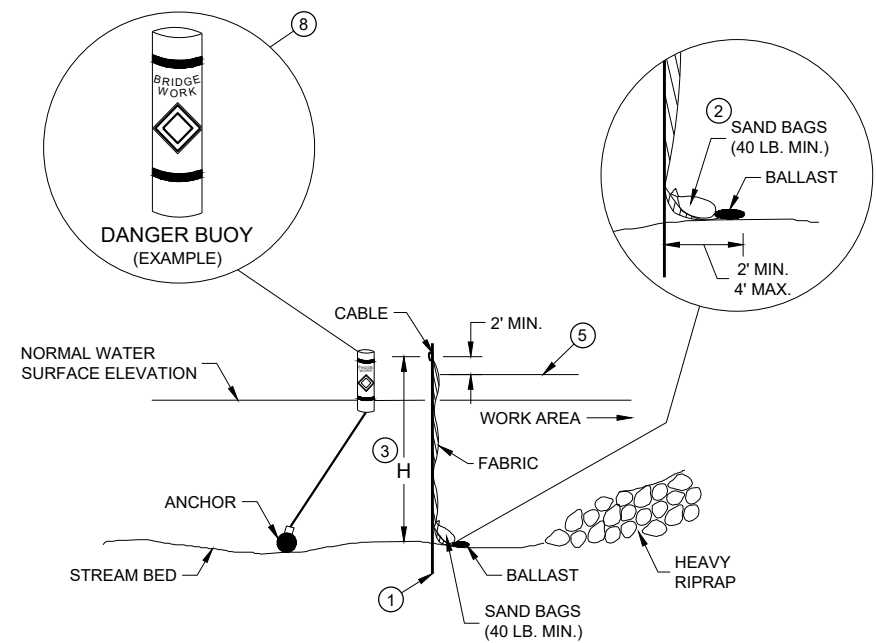
FHWA

ENGINEER



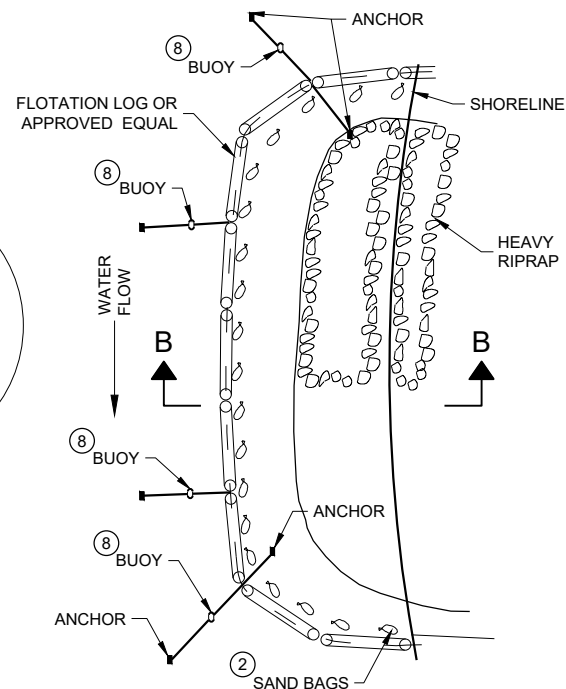
SECTION B - B

TURBIDITY BARRIER - FLOAT ALTERNATIVE CAUTION - SEE NOTE 6

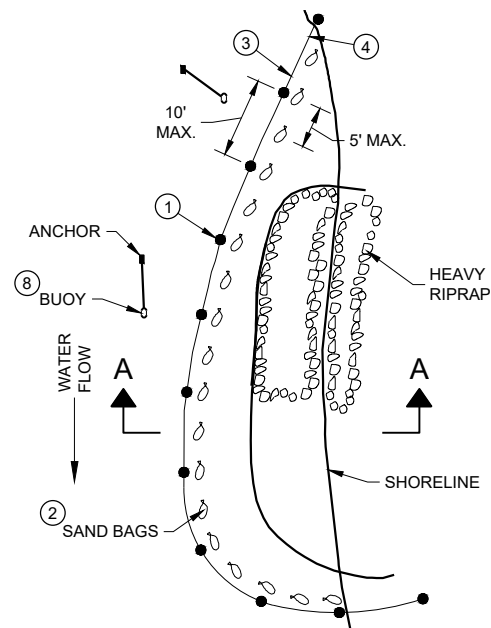


SECTION A - A

TURBIDITY BARRIER - STANDARD POST INSTALLATION



PLAN VIEW



PLAN VIEW

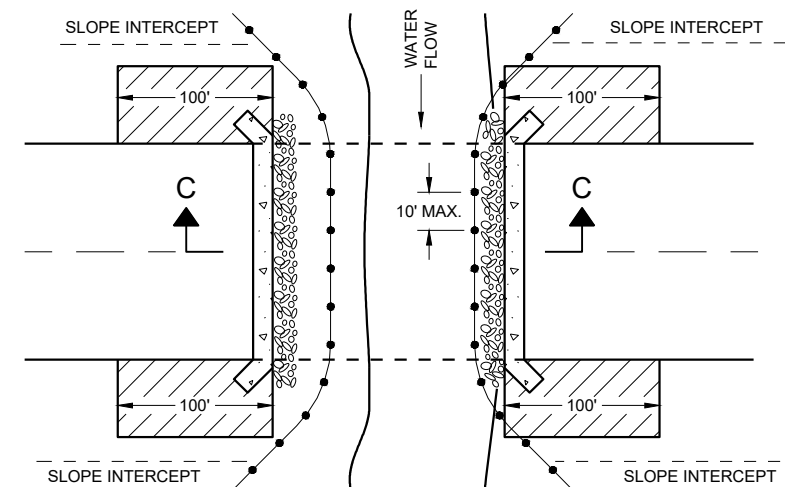
TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

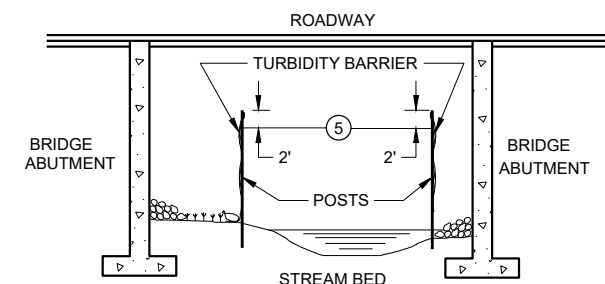
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

- 1 DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
- 2 SAND BAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
- 3 WHEN BARRIER HEIGHT "H" EXCEEDS 8 FEET, POST SPACING MAY NEED TO BE DECREASED.
- 4 IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
- 5 ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
- 6 FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.
- 7 ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
- 8 USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C - C

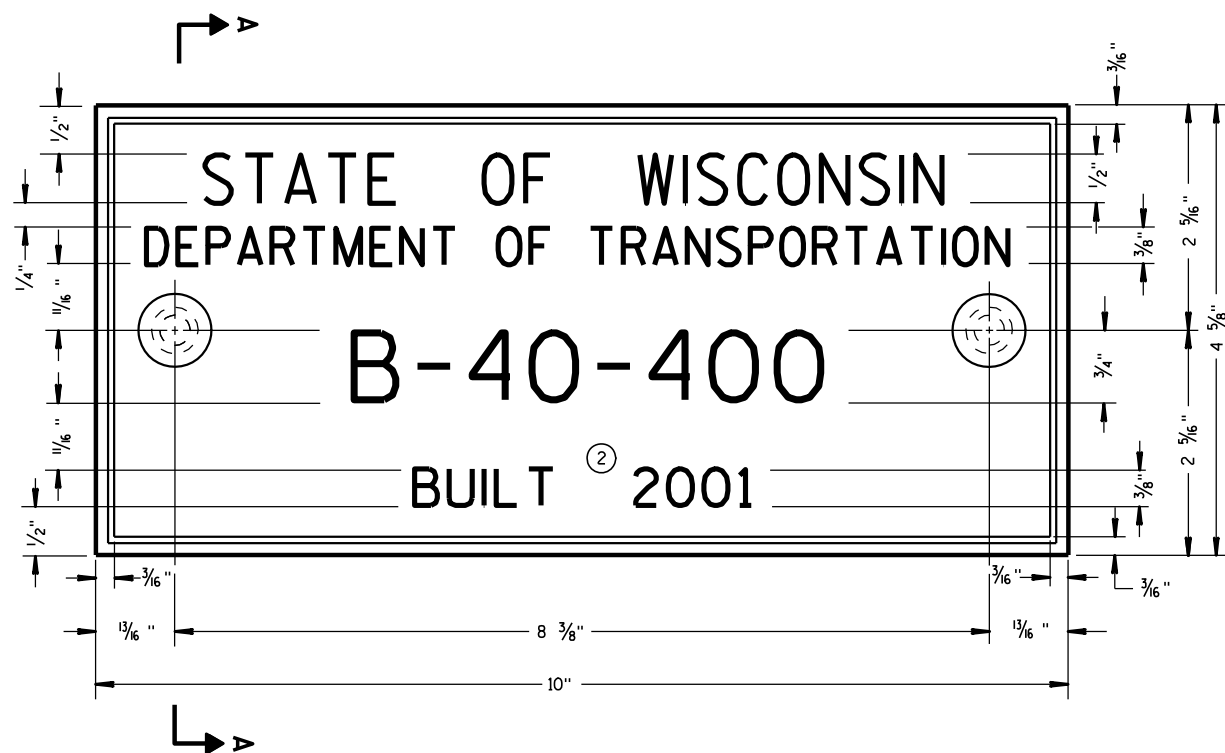
TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

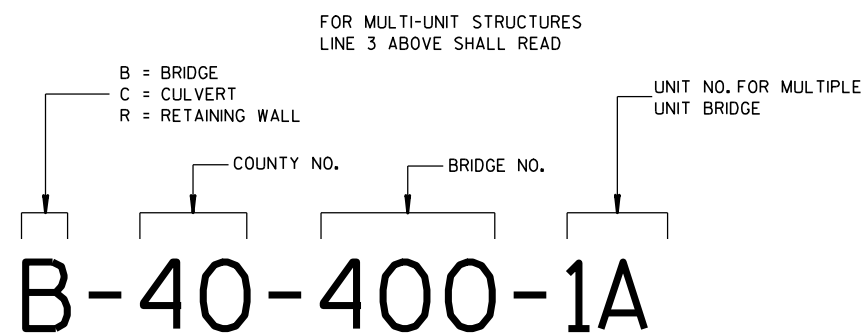
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/4/02 DATE /S/ Beth Canestra
CHIEF ROADWAY DEVELOPER
19 ENGINEER

FHWA



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



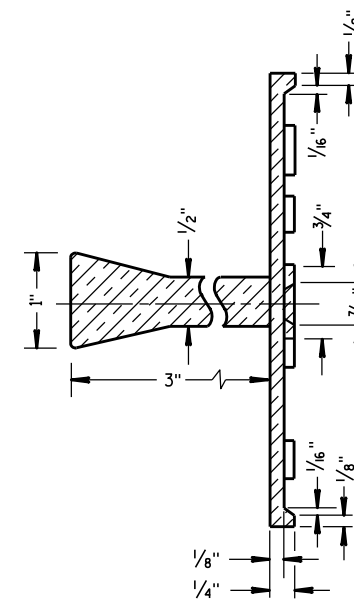
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

GENERAL NOTES

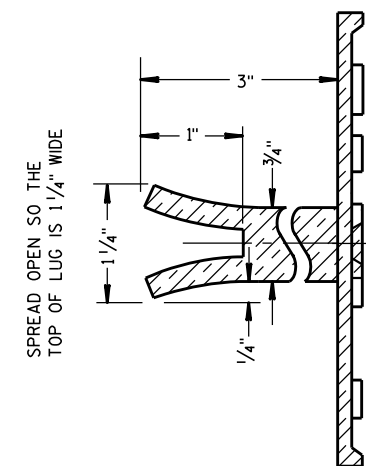
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

- ① EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ② REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.

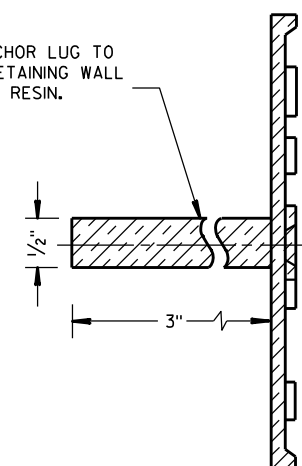


SECTION A-A



ALTERNATE LUG

- ① ADHERE ANCHOR LUG TO PRECAST RETAINING WALL WITH EPOXY RESIN.



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

**NAME PLATE
(STRUCTURES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

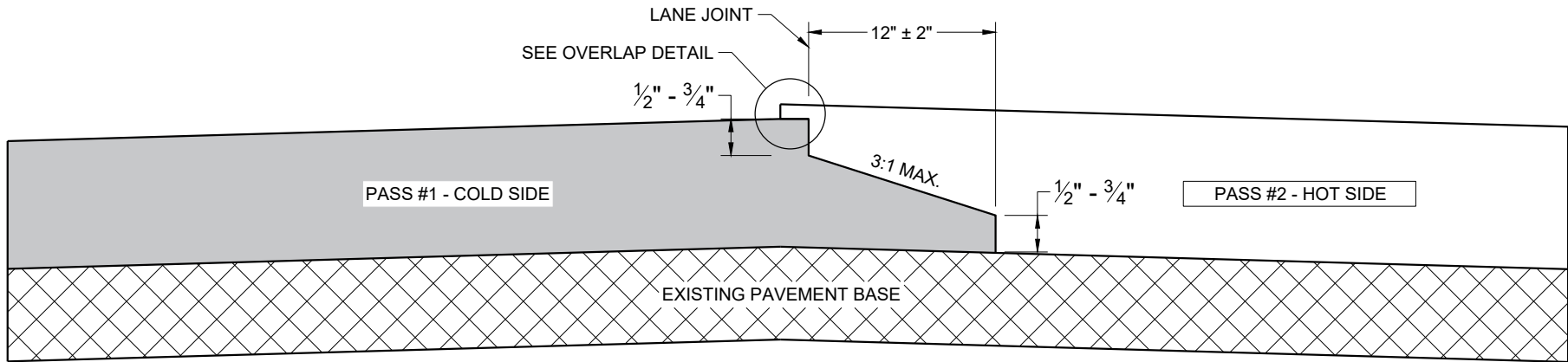
APPROVED

3/26/10
DATE

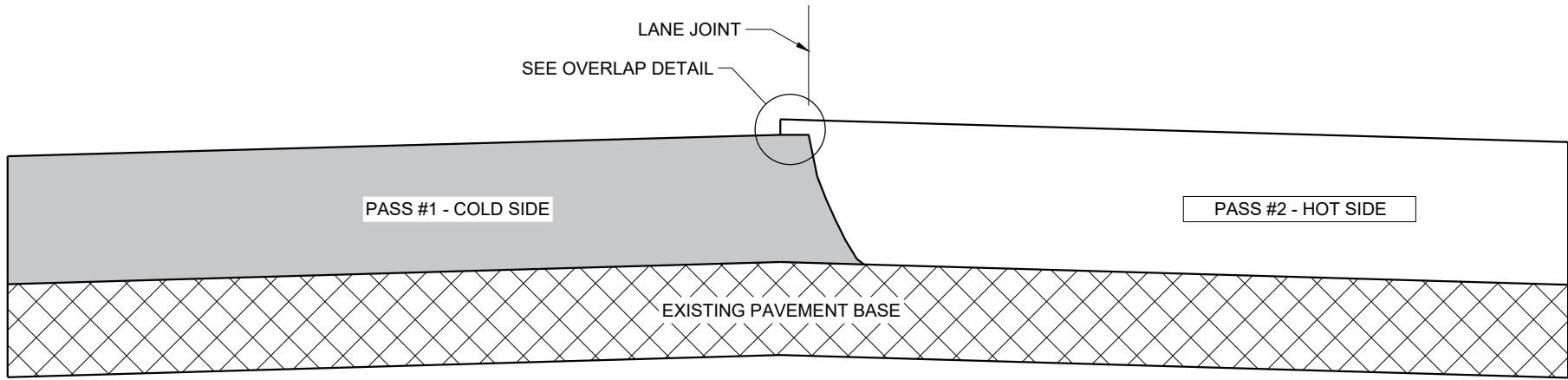
FHWA

/S/ Scot Beck
CHIEF STRUCTURAL DEVELOPER

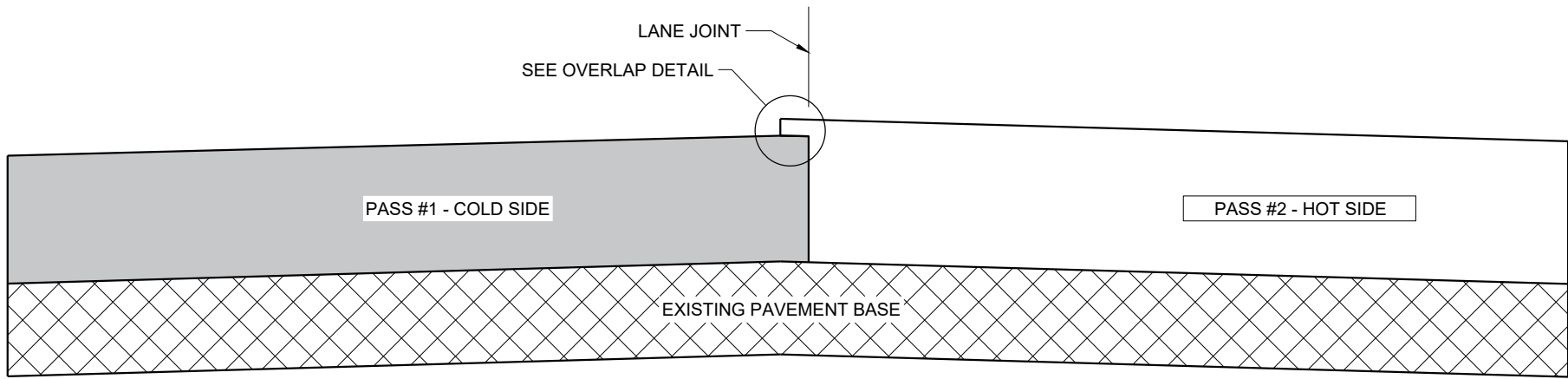
JEER



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

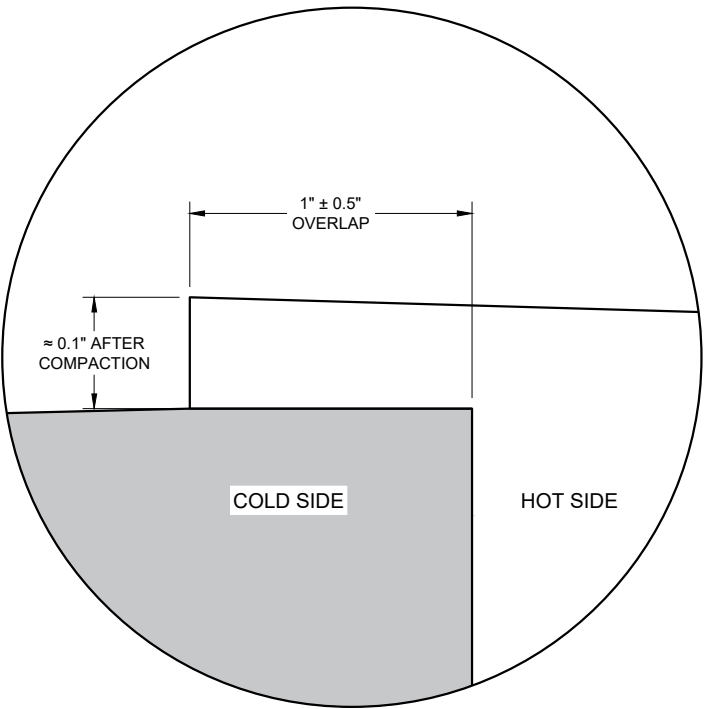
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY $1" \pm 0.5"$ AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY $0.1"$ AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO $2"$ FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.

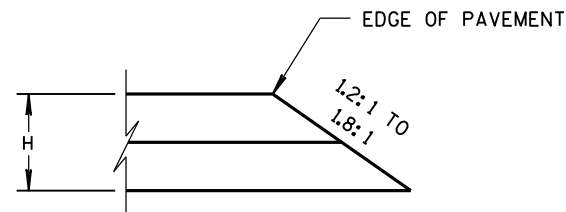


OVERLAP DETAIL (TYPICAL)

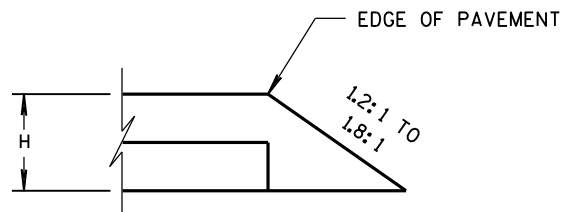
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

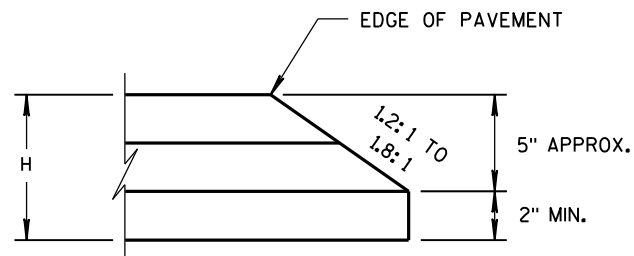
APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGIN 21
FHWA



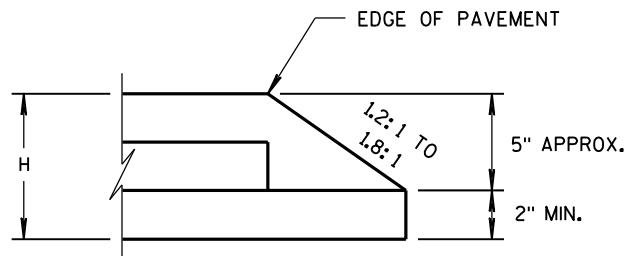
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

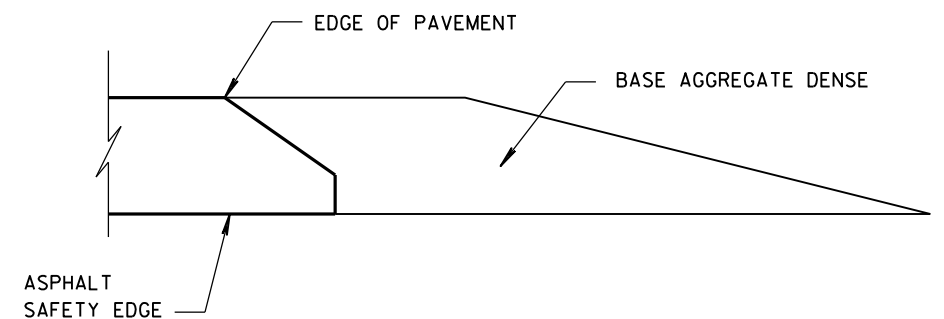


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE_{SM}

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

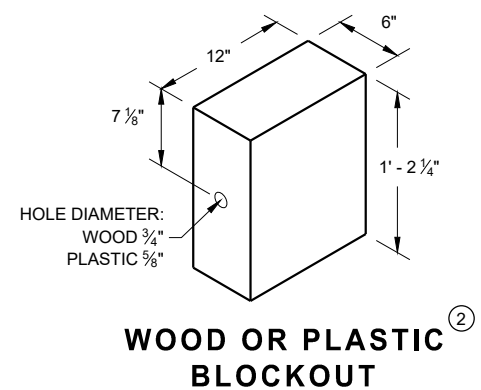
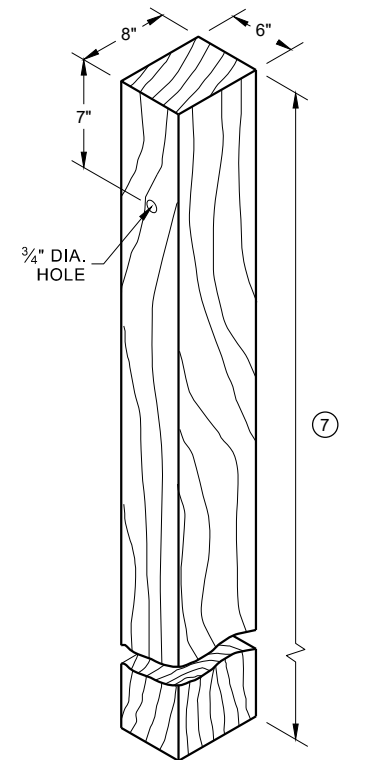
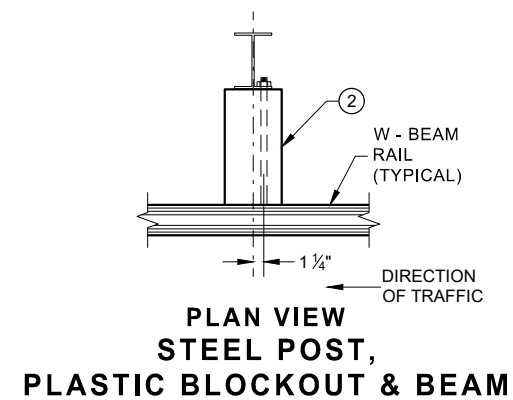
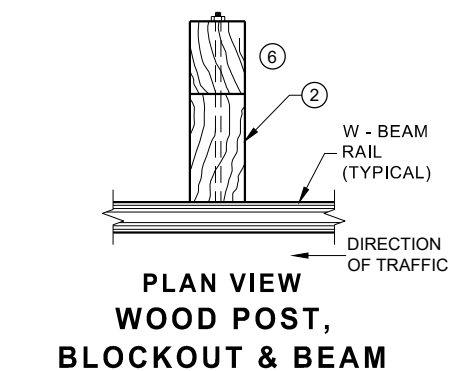
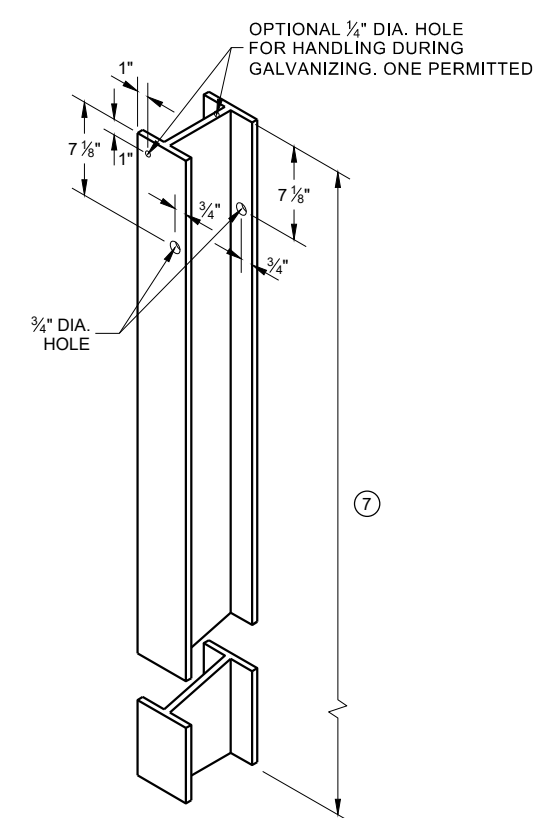
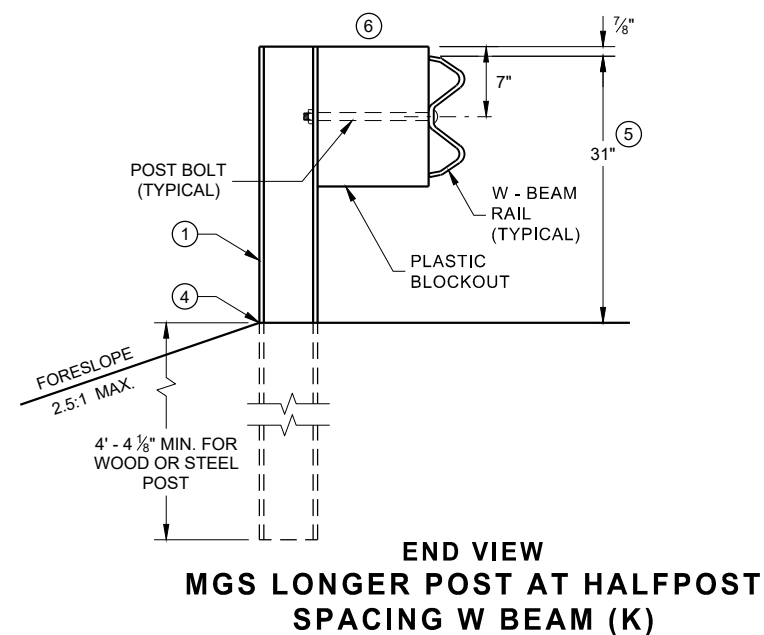
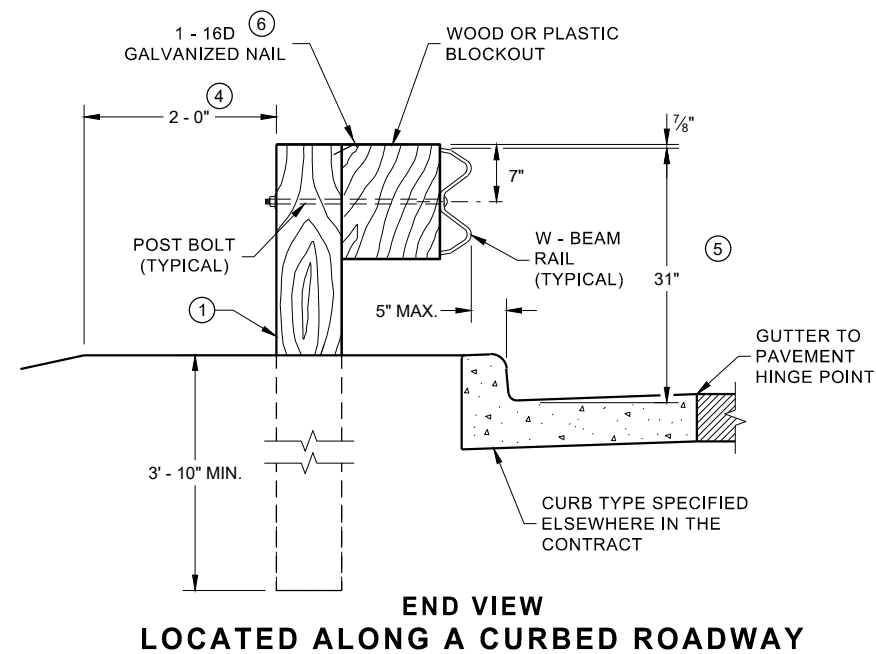
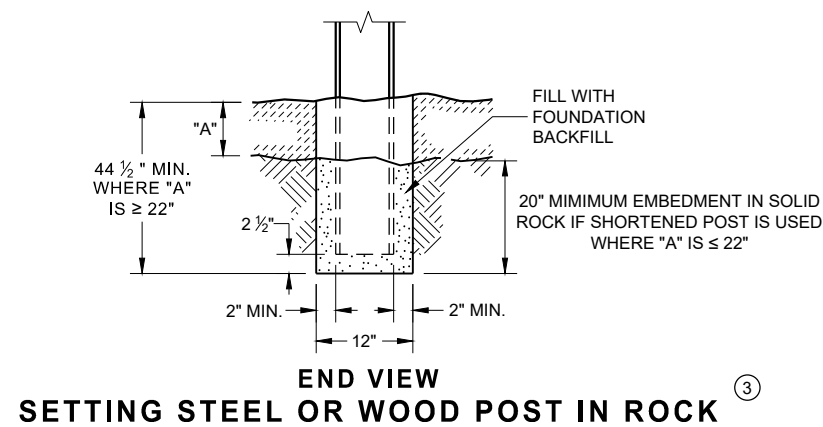
DATE 11/30/2012

FHWA

/s/ Jerry H. Zoaga
ROADWAY STANDARDS
ENGINEER

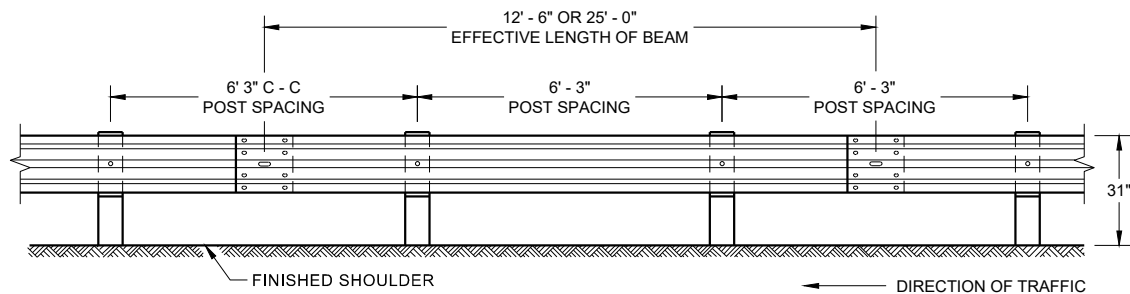
ENT

- 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 $\pm 1"$. FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 3/4" 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".

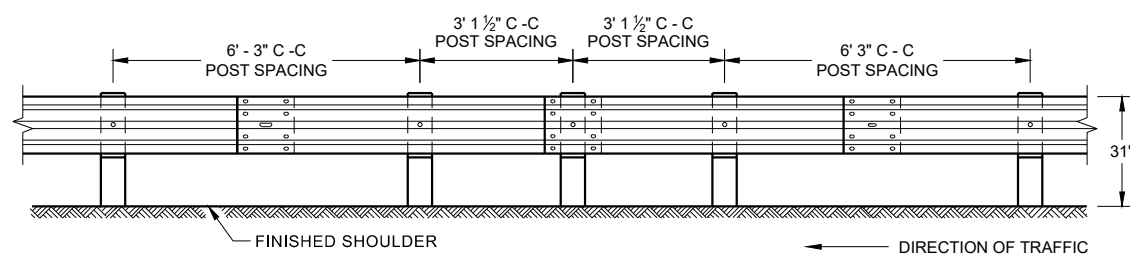


MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

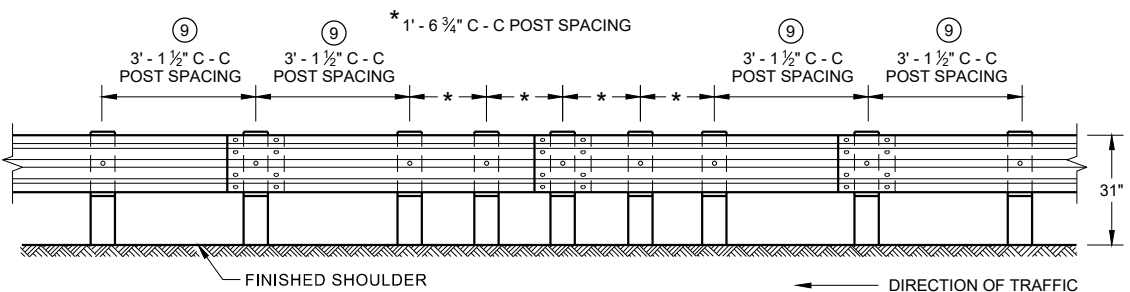
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



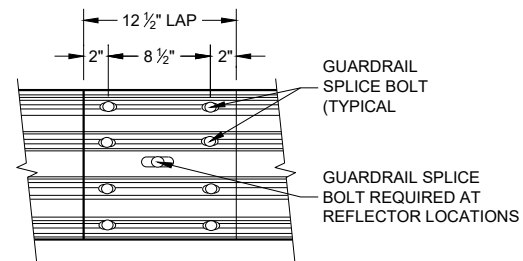
**FRONT VIEW
POST SPACING STANDARD INSTALLATION**



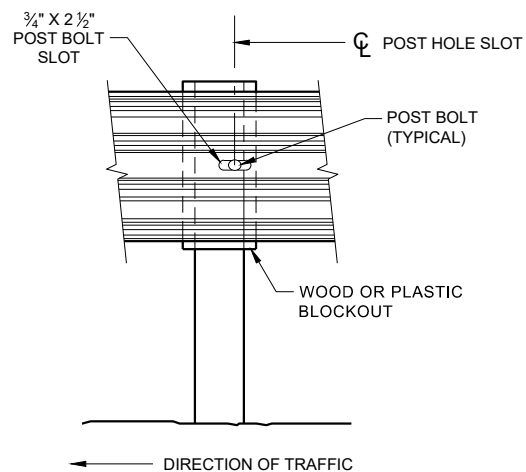
**FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)**



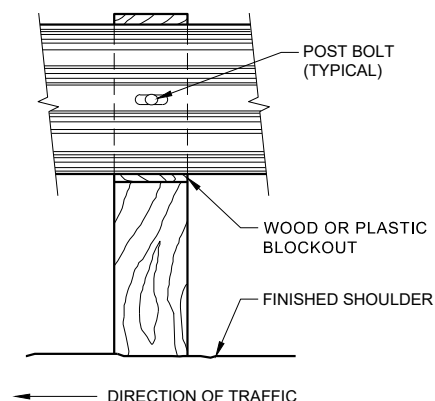
**FRONT VIEW
QUARTER POST SPACING (QS)**



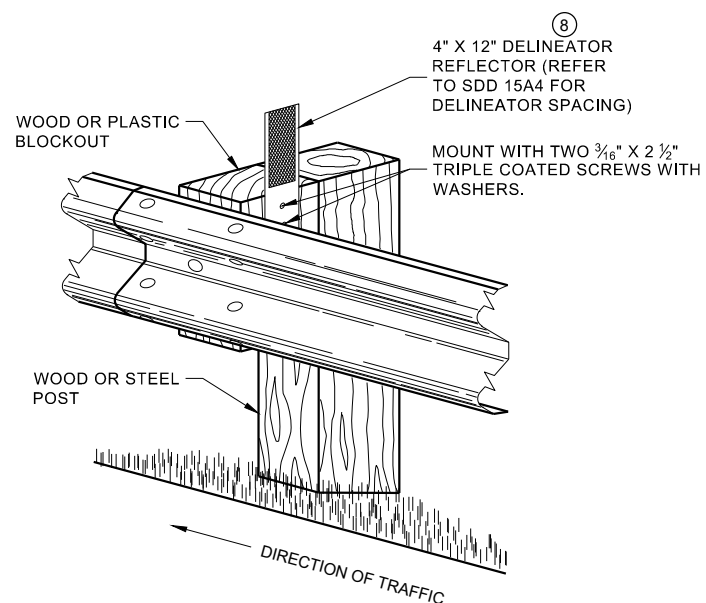
**FRONT VIEW
MID-SPAN BEAM SPLICE**



FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



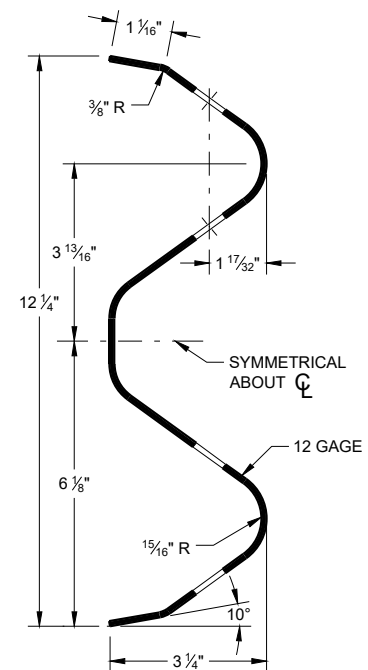
**ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION**

GENERAL NOTES

- 8 DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- 9 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A 3/4" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 3/4" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 3/4" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

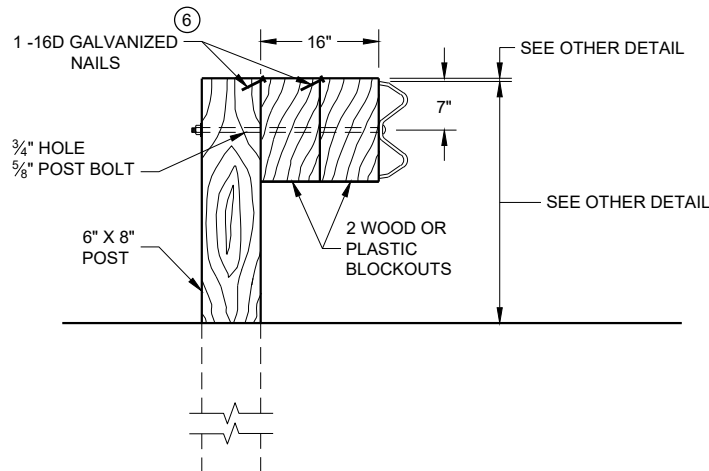
GUARD RAIL SPLICE BOLTS ARE A 3/4" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 3/4" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



SECTION THRU W-BEAM RAIL

**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

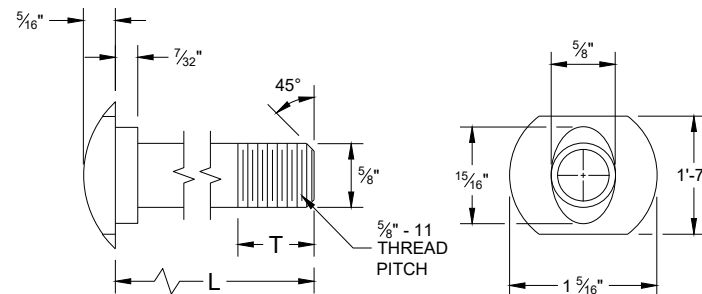
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 24



DETAIL FOR 16" BLOCKOUT DEPTH

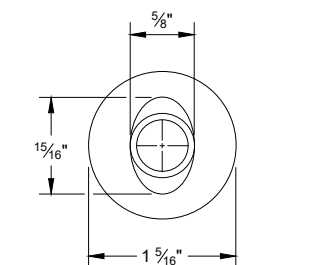
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

- NOTE:
1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF $\frac{3}{16}$ ".
 2. IF THE BOLT EXTENDS MORE THAN $\frac{1}{4}$ " FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

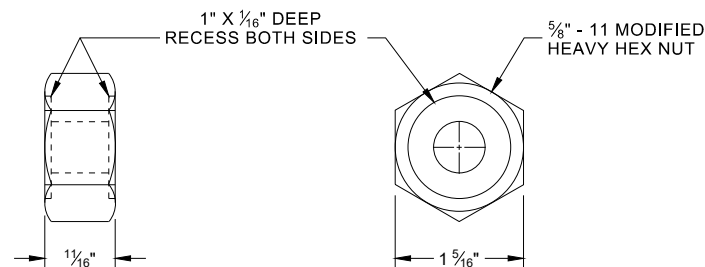


POST BOLT TABLE

L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"

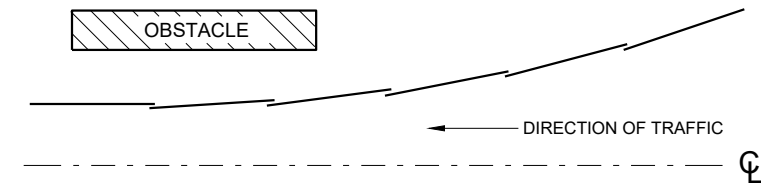


ALTERNATE BOLT HEAD

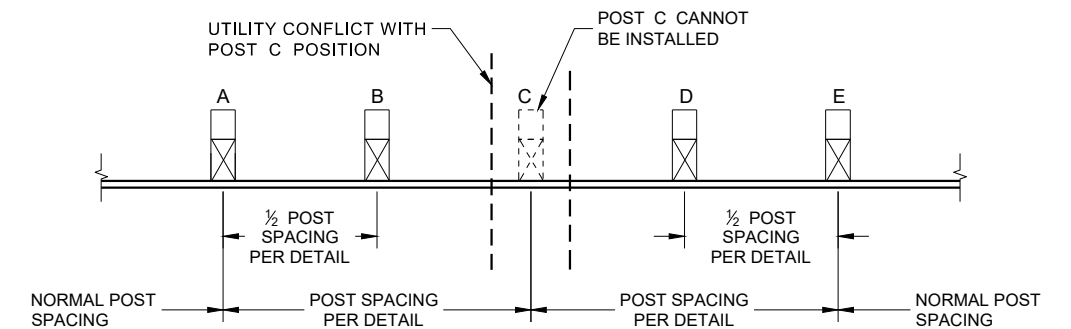


POST BOLT, SPLICE BOLT
AND RECESS NUT

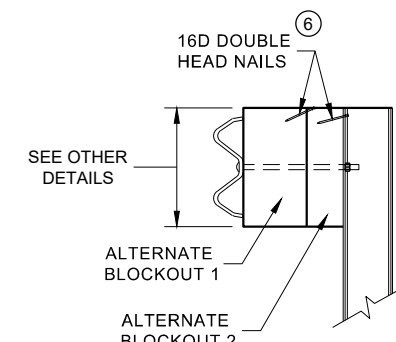
- ⑥ WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



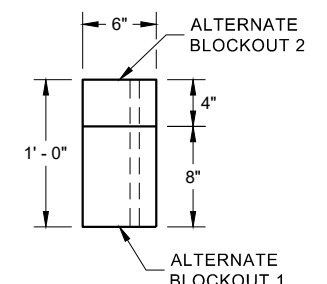
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION



SIDE VIEW



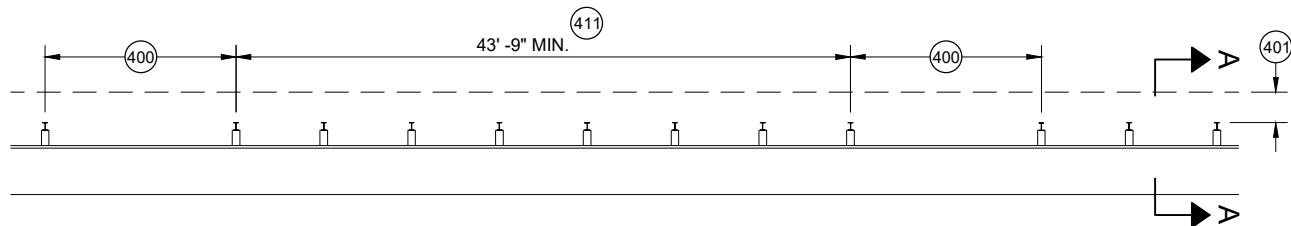
PLAN VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

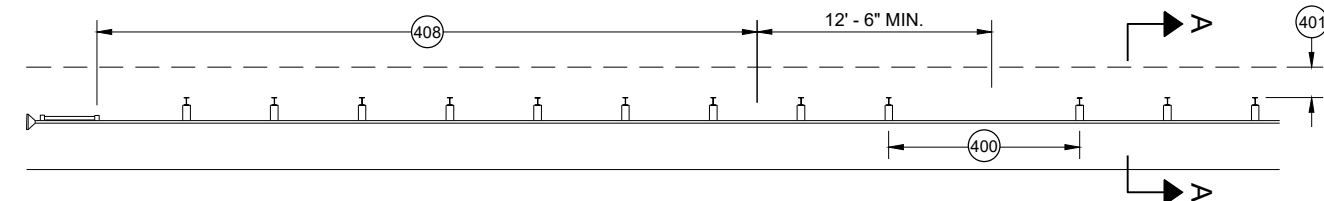
- NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.
- DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

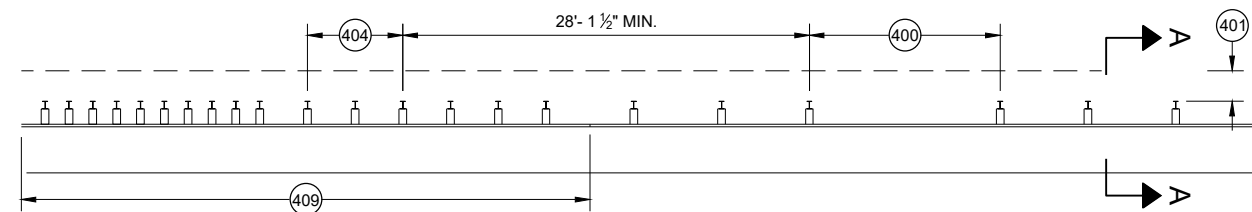
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



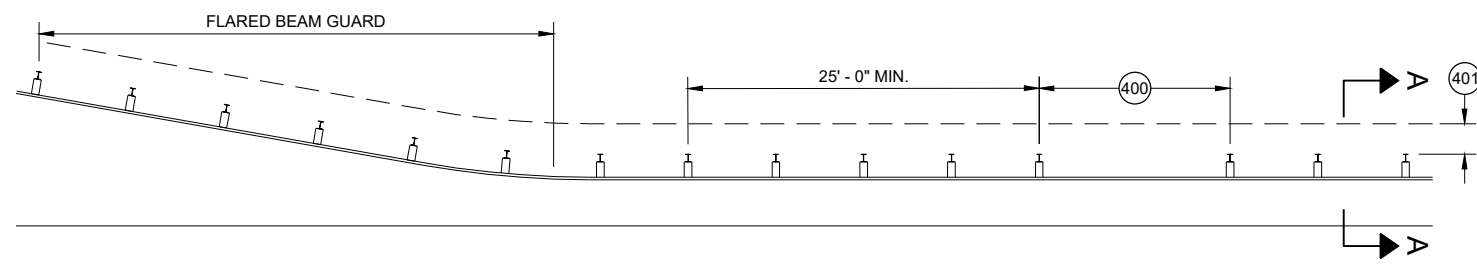
MISSING POST IN MGS GUARDRAIL



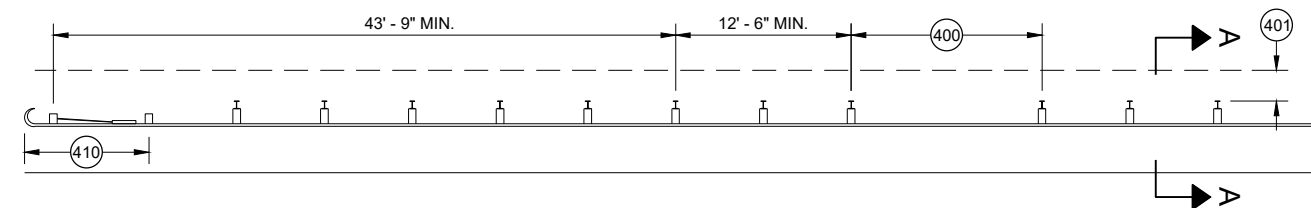
MISSING POST IN MGS GUARDRAIL NEAR EAT



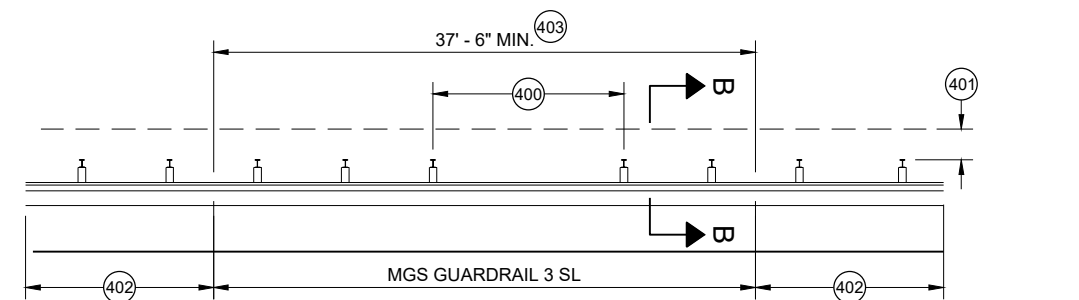
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

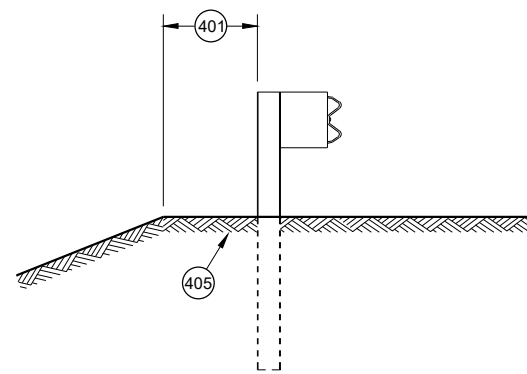


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

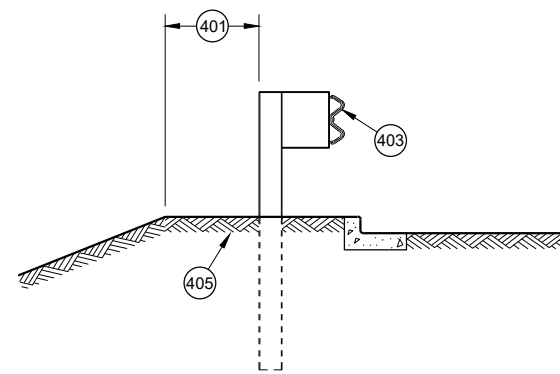


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL)

- (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



SECTION B - B

**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

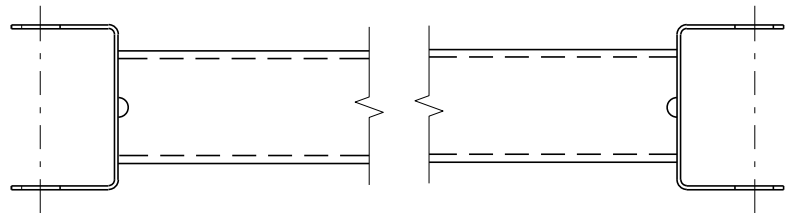
FHWA

- (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.

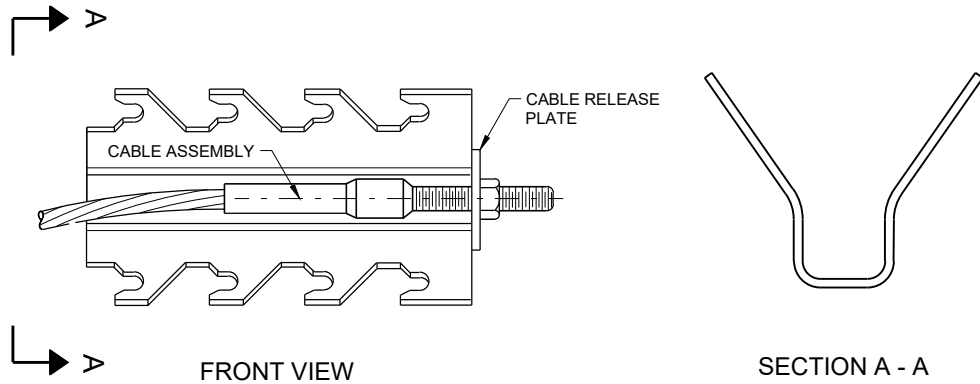
THE CENTER OF THE UPPER 3 1/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 27

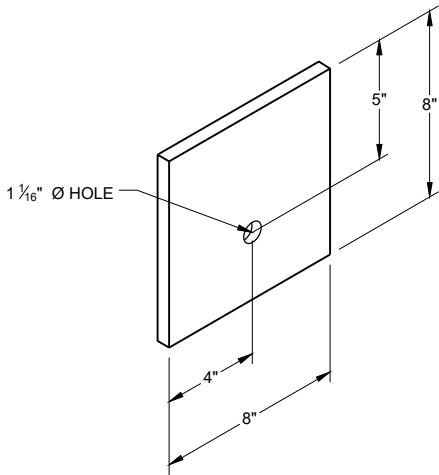


GENERIC GROUND STRUT⁹ E

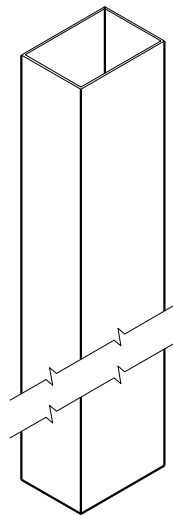
BILL OF MATERIALS	
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED 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



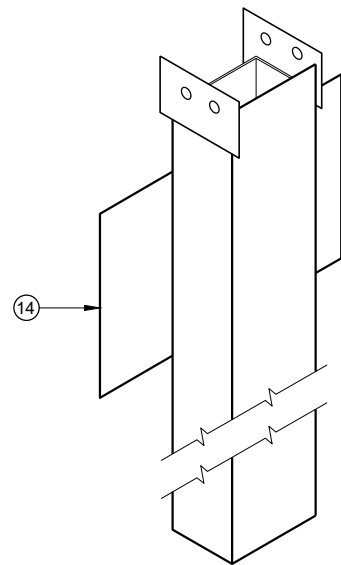
GENERIC ANCHOR CABLE BOX⁹ E



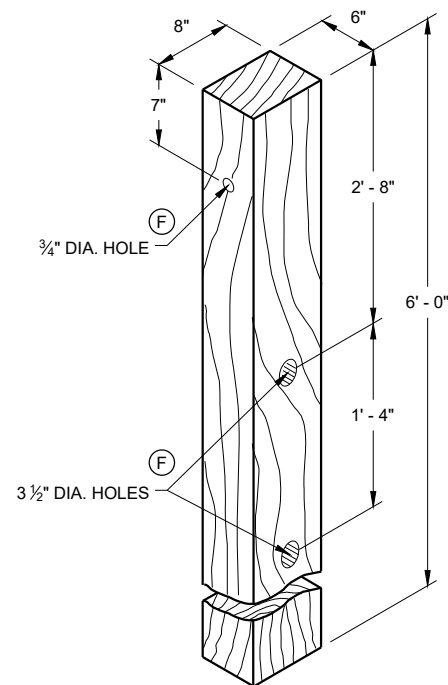
BEARING PLATE⁶ E



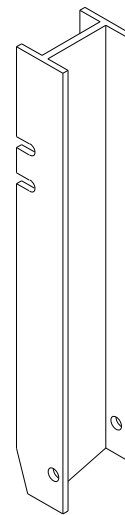
UPPER POST NO. 1 ⁽¹⁾ (E)



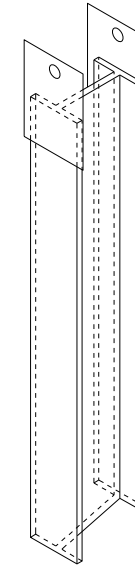
LOWER POST NO. 1 ⁽²⁾ (E)



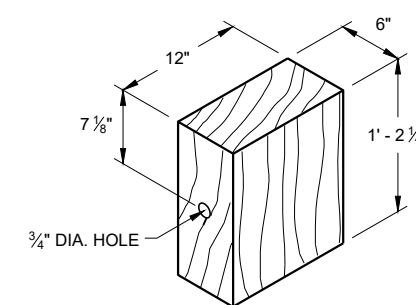
WOOD CRT POST ⁽³⁾ (E)
POSTS NUMBER 3-9



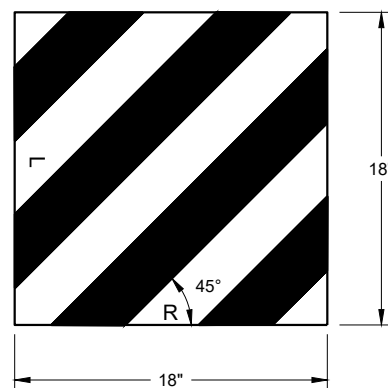
UPPER POST NO. 2 ⁽¹⁵⁾ (E)



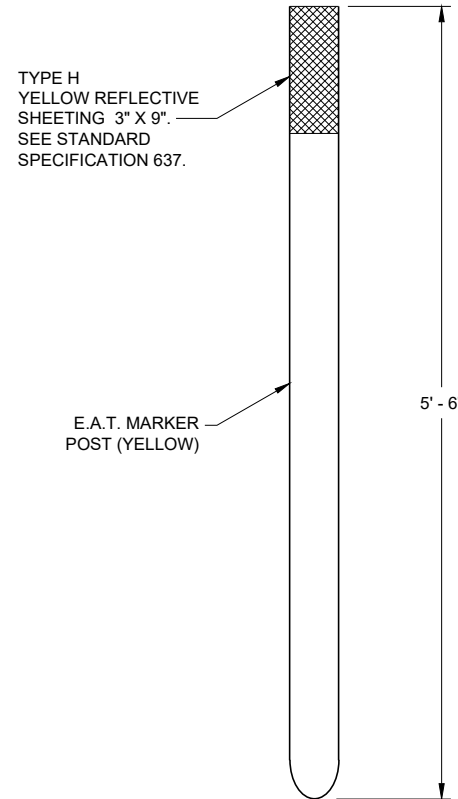
LOWER POST NO. 2 ⁽¹⁶⁾ (E)



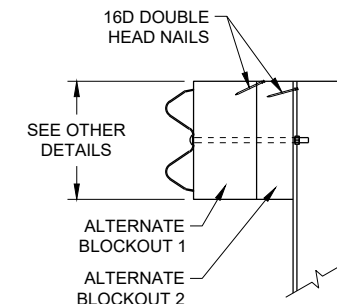
WOOD BLOCKOUT ⁽⁴⁾
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



W5 - 59
REFLECTIVE SHEETING DETAIL ^(E)

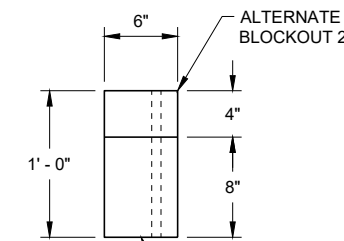


FRONT VIEW
SIDE VIEW
E.A.T. MARKER POST ⁽¹³⁾



SIDE VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL



TOP VIEW

**MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR 29
FHWA



Ⓢ W-BEAM CONNECTION WHEN REQUIRED

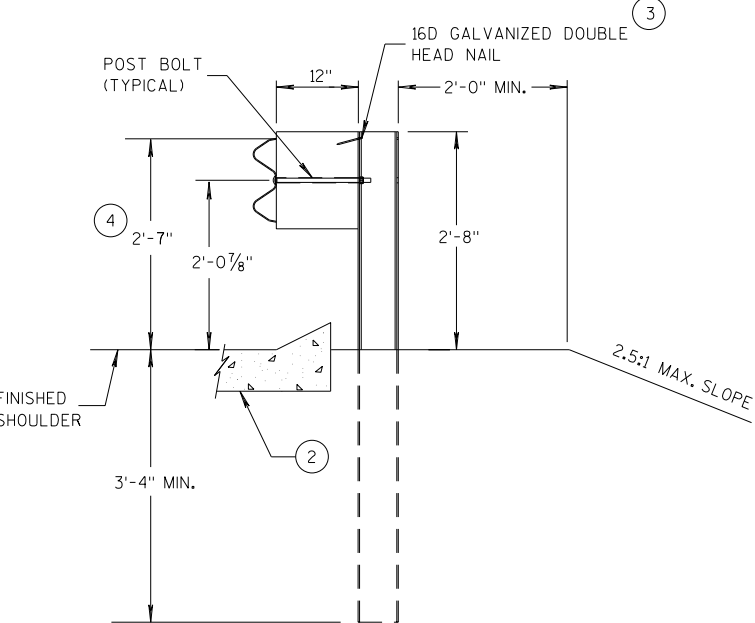
- ① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.
- ② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.
- ⑬ STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



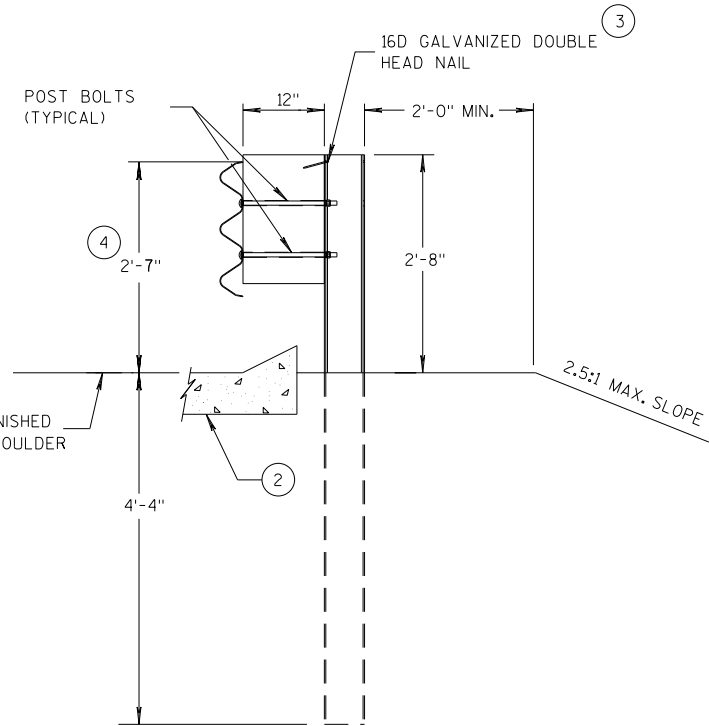
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 30

GENERAL NOTES

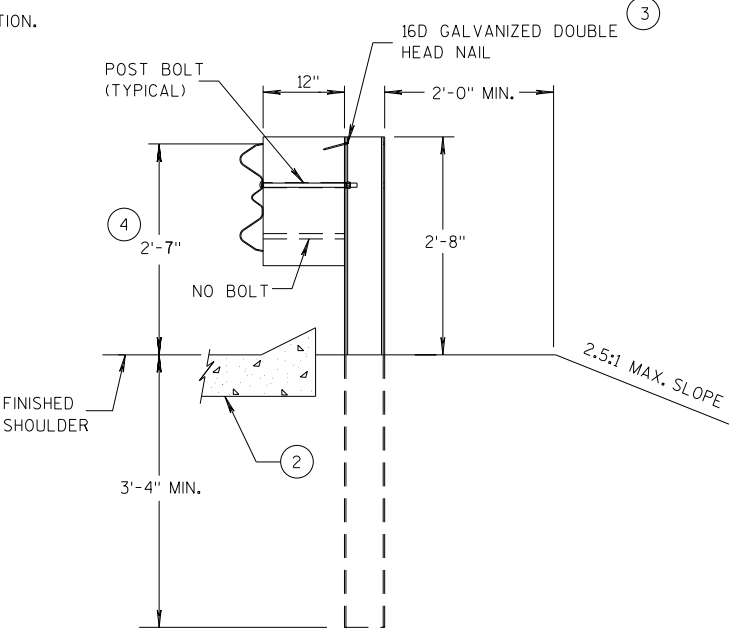
- 2 OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.
- 3 WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.
- 4 TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".
- 13 STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



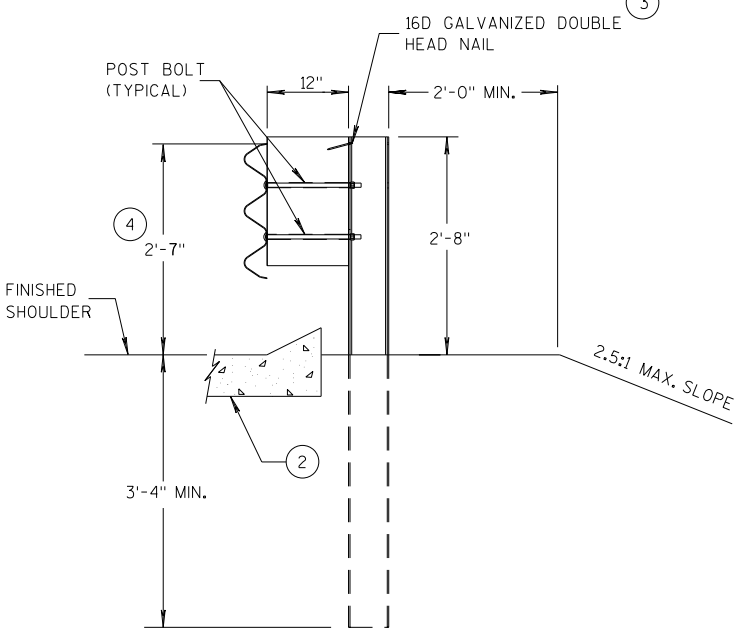
SECTION A-A
POSTS 1-5



SECTION D-D
POSTS 12-17



SECTION B-B
POST 6



SECTION C-C
POSTS 7-11

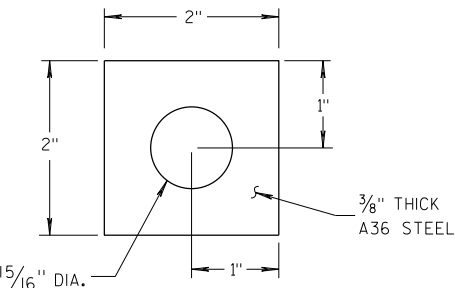
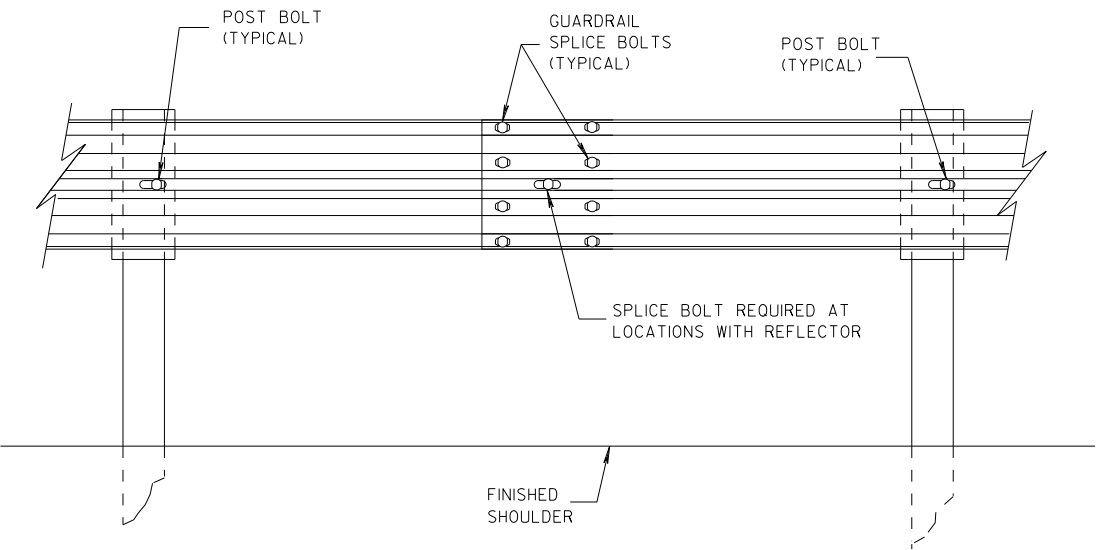
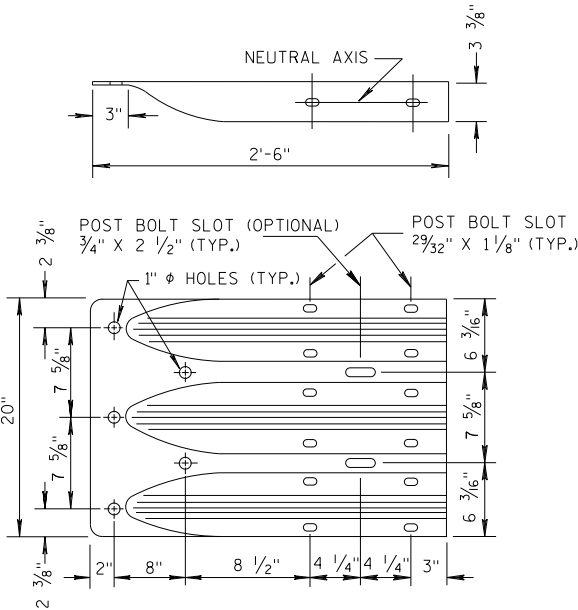


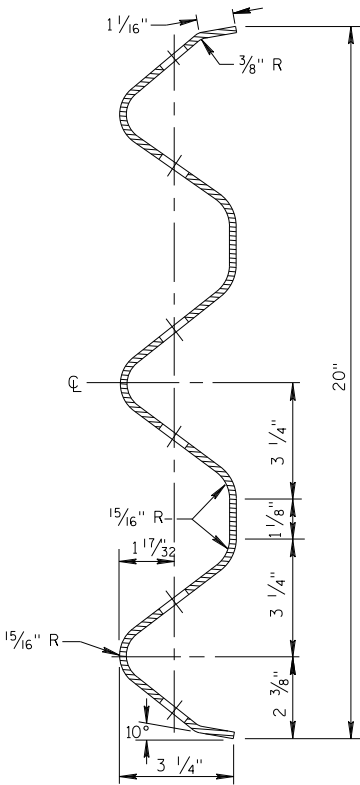
PLATE WASHER DETAIL



SPlice DETAIL



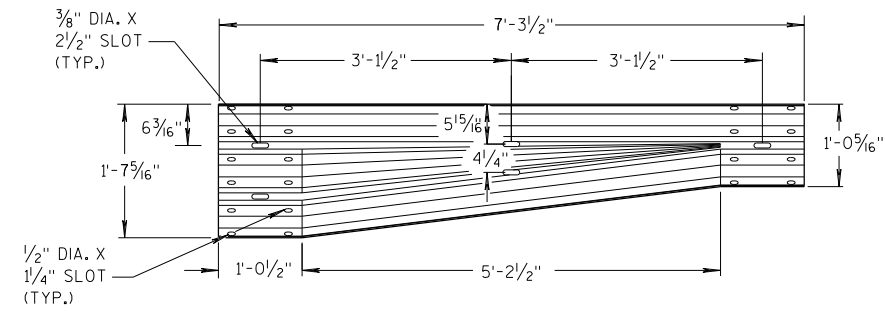
THRIE BEAM
TERMINAL CONNECTOR



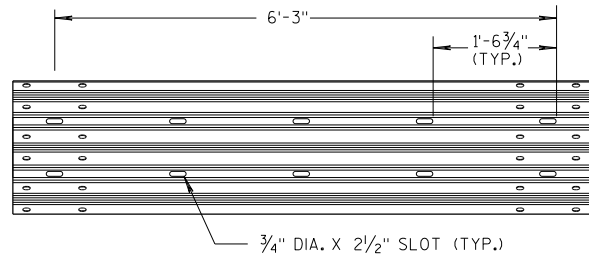
SECTION THRU THRIE
BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

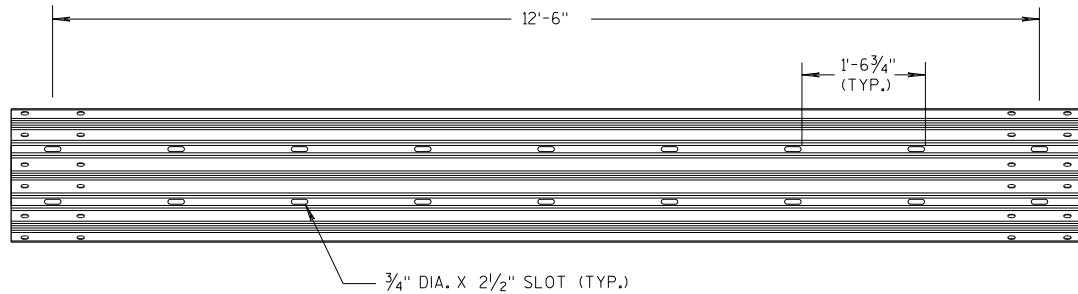
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



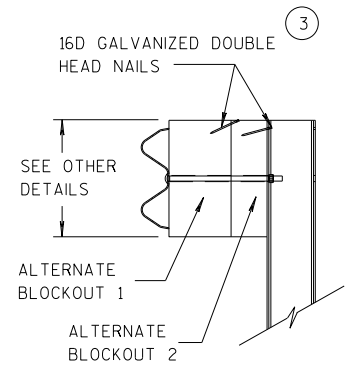
W-BEAM TO THRIE BEAM TRANSITION SECTION



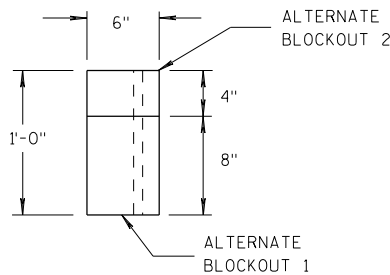
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

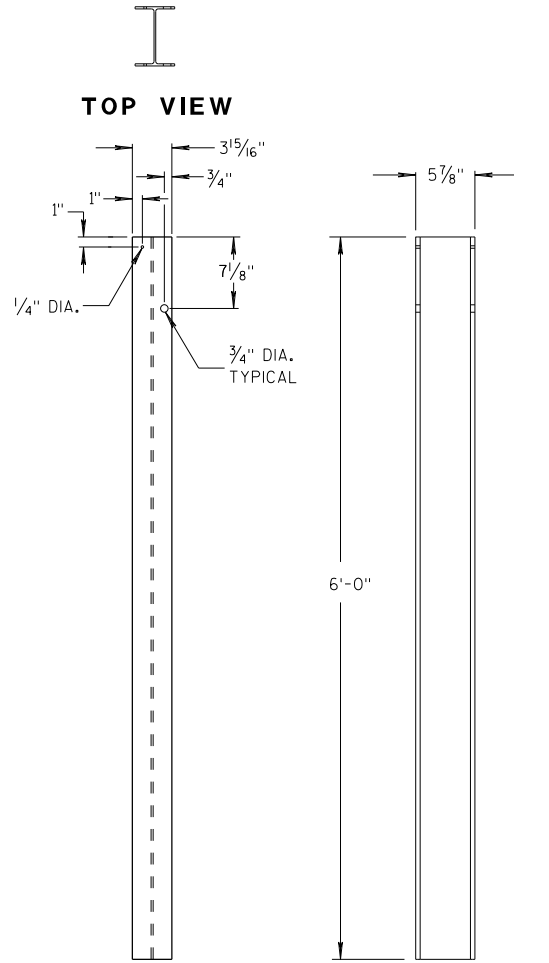


SIDE VIEW



TOP VIEW

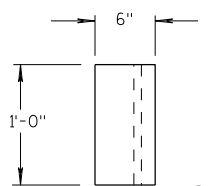
ALTERNATE WOOD BLOCKOUT DETAIL



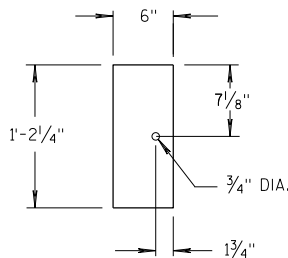
FRONT VIEW

SIDE VIEW

STEEL POSTS 1-5

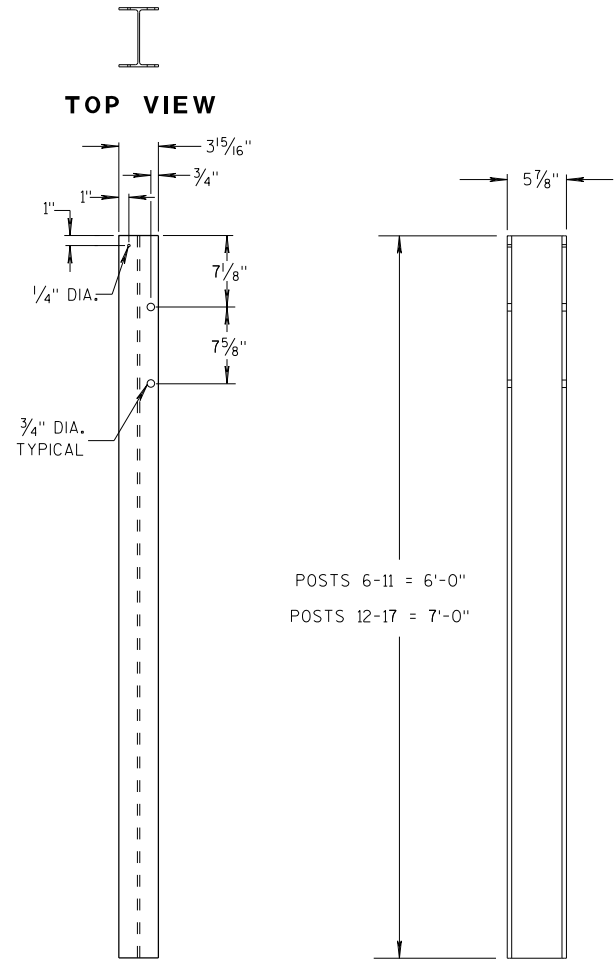


TOP VIEW



FRONT VIEW

**BLOCKOUT
POSTS 1-5**

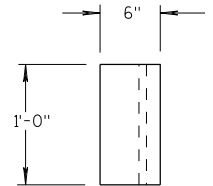


FRONT VIEW

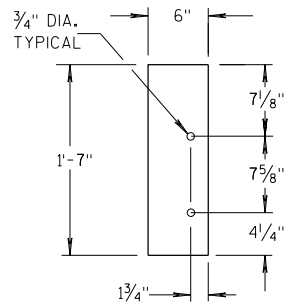
SIDE VIEW

STEEL POSTS 6-17

POSTS 6-11 = 6'-0"
POSTS 12-17 = 7'-0"



TOP VIEW



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.

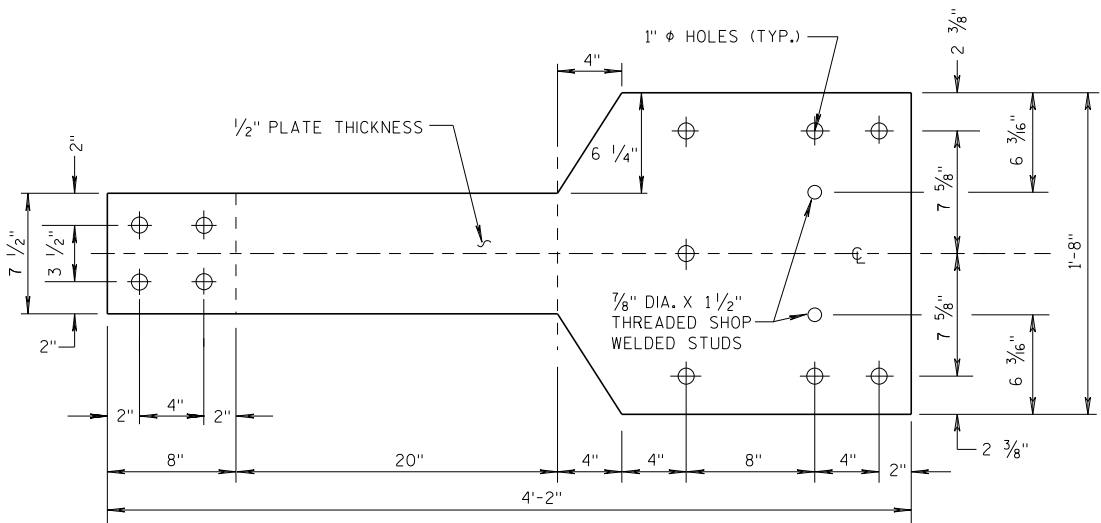
⑬ STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

**MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)**

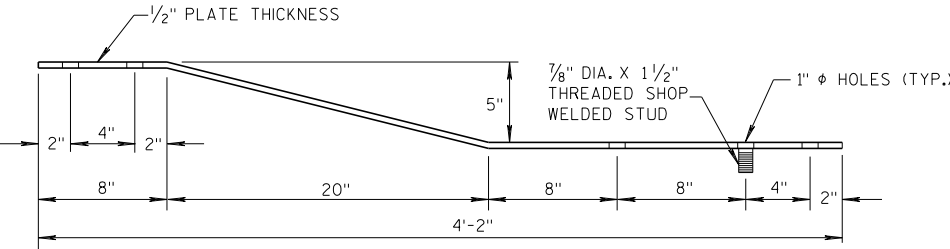
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

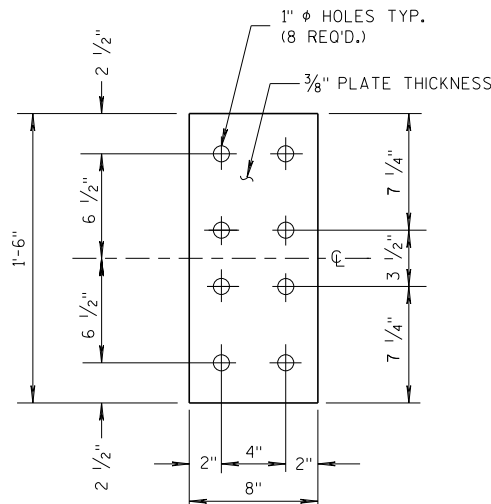
④ TOLERANCE FOR TOP OF W-BEAM RAIL IS $\pm 1"$.



FRONT VIEW

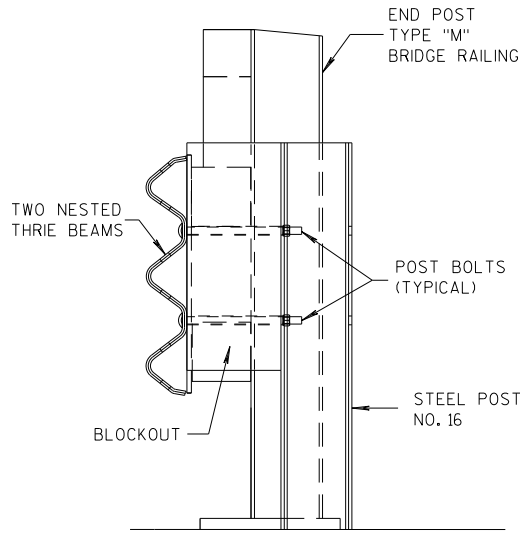


PLAN VIEW
BACK-UP PLATE DETAIL, TYPE "M"

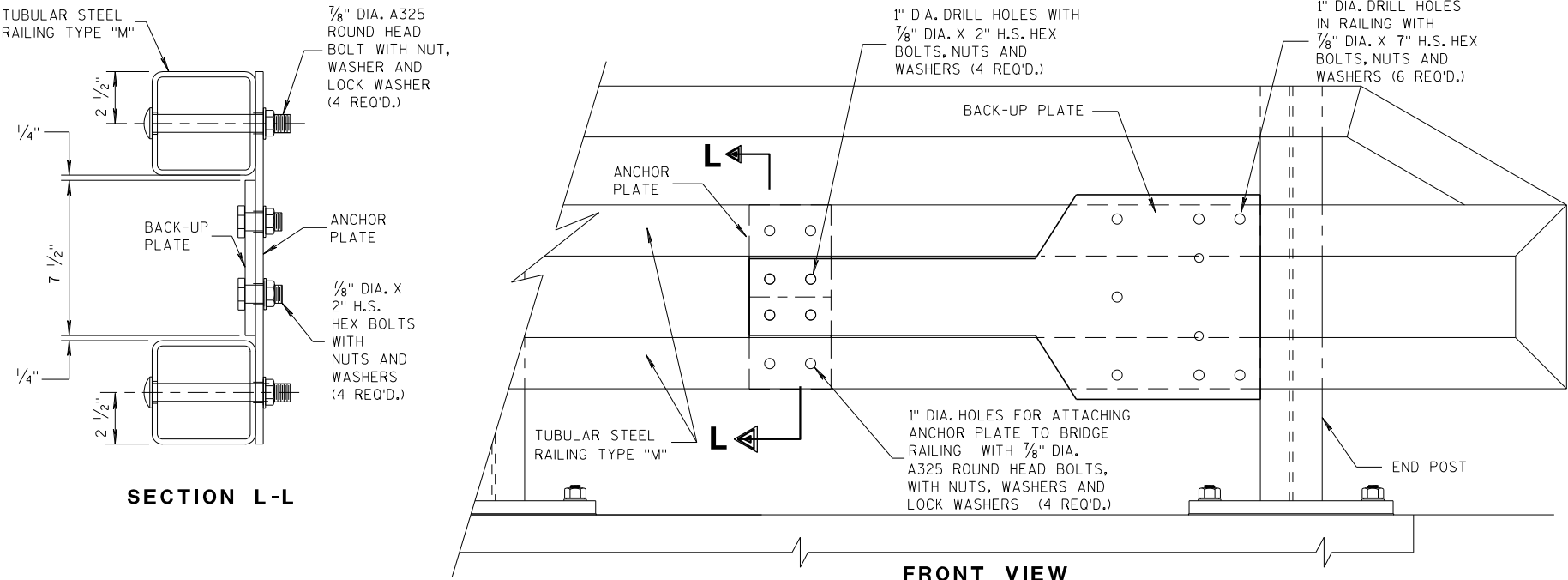


FRONT VIEW

ANCHOR
PLATE DETAIL,
TYPE "M"



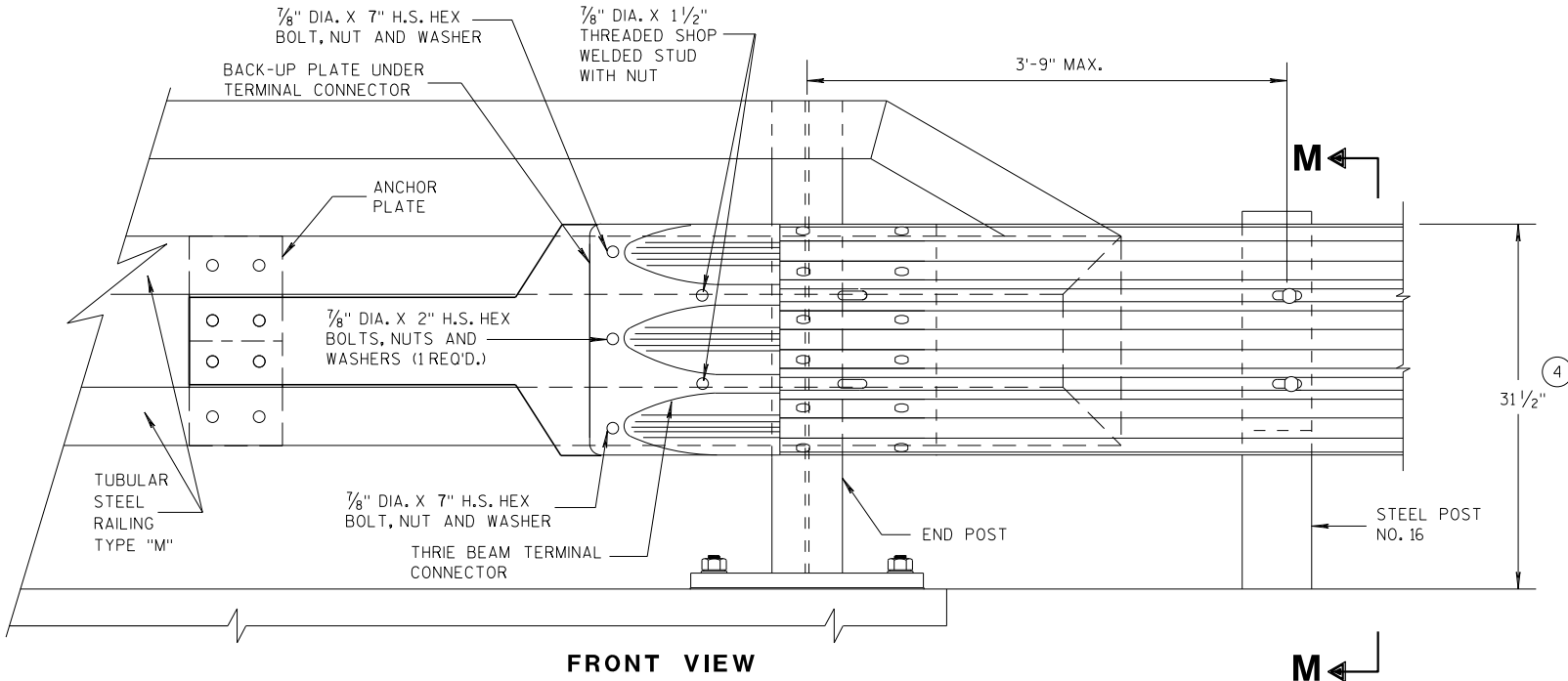
SECTION M-M



SECTION L-L

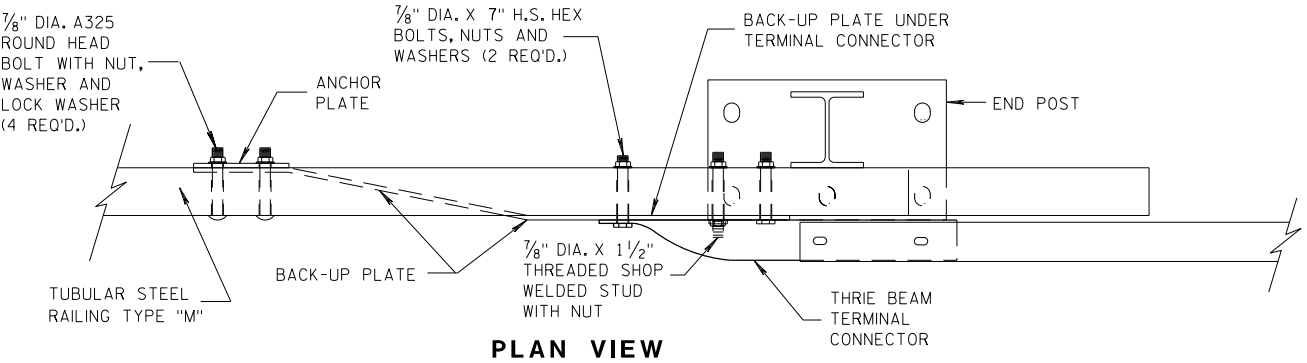
FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW

M



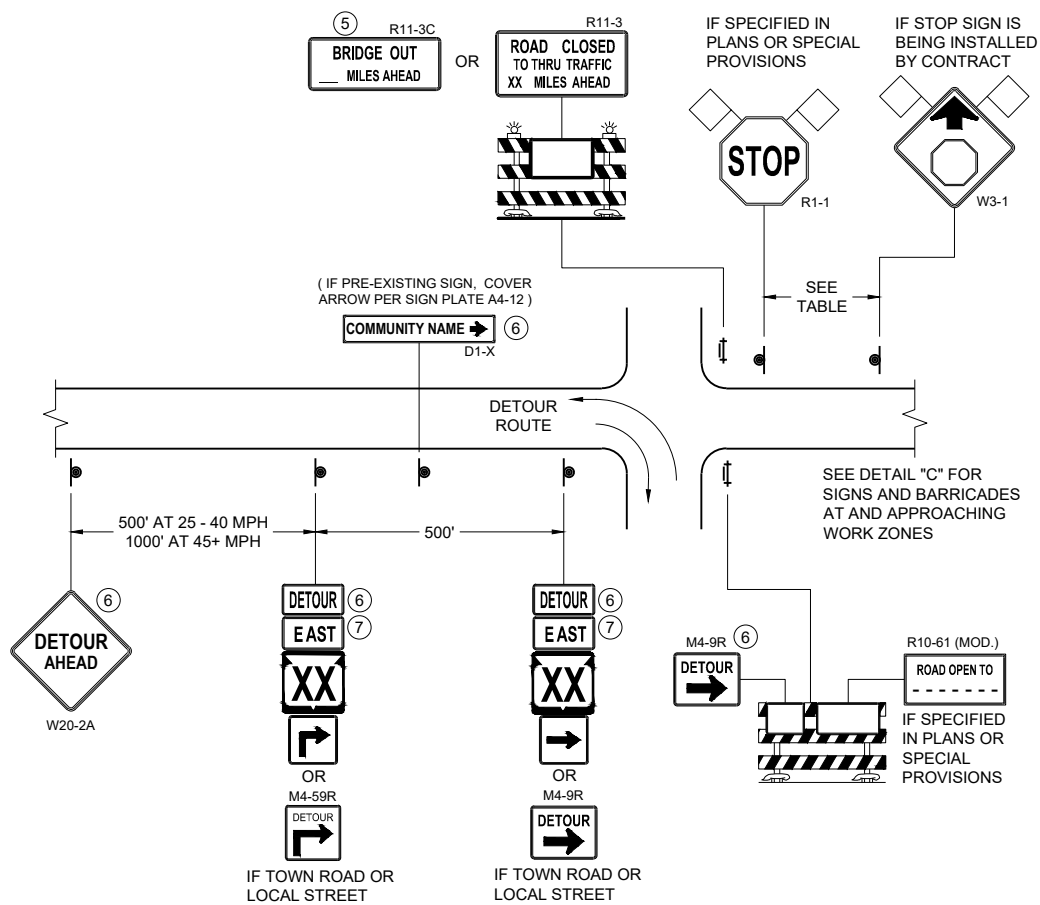
PLAN VIEW

THREE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

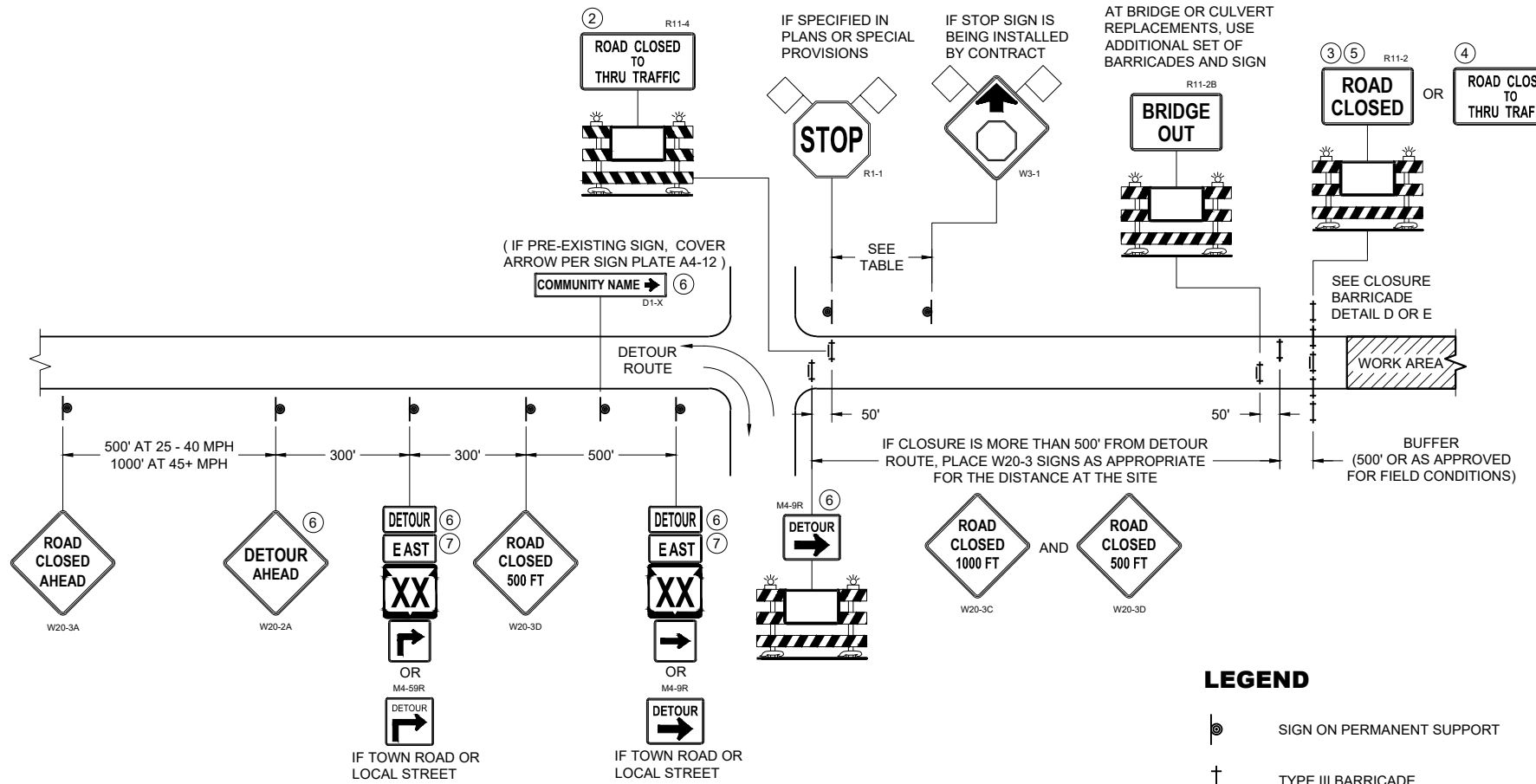
MIDWEST GUARDRAIL SYSTEM
THREE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

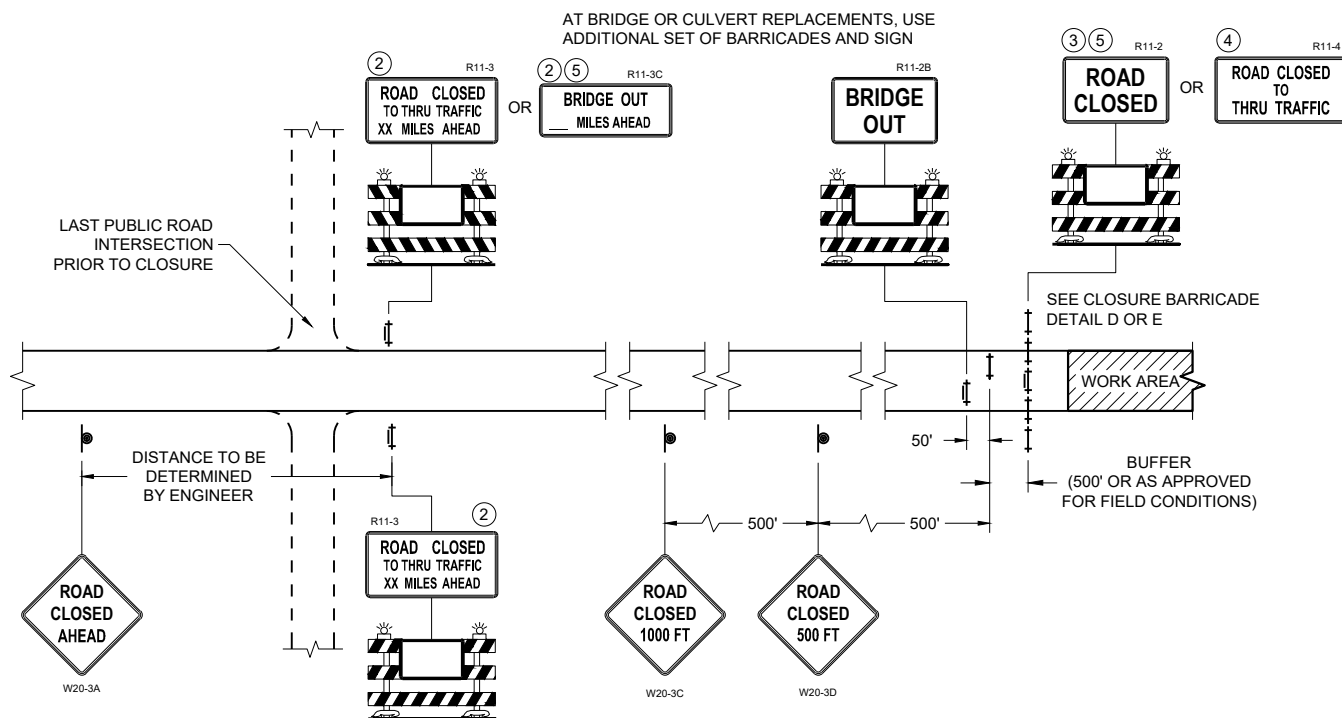
APPROVED
07/2018 /S/ Rodney Taylor
DATE ROADWAY STANDARDS UNIT SUPERVISOR
FHWA 33 ENT



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN OR EQUAL TO 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN 1/2 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

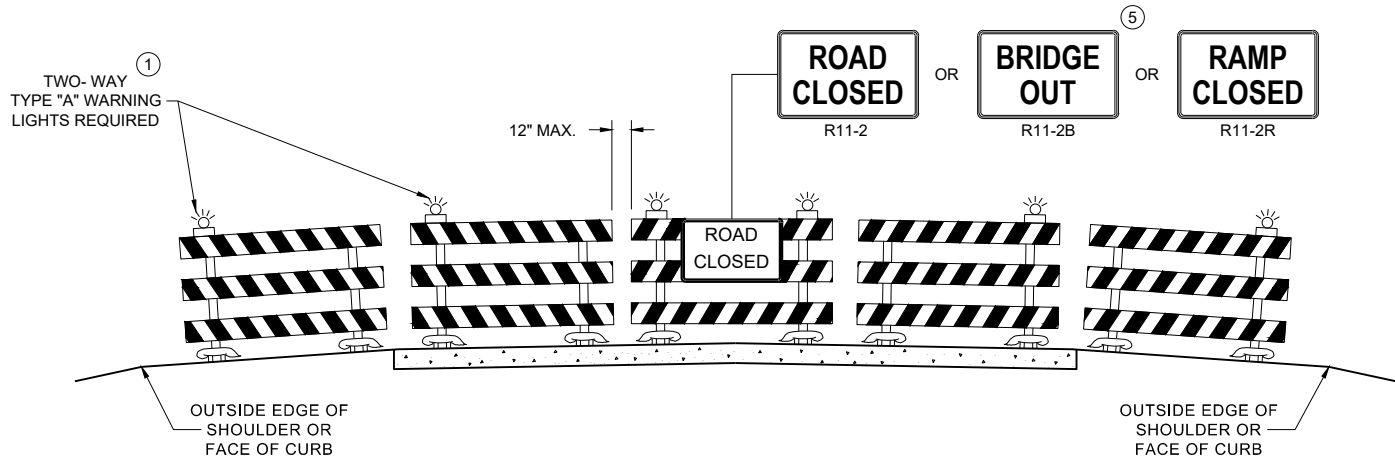
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR M4 - 8
- EAST M3 - X
- XX M1 - 4 OR XX M1 - 6 OR COUNTY M1 - 5A
- M05 - 1 OR M06 - 1

**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

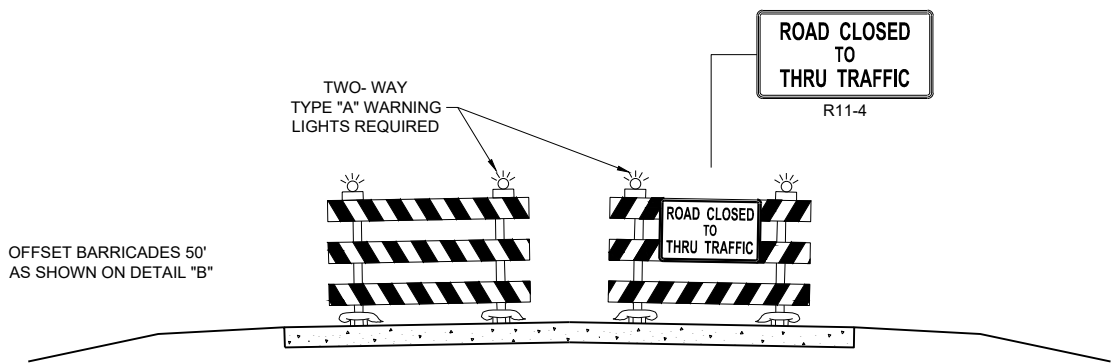
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

PARTIAL NUMBERS ON SIGNS SHALL BE DISPLAYED AS A WHOLE NUMBER(AS NEEDED) FOLLOWED BY A FRACTION. SIGNS SHALL NOT DISPLAY NUMBERS IN DECIMAL FORM.

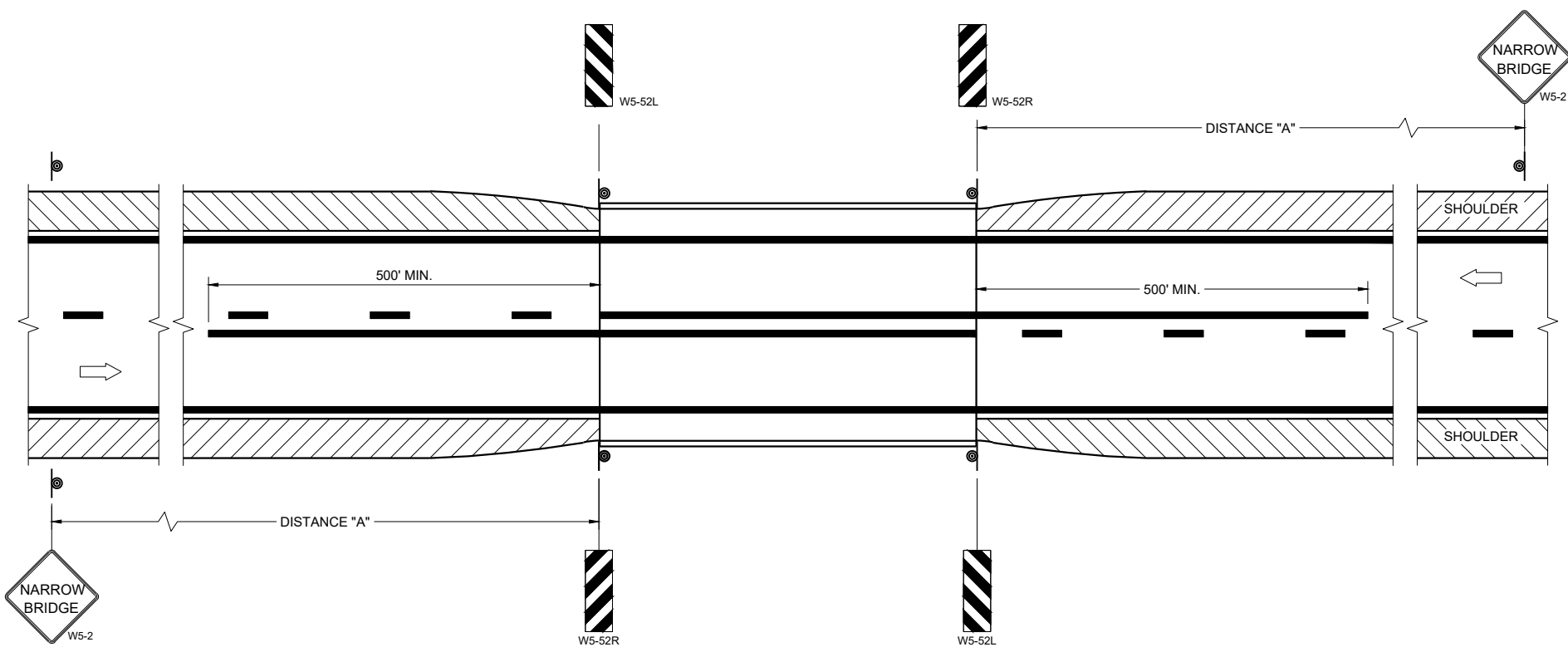
"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

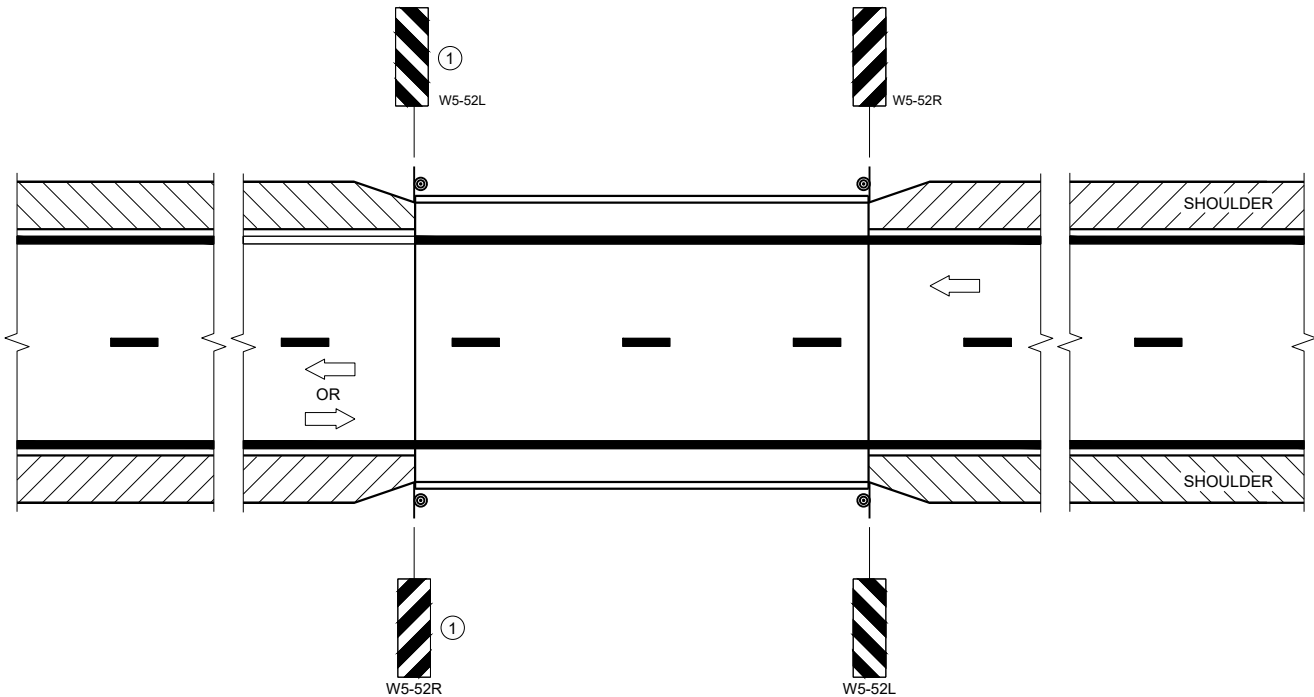
SIGNS PLACED ON TYPE III BARRICADES THAT ARE SIZES OTHER THAN 48"X30" SHALL HAVE A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE.

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2025 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	



SITUATION 1
WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.



SITUATION 2
WARRANTING CRITERIA:
1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THE DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

ON BRIDGE ONLY PROJECTS, PLACE 300 FEET OF EDGELINE.

OMIT EDGELINES ON ROADWAYS WITHOUT EXISTING EDGELINES.

① OMIT ON ONE-WAY TRAVELED WAYS.

LEGEND

⊙ SIGN ON PERMANENT SUPPORT

➡ DIRECTION OF TRAFFIC

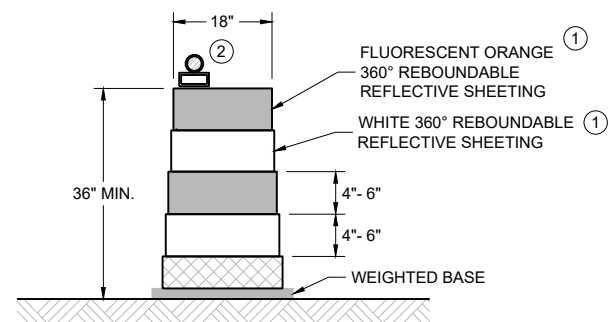
DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	700'

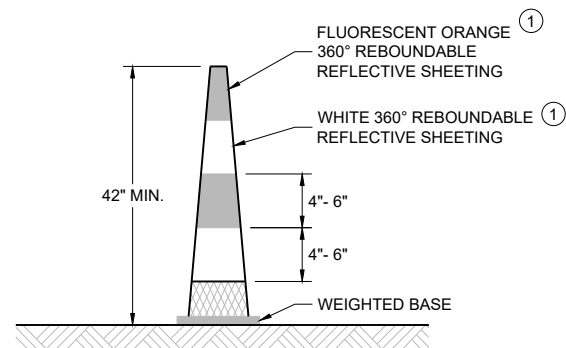
**SIGNING AND MARKING
FOR TWO LANE BRIDGES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Jeannie Silver
DATE Statewide Pavement Marking Engineer
FHWA

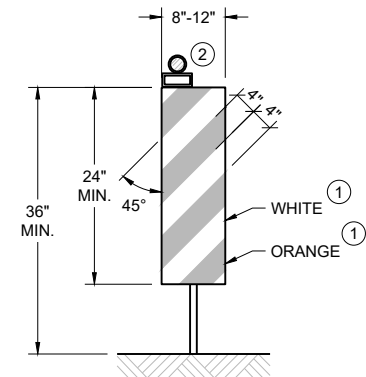
**DRUM**

BALLAST WIDTHS
RANGE FROM 24"-36"

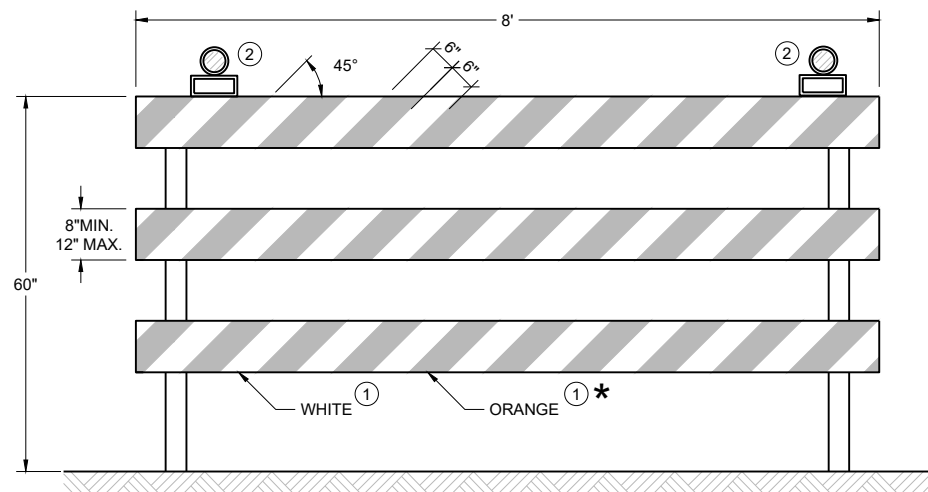
**42" CONE**

DO NOT USE IN TAPERS
 $\frac{1}{2}$ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"

**VERTICAL PANEL**

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.

**TYPE III BARRICADE**

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

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.

**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2026 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

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

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

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

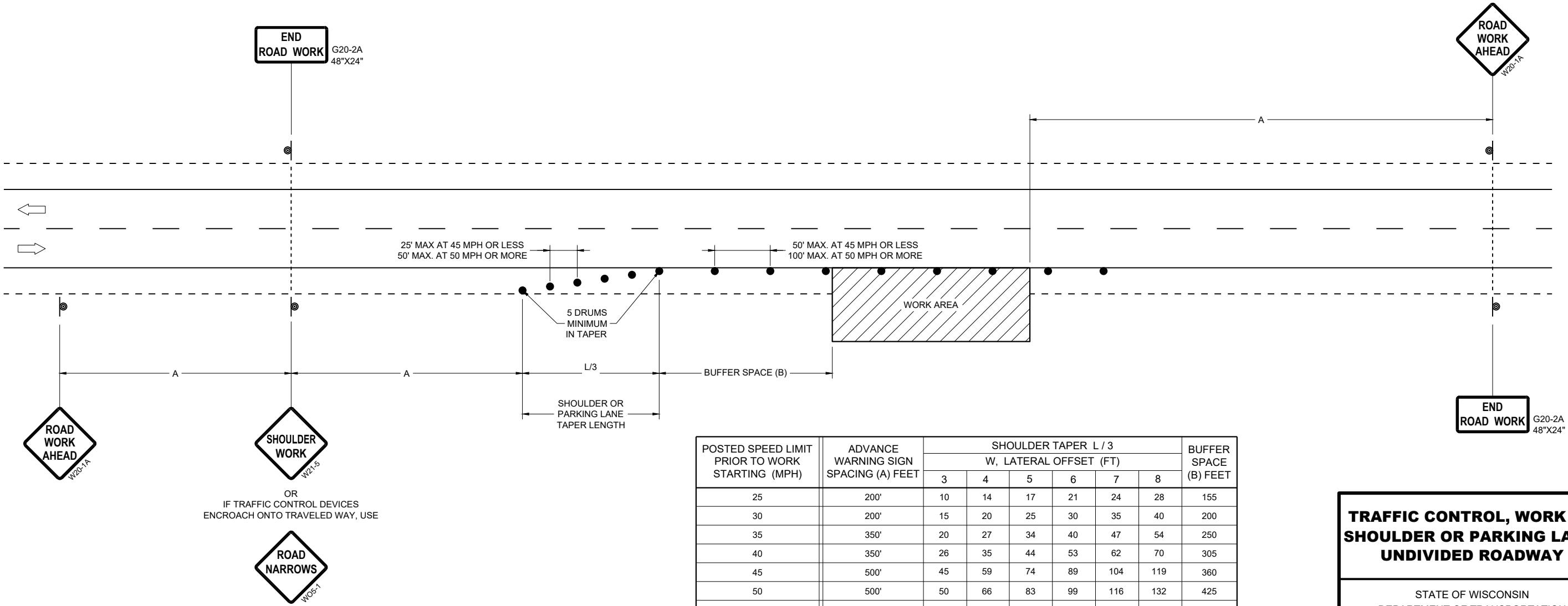
W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

6

6

SDD 15D28-06

SDD 15D28-06



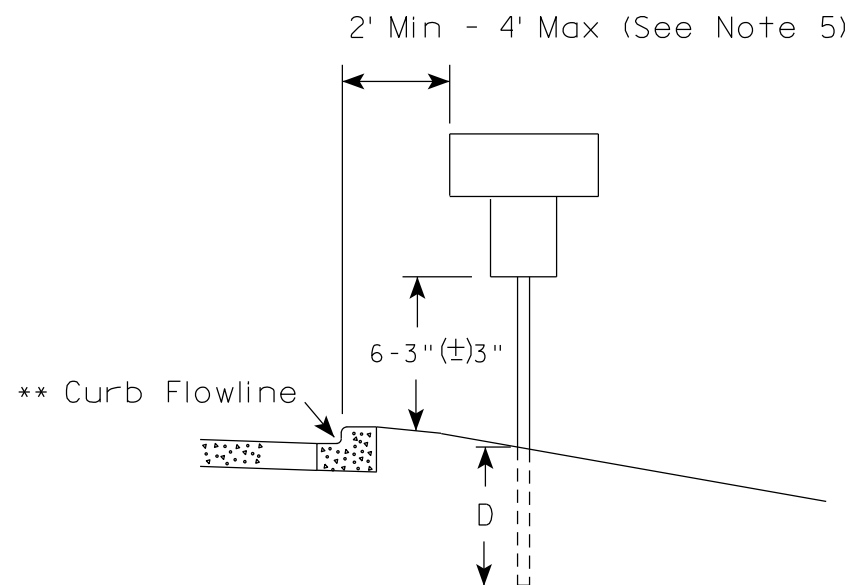
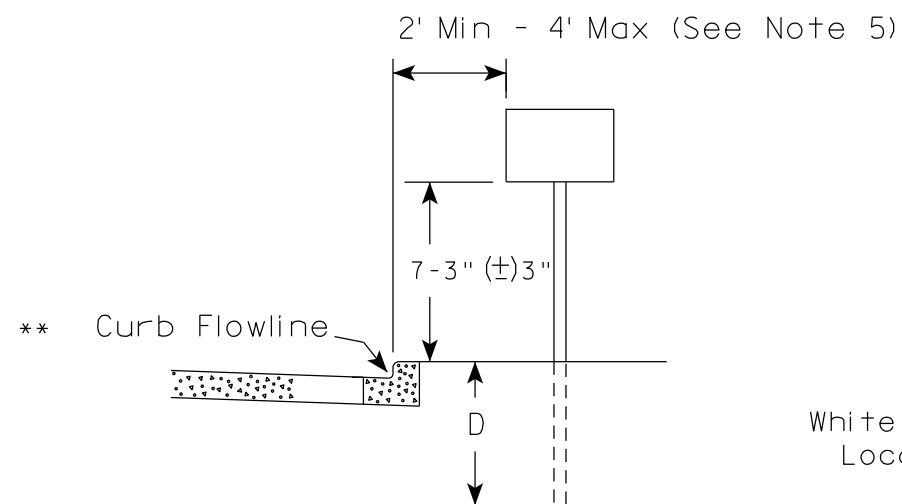
TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2026 /S/ ANDREW HEIDTKE
DATE STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

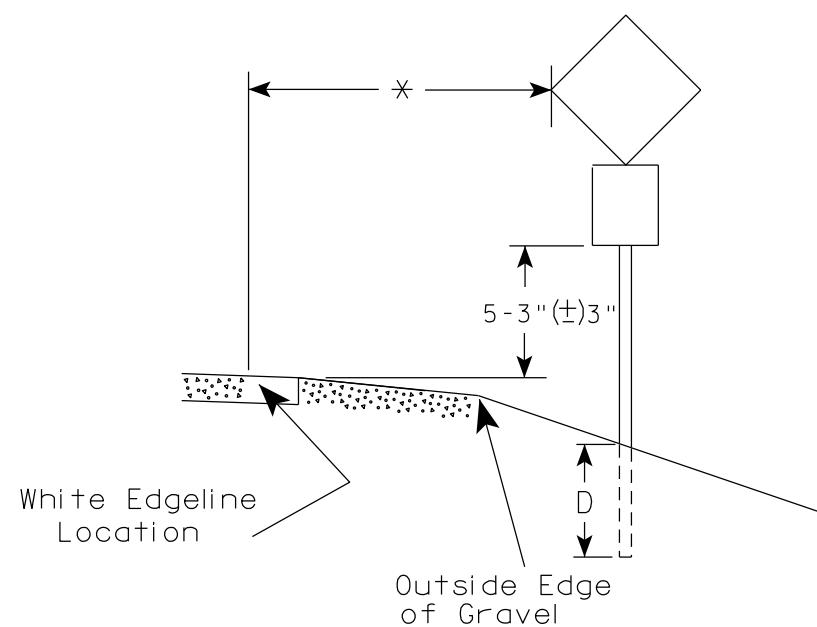
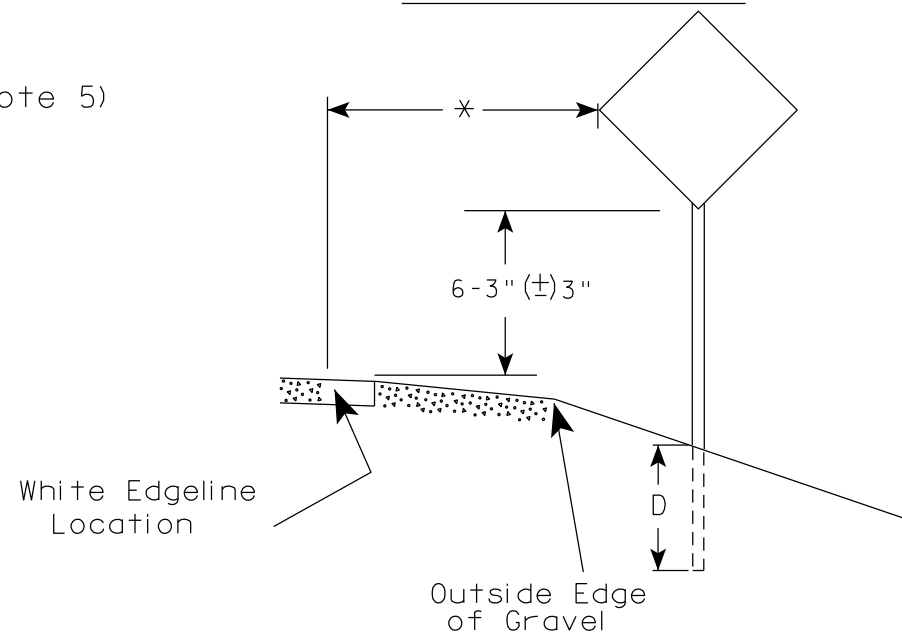
FHWA

URBAN AREA



* * 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.

RURAL AREA (See Note 2)



* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

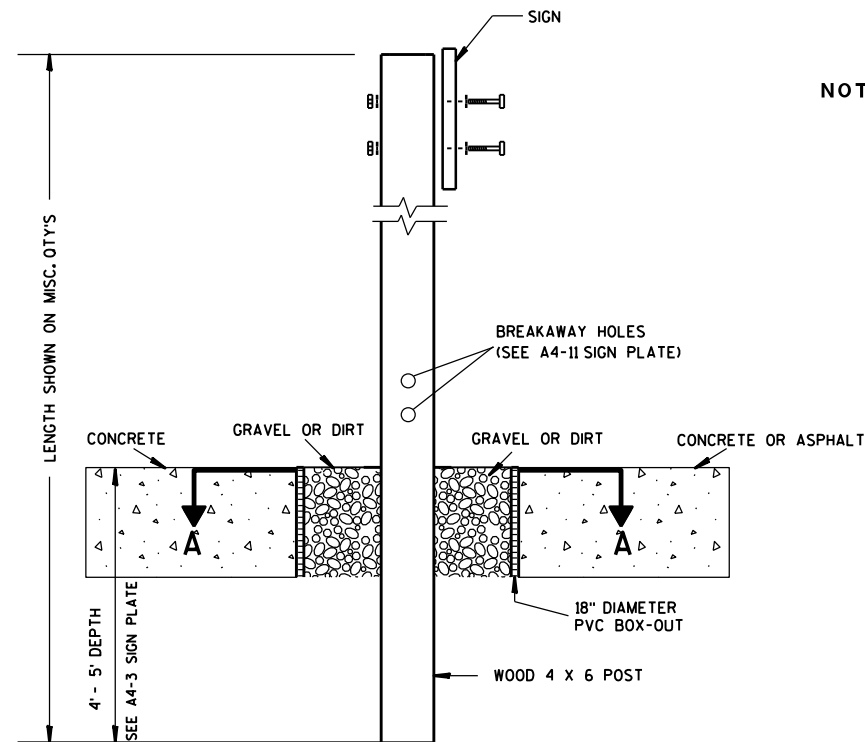
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the Engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

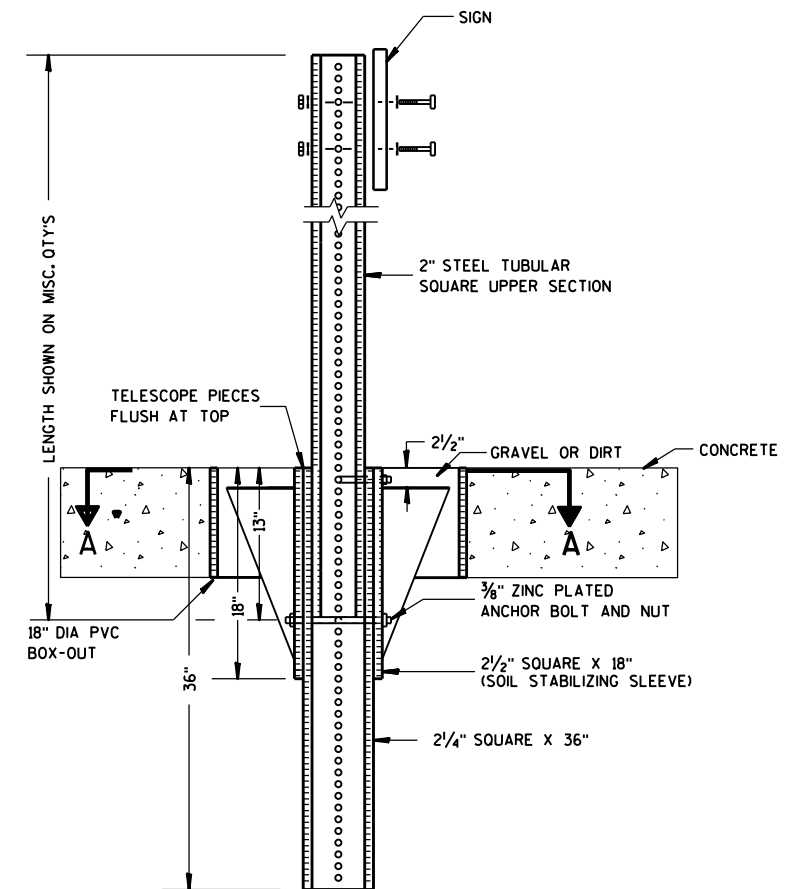
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

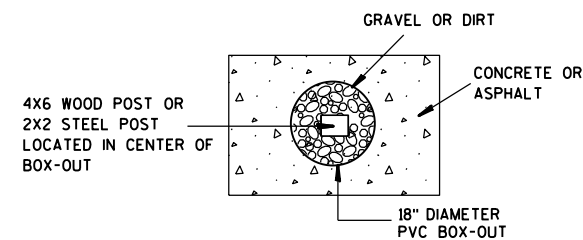
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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 PLAT 40 A4-3B.1

PROJECT NO:

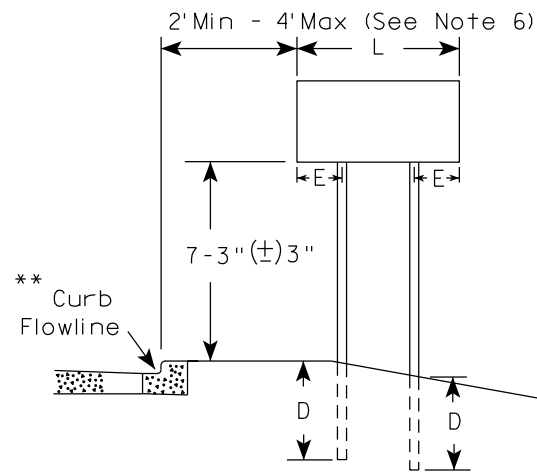
HWY:

COUNTY:

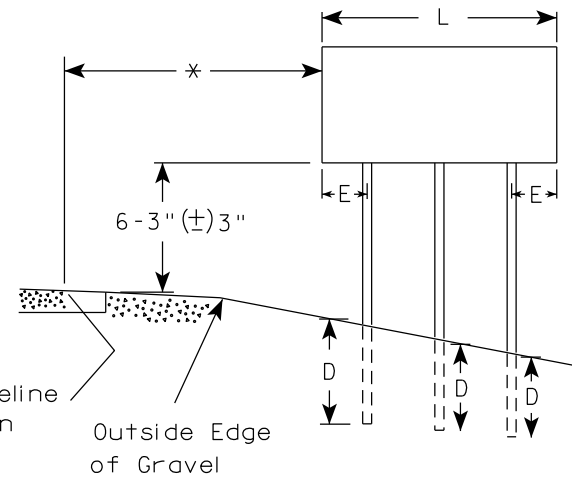
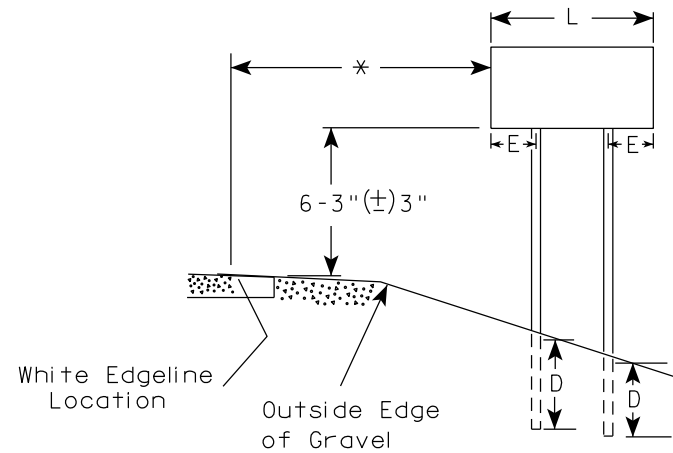
SHEET NO:

E

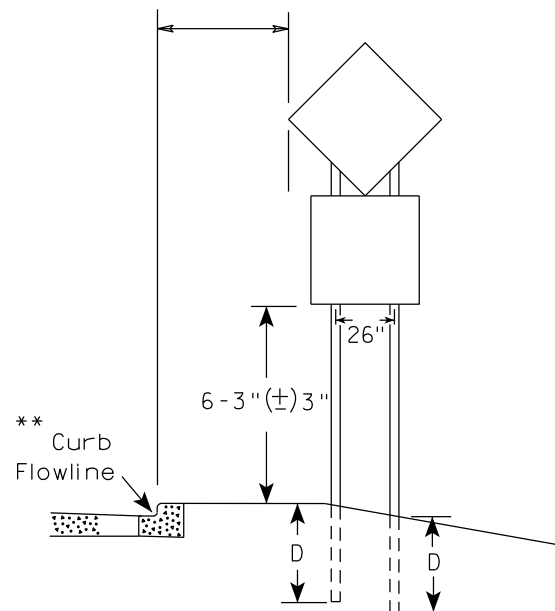
URBAN AREA



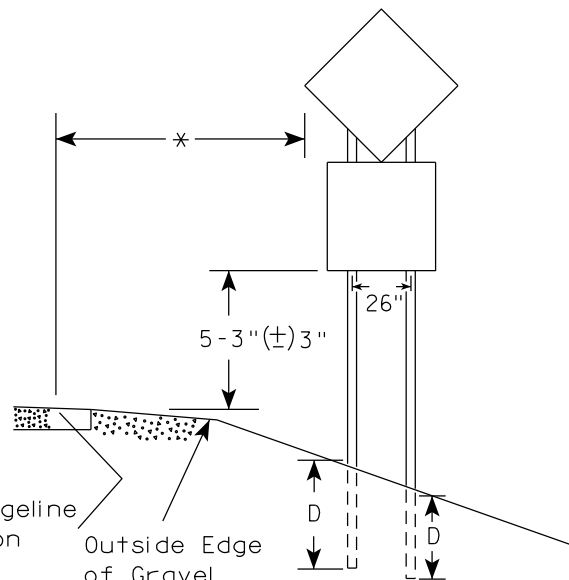
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



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"

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	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 12/6/23	PLATE NO. A4-4.16

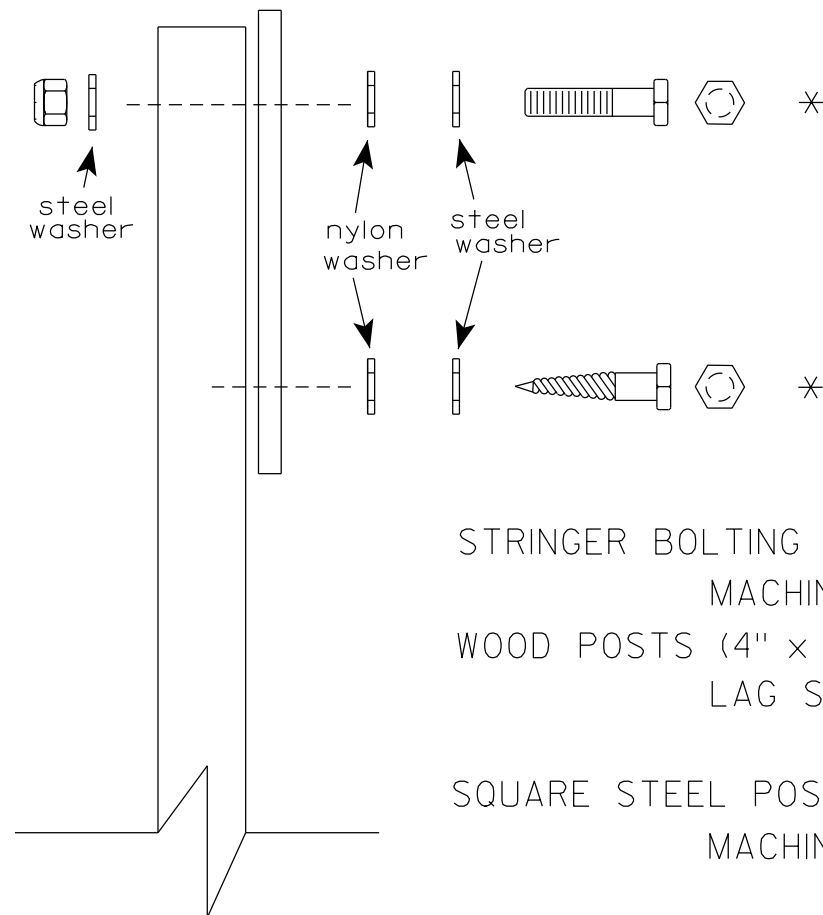
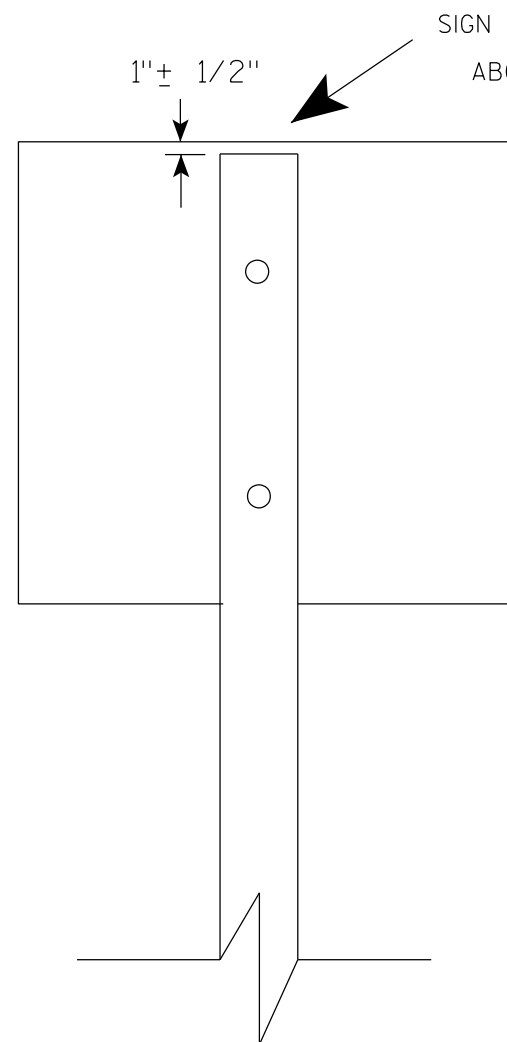
GENERAL NOTES

- For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
- See tables below for required number of posts.
- For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
- The (±) tolerance for mounting height is 3 inches.
- J-Assemblies are considered to be one sign for mounting height.
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
- 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.



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.

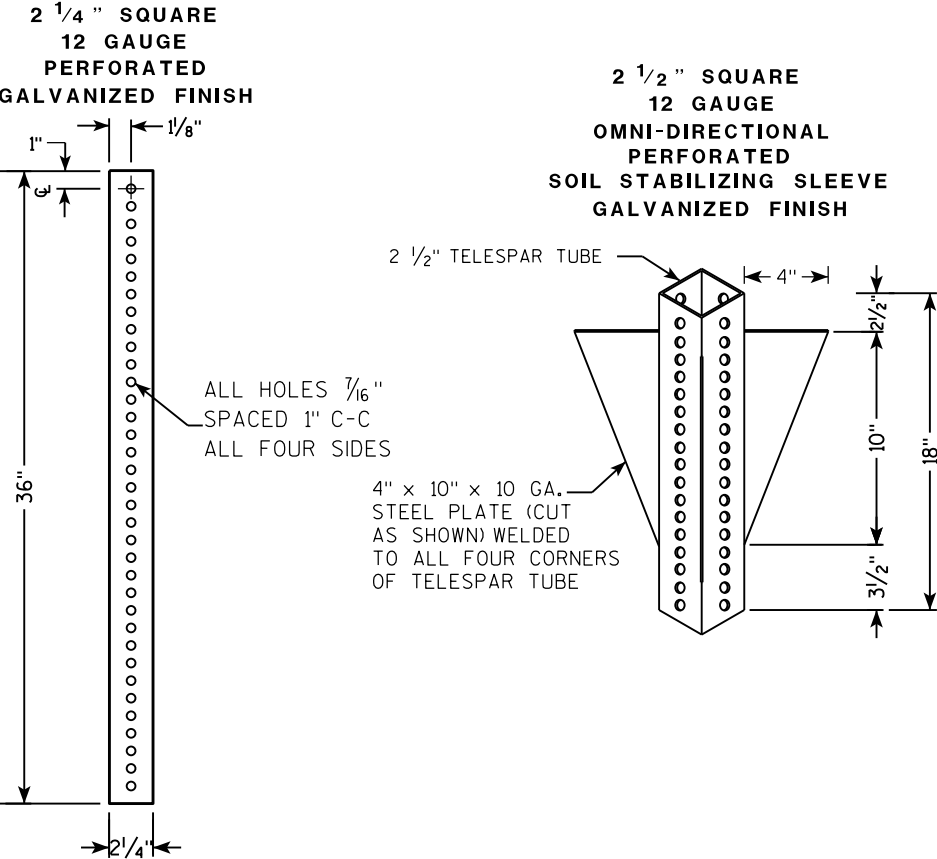
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (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 $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

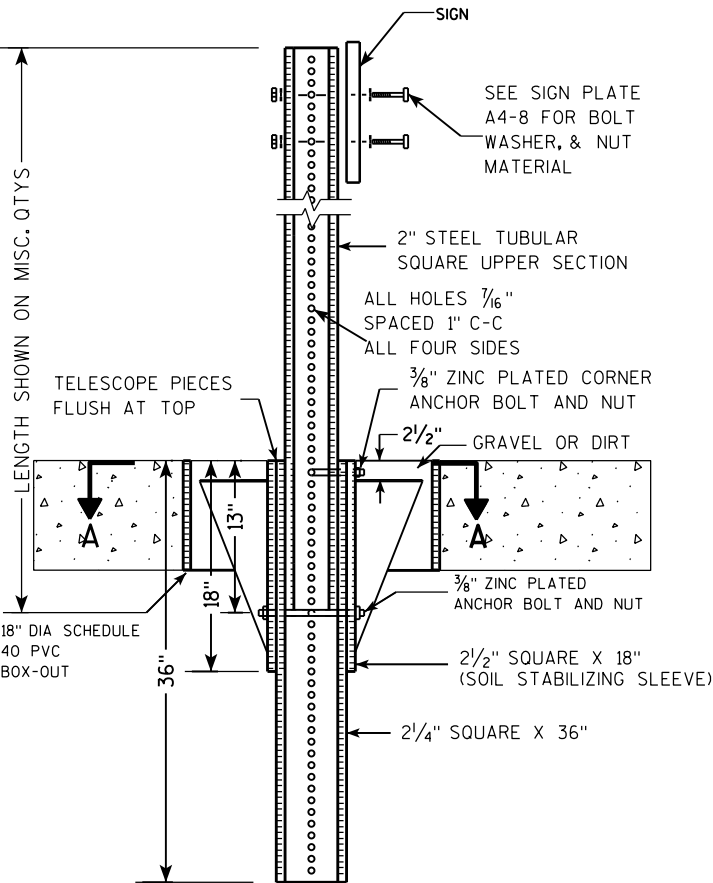
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

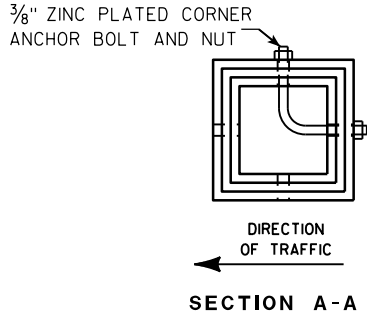
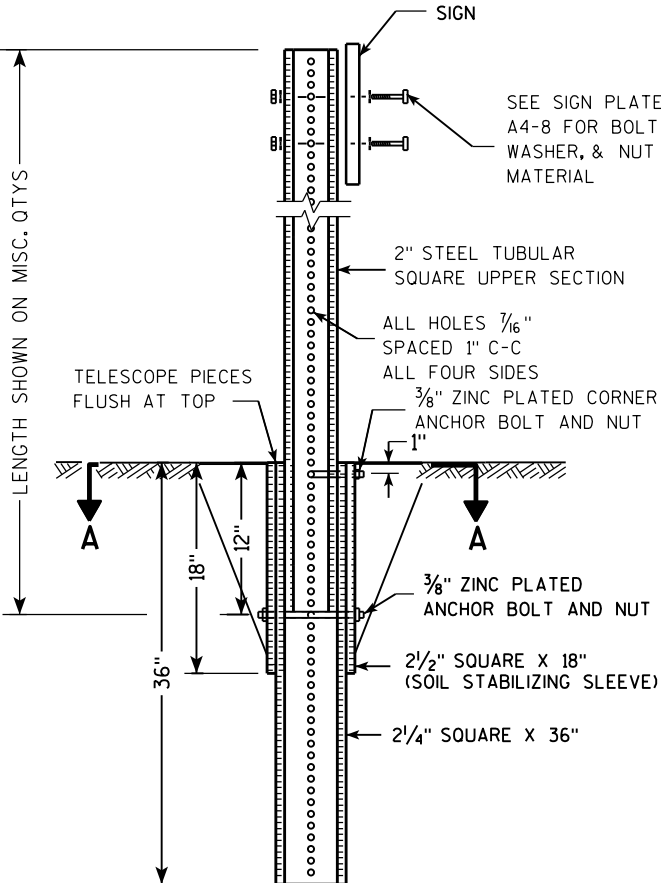
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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)



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).

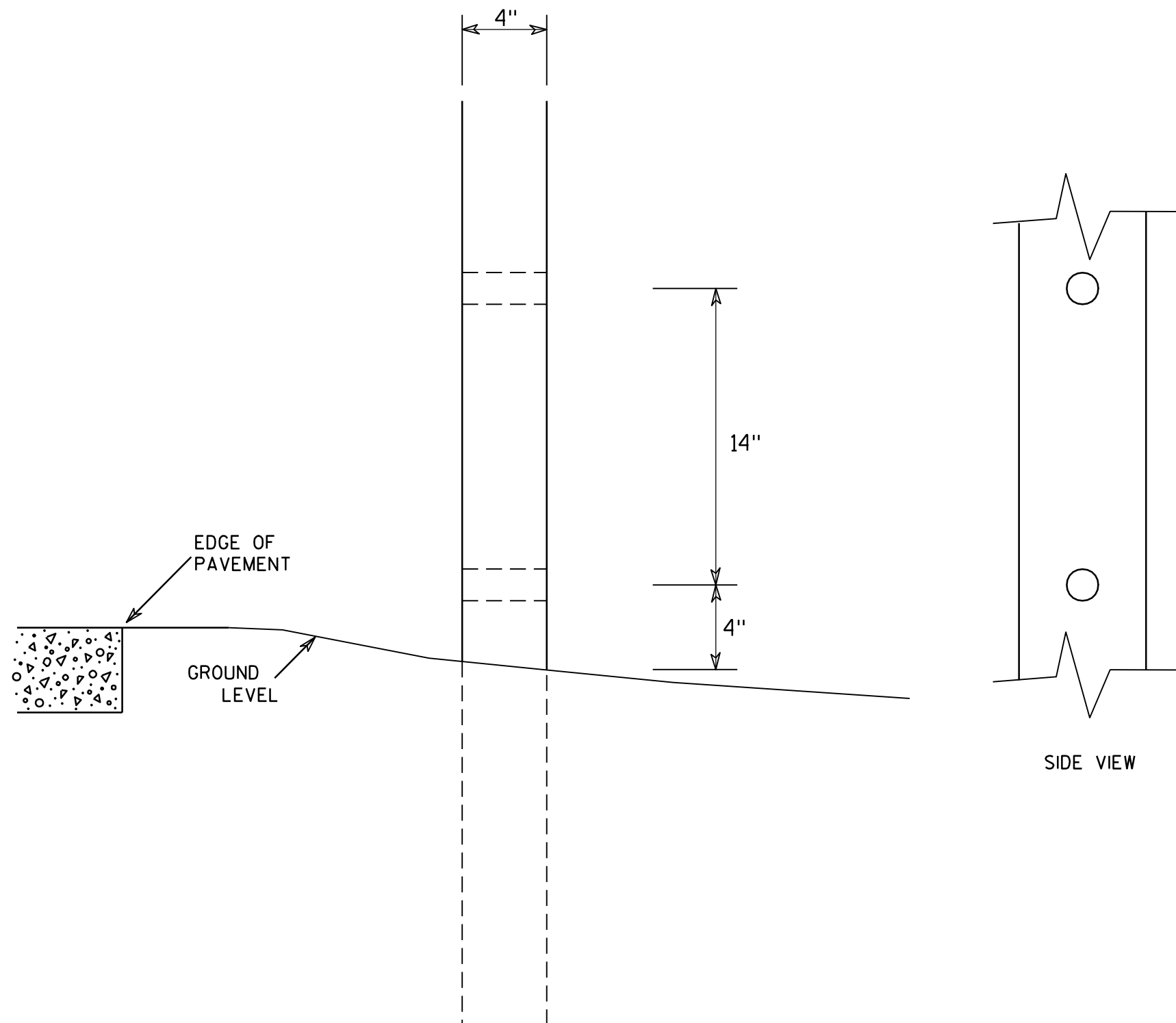
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLAT 43 14-9.9

7



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

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:

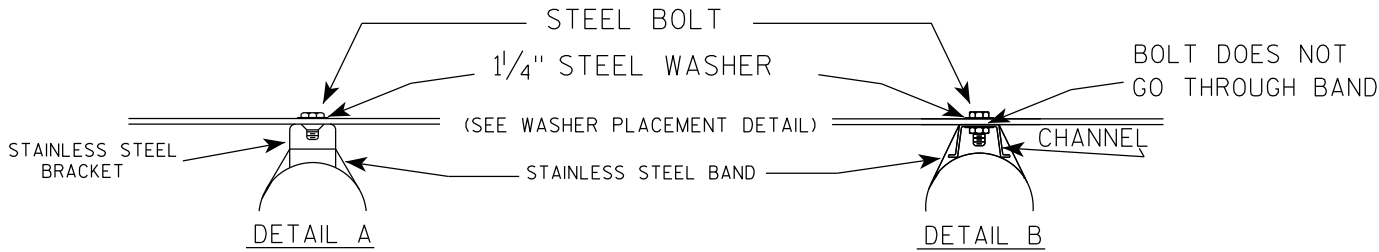
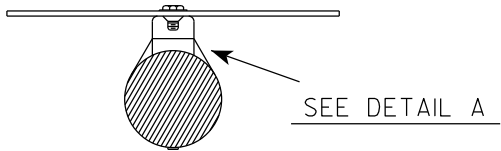
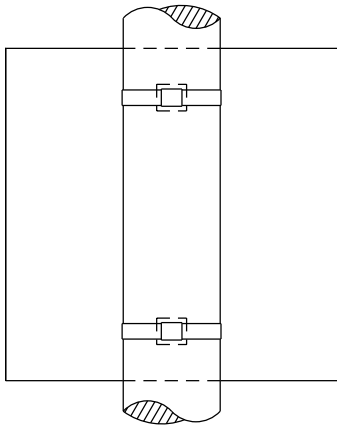
COUNTY:

SHEET NO: 44

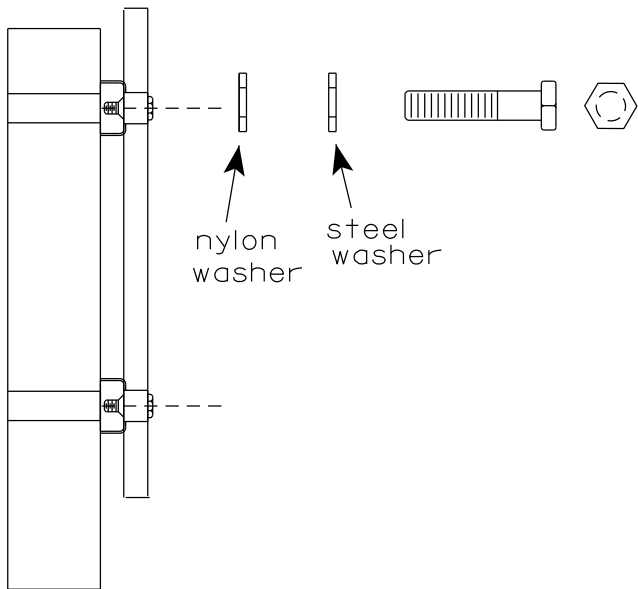
E

BANDING

SINGLE SIGN



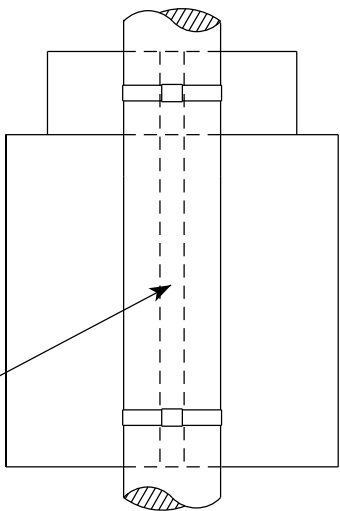
WASHER PLACEMENT



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

CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

"J" ASSEMBLY



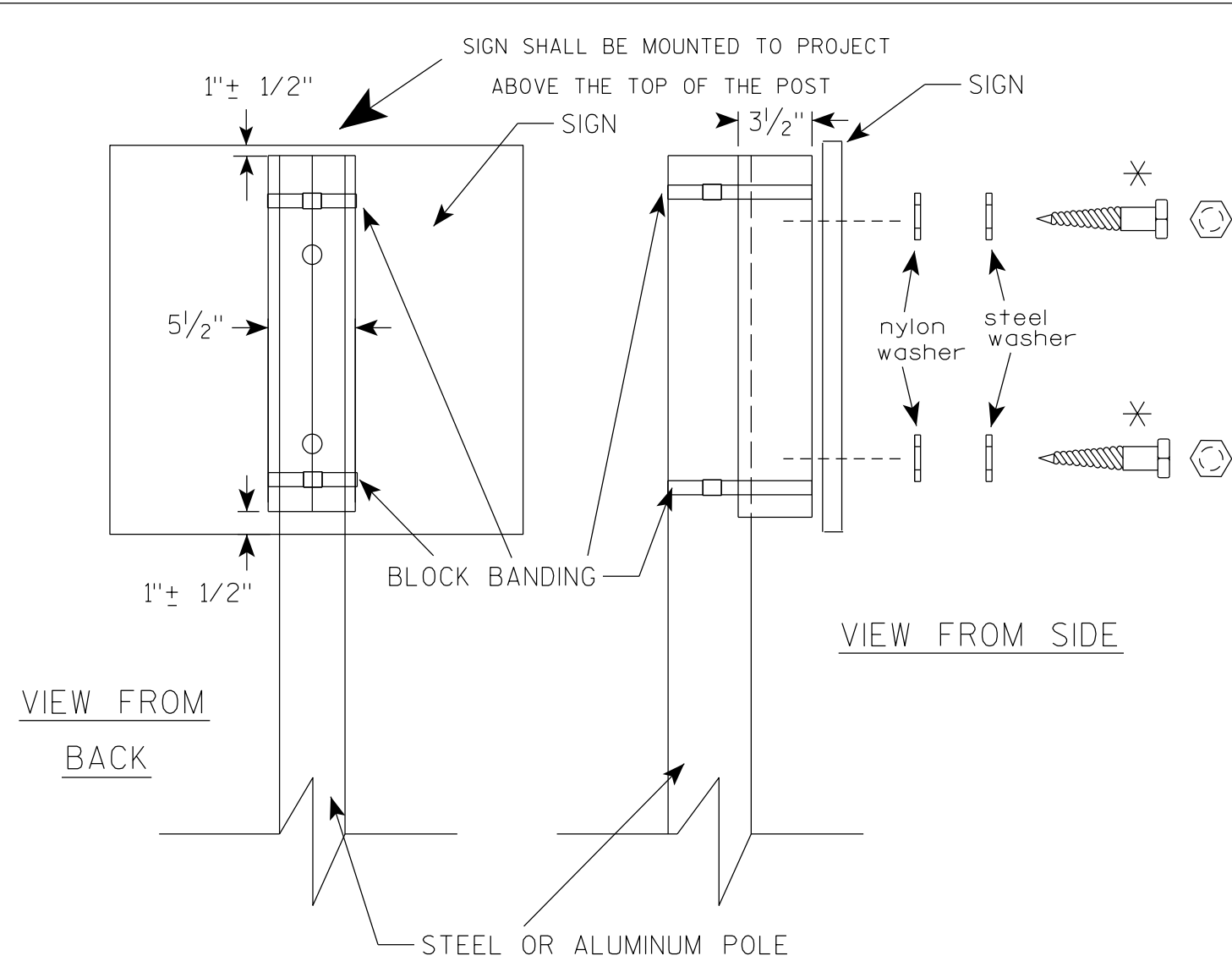
SEE DETAIL B

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 3/4" 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

STANDARD SIGN
SIGN BANDING DETAILS

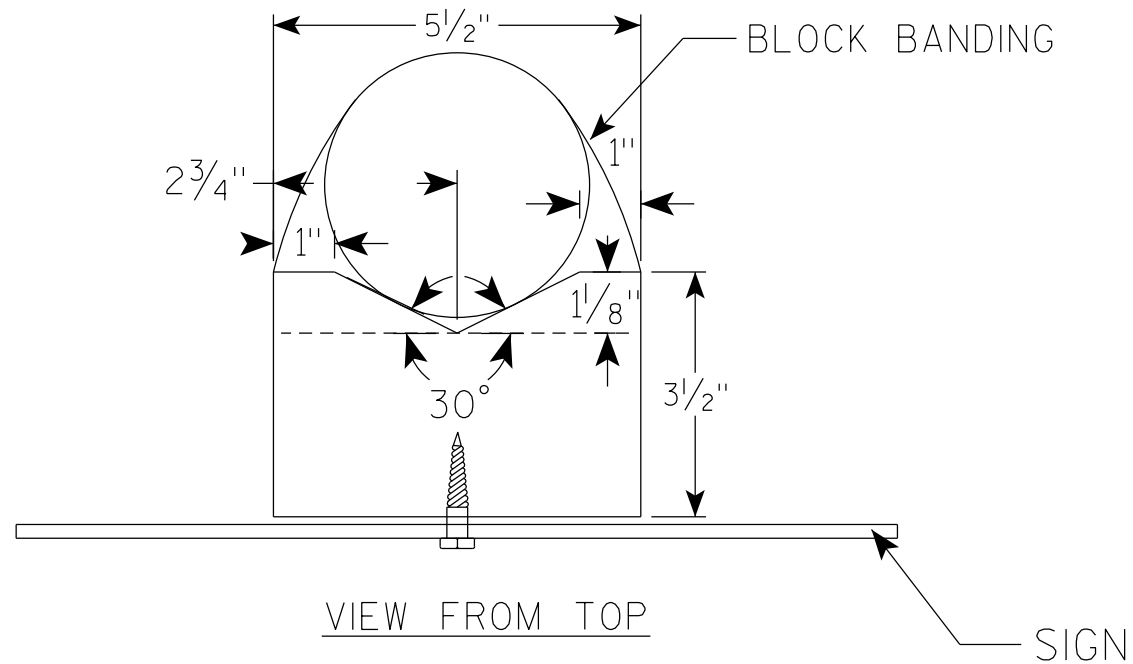
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4



VIEW FROM
BACK

VIEW FROM SIDE



VIEW FROM TOP

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, $\frac{3}{4}$ " 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 NORMALLY 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 $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

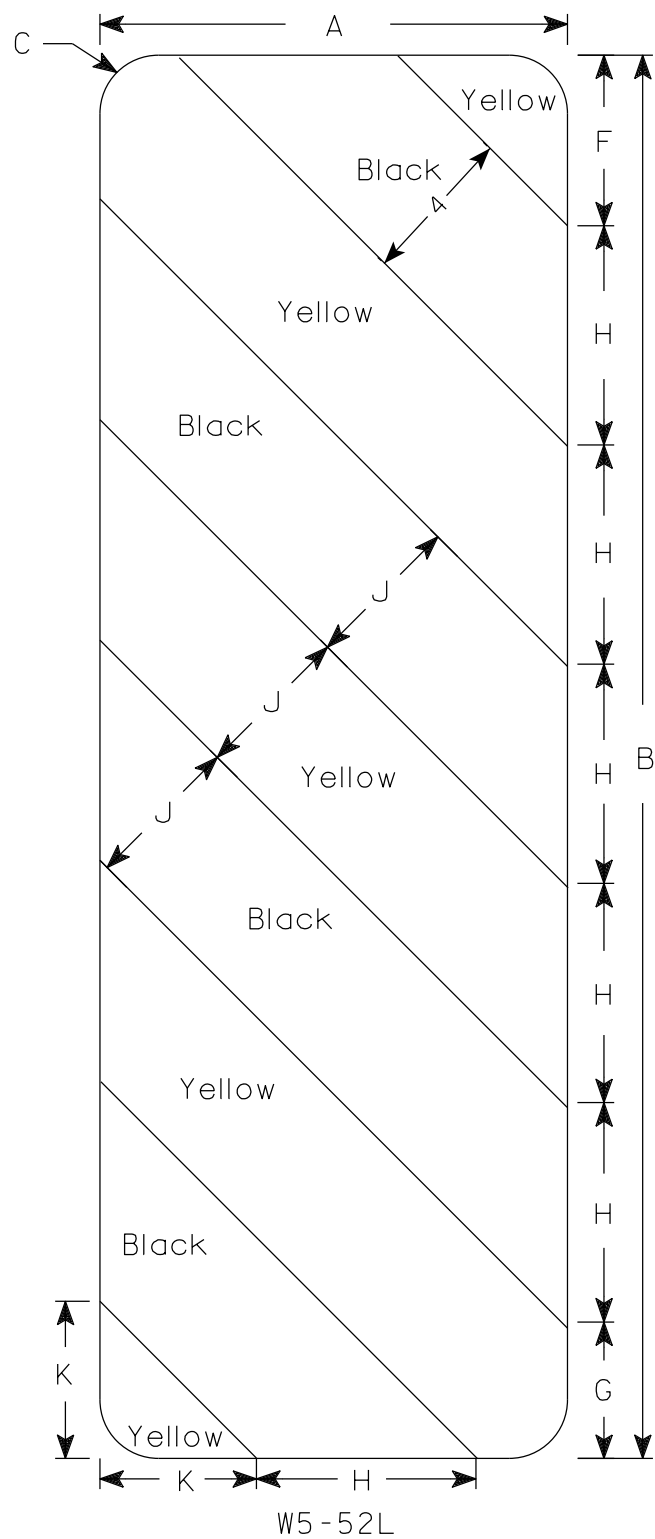
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

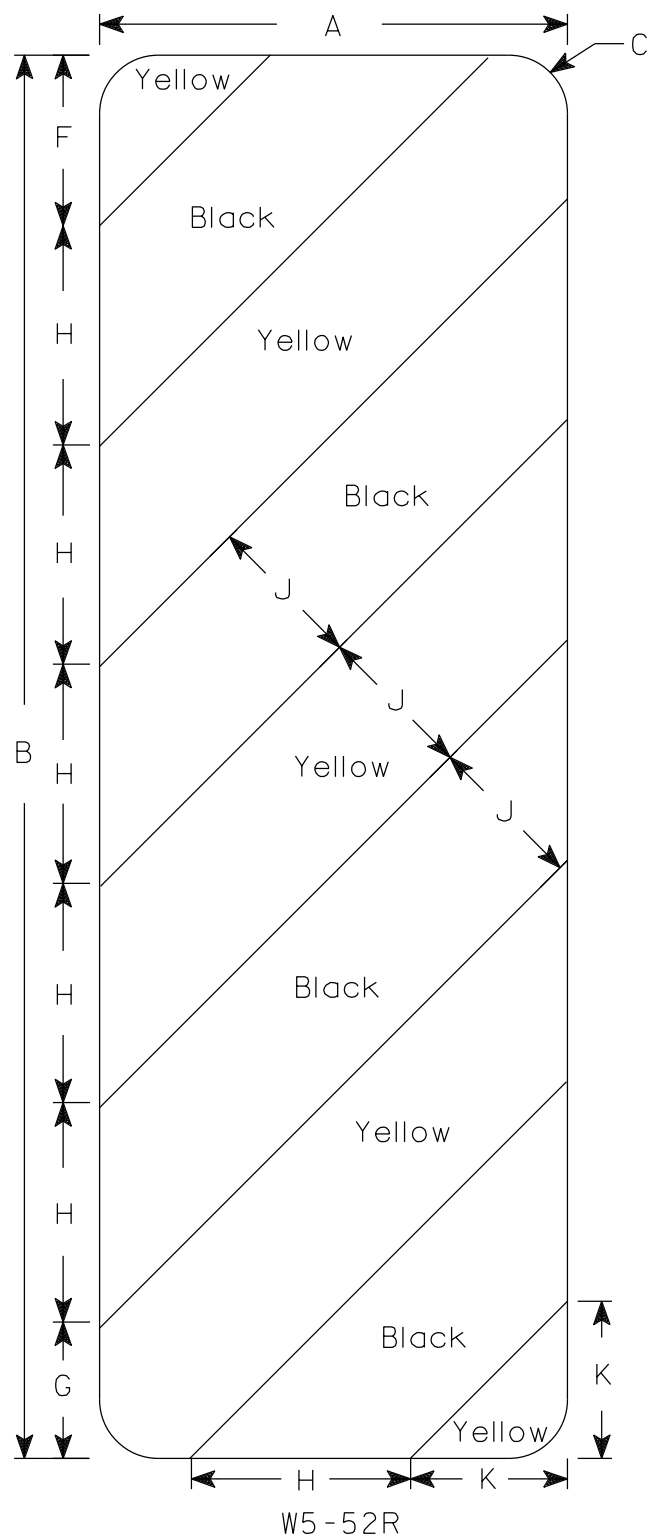
PROJECT NO:

SHEET NO: 46

E



W5-52L



W5-52R

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Yellow
 - Message - Black
- 3. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54	1 1/2			6	5 1/2	8 1/2	45°	6	6 5/16																6.75
4																											
5																											

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

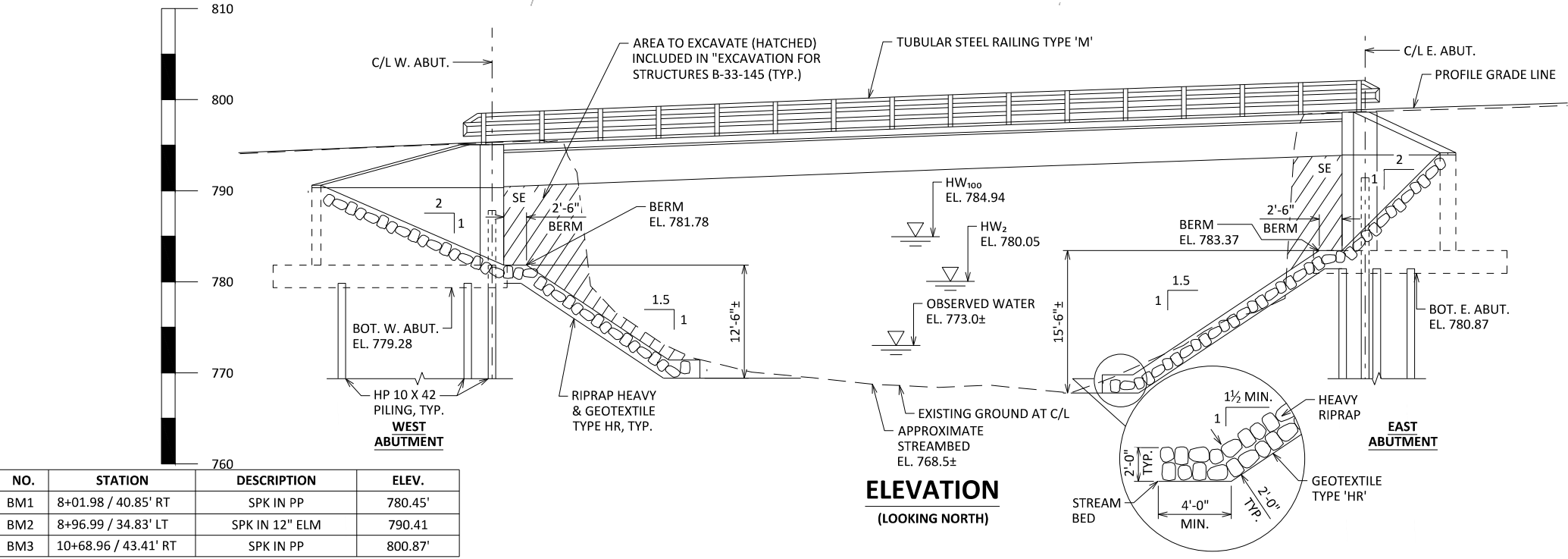
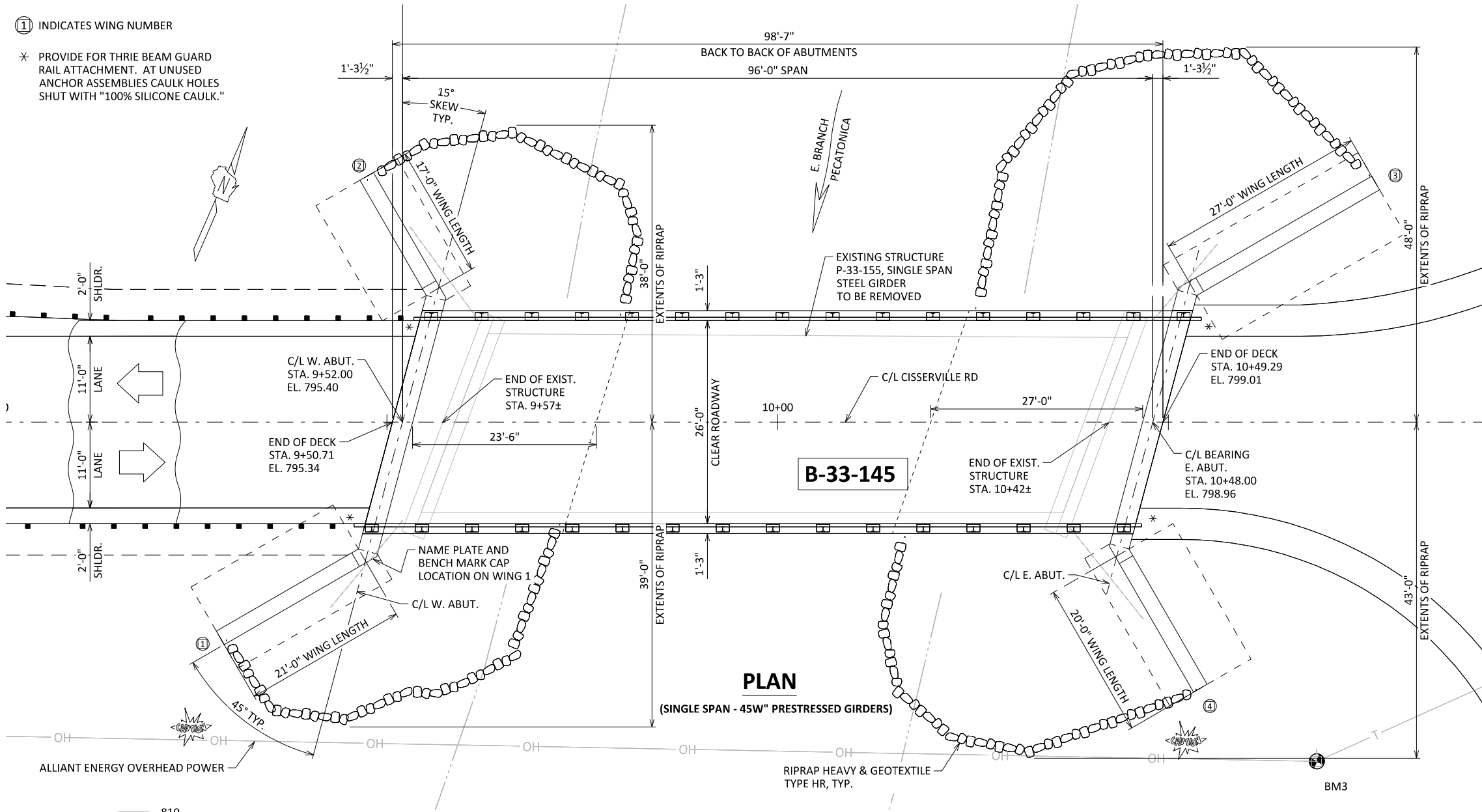
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/4/2024 PLATE NO. W5-52.10

X:\KOL\LAFAH\1770835-final-dsgn\51-drawings\20-Struct\B-33-145\Sheet01-General.dwg, 6/30/2026 6:28:10 PM, _DWG To PDF.pc3

① INDICATES WING NUMBER

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK."



NO.	STATION	DESCRIPTION	ELEV.
BM1	8+01.98 / 40.85' RT	SPK IN PP	780.45'
BM2	8+96.99 / 34.83' LT	SPK IN 12" ELM	790.41
BM3	10+68.96 / 43.41' RT	SPK IN PP	800.87'

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.18
OPERATING RATING: RF = 1.78
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE $f'_c = 4,000$ PSI
ALL OTHER $f'_c = 3,500$ PSI

BAR STEEL REINFORCEMENT
GRADE 60 $f_y = 60,000$ PSI

45-W" PRESTRESSED GIRDERS:
CONCRETE MASONRY $f'_c = 8,000$ PSI
STRANDS: 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
WEST ABUT ESTIMATED 60'-0" LONG.
EAST ABUT ESTIMATED 40'-0" LONG.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE PILE CAPACITY.

HYDRAULIC DATA

100-YEAR FREQUENCY:

$Q_{100} = 24,800$ C.F.S.
 $V_{100} = 12.0$ F.P.S.
 $HW_{100} = EL. 784.94$
WATERWAY AREA = 825 SQ. FT.
DRAINAGE AREA = 417 SQ. MI.
SCOUR CRITICAL CODE = 5

ROADWAY OVERTOPPING

FREQUENCY = 2 YEARS
 $Q = 3,930$ C.F.S.
 $HW = EL. 780.05$

2-YEAR FREQUENCY:

$Q_2 = 3,930$ C.F.S.
 $V_2 = 6.0$ F.P.S.
 $HW_2 = EL. 780.05$

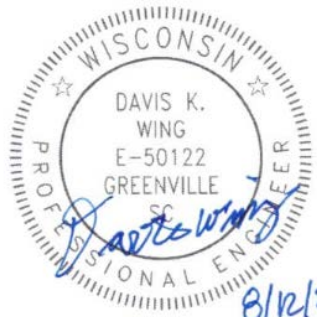
TRAFFIC DATA

FEATURE ON:

ADT = 290 (2027)
ADT = 320 (2047)
R.D.S. = 55 MPH

LIST OF DRAWINGS:

- GENERAL PLAN
- CROSS SECTION & QUANTITIES
- SUBSURFACE EXPLORATION
- WEST ABUTMENT
- WING 1 DETAILS
- WING 2 DETAILS
- WEST ABUT BAR DETAILS
- EAST ABUTMENT
- WING 3 DETAILS
- WING 4 DETAILS
- EAST ABUT BAR DETAILS
- SUPERSTRUCTURE
- SUPERSTRUCTURE DETAILS
- 45W PS GIRDER
- STRAND DRAPING & PATTERNS
- STEEL DIAPHRAGMS
- TUBULAR STEEL RAILING TYPE 'M'



STRUCTURE DESIGN CONTACTS:

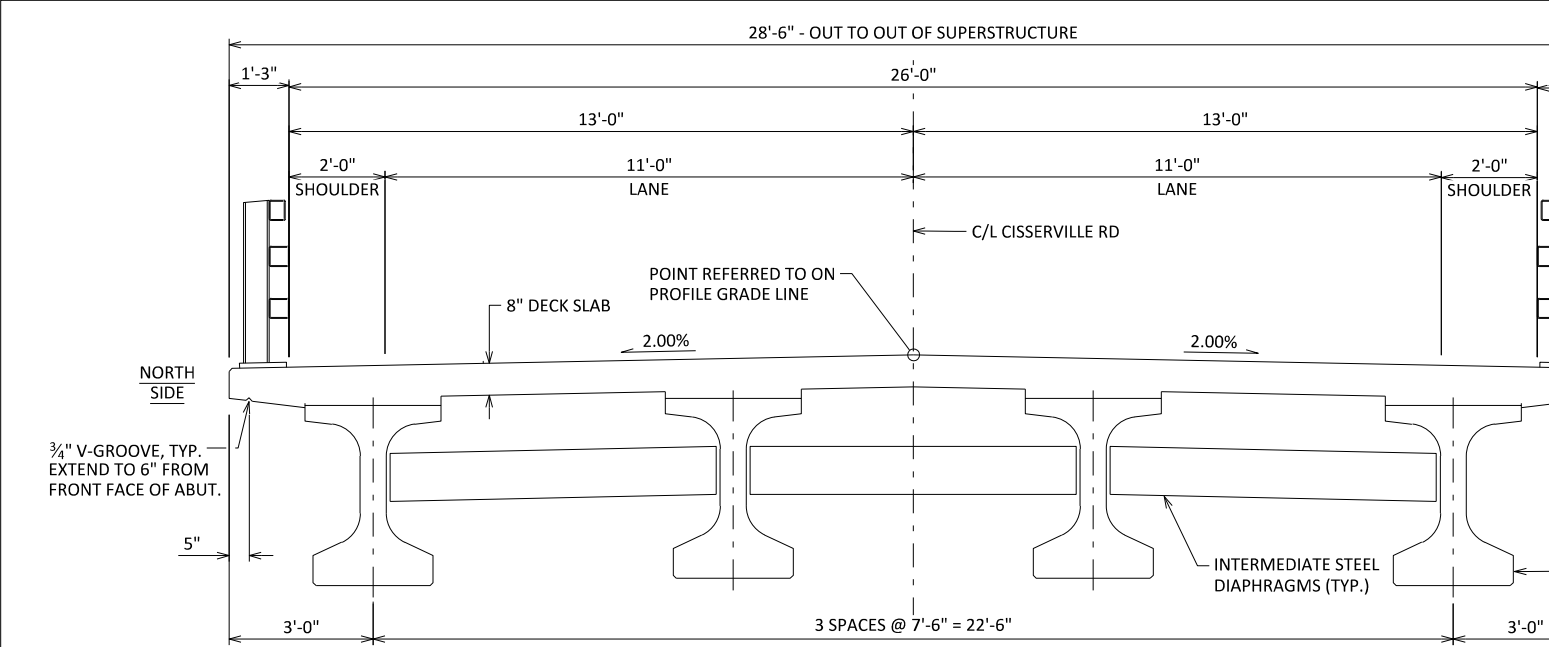
SEH: DAVIS WING, PE 336.464.7271
WISDOT: AARON BONK 608.261.0261

NO.	DATE	REVISION	BY
 SHORT ELLIOTT HENDRICKSON INC.			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED		08/12/26	DATE
CHIEF STRUCTURES DESIGN ENGINEER			
STRUCTURE B-33-145			
CISSERVILLE RD OVER E BRANCH PECATONICA			
COUNTY	LAYFAYETTE	TOWN	WIOTA
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATION			
DESIGNED BY	DKW	DESIGN CK'D	JGM
DRAWN BY	RAD	PLANS CK'D	DKW
GENERAL PLAN			SHEET 1 OF 17 48

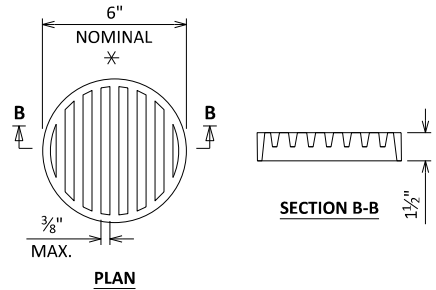
I.D.

DATE:

X:\KO\LAFAH\177083\5-final-dsgn\51-drawings\20-Struct\B-33-145\Sheet02-Quantities.dwg, 6/30/2026 6:28:19 PM, _DWG To PDF.pc3



CROSS SECTION THRU ROADWAY



RODENT SHIELD DETAIL

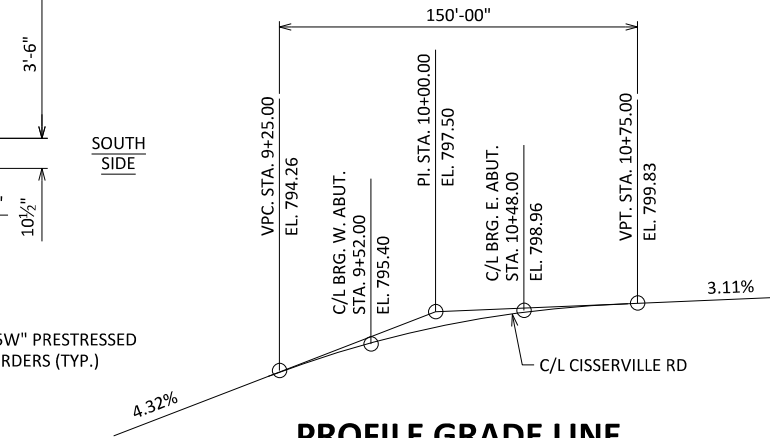
* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

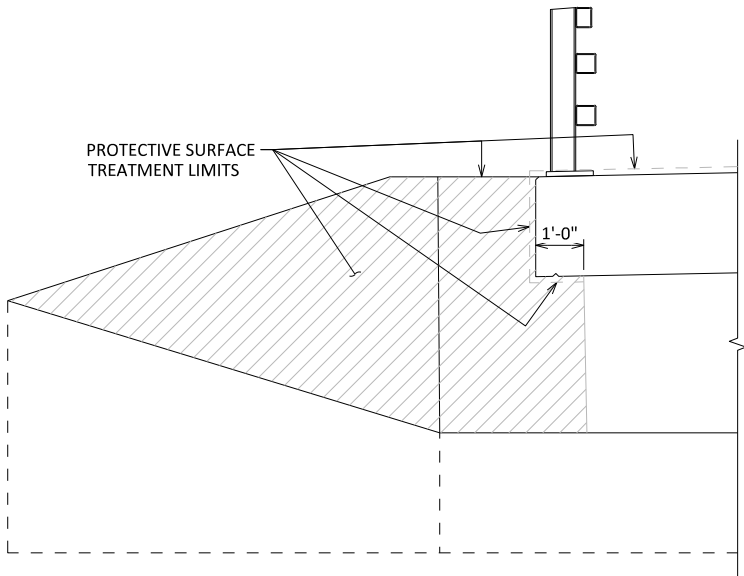
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

TOTAL ESTIMATED QUANTITIES

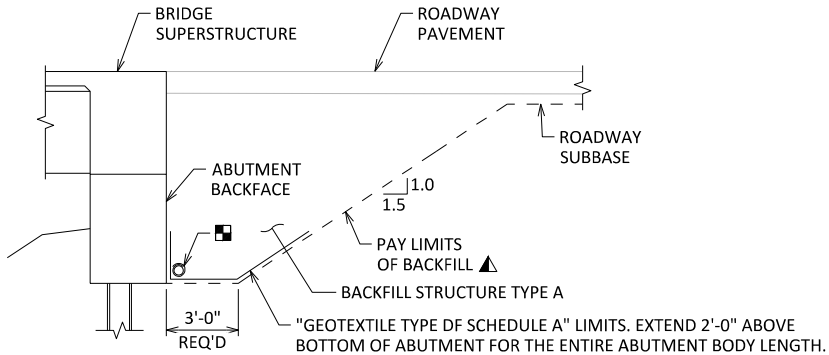
BID ITEM NUMBER	BID ITEMS	UNIT	WEST ABUT	EAST ABUT	SUPER	TOTALS
203.0250	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS P-33-155	EACH	---	---	---	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-33-145	EACH	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	628	805	---	1,433
502.0100	CONCRETE MASONRY BRIDGES	CY	110.3	141.8	103.2	355
502.3200	PROTECTIVE SURFACE TREATMENT	SY	54	70	354	478
503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	---	---	388	388
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2,880	3,330	---	6,210
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	8,430	11,910	18,240	38,580
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	4	4	---	8
506.4000	STEEL DIAPHRAGMS B-33-145	EACH	---	---	6	6
513.4061	RAILING TUBULAR TYPE M	LF	---	---	202	202
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	21	22	---	43
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	915	610	---	1,525
606.0300	RIPRAP HEAVY	CY	151	198	---	349
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	115	135	---	250
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	72	81	---	153
645.0120	GEOTEXTILE TYPE HR	SY	258	335	---	593
	NON-BID TEMS					
	FILLER	SIZE	1/2", 3/4"			
	NAMEPLATE	EACH	1			
	BENCHMARK	EACH	1			



PROFILE GRADE LINE



PROTECTIVE SURFACE TREATMENT DETAILS



TYPICAL SECTION THRU ABUTMENT

- ▲ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

STATE PROJECT NUMBER

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GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES B-33-0145" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

AT ABUTMENTS, HP 12X53 STEEL PILING MAY BE USED IN LIEU OF HP 10X42 STEEL PILING. PAYMENT SHALL BE BASED ON BID PRICE FOR HP 10X42 STEEL PILING.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE "45W PRESTRESSED GIRDER DETAILS 2" SHEET.

AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE).

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-145			
	DRAWN BY	RAD	PLANS CK'D DKW
CROSS SECTION & QUANTITIES		SHEET 2 OF 17 49	

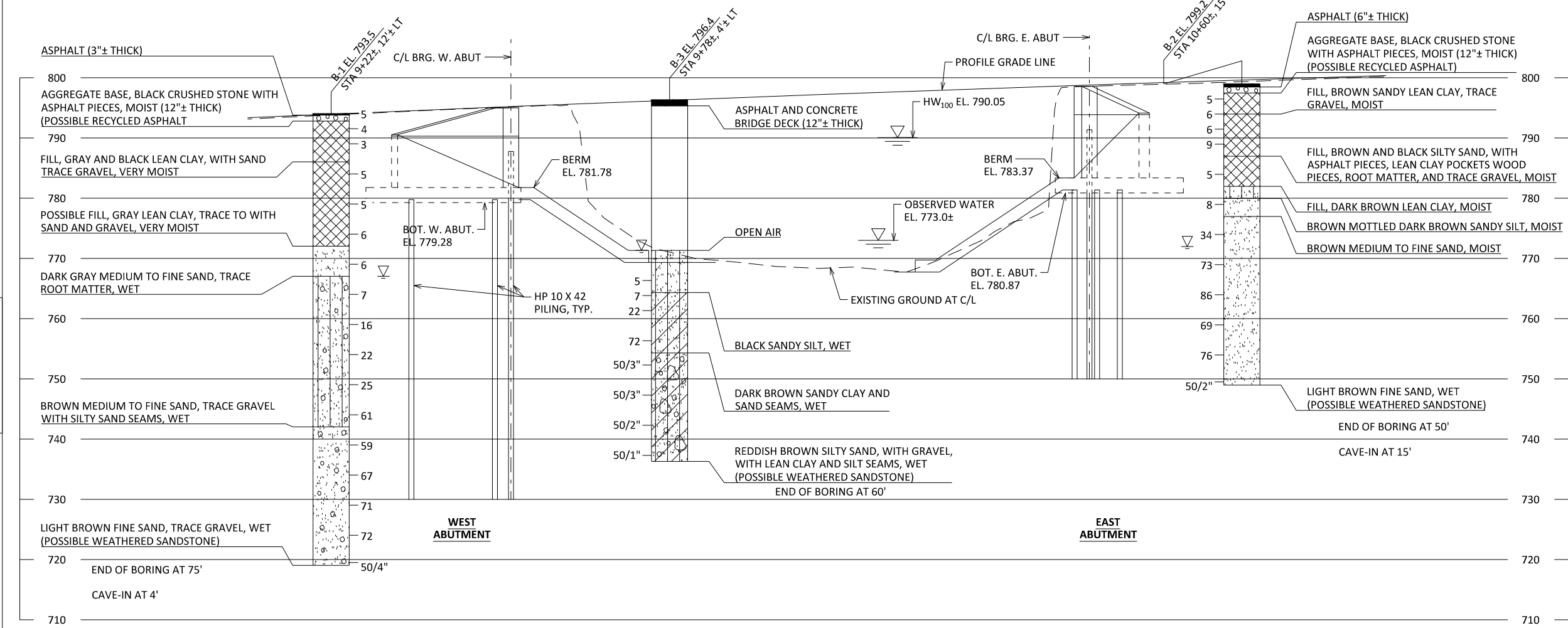
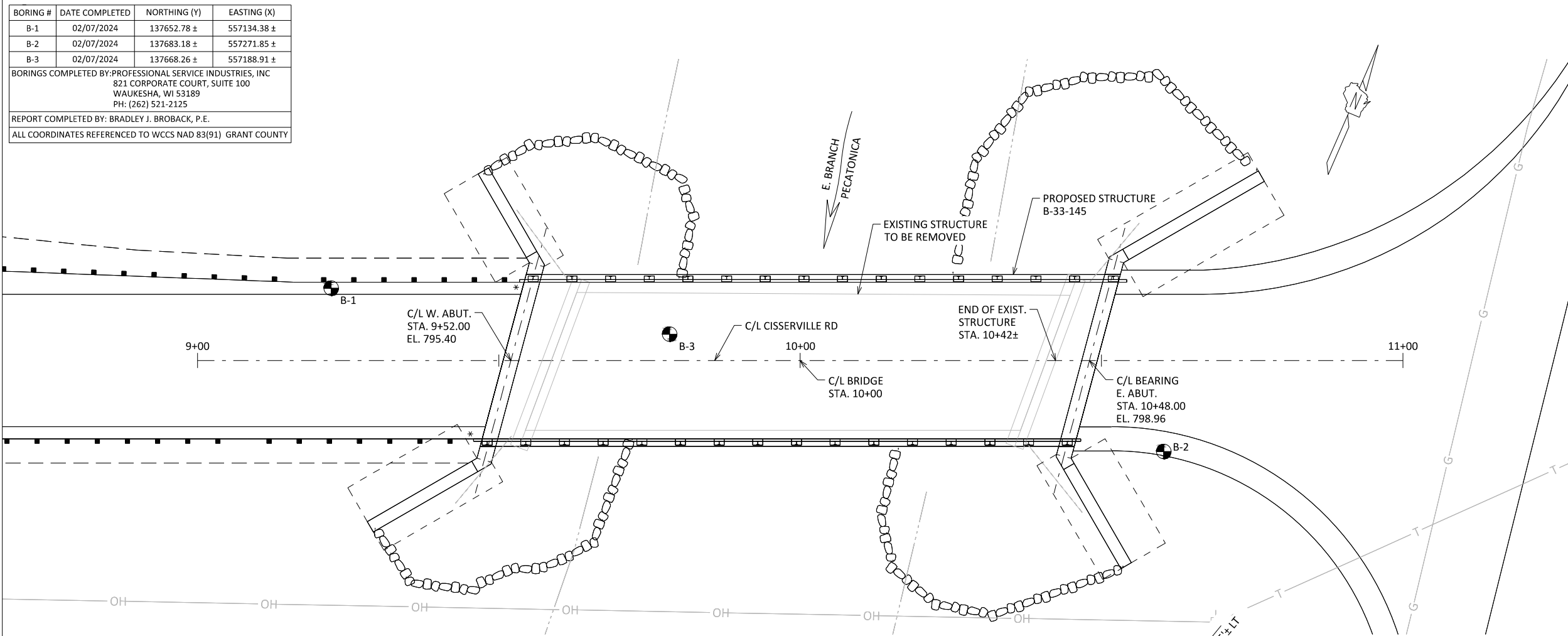
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BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	02/07/2024	137652.78 ±	557134.38 ±
B-2	02/07/2024	137683.18 ±	557271.85 ±
B-3	02/07/2024	137668.26 ±	557188.91 ±

BORINGS COMPLETED BY:PROFESSIONAL SERVICE INDUSTRIES, INC
821 CORPORATE COURT, SUITE 100
WAUKESHA, WI 53189
PH: (262) 521-2125

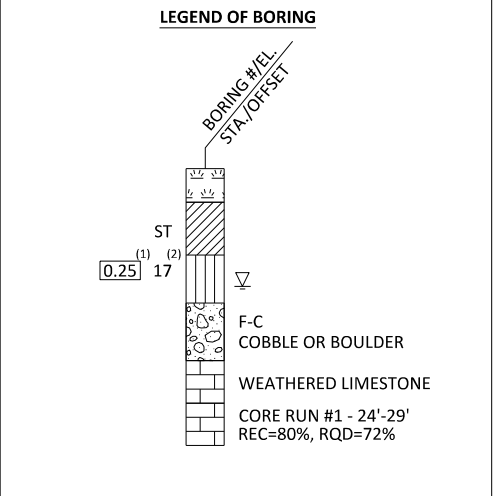
REPORT COMPLETED BY: BRADLEY J. BROBACK, P.E.

ALL COORDINATES REFERENCED TO WCCS NAD 83(91) GRANT COUNTY



STATE PROJECT NUMBER
5695-00-73

<u>MATERIAL SYMBOLS</u>					
	ASPHALT		TOPSOIL		PEAT
	CONCRETE		FILL		GRAVEL
	SAND		CLAY		SILT
	BOULDERS OR COBBLES		LIMESTONE		BEDROCK (UNKNOWN)
	SHALE		SANDSTONE		IGNEOUS/ META



- ⁽¹⁾ UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)
- ⁽²⁾ UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

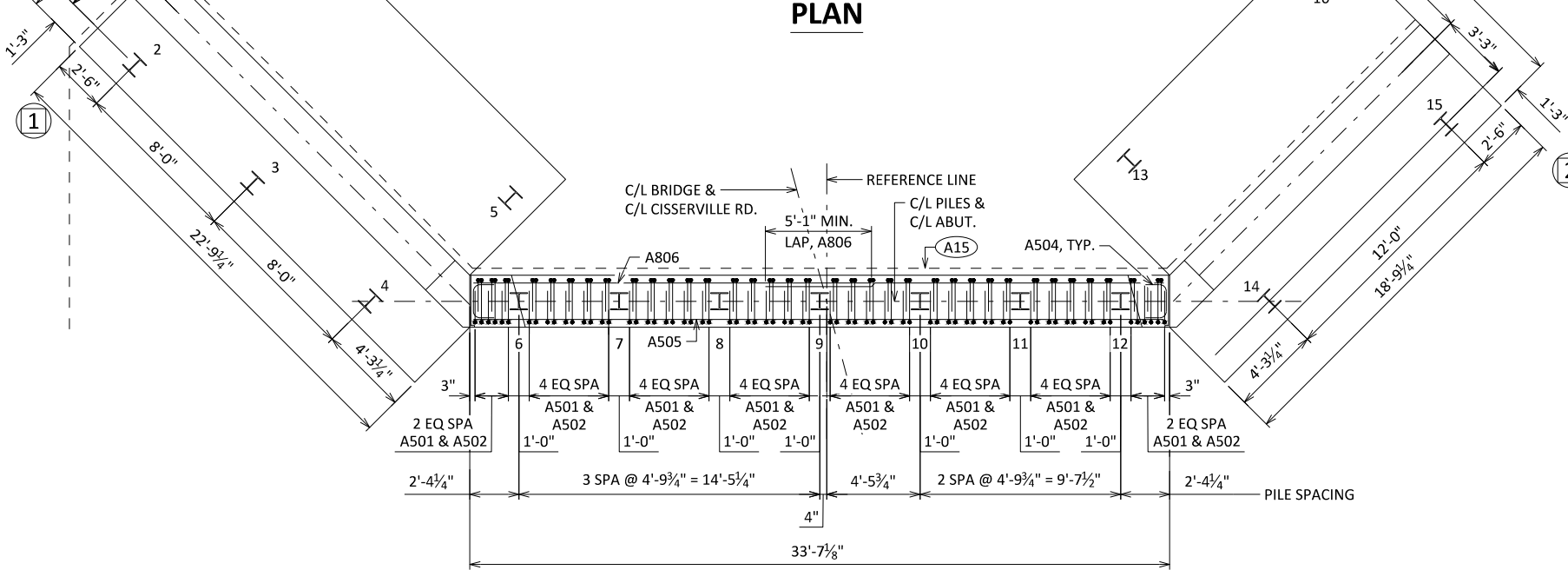
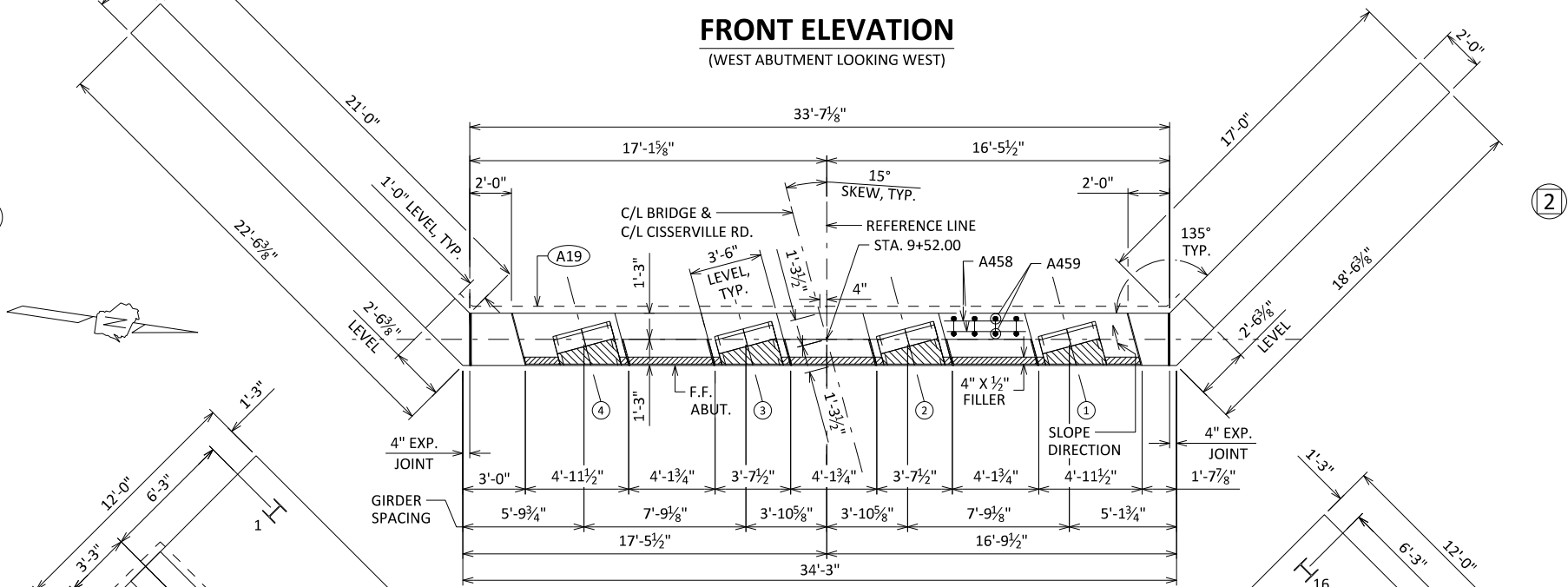
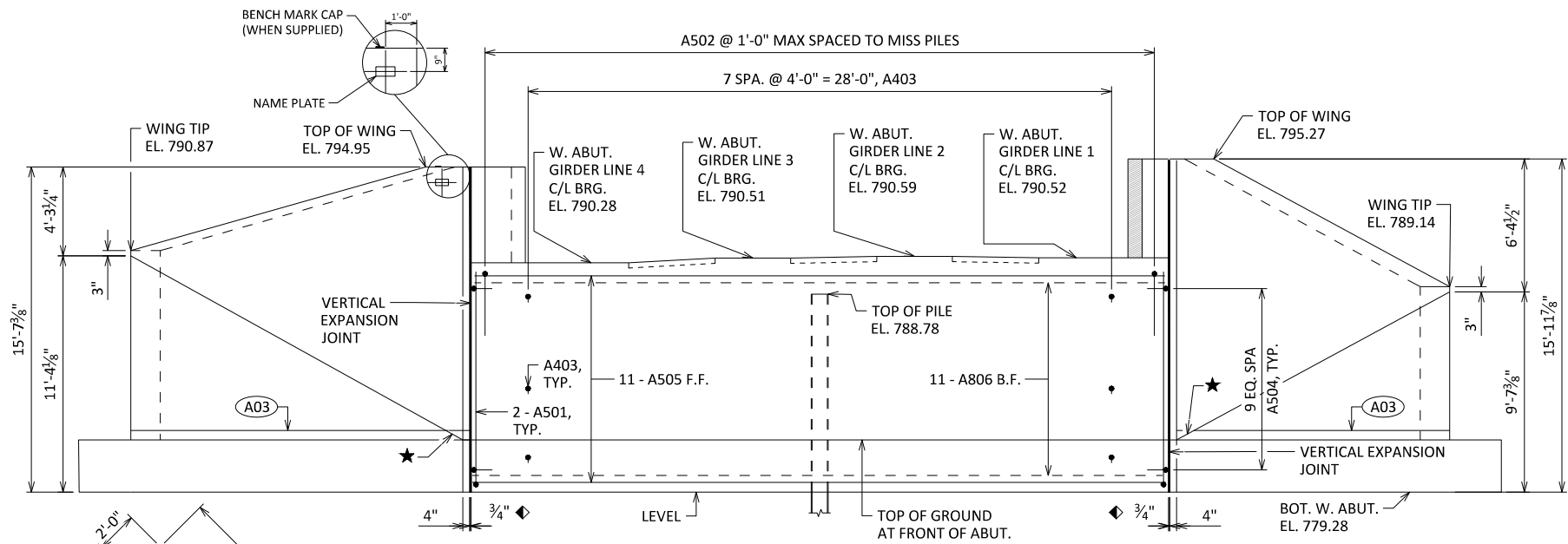
<u>GROUND WATER ELEVATION</u>	
	AT TIME OF DRILLING
	END OF DRILLING
	AFTER DRILLING
<u>ABBREVIATIONS</u>	
F-FINE	M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

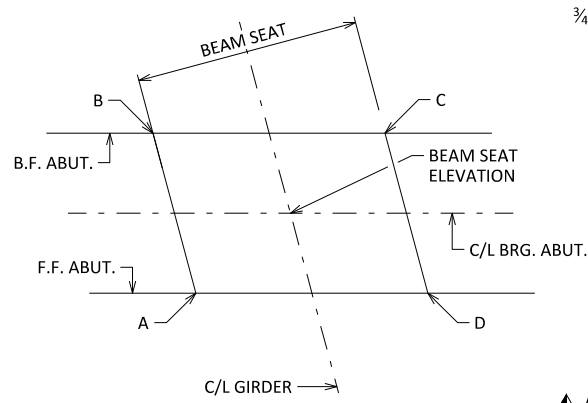
BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-145			
DRAWN BY		RAD	PLANS CK'D DKW
SUBSURFACE EXPLORATION		SHEET 3 OF 17 50	

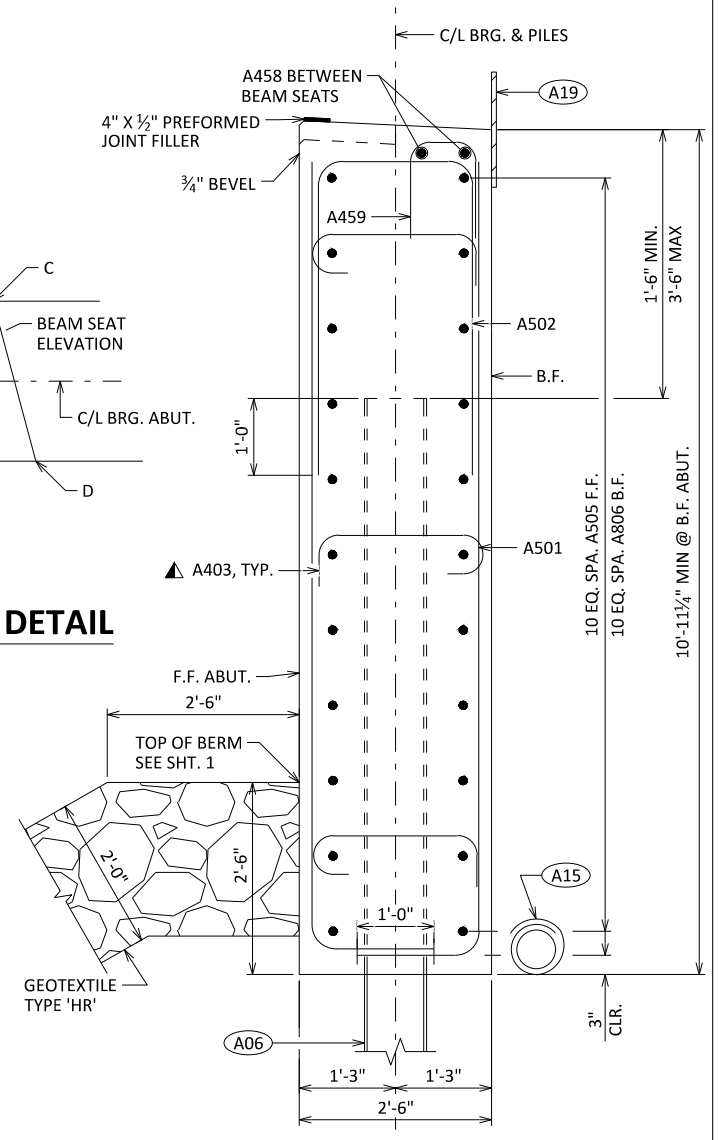
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PILE LAYOUT



SLOPED BEAM SEAT DETAIL



SECTION THRU BODY

SLOPED BEAM SEAT ELEVATIONS

WEST ABUTMENT				
GIRDER	A ELEV.	B ELEV.	C ELEV.	D ELEV.
1	790.56	790.45	790.50	790.61
2	790.63	790.52	790.56	790.67
3	790.54	790.44	790.48	790.58
4	790.30	790.19	790.24	790.35

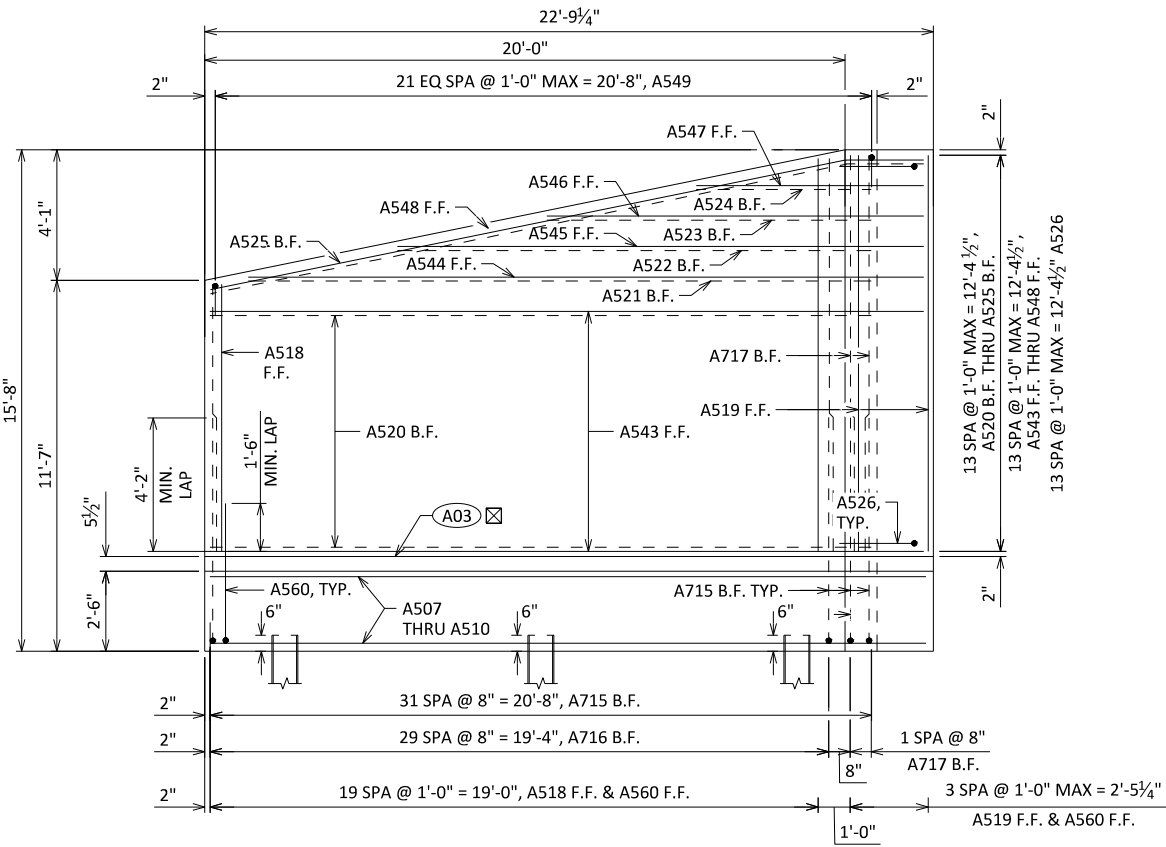
- A03** OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).
- A06** SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 60'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- A15** PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5' MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A17** 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER NON-STAINING GRAY NON-BITUMINOUS JOINT SE (1" DEEP AND HOLD 3/8" BELOW SURFACE OF CONC EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE
- A18** 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT PARALLEL WITH GIRDER.
- A19** 18" (RMW) RUBBERIZED MEMBRANE WATERPROC SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

LEGEND

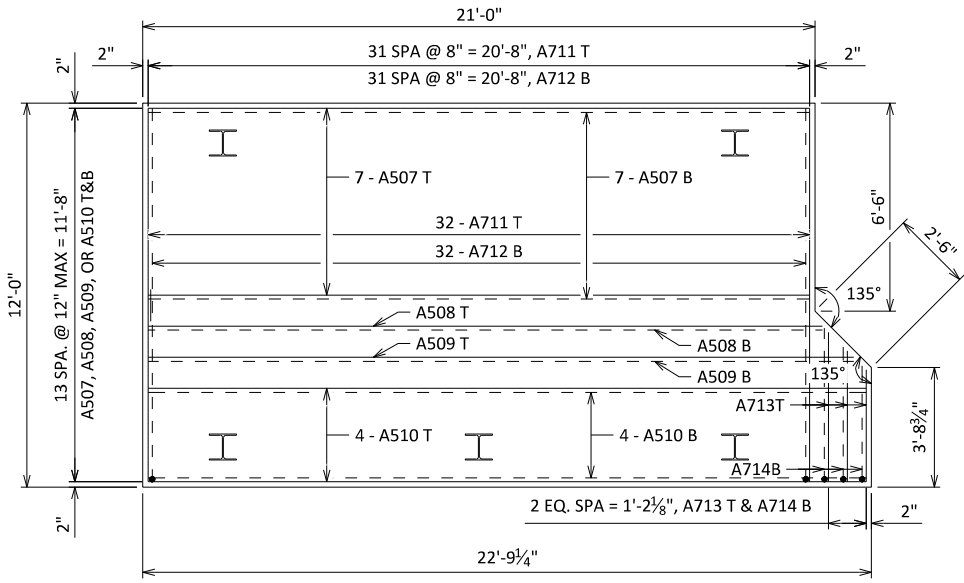
- F.F. = FRONT FACE
B.F. = BACK FACE
E.F. = EACH FACE
- ▲ ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES
- ◆ SEE SHEET 7 OF 17 FOR VERT. EXP. JOINT DETAIL
- ★ ENSURE WINGWALL FOOTING IS FULLY COVERED BY GEOTEXTILE HR FABRIC AND A LAYER OF HEAVY RIPRAP.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-145			
DRAWN BY		ZLM	PLANS CK'D DKW
WEST ABUTMENT		SHEET 4 OF 17 51	

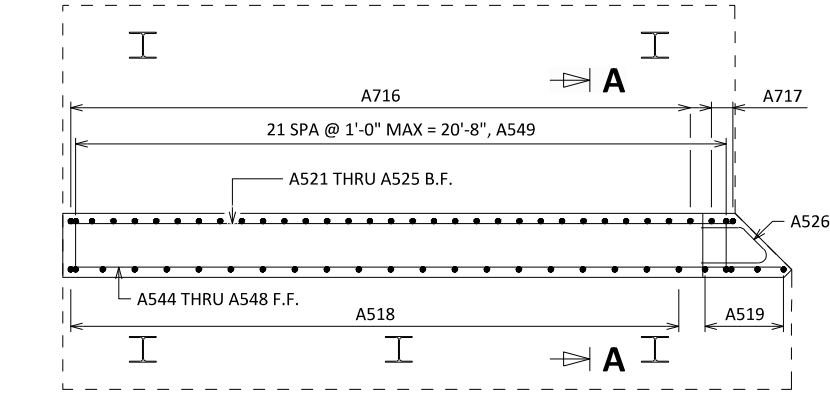
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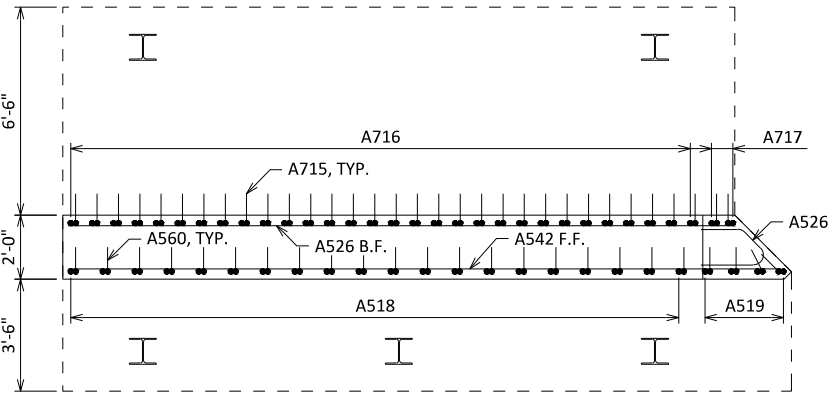
WING 1 ELEVATION
SHOWING F.F. WING



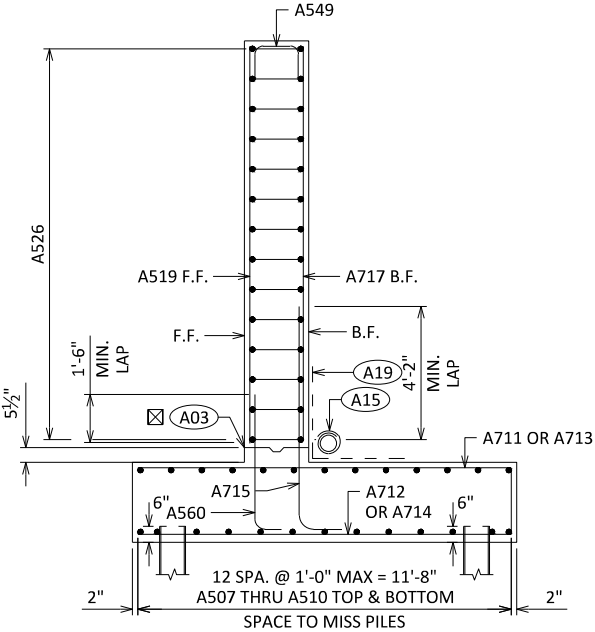
WING 1 FOOTING PLAN
SHOWING TOP OF FOOTING



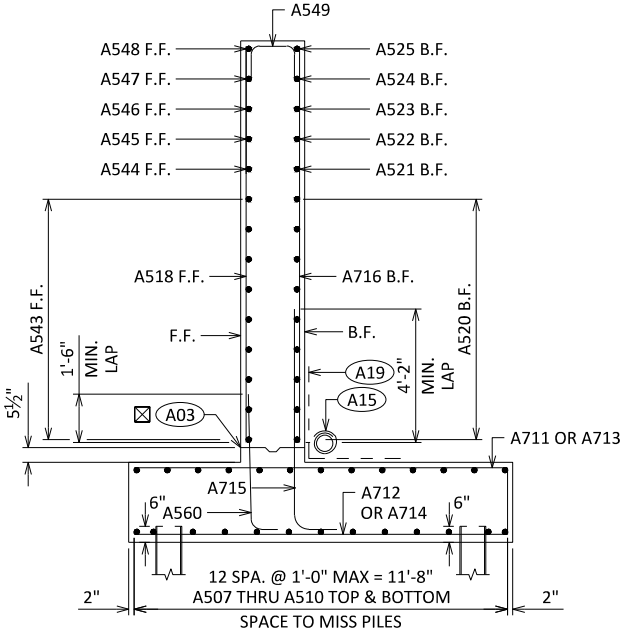
WING 1 PLAN
SHOWING UPPER WING REINFORCEMENT



WING 1 PLAN
SHOWING LOWER WING REINFORCEMENT



SECTION THRU WING 1

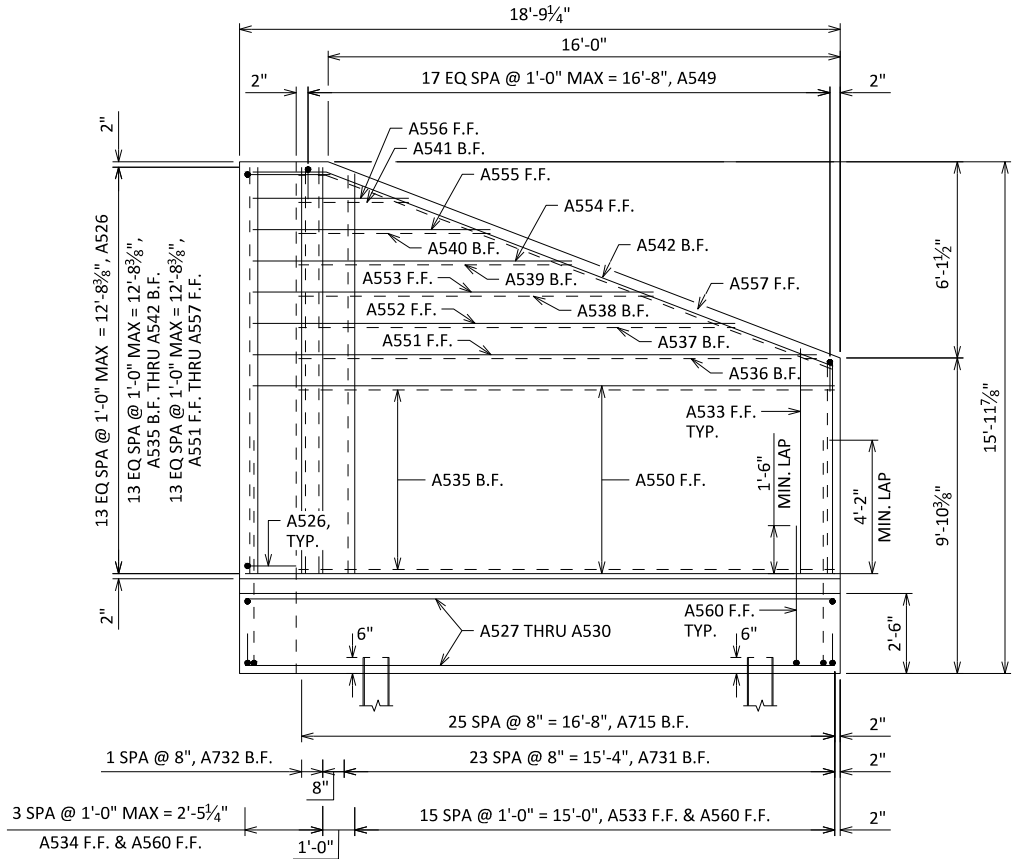


SECTION A-A

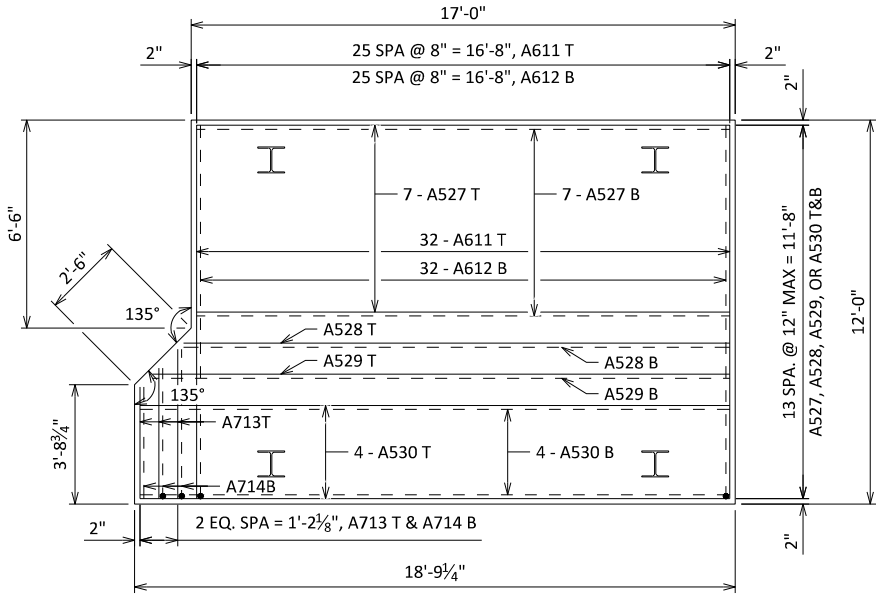
- A03** OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).
- A15** PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A19** 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- ☒ IF OPTIONAL CONSTRUCTION JOINT IS USED, SURFACE TO BE CLEANED AND FREE OF LATIENENCE BEFORE STEM IS POURED.

STATE PROJECT NUMBER			
5695-00-73			
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-145			
DRAWN BY		ZLM	PLANS CK'D DKW
WING 1 DETAILS		SHEET 5 OF 17	
		52	

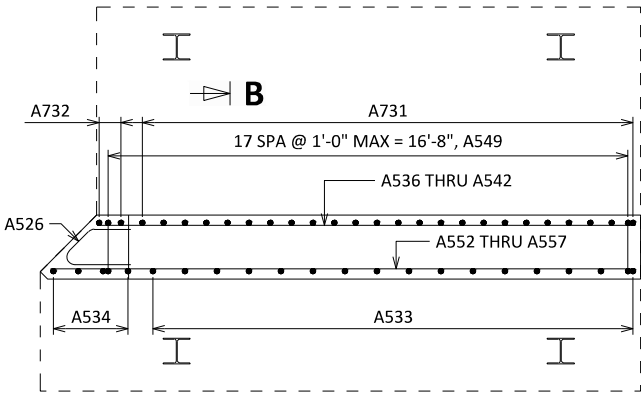
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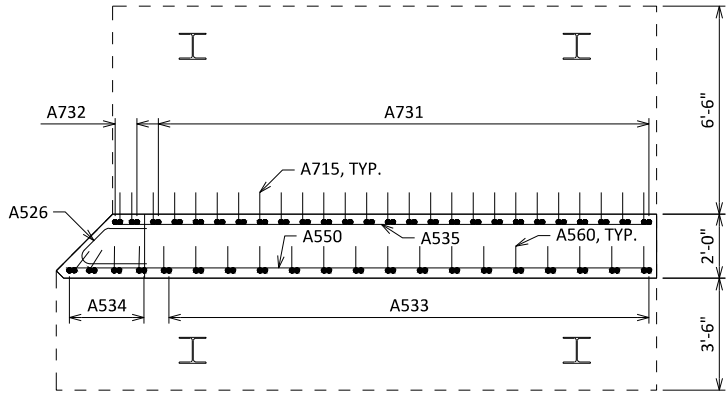
WING 2 ELEVATION
SHOWING F.F. WING



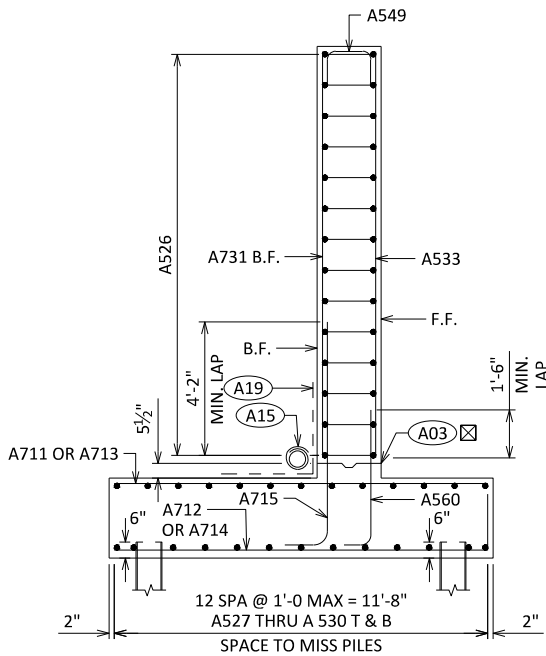
WING 2 FOOTING PLAN
SHOWING TOP OF FOOTING



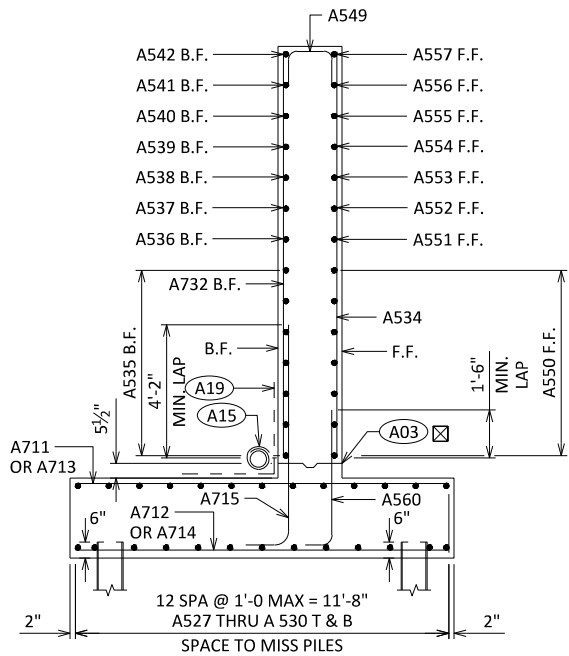
WING 2 PLAN
SHOWING UPPER WING REINFORCEMENT



WING 2 PLAN
SHOWING LOWER WING REINFORCEMENT



SECTION THRU WING 2



SECTION B-B

- A03** OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).
- A15** PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A19** 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- ☒ IF OPTIONAL CONSTRUCTION JOINT IS USED, SURFACE TO BE CLEANED AND FREE OF LATIENENCE BEFORE STEM IS POURED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-145			
DRAWN BY		ZLM	PLANS CK'D DKW
WING 2 DETAILS		SHEET 6 OF 17	
		53	

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BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

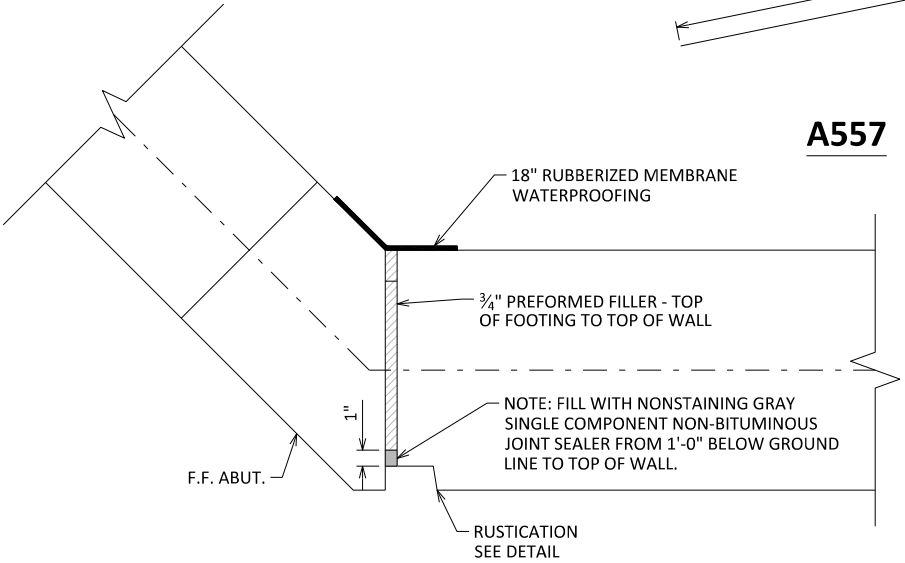
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		72	11'-9"	X		ABUTMENT BODY VERT
A502		36	7'-11"	X		ABUTMENT BODY STIRRUP - TOP U-BAR
A403		32	3'-3"	X		ABUTMENT BODY TIE
A504		20	3'-10"	X		ABUTMENT BODY STIRRUP - HORIZ U-BAR
A505		11	33'-3"			ABUTMENT BODY HORIZ - F.F.
A806		22	19'-2"			ABUTMENT BODY HORIZ - B.F.
A507	X	14	20'-8"			FOOTING HORIZ TOP & BOTTOM
A508	X	2	21'-1"			FOOTING HORIZ TOP & BOTTOM
A509	X	2	22'-1"			FOOTING HORIZ TOP & BOTTOM
A510	X	8	22'-5"			FOOTING HORIZ TOP & BOTTOM
A711	X	58	11'-8"			FOOTING HORIZ TOP
A712	X	58	12'-10"	X		FOOTING HORIZ BOTTOM
A713	X	6	4'-1"		▲	FOOTING HORIZ TOP
A714	X	6	5'-11"	X	▲	FOOTING HORIZ BOTTOM
A715	X	58	8'-4"	X		FOOTING DOWEL B.F.
A716	X	30	10'-4"		▲	WING 1 VERT. B.F.
A717	X	2	12'-4"			WING 1 VERT. B.F.
A518	X	20	10'-4"		▲	WING 1 VERT F.F.
A519	X	4	12'-4"			WING 1 VERT F.F.
A520	X	8	20'-8"			WING 1 HORIZ B.F.
A521	X	1	19'-6"			WING 1 HORIZ B.F.
A522	X	1	14'-10"			WING 1 HORIZ B.F.
A523	X	1	10'-2"			WING 1 HORIZ B.F.
A524	X	1	5'-6"			WING 1 HORIZ B.F.
A525	X	1	21'-1"	X		WING 1 HORIZ B.F.
A526	X	28	10'-5"	X		WING 1 & 2 CORNER
A527	X	14	16'-8"			FOOTING HORIZ. TOP & BOTTOM
A528	X	2	17'-1"			FOOTING HORIZ. TOP & BOTTOM
A529	X	2	18'-1"			FOOTING HORIZ. TOP & BOTTOM
A530	X	8	18'-5"			FOOTING HORIZ. TOP & BOTTOM
A731	X	24	9'-8"		▲	WING 2 VERT B.F.
A732	X	2	12'-8"			WING 2 VERT B.F.
A533	X	16	9'-8"		▲	WING 2 VERT F.F.
A534	X	4	12'-8"			WING 2 VERT F.F.
A535	X	7	18'-5"			WING 2 HORIZ B.F.
A536	X	1	17'-10"			WING 2 HORIZ B.F.
A537	X	1	15'-4"			WING 2 HORIZ B.F.
A538	X	1	12'-9"			WING 2 HORIZ B.F.
A539	X	1	10'-3"			WING 2 HORIZ B.F.
A540	X	1	7'-8"			WING 2 HORIZ B.F.
A541	X	1	5'-1"			WING 2 HORIZ B.F.
A542	X	1	18'-9"	X		WING 2 HORIZ B.F.
A543	X	8	22'-3"			WING 1 HORIZ F.F.
A544	X	1	21'-3"			WING 1 HORIZ F.F.
A545	X	1	16'-5"			WING 1 HORIZ F.F.
A546	X	1	11'-9"			WING 1 HORIZ F.F.
A547	X	1	7'-1"			WING 1 HORIZ F.F.
A548	X	1	22'-8"			WING 1 HORIZ F.F.
A549	X	40	3'-6"			WING 1 & 2 STIRRUP TOP
A550	X	7	19'-9"			WING 2 HORIZ F.F.
A551	X	1	19'-2"			WING 2 HORIZ F.F.
A552	X	1	16'-8"			WING 2 HORIZ F.F.
A553	X	1	14'-1"			WING 2 HORIZ F.F.
A554	X	1	11'-6"			WING 2 HORIZ F.F.
A555	X	1	8'-11"			WING 2 HORIZ F.F.
A556	X	1	6'-4"			WING 2 HORIZ F.F.
A557	X	1	20'-11"	X		WING 2 HORIZ F.F.
A458		6	3'-9"			BODY HORIZ BETWEEN BEAM SEATS
A459		12	3'-3"	X		BODY VERT BETWEEN BEAM SEATS
A560	X	44	5'-0"	X		FOOTING DOWEL F.F.

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

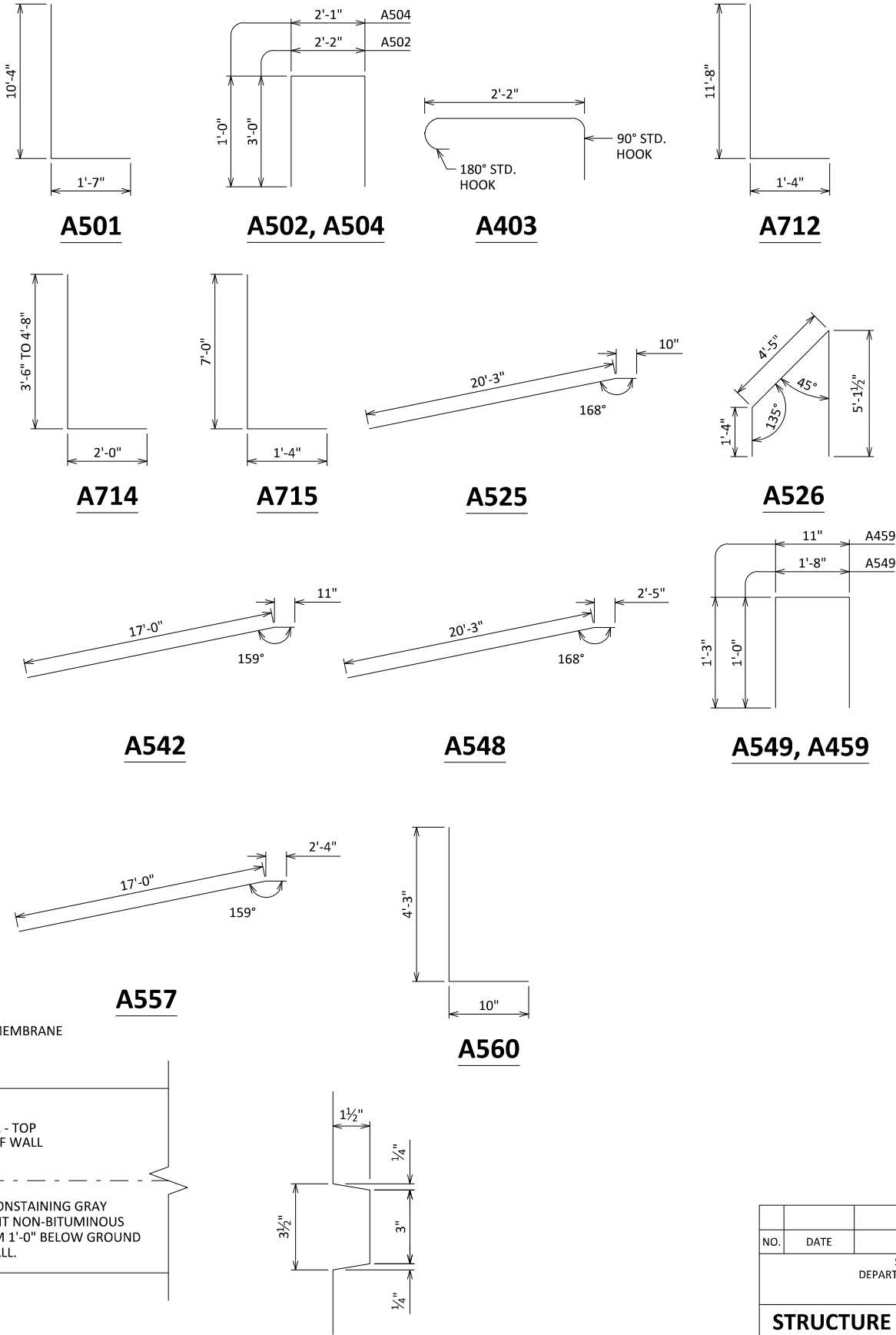
BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
A713	2 SERIES OF 3	3'-6" TO 4'-8"
A714	2 SERIES OF 3	5'-4" TO 6'-6"
A716	1 SERIES OF 30	8'-4" TO 12'-3"
A518	1 SERIES OF 20	8'-4" TO 12'-3"
A731	1 SERIES OF 26	6'-7" TO 12'-8"
A533	1 SERIES OF 16	6'-7" TO 12'-8"



VERTICAL EXPANSION JOINT
DO NOT RUN ANY BAR STEEL THRU JOINT

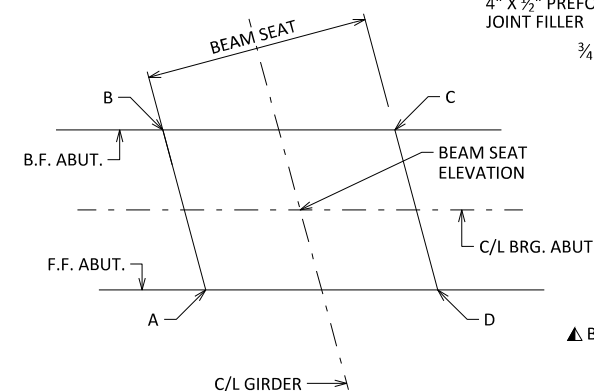


RUSTICATION DETAIL

STATE PROJECT NUMBER

5695-00-73

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-145			
		DRAWN BY ZLM	PLANS CK'D DKW
WEST ABUT BAR DETAILS		SHEET 7 OF 17	
		54	



Technical drawing showing a detail of a bridge abutment structure. The drawing includes reinforcement details, beam seat elevation, and geotextile details.

Reinforcement Details:

- B456 BETWEEN BEAM SEATS**
- 4" X 1/2" PREFORMED JOINT FILLER**
- 3/4" BEVEL**
- B457**
- B502**
- B501**
- B403, TYP.**
- F.F. ABUT.**

Beam Seat Elevation:

- C/L BRG. & PILES**
- A19**
- 1'-6" MIN.**
- 3'-6" MAX**
- B.F.**
- 1'-0"**
- C/L BRG. ABUT.**
- D**

Geotextile Details:

- GEOTEXTILE TYPE 'HR'**
- 2'-0"**
- 2'-6"**
- TOP OF BERM SEE SHT. 1**
- 1'-0"**
- 1'-3"**
- 2'-6"**
- 3" CLR.**
- A06**
- A15**

Other Labels:

- 12 EQ. SPA. B505 F.F.**
- 12 EQ. SPA. B806 B.F.**
- 13'-3/4" MIN. AT R.F. ABUT.**

F.F. = FRONT FACE
B.F. = BACK FACE
E.F. = EACHFACE

▲ ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES

EAST ABUTMENT				
GIRDER	A ELEV.	B ELEV.	C ELEV.	D ELEV.
1	794.05	794.13	794.09	794.01
2	794.12	794.21	794.18	794.09
3	794.06	794.14	794.11	794.03
4	793.84	793.92	793.88	793.80

A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

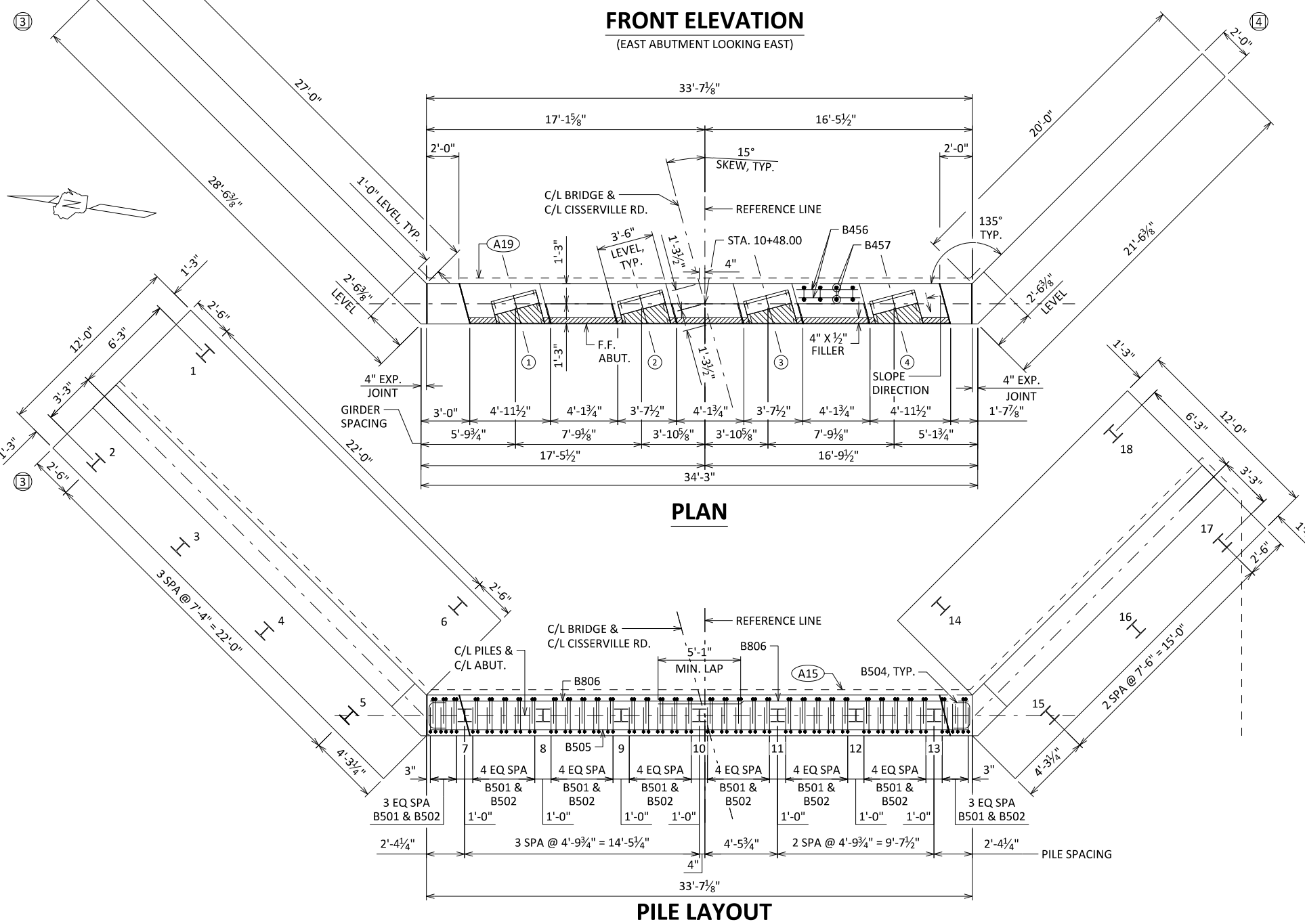
A06 SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 40'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

A17 ½" FILLER (INCLUDED IN WING LENGTH); SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE) EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

A18 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

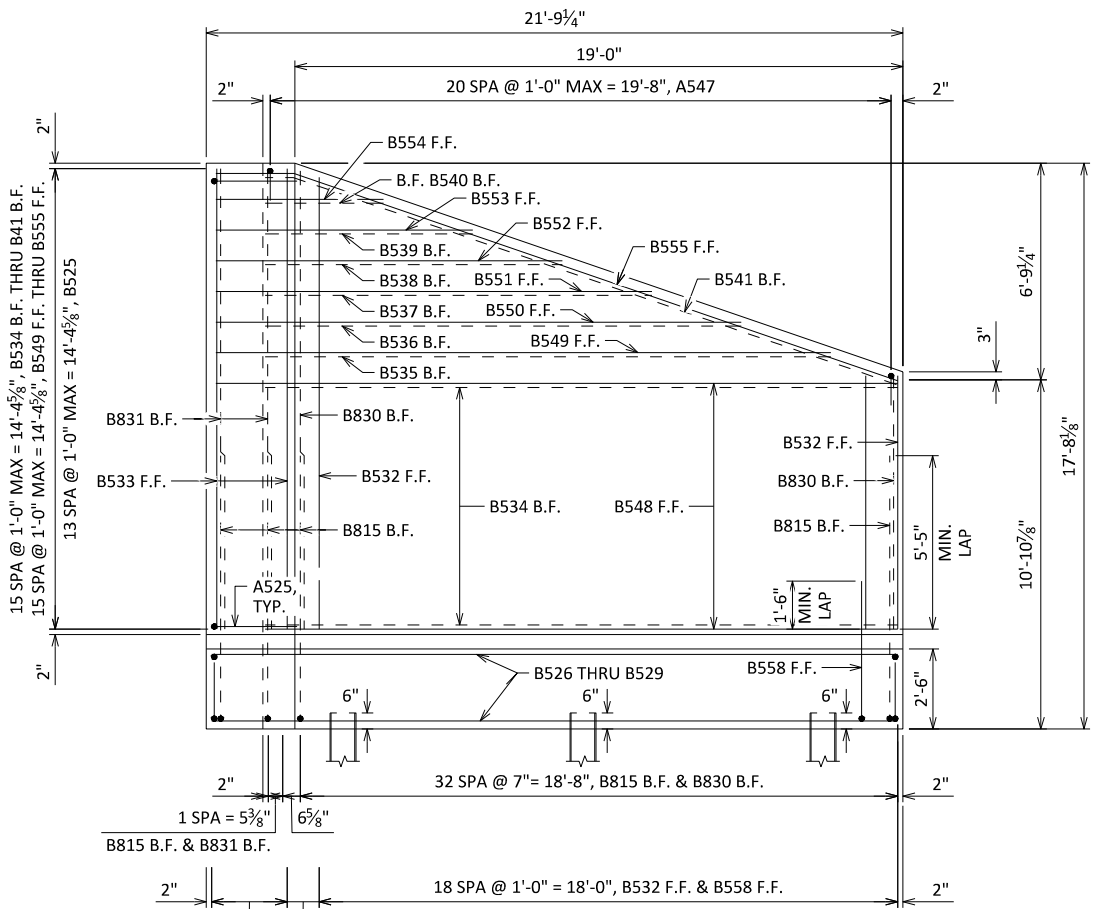
A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING
SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



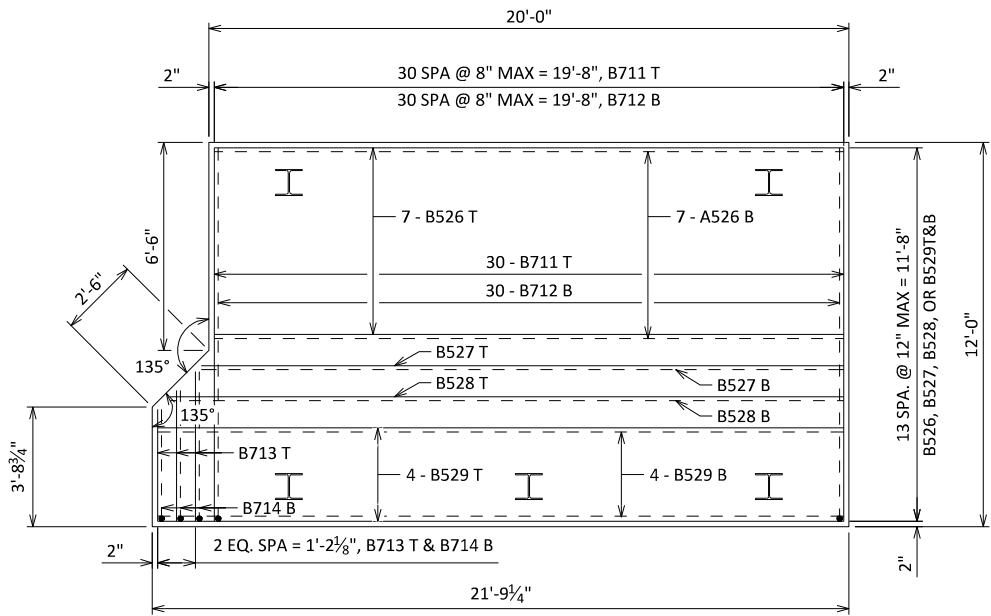


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| NO. | DATE | REVISION | | BY |
| STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION | | | | |
| STRUCTURE B-33-145 | | | | |
| | | DRAWN
BY | ZLM | PLANS
CK'D
DKW |
| WING 3 DETAILS | | | SHEET 9 OF 17 | |
| | | | 56 | |

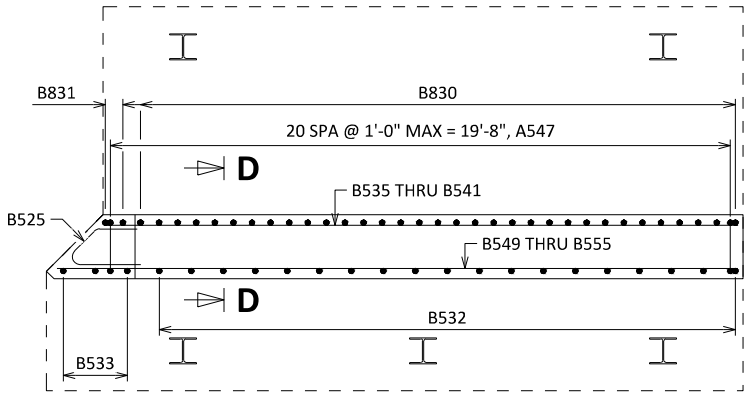
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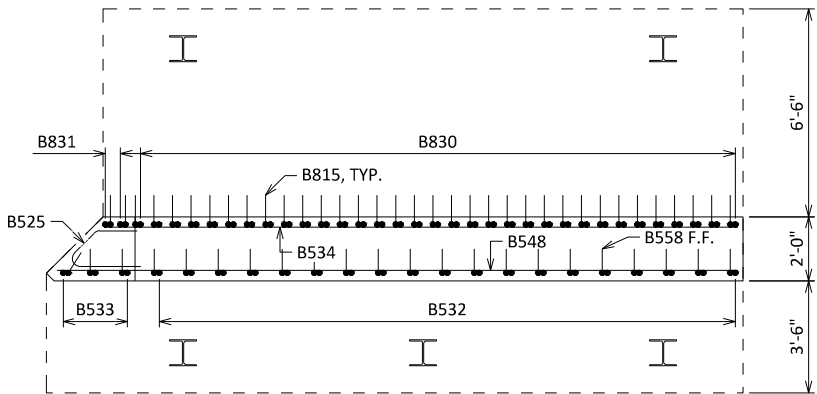
WING 4 ELEVATION
SHOWING F.F. WING



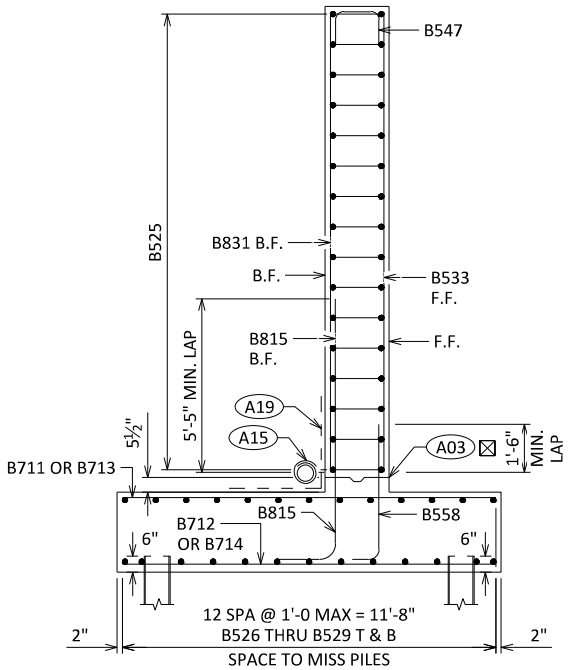
WING 4 FOOTING PLAN
SHOWING TOP OF FOOTING



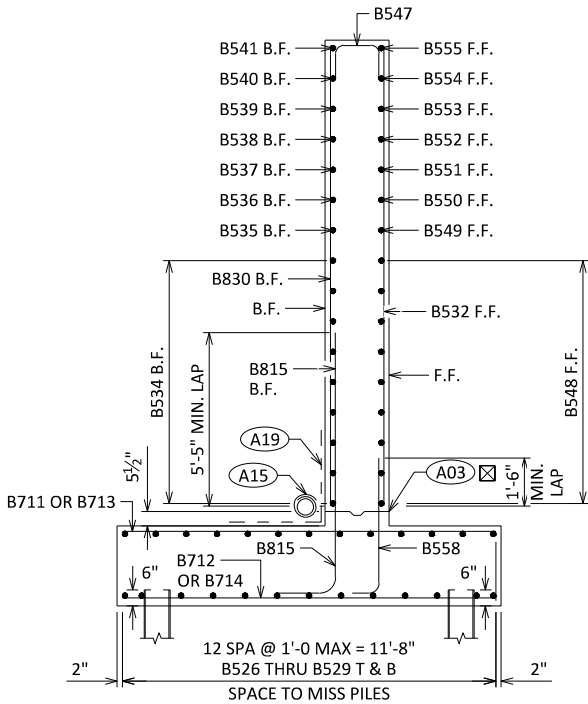
WING 4 PLAN
SHOWING UPPER WING REINFORCEMENT



WING 4 PLAN
SHOWING LOWER WING REINFORCEMENT



SECTION THRU WING 4



SECTION D-D

- A03** OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).
- A19** 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- ☒ IF OPTIONAL CONSTRUCTION JOINT IS USED, SURFACE TO BE CLEANED AND FREE OF LATIENENCE BEFORE STEM IS POURED

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-145			
DRAWN BY		ZLM	PLANS CK'D DKW
WING 4 DETAILS		SHEET 10 OF 17	
		57	

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BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

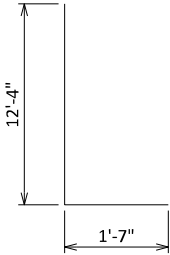
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		72	13'-9"	X		ABUTMENT BODY VERT
B502		36	7'-11"	X		ABUTMENT BODY STIRRUP - TOP U-BAR
B403		32	3'-3"	X		ABUTMENT BODY TIE
B504		26	3'-10"	X		ABUTMENT BODY STIRRUP - HORIZ U-BAR
B505		13	33'-3"			ABUTMENT BODY HORIZ - F.F.
B806		26	19'-2"			ABUTMENT BODY HORIZ - B.F.
B507	X	14	26'-8"			FOOTING HORIZ TOP & BOTTOM
B508	X	2	27'-1"			FOOTING HORIZ TOP & BOTTOM
B509	X	2	28'-1"			FOOTING HORIZ TOP & BOTTOM
B510	X	8	28'-5"			FOOTING HORIZ TOP & BOTTOM
B711	X	72	11'-8"			FOOTING HORIZ TOP
B712	X	72	12'-10"	X		FOOTING HORIZ BOTTOM
B713	X	6	4'-1"		▲	FOOTING HORIZ TOP
B714	X	6	5'-11"	X	▲	FOOTING HORIZ BOTTOM
B815	X	82	8'-7"	X		FOOTING DOWEL F.F.
B816	X	39	12'-9"		▲	WING 3 VERT. B.F.
B817	X	2	14'-8"			WING 3 VERT. B.F.
B518	X	26	12'-9"		▲	WING 3 VERT F.F.
B519	X	3	14'-8"			WING 3 VERT F.F.
B520	X	12	26'-9"			WING 3 HORIZ B.F.
B521	X	1	21'-2"			WING 3 HORIZ B.F.
B522	X	1	14'-5"			WING 3 HORIZ B.F.
B523	X	1	7'-8"			WING 3 HORIZ B.F.
B524	X	1	27'-0"	X		WING 3 HORIZ B.F.
B525	X	32	10'-5"	X		WING 3 & 4 CORNER
B526	X	14	19'-8"			FOOTING HORIZ. TOP & BOTTOM
B527	X	2	20'-1"			FOOTING HORIZ. TOP & BOTTOM
B528	X	2	21'-1"			FOOTING HORIZ. TOP & BOTTOM
B529	X	8	21'-5"			FOOTING HORIZ. TOP & BOTTOM
B830	X	29	11'-2"		▲	WING 4 VERT B.F.
B831	X	2	14'-5"			WING 4 VERT B.F.
B532	X	19	11'-2"		▲	WING 4 VERT F.F.
B533	X	4	14'-5"			WING 4 VERT F.F.
B534	X	9	19'-9"			WING 4 HORIZ B.F.
B535	X	1	17'-8"			WING 4 HORIZ B.F.
B536	X	1	14'-10"			WING 4 HORIZ B.F.
B537	X	1	12'-1"			WING 4 HORIZ B.F.
B538	X	1	9'-3"			WING 4 HORIZ B.F.
B539	X	1	6'-6"			WING 4 HORIZ B.F.
B540	X	1	3'-8"			WING 4 HORIZ B.F.
B541	X	1	20'-10"	X		WING 4 HORIZ B.F.
B542	X	12	28'-3"			WING 3 HORIZ F.F.
B543	X	1	22'-8"			WING 3 HORIZ F.F.
B544	X	1	15'-11"			WING 3 HORIZ F.F.
B545	X	1	9'-2"			WING 3 HORIZ F.F.
B546	X	1	28'-6"			WING 3 HORIZ F.F.
B547	X	49	3'-6"			WING 3 & 4 STIRRUP TOP
B548	X	9	21'-4"			WING 4 HORIZ F.F.
B549	X	1	19'-2'			WING 4 HORIZ F.F.
B550	X	1	16'-5"			WING 4 HORIZ F.F.
B551	X	1	13'-7"			WING 4 HORIZ F.F.
B552	X	1	10'-10"			WING 4 HORIZ F.F.
B553	X	1	8'-0"			WING 4 HORIZ F.F.
B554	X	1	5'-2"			WING 4 HORIZ F.F.
B555	X	1	22'-4"	X		WING 4 HORIZ F.F.
B456		6	3'-9"			ABUTMENT BODY BETWEEN SEATS HORIZ
B457		12	3'-3"	X		ABUTMENT BODY BETWEEN SEATS VERT
B558	X	51	5'-0"	X		FOOTING DOWEL F.F.

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

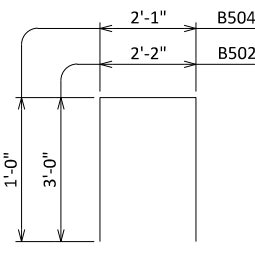
BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

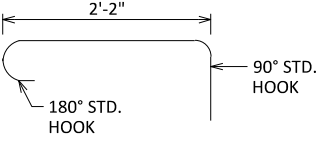
BAR MARK	NO. REQ'D.	LENGTH
B713	2 SERIES OF 3	3'-6" TO 4'-8"
B714	2 SERIES OF 3	5'-4" TO 6'-6"
B816	1 SERIES OF 45	10'-11" TO 14'-7"
B518	1 SERIES OF 26	10'-11" TO 14'-7"
B830	1 SERIES OF 33	7'-11" TO 14'-4"
B532	1 SERIES OF 19	7'-11" TO 14'-4"



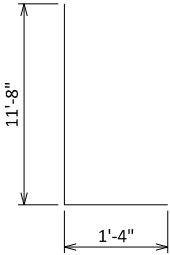
B501



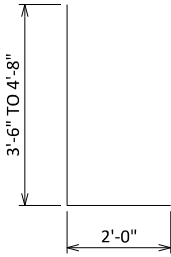
B502, B504



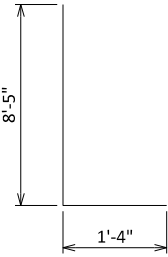
B403



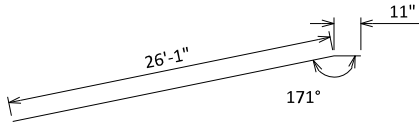
B712



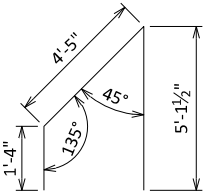
B714



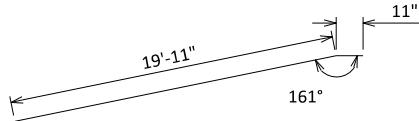
B815



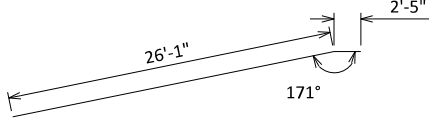
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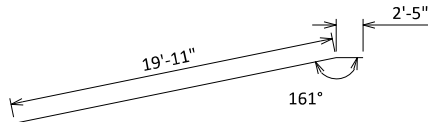
B525



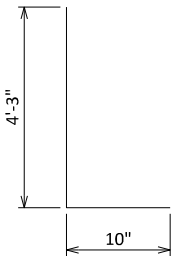
B541



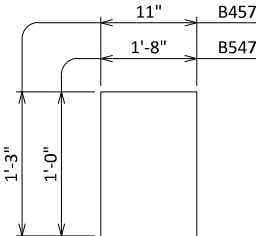
B546



B555

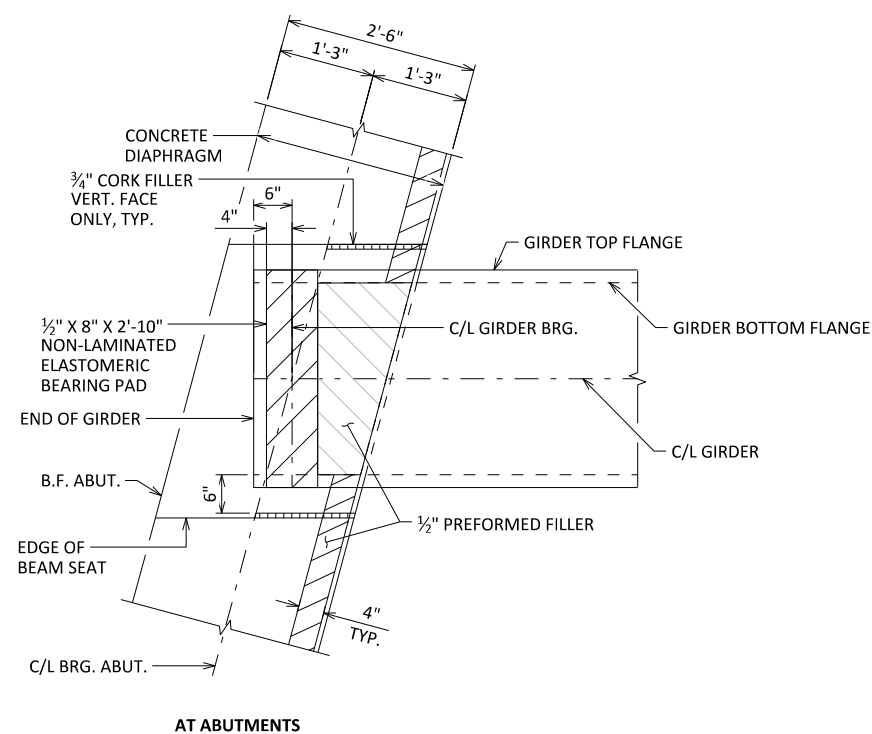


B558

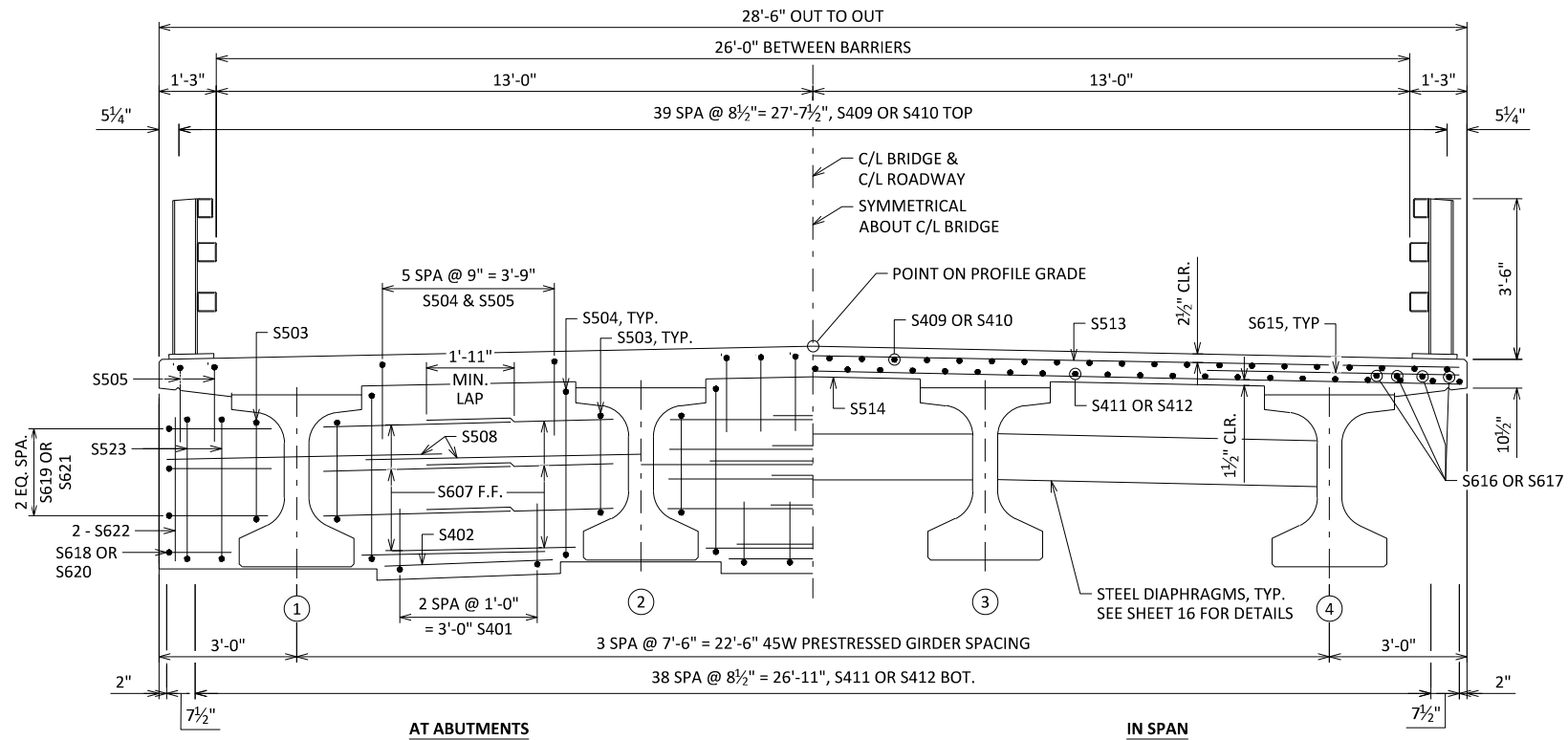


B547, B457

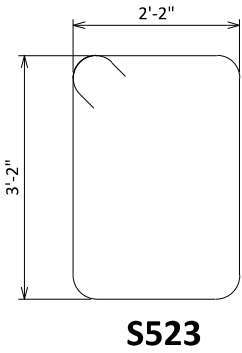
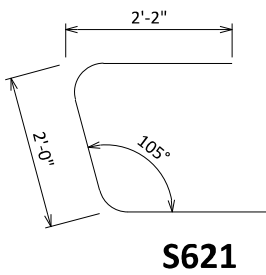
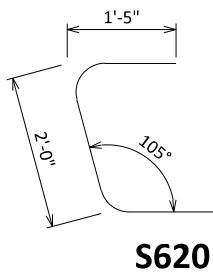
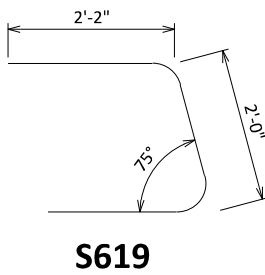
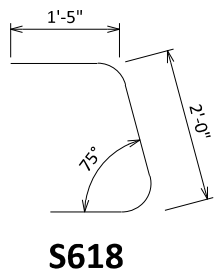
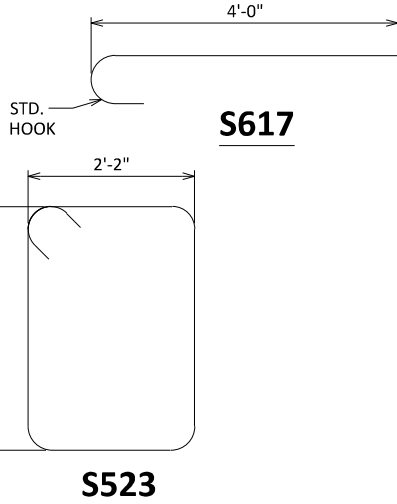
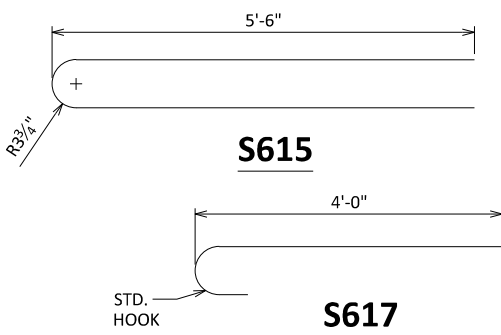
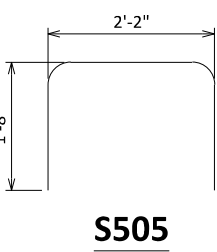
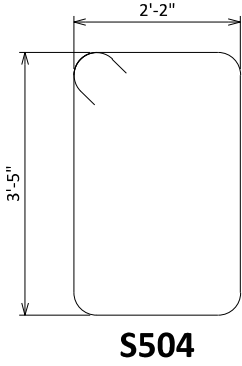
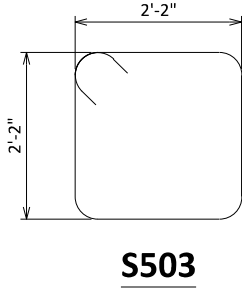
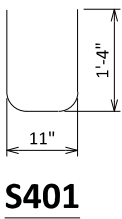
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE		B-33-145	
		DRAWN BY	PLANS CK'D
		ZLM	DKW
EAST ABUT BAR DETAILS		SHEET 11 OF 17	
		58	



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-145			
		DRAWN BY	PLANS CK'D
		ZLM	DKW
SUPERSTRUCTURE		SHEET 12 OF 17	
		59	



CROSS SECTION THRU DECK



BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	18	3'-5"	X		ABUTMENT DIAPHRAGM BETWEEN SEATS VERT.
S402	X	12	3'-8"			ABUTMENT DIAPHRAGM BETWEEN SEATS HORIZ.
S503	X	16	9'-4"	X		ABUTMENT DIAPHRAGM STIRRUPS VERT.
S504	X	36	11'-10"	X		ABUTMENT DIAPHRAGM STIRRUPS VERT.
S505	X	44	5'-3"	X		ABUTMENT DIAPHRAGM TO SLAB TIES
S606	X	12	29'-2"			ABUTMENT DIAPHRAGM BACK FACE
S607	X	48	4'-1"			ABUTMENT DIAPHRAGM FRONT FACE
S508	X	16	6'-0"			ABUTMENT DIAPHRAGM BARS HORIZ. WEB
S409	X	40	22'-3"			SLAB TOP LONGITUDINAL
S410	X	80	39'-8"			SLAB TOP LONGITUDINAL
S411	X	41	22'-3"			SLAB BOTTOM LONGITUDINAL
S412	X	82	39'-8"			SLAB BOTTOM LONGITUDINAL
S513	X	140	29'-2"			SLAB TOP TRANSVERSE
S514	X	139	29'-2"			SLAB BOTTOM TRANSVERSE
S615	X	64	11'-8"	X		RAIL POST
S616	X	112	6'-0"			RAIL POST INTERIOR
S617	X	16	4'-8"	X		RAIL POST END
S618	X	2	4'-6"	X		ABUTMENT DIAPHRAGM ENDS HORIZONTAL
S619	X	6	6'-0"	X		ABUTMENT DIAPHRAGM ENDS HORIZONTAL
S620	X	2	4'-6"	X		ABUTMENT DIAPHRAGM ENDS HORIZONTAL
S621	X	6	6'-0"	X		ABUTMENT DIAPHRAGM ENDS HORIZONTAL
S622	X	8	3'-2"			ABUTMENT DIAPHRAGM SIDES VERTICAL
S523	X	8	11'-4"	X		ABUTMENT DIAPHRAGM STIRRUPS VERT.

FINAL TOP OF DECK ELEVATIONS

	CL BRG. WEST ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	CL BRG. E. ABUT.
NORTH E.O.D.	795.27	795.66	796.03	796.41	796.77	797.13	797.48	797.82	798.16	798.48	798.80
GIRDER LINE 1	795.30	795.68	796.06	796.44	796.80	797.16	797.51	797.85	798.19	798.52	798.84
GIRDER LINE 2	795.36	795.75	796.13	796.51	796.88	797.24	797.59	797.93	798.27	798.60	798.92
C/L	795.40	795.79	796.17	796.54	796.91	797.27	797.63	797.97	798.31	798.64	798.96
GIRDER LINE 3	795.28	795.67	796.06	796.43	796.80	797.16	797.51	797.86	798.20	798.53	798.85
GIRDER LINE 4	795.05	795.44	795.83	796.20	796.57	796.94	797.29	797.64	797.98	798.31	798.64
SOUTH E.O.D.	794.95	795.35	795.73	796.11	796.48	796.85	797.20	797.55	797.89	798.22	798.55

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-145			
		DRAWN BY	PLANS CK'D
		ZLM	DKW
SUPERSTRUCTURE DETAILS		SHEET 13 OF 17 60	

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECT. 503.3.4 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

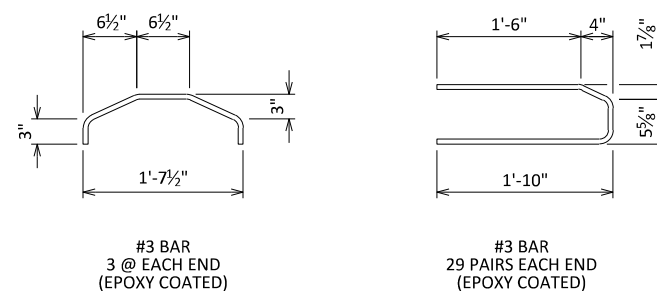
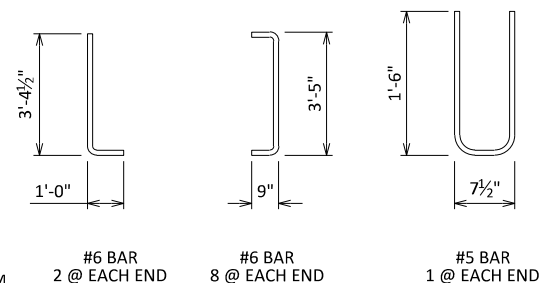
STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A1064 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DESIGN SECTION. IF USED, WWF SUBSTITUTION DETAILS SHALL BE SUBMITTED ELECTRONICALLY TO THE WISDOT FABRICATION LIBRARY AND ACCEPTED PRIOR TO SHOP DRAWING SUBMITTAL.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM"
SHEET.



SECTION A-A

BOTTOM FLANGE

SIDE VIEW & TYPICAL SECTION IN SPAN

- (A) DETAIL TYP. AT EACH END
- (B) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-9"

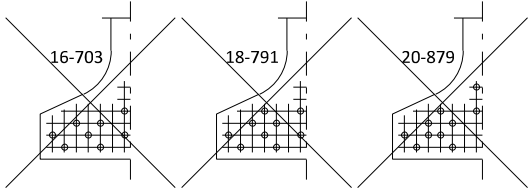
* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

GIRDER DATA																								
SPAN	GIRDER	GIRDER LENGTH "L" (FEET)	DEAD LOAD DEFL. (IN.)									CONC. STRGTH. f'c (k.s.i.)	"P" 1ST 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN						UNDRAPED PATTERN	
			1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10						TOTAL NO. OF STRANDS	f'ci (K.S.I.) *	(IN.)				TOTAL NO. OF STRANDS	f'ci (K.S.I.) *
																			"A"	"B" MIN.	"B" MAX.	"C"		
ALL	ALL	97	0.5	1.0	1.4	1.5	1.6	1.5	1.4	1.0	0.5	8	7.5	7.5	7.5	0.6	32	6.4	39	13.5	16.5	5	-	-

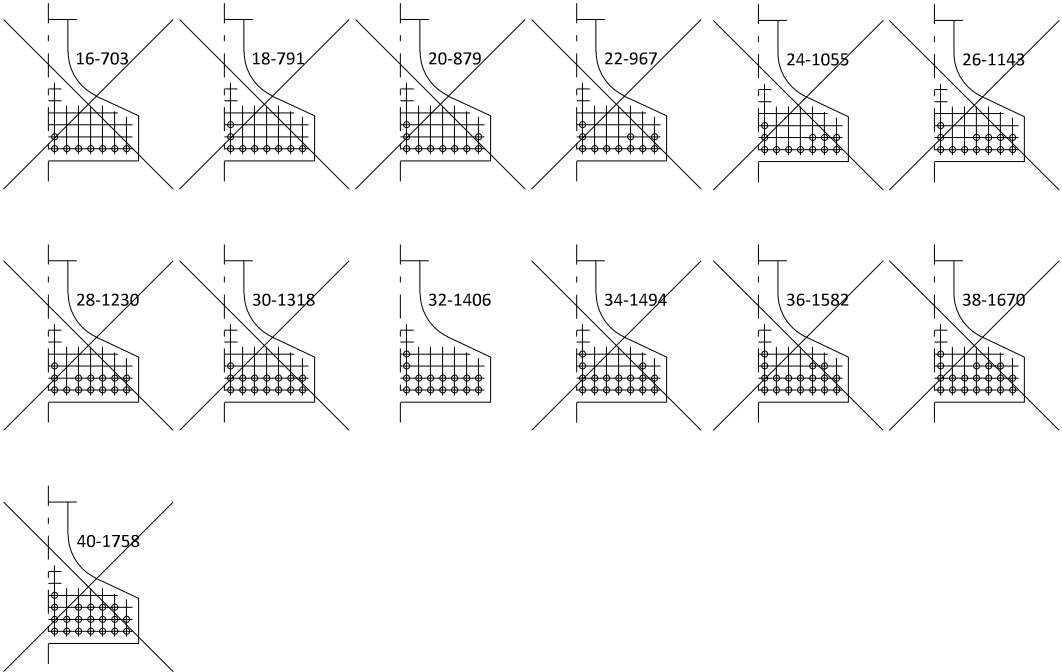
NO.	DATE	REVISION
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
STRUCTURE B-33-145		
	DRAWN BY	PLANS CK'D
	ZLM	DKW
45W PS GIRDER		SHEET 14 OF 17
		61

X:\KO\L\LAF\AH\177083\5-final-dsgn\51-drawings\20-Struct\B-33-145\Sheet\45W_Prestressed_Girder.dwg, 6/30/2026 6:29:44 PM, _DWG To PDF.pc3



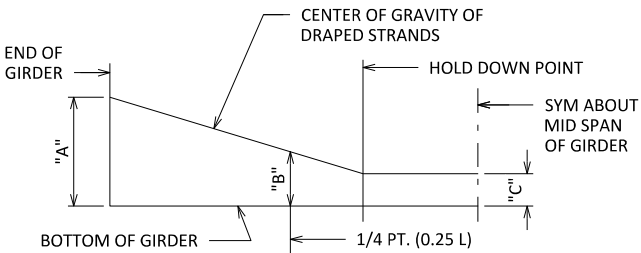
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY
TO AVOID DRAPING OF STRANDS

0.6" DIA. STRANDS



ARRANGEMENT AT C/L SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6" DIA. STRANDS



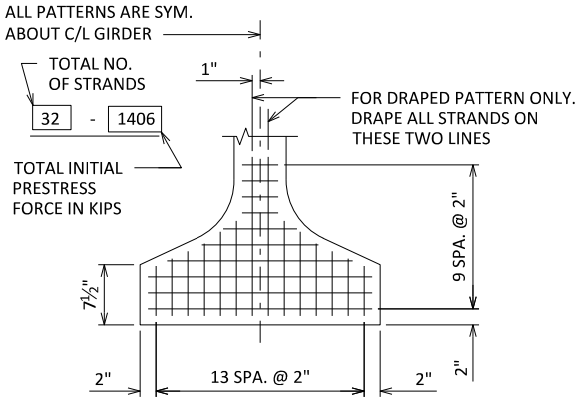
DRAPED STRAND PROFILE

✱ THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

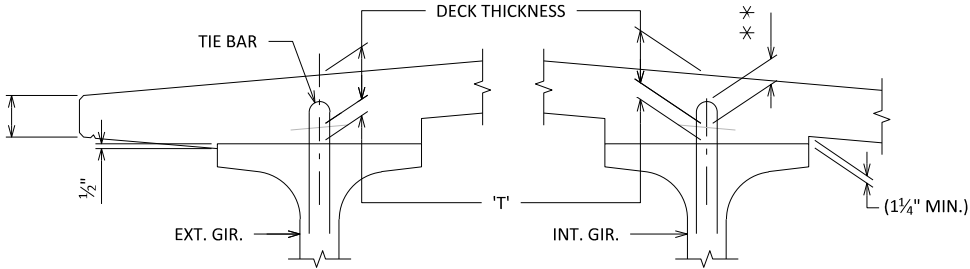
SPAN	CAMBER (IN.) ✱
ALL	3.2

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T',
USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.



TYP. STRAND PATTERN



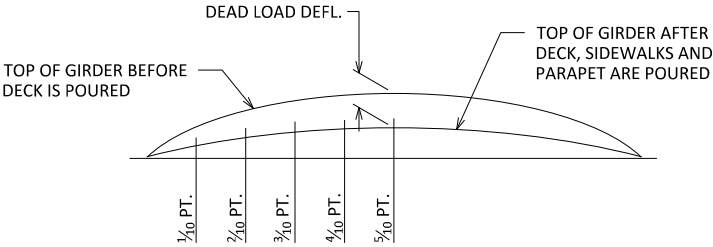
DECK HAUNCH DETAIL

IF 1 1/4" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN 1/2" OR, IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT C/L OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

- TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
- + DEAD LOAD DEFLECTION
- DECK THICKNESS
- = HAUNCH HEIGHT 'T'

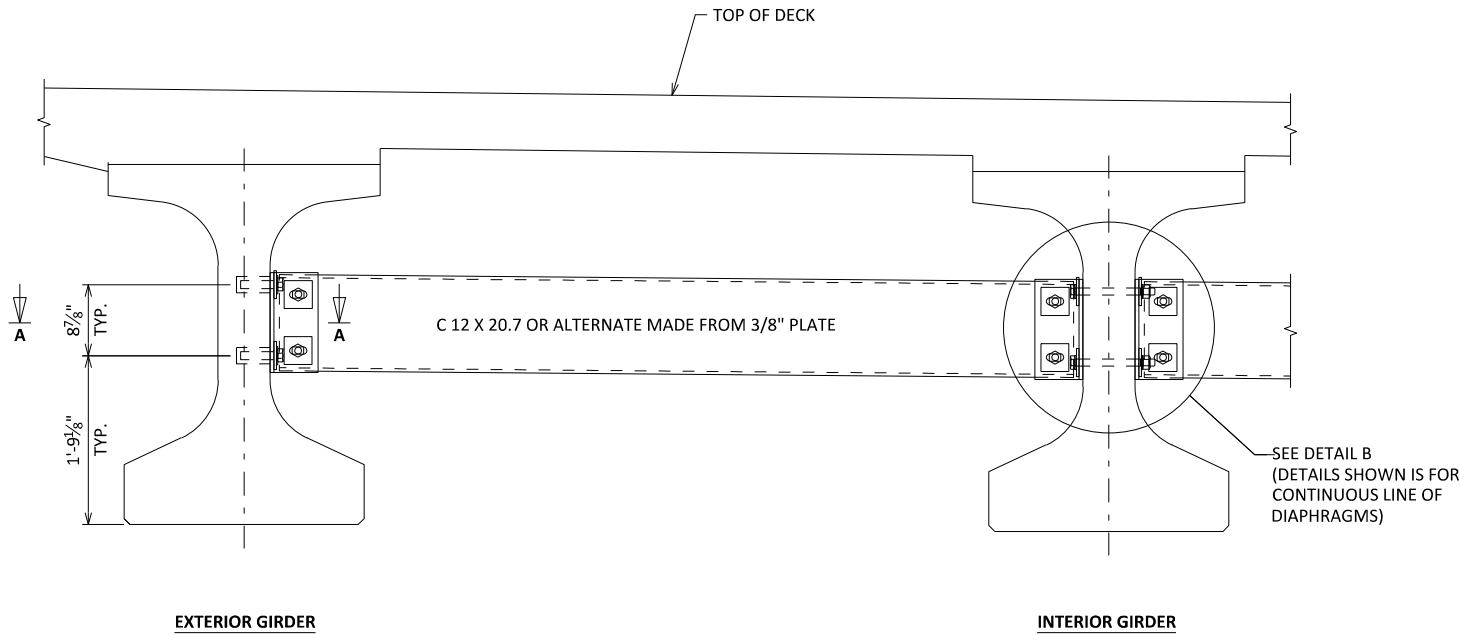
NOTE: AN AVERAGE HAUNCH ('T') OF 3.25" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



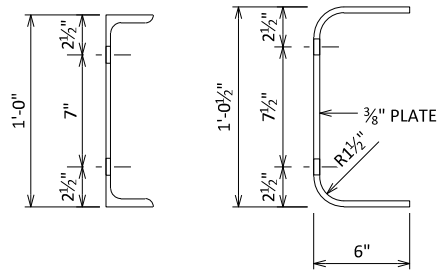
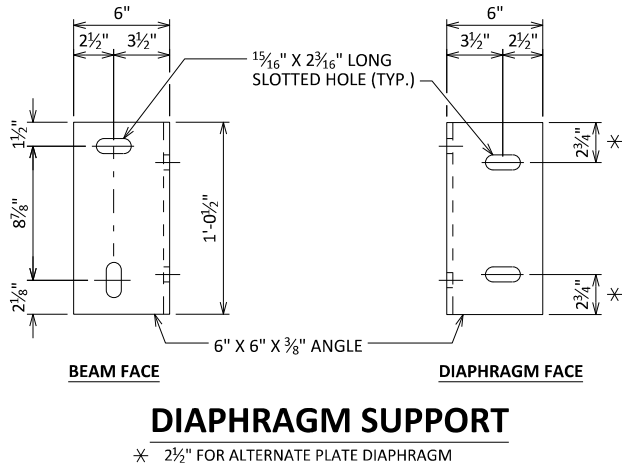
DEAD LOAD DEFLECTION DIAGRAM

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-145			
	DRAWN BY	ZLM	PLANS CK'D DKW
STRAND DRAPING & PATTERNS		SHEET 15 OF 17 62	

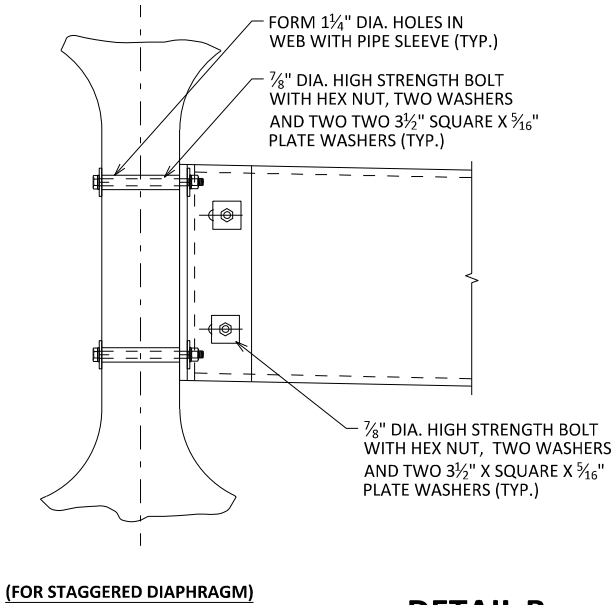
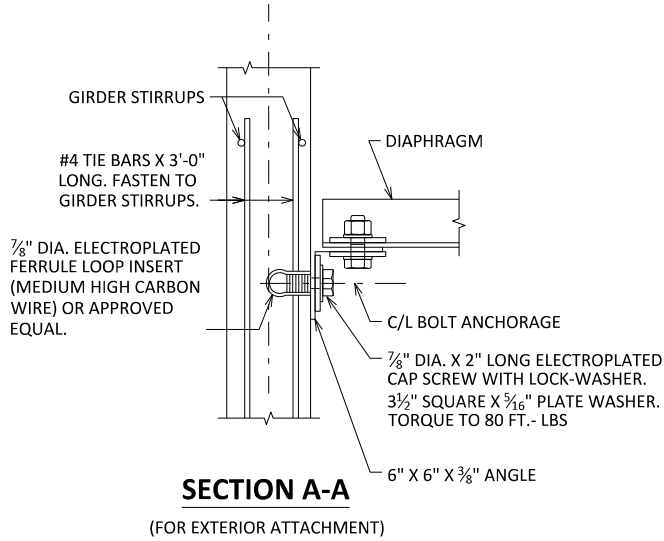
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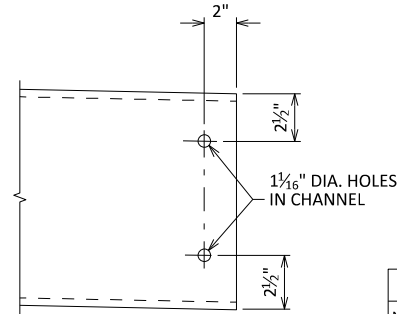
PART TRANSVERSE SECTION AT DIAPHRAGM



SECTION THRU DIAPHRAGM

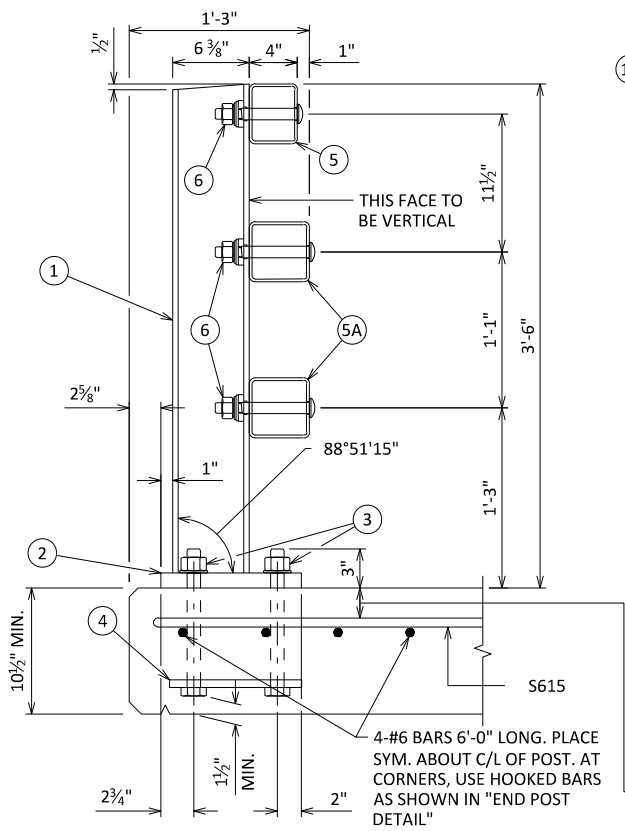


DETAIL B

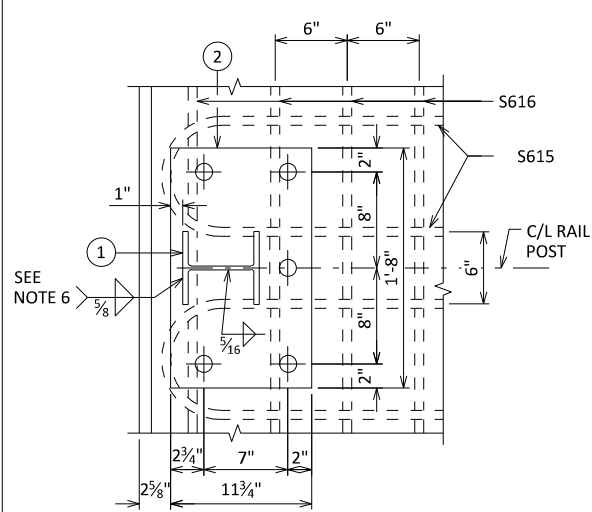


NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-145			
DRAWN BY		ZLM	PLANS CK'D DKW
STEEL DIAPHRAGMS		SHEET 16 OF 17	
		63	

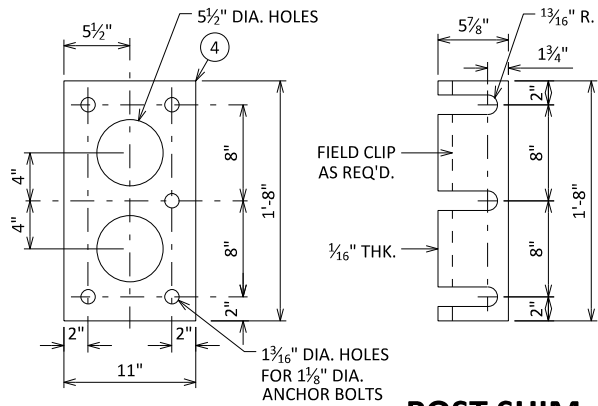
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SECTION THRU RAILING ON DECK

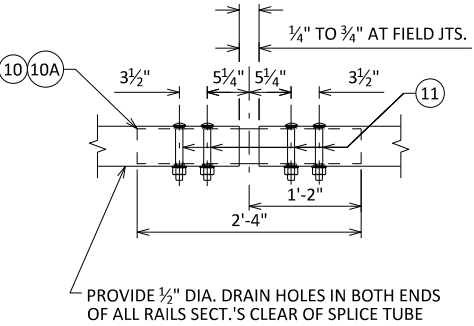


SECTION A-A

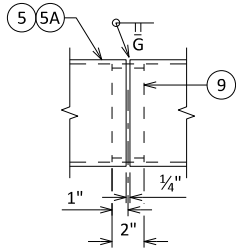


ANCHOR PLATE
AT RAIL TO DECK CONNECTION

POST SHIM
DETAIL



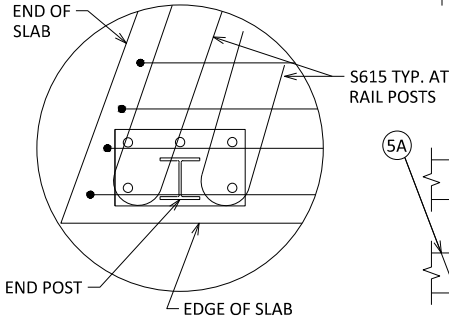
FIELD ERECTION JOINT DETAIL



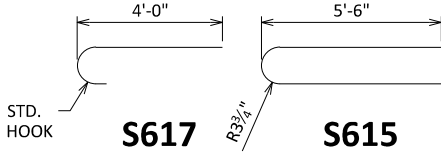
SHOP RAIL SPLICE DETAIL

LOCATION MUST BE SHOWN ON SHOP DRAWINGS

2 1/2" FOR SLABS ON GIRDERS; FOR OTHER STRUCTURES, PLACE BELOW TOP MAT SLAB REINFORCEMENT

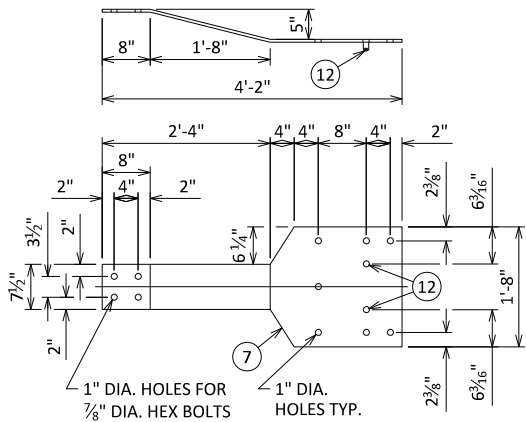


END POST DETAIL
REINFORCEMENT AT CORNERS

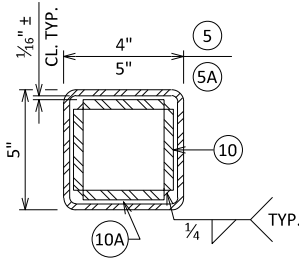


S617

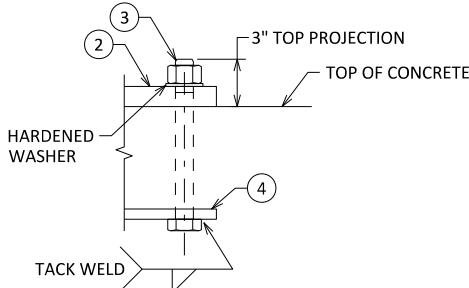
S615



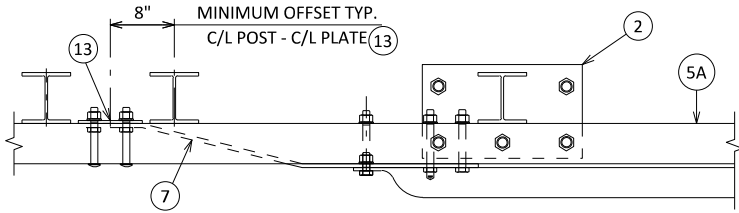
BACK-UP PLATE DETAIL
AT BEAM GUARD ATTACHMENT



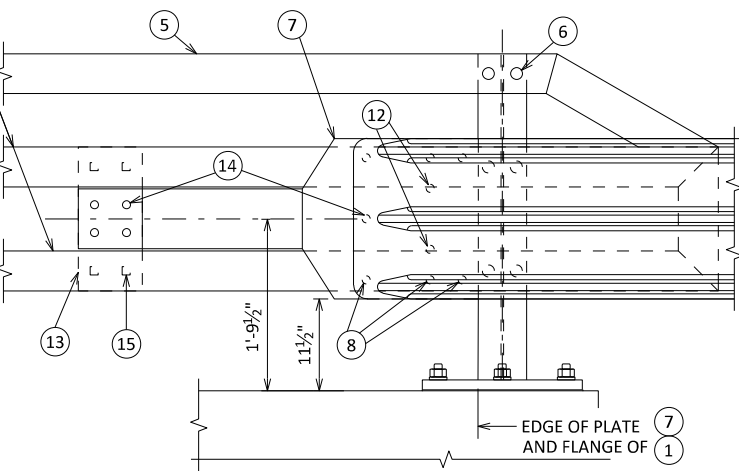
SECTION B-B



ANCHOR BOLTS

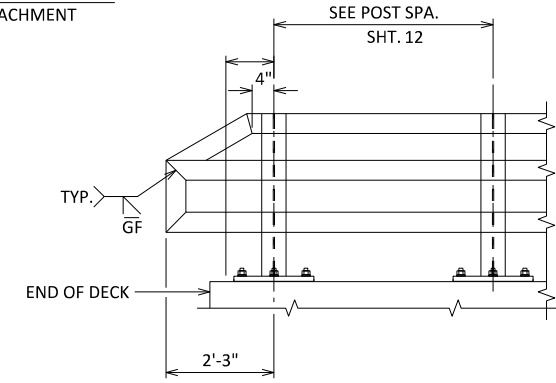


TOP VIEW AT END POST
THRIE BEAM RAIL ATTACHMENT

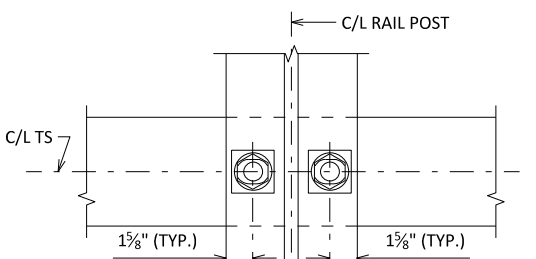


ANCHOR PLATE
AT BEAM GUARD ATTACHMENT

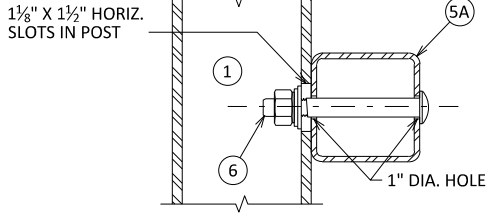
DETAIL AT END POST
THRIE BEAM RAIL ATTACHMENT



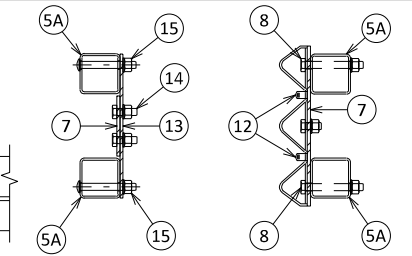
PART ELEVATION OF RAILING



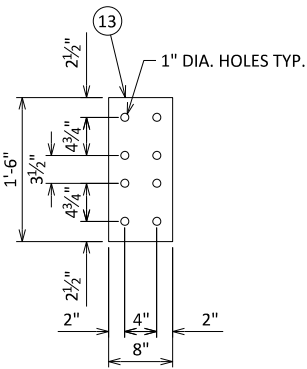
SECTION THRU POST WEB



SECTION THRU RAIL
NOTE: CONNECTIONS AT LOWER RAILS SHOWN. CONNECTIONS AT TOP RAILS SIMILAR.



SECTION C-C SECTION D-D



ANCHOR PLATE
AT BEAM GUARD ATTACHMENT

LEGEND

- W6 X 25 WITH 1 1/8" X 1 1/2" HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.
- PLATE 1 1/4" X 11 3/4" X 1'-8" WITH 1 1/16" DIA. OVERSIZED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN.
- ASTM A449 - 1 1/8" DIA. ANCHOR BOLTS WITH NUT AND HARDENED WASHER (ALL GALVANIZED). 5 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 1'-9" LONG IN ABUTMENT WINGS. AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 16" USE 1'-3" LONG. USE 10 3/4" LONG AT ALL OTHER LOCATIONS. (AN EQUIVALENT THREADED ROD WITH NUTS AND HARDENED WASHERS MAY BE SUBSTITUTED FOR ANCHOR BOLTS IN WINGS IF REQ'D. FOR CONSTRUCTABILITY.)
- 5/8" X 11" X 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1 3/16" DIA. HOLES FOR ANCHOR BOLTS NO. 3
- TS 5 X 4 X 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
- TS 5 X 5 X 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
- 7/8" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, 3/16" X 1 5/8" MIN. WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION.)
- 1/2" THK. BACK-UP PLATE WITH 2 - 7/8" X 1 1/2" THREADED SHOP WELDED STUDS (NO. 12). BOLT TO RAIL AS SHOWN IN DETAIL. REQUIRED AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYMMETRICALLY ABOUT TUBES NO. 5A.
- 1" DIA. HOLES IN PLATE NO. 7 & TUBES NO. 5A FOR 7/8" DIA. A325 BOLTS WITH HEX NUTS AND WASHERS. 6 HOLES IN TUBES AND PLATE NO. 7.
- SPLICE SLEEVE FABRICATED FROM 1/4" PLATE. PROVIDE "SLIDING FIT".
- 3/8" X 3 3/8" X 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.
- 3/8" X 2 5/8" X 2'-4" PLATE USED IN NO. 5, 3/8" X 3 3/8" X 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.
- 7/8" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 1 1/16" X 1 1/4" LONGIT. SLOTTED HOLES IN PLATE NO. 10A. AT FIELD JOINTS AND 1 1/16" X 2 1/4" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 10A. PROVIDE 1 3/16" DIA. ROUND HOLES IN TUBES NO. 5 AND NO. 5A.
- 7/8" DIA. X 1 1/2" LONG THREADED SHOP WELDED STUDS (2 REQ'D.).
- 3/8" X 8" X 1'-6" PLATE. BOLT TO RAIL AS SHOWN IN DETAIL. REQ'D. AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYM. ABOUT TUBES NO. 5A.
- 7/8" DIA. X 2" LONG A325 HEX BOLT WITH NUT AND WASHER (5 REQ'D.).
- 1" DIA. HOLES IN TUBES NO. 5A FOR 7/8" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER AND LOCK WASHER (4 REQ'D.). 4 HOLES IN TUBES.

GENERAL NOTES

- BID ITEM SHALL BE "RAILING TUBULAR TYPE M" WHICH INCLUDES ALL ITEMS SHOWN.
- RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY = 50 KSI. ANCHOR PLATES, AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.
- THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/2 TURN.
- RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE. RAILS SHALL BE SPLICED IN A PANEL OVER EXPANSION JOINTS.
- ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
- WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
- FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 AND CAULK AROUND PERIMETER OF PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
- POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.
- ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY SSPC SPECIFICATIONS.

TIE TO TOP MAT OF STEEL.

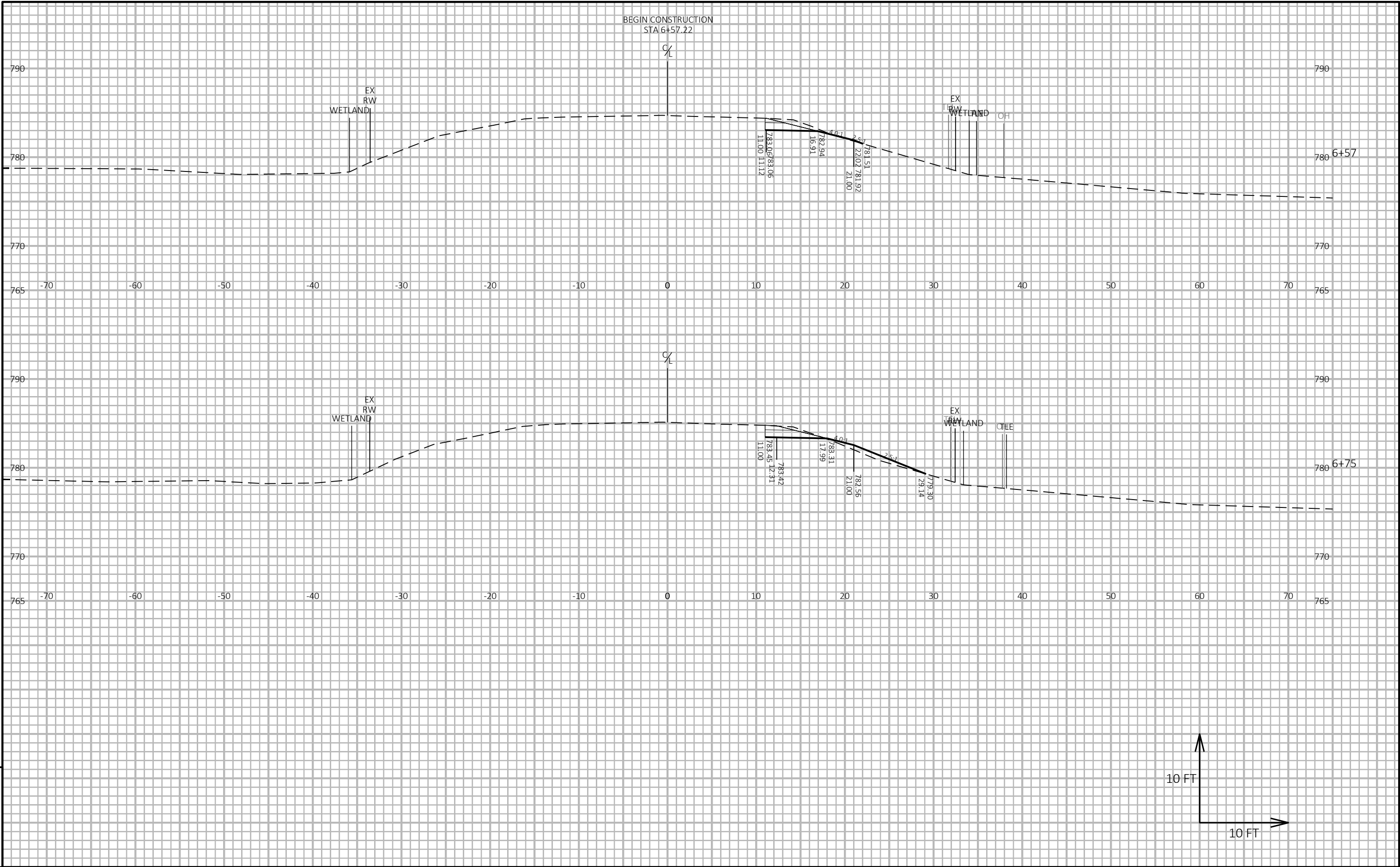
ANCHOR BOLT ASSEMBLY MAY BE TACK WELDED, EITHER IN THE SHOP, OR IN THE FIELD AFTER THE ANCHOR PLATE IS PLACED.

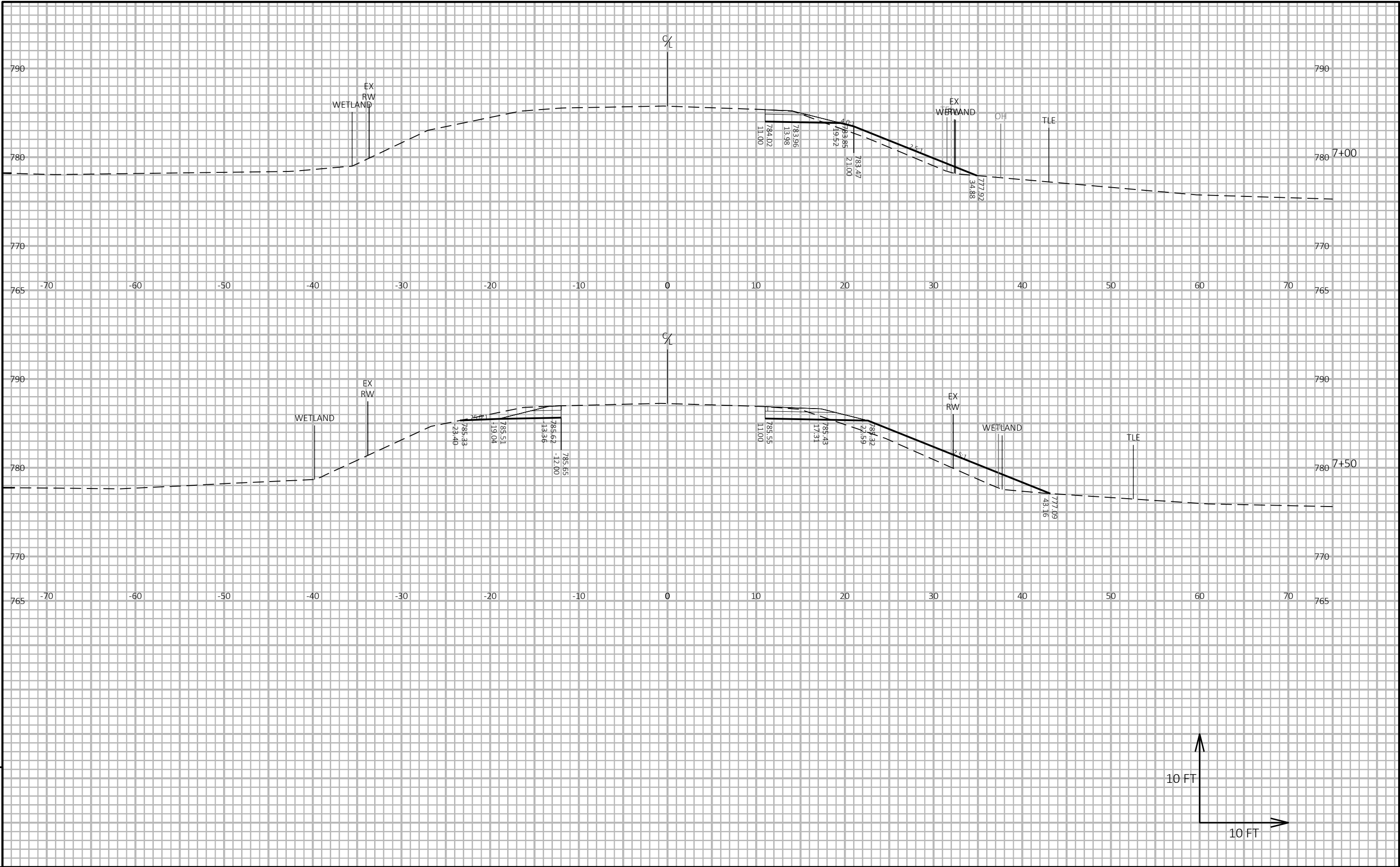
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-145			
		DRAWN BY	PLANS CK'D
		ZLM	DKW
TUBULAR STEEL RAILING TYPE 'M'		SHEET 17 OF 17 64	

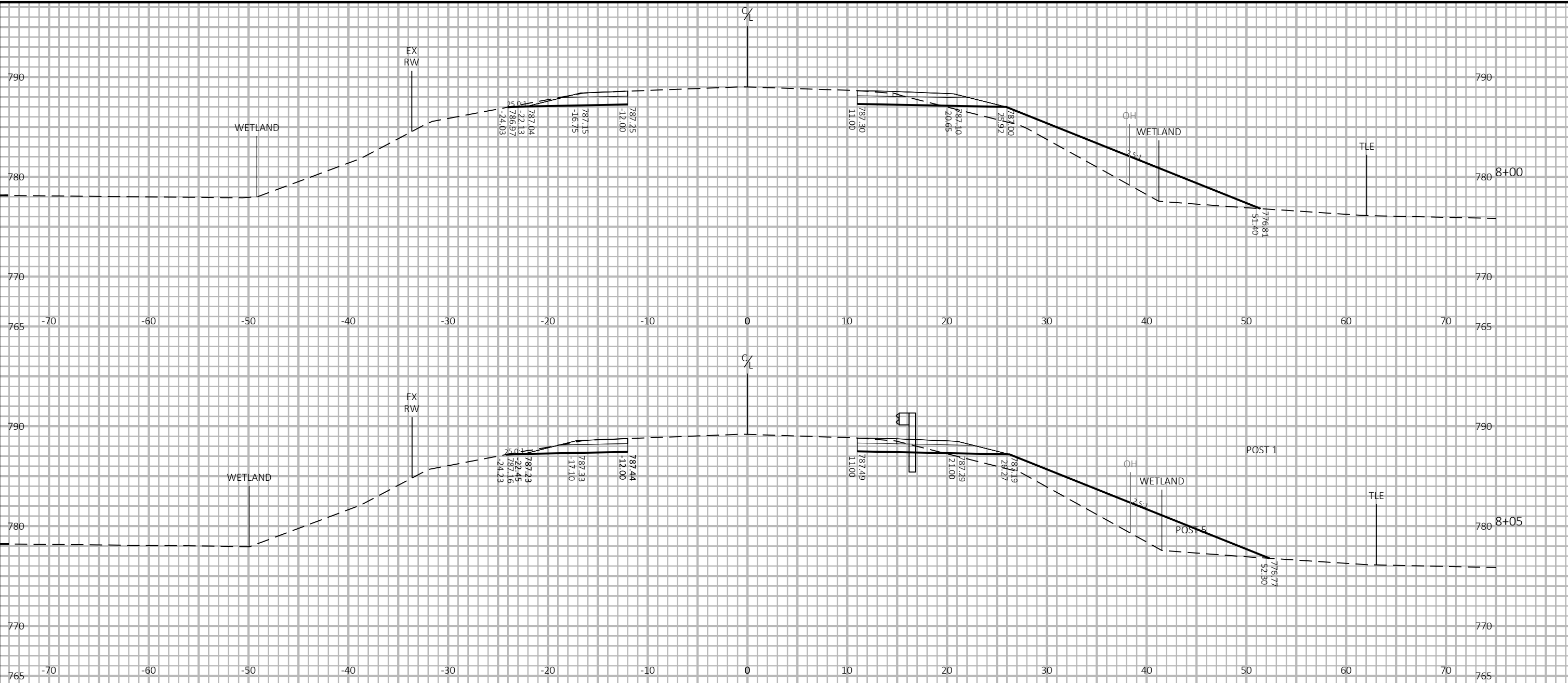
BRIDGE B-33-0145
EARTHWORK DATA

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		MASS ORDINATE
			CUT	FILL	CUT (3)	FILL (1)	CUT 1.00	FILL 1.3 (2)	
6+57.22	AH	657.22	0.00	6.3	0.22	0.00	0.00	0.00	0.00
6+75.00		675.00	17.78	6.22	4.01	4.12	1.39	4.12	2.31
7+00.00		700.00	25.00	6.21	11.64	5.75	7.25	9.88	-1.35
7+50.00		750.00	50.00	16.52	29.51	21.05	38.10	30.92	-29.84
8+00.00		800.00	50.00	17.47	55.45	31.47	78.67	62.40	-100.63
8+05.21		805.21	5.21	17.78	60.19	3.40	11.16	65.80	-111.74
8+31.76		831.76	26.55	91.74	46.34	53.85	52.38	119.64	-125.98
8+50.00		850.00	18.24	91.39	44.92	61.86	30.83	181.50	-104.20
8+58.30		858.30	8.30	91.77	45.91	28.15	13.96	209.65	-94.19
8+62.85		862.85	4.55	91.79	46.90	15.47	7.82	225.12	-88.89
8+89.40		889.40	26.55	83.12	56.29	86.00	50.74	311.12	-68.85
9+00.00		900.00	10.60	82.82	68.74	32.57	24.54	343.69	-68.18
9+15.94		915.94	15.94	84.84	0.43	49.49	20.42	393.18	-45.24
9+25.00	BK	925.00	9.06	87.66	0.14	28.94	0.10	422.12	-16.42
STRUCTURE B-33-0145									
CISSERVILLE RD/CTH M INTERSECTION			SEE EARTHWORK SUMMARY FOR INTERSECTION GRADING TOTALS						
			TOTALS		423		439		

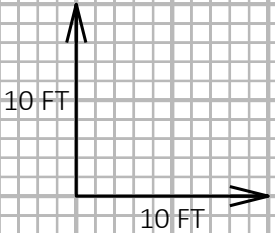
- (1) - NOT A BID ITEM - FOR INFORMATIONAL PURPOSES ONLY
- (2) - FILL EXPANSION 30%
- (3) - EXISTING ASPHALTIC PAVEMENT IS INCLUDED IN COMMON EXCAVATION TOTALS

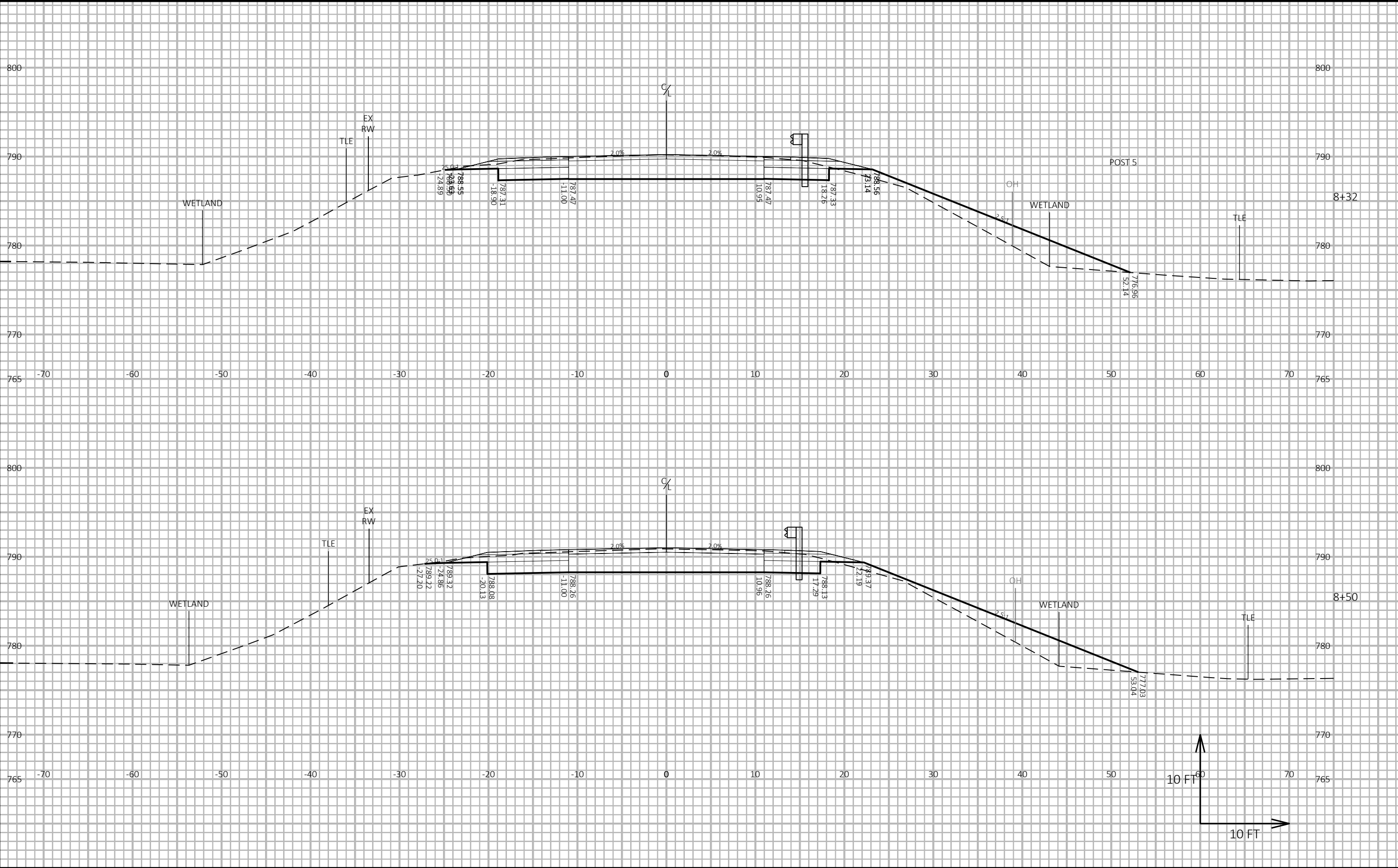


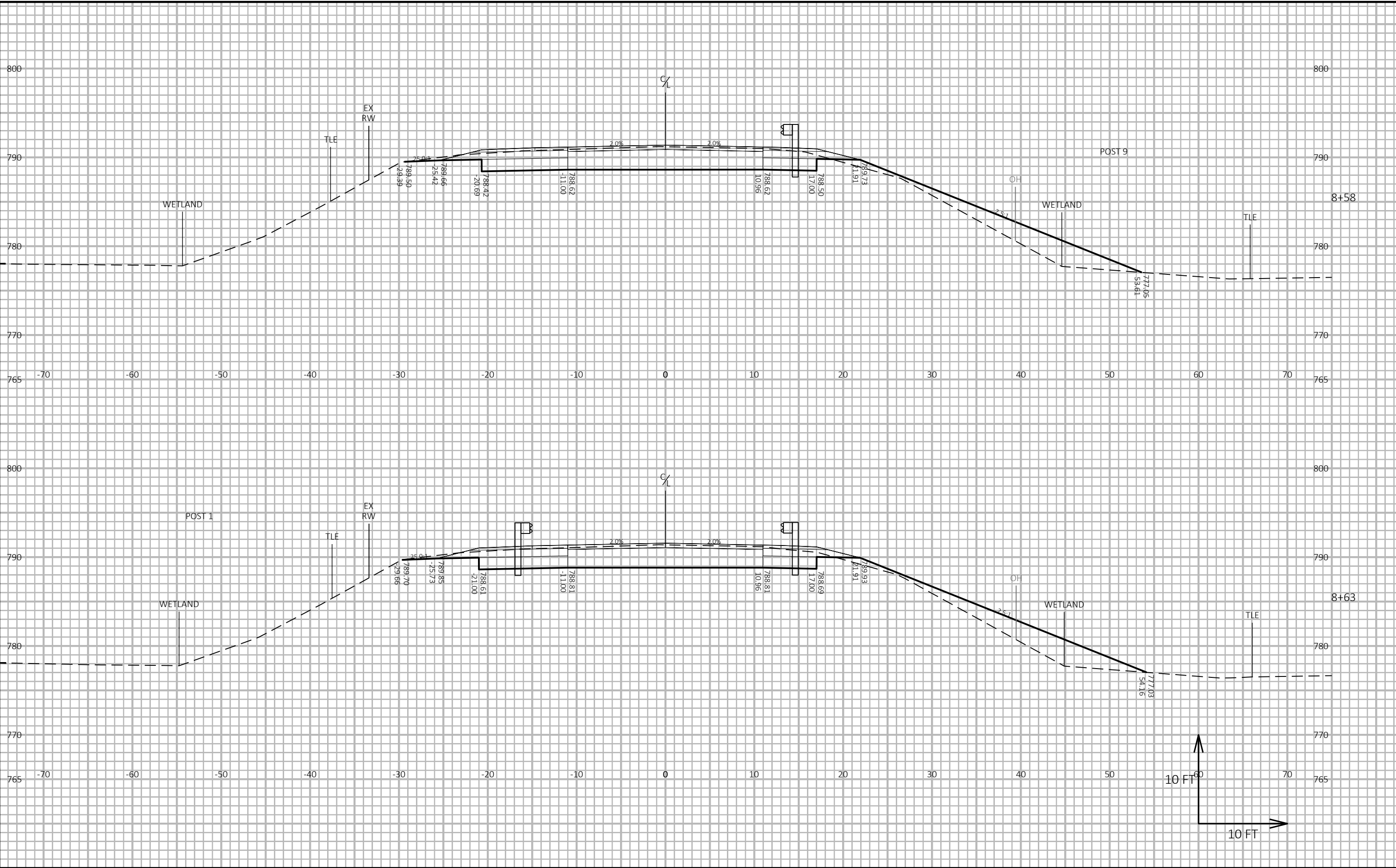


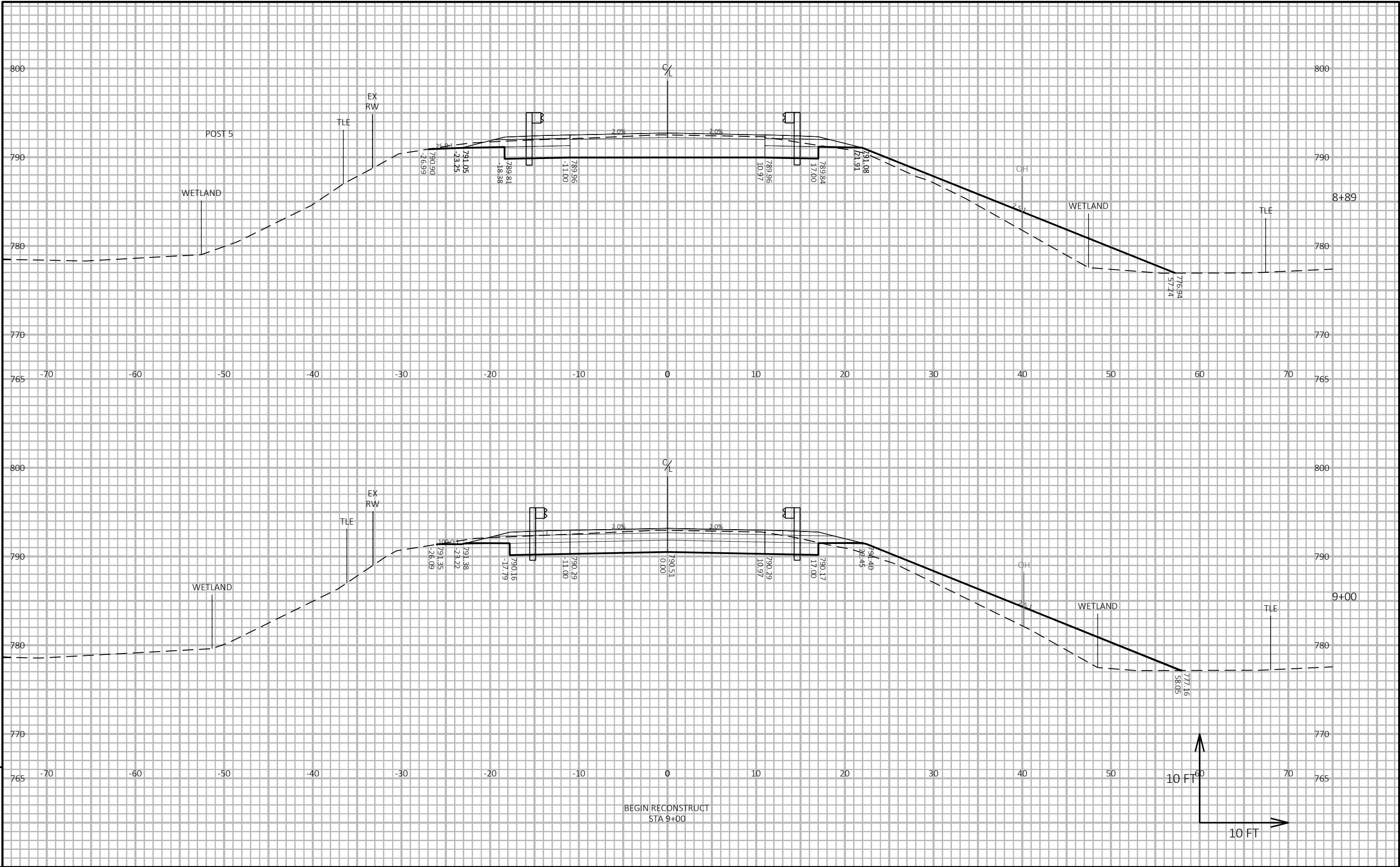


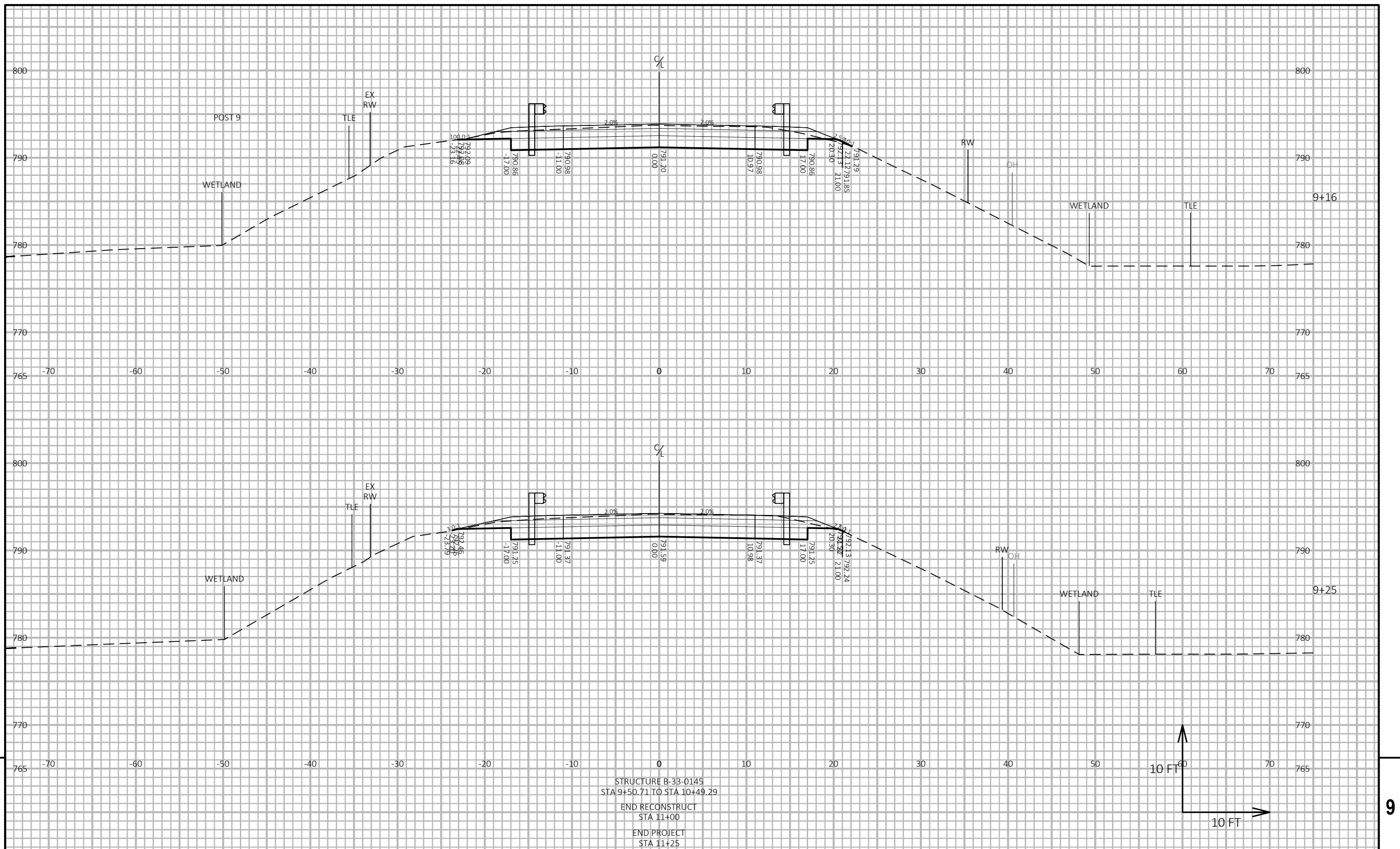
BEGIN PROJECT
STA 8+25











PROJECT NO:	5695-00-73
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HWY: LOCAL STREET

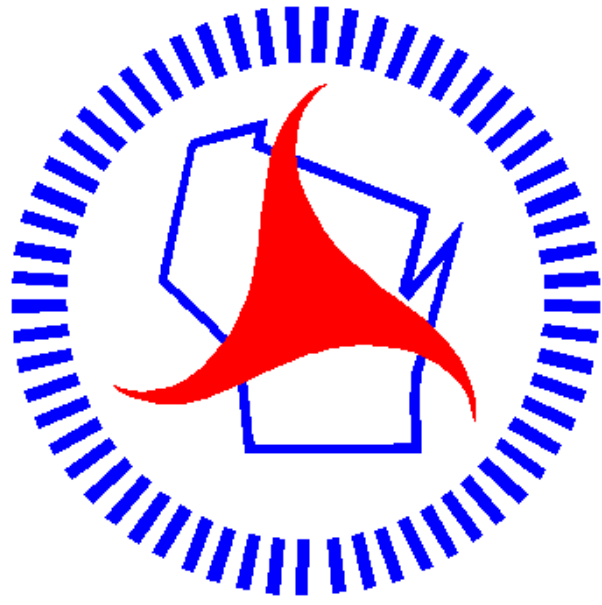
COUNTY: LAFAYETTE

CROSS SECTIONS: CISSERVILLE ROAD

SHEET 72

9

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

<http://www.dot.wisconsin.gov>