

MAD

PROJECT ID:
WITH: 5695-00-74

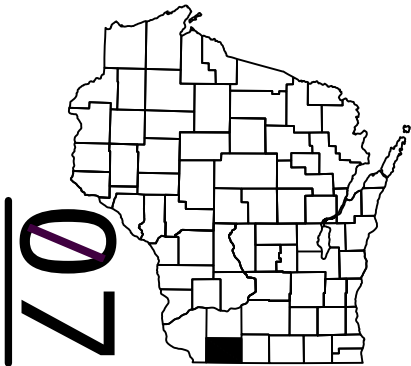
5625-00-75

COUNTY:
LAFAYETTE

December 2024
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 = 48



DESIGN DESIGNATION 5625-00-05

A.A.D.T.	2025	=	90
A.A.D.T.	2045	=	100
D.H.V.		=	9
D.D.		=	60/40
T.		=	10% (ASSUMED)
DESIGN SPEED		=	40 M.P.H
ESALS		=	73,000

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 BENTON, CARR FACTORY ROAD

BR GALENA RIVER BRIDGE B-33-0148

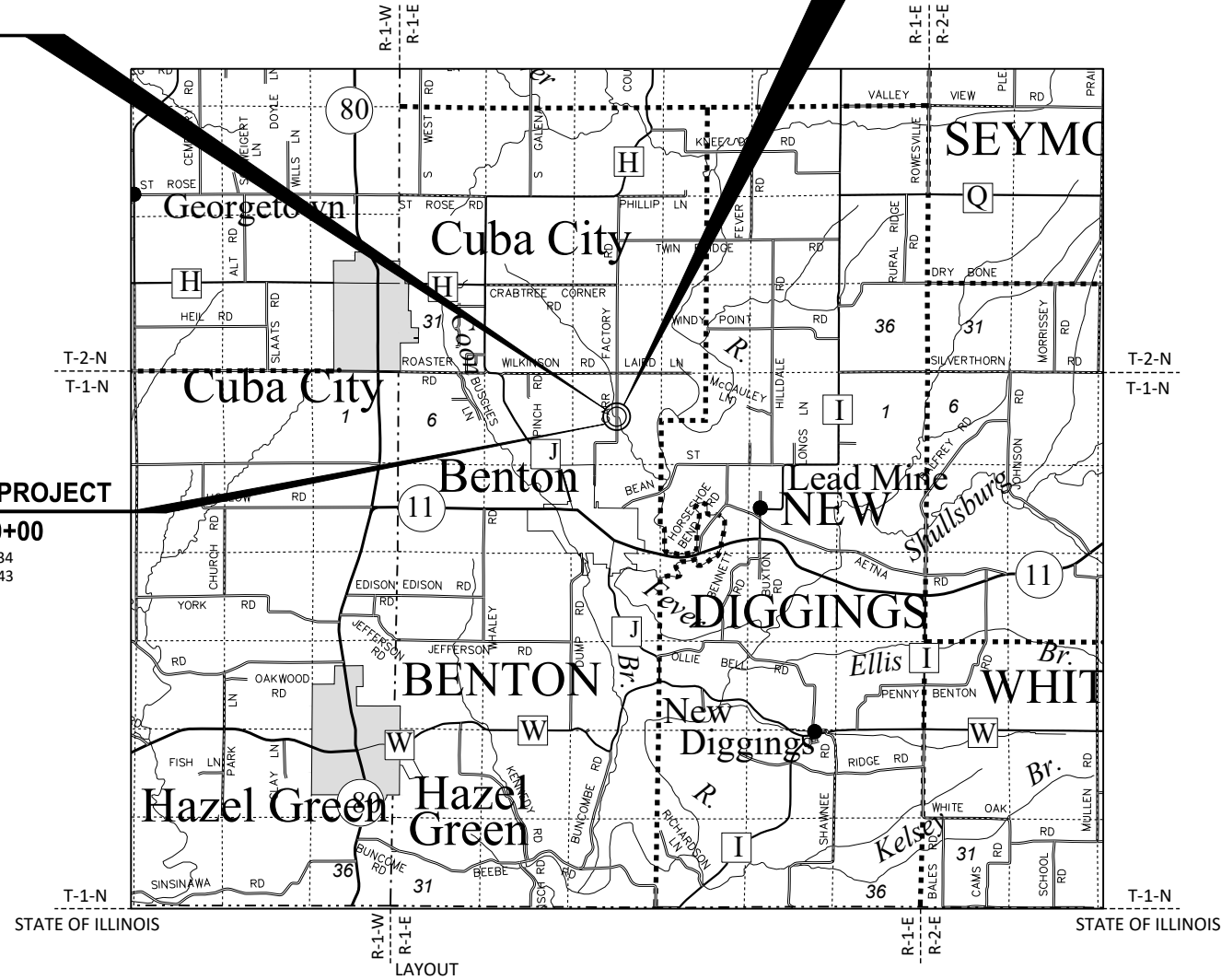
LOC STR
LAFAYETTE COUNTY

STATE PROJECT NUMBER
5625-00-75

END PROJECT
STA. 11+40

STRUCTURE B-33-148

BEGIN PROJECT
STA. 10+00
Y = 132,591.34
X = 413,023.43



SCALE 0 2 MI
TOTAL NET LENGTH OF CENTERLINE = 0.027 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 THE NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID (18).

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
PROJECT ID		
5625-00-75	WISC 2025096	1
5695-00-74	WISC 2025097	

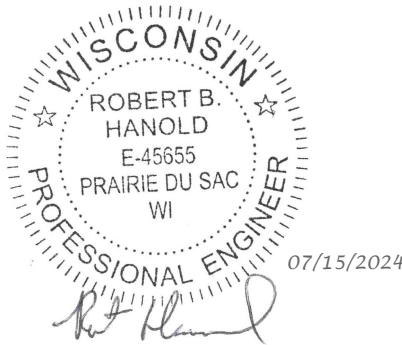
ACCEPTED FOR

COUNTY of LAFAYETTE

7/23/24 (Date) Dan Rieley (Highway Commissioner)

ORIGINAL PLANS PREPARED BY

JEWELL
associates engineers, inc
Engineers - Architects - Surveyors



STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	JEWELL ASSOCIATES ENGINEERS, INC.
Designer	JEWELL ASSOCIATES ENGINEERS, INC.
Project Manager	ZACHARY PEARSON, P.E.
Regional Examiner	SW REGION
Regional Supervisor	KYLE HEMP, P.E.

APPROVED FOR THE DEPARTMENT
07/24/24 ZACHARY PEARSON
DATE: (Signature)

E

GENERAL NOTES

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

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE, AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION. EXACT LOCATIONS OF EBS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

THE QUANTITY OF THE ITEMS FOR EROSION PROTECTION INCLUDES AN UNDISTRIBUTED AMOUNT FOR PROTECTION, CONTROL AND ABATEMENT OF WATER POLLUTION RESULTING FROM SOIL EROSION. THE DISTRIBUTION AND LOCATION OF THESE MATERIALS ARE TO BE DETERMINED BY THE ENGINEER.

UNLESS SHOWN OTHERWISE, DISTURBED AREAS SHOWN WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS ARE TO BE FERTILIZED (TYPE B), SEEDED (USE SEED MIX NO. 75), AND MULCHED/EMAT AS DIRECTED BY THE ENGINEER.

WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE DENSE OR ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

SILT FENCE AND TURBIDITY BARRIER SHALL BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER IN THE FIELD. SILT FENCE SHALL AND TURBIDITY BARRIER BE PLACED PRIOR TO CONSTRUCTION AND SHALL BE IN PLACE PRIOR TO STRUCTURE REMOVAL.

REMOVAL OF ASPHALTIC SURFACES WHERE AN ABUTTING ASPHALTIC SURFACE IS TO REMAIN IN PLACE SHALL REQUIRE A SAWCUT MEETING THE APPROVAL OF THE ENGINEER IN THE FIELD.

WETLANDS ARE PRESENT IN THE PROJECT LIMITS. THE CONTRACTOR SHALL NOT OPERATE EQUIPMENT OR STOCKPILE MATERIALS BEYOND THE EXISTING SLOPE INTERCEPT FROM STA. 10+00 - STA. 10+59 RT., STA 10+69 - STA 11+40 RT., STA 10+92 - STA. 11+40 LT.

THE LOCATION OF ALL PERMANENT SIGNING SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD PRIOR TO PLACEMENT.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTION AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, BIKE, OR PARKING LANE.

4-INCHES OF ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH A 2 ¼-INCH LOWER LAYER AND A 1 ¾-INCH UPPER LAYER.

ADJUST DITCH GRADING AS NECESSARY TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER IN THE FIELD.

ASPHALTIC SURFACE QUANTITIES WERE CALCULATED USING 115 LB/SY/IN.

CONTACTS

WISDOT:
WISCONSIN DEPARTMENT OF TRANSPORTATION
2101 WRIGHT ST.
MADISON, WI 53704
ATTN: ZACHARY PEARSON, P.E.
PHONE: (608) 246-5319
EMAIL: zachary.pearson@dot.wi.gov

LAFAYETTE COUNTY HIGHWAY DEPARTMENT:
DAN RIELLY, HIGHWAY COMMISSIONER
12016 HILL STREET
P.O. BOX 100
DARLINGTON, WI 53530
PHONE: (608) 776-4917
EMAIL: dan.rielly@lafayettecountywi.gov

DESIGN CONSULTANT:
JEWELL ASSOCIATES ENGINEERS, INC.
560 SUNRISE DRIVE
SPRING GREEN, WI 53588
ATTN: ROBERT HANOLD, P.E.
PHONE: (608) 588-7484
CELL: (608) 606-3568
EMAIL: robert.hanold@jewellassoc.com

DNR LIAISON:
STATE OF WISCONSIN
DNR SERVICE CENTER
3911 FISH HATCHERY RD
FITCHBURG WI 53711
ATTN: SHELLEY NELSON
PHONE: (608) 444-2835
EMAIL: shelley.nelson@wisconsin.gov

UTILITIES

FIBER OPTIC
BRIGHTSPEED
ATTN: DOUG MCGOWAN
135 N BONSON ST
PLATTEVILLE, WI 53818
PHONE: (608) 342-4316
EMAIL: doug.mcgowan1@brightspeed.com

ELECTRIC
SCENIC RIVERS ENERGY COOPERATIVE
ATTN: ANDREW LINDENBERG
206 CR-K
LANCASTER, WI 53813
PHONE: (608) 723-2121 EXT 587
EMAIL: alindenberg@srec.net

NATURAL GAS
NORTHERN NATURAL GAS CO,
ATTN: PHIL CURRY
5557 COUNTY D
PLATTEVILLE, WI 53818
PHONE: (402) 530-2801
EMAIL: phillip.curry@nngco.com

DIGGERS



HOTLINE

Dial  or (800) 242-8511

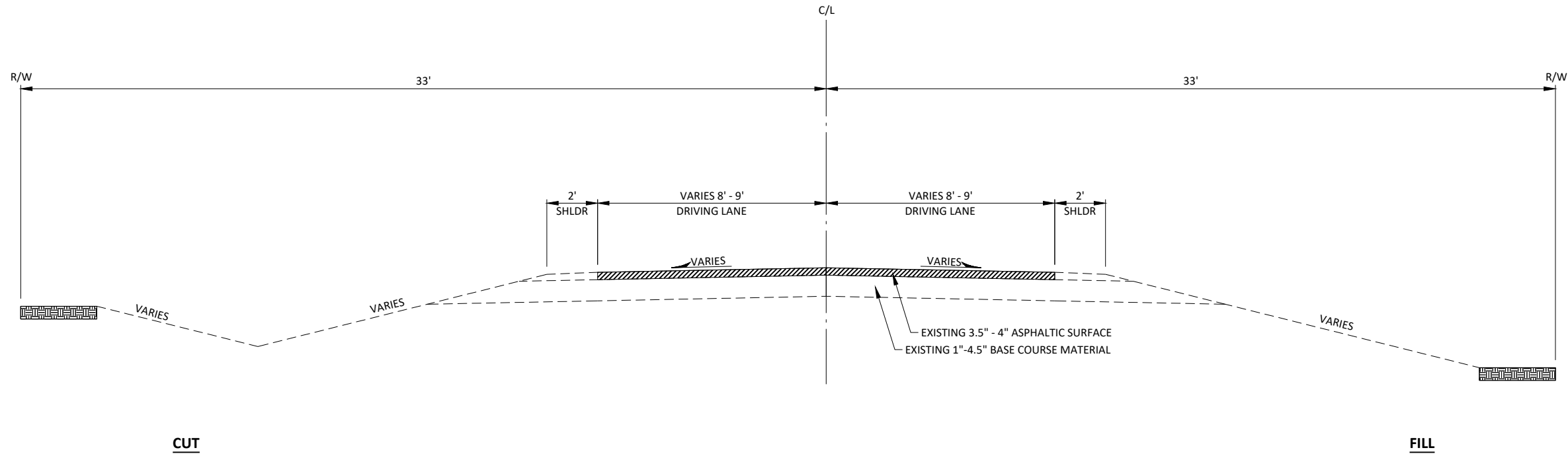
www.DiggersHotline.com

LIST OF STANDARD ABBREVIATIONS

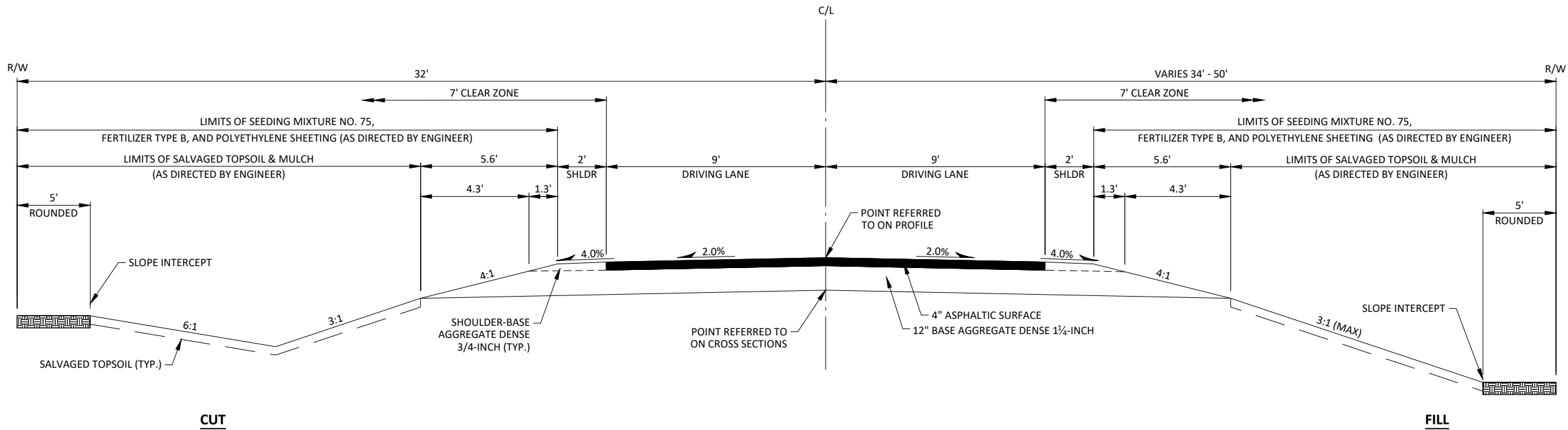
ABUT	Abutment	INV	Invert	SALV	Salvaged
AC	Acre	IP	Iron Pipe or Pin	SAN S	Sanitary Sewer
AGG	Aggregate	IRS	Iron Rod Set	SEC	Section
AH	Ahead	JT	Joint	SHLDR	Shoulder
<	Angle	JCT	Junction	SHR	Shrinkage
ASPH	Asphaltic	LHF	Left-Hand Forward	SW	Sidewalk
AVG	Average	L	Length of Curve	S	South
ADT	Average Daily Traffic	LIN FT or LF	Linear Foot	SQ	Square
BAD	Base Aggregate Dense	LC	Long Chord of Curve	SF or SQ FT	Square Feet
BK	Back	MH	Manhole	SY or SQ YD	Square Yard
BF	Back Face	MB	Mailbox	STD	Standard
BM	Bench Mark	ML or M/L	Match Line	SDD	Standard Detail Drawings
BR	Bridge	N	North	STH	State Trunk Highways
C or C/L	Center Line	Y	North Grid Coordinate	STA	Station
CC	Center to Center	O.A.L.	Overall Length	SS	Storm Sewer
CTH	County Trunk Highway	OD	Outside Diameter	SG	Subgrade
CR	Creek	PLE	Permanent Limited Easement	SE	Superelevation
CR	Crushed		Point	SL or S/L	Survey Line
CY or CU YD	Cubic Yard	PT	Point of Curvature	SV	Septic Vent
CP	Culvert Pipe	PC	Point of Intersection	T	Tangent
C & G	Curb and Gutter	PI	Point of Reverse Curvature	TEL	Telephone
D	Degree of Curve	PRC	Point of Tangency	TEMP	Temporary
DHV	Design Hour Volume	PT	Point On Curve	TI	Temporary Interest
DIA	Diameter	POC	Point on Tangent	TLE	Temporary Limited Easement
E	East	POT	Polyvinyl Chloride	t	Ton
X	East Grid Coordinate	PVC	Portland Cement Concrete	T or TN	Town
ELEC	Electric (al)	PCC	Pound	TRANS	Transition
EL or ELEV	Elevation	LB	Pounds Per Square Inch	TL or T/L	Transit Line
ESALS	Equivalent Single Axle Loads	PSI	Private Entrance	T	Trucks (percent of)
EBS	Excavation Below Subgrade	PE	Radius	TYP	Typical
ESTR	Existing Sign to Remain	R	Railroad	UNCL	Unclassified
FF	Face to Face	RR	Range	UG	Underground Cable
FE	Field Entrance	R	Reference Line	USH	United States Highway
F	Fill	RL or R/L	Reference Point	VAR	Variable
FG	Finished Grade	RP	Reinforced Concrete Culvert	V	Velocity or Design Speed
FL or F/L	Flow Line	RCCP	Pipe	VERT	Vertical
FT	Foot	REQ'D	Required	VC	Vertical Curve
FTG	Footing	RES	Residence or Residential	VOL	Volume
GN	Grid North	RW	Retaining Wall	WM	Water Main
HT	Height	RT	Right	WV	Water Valve
CWT	Hundredweight	RHF	Right-Hand Forward	W	West
HYD	Hydrant	R/W	Right-of-Way	WB	Westbound
INL	Inlet	R	River	YD	Yard
ID	Inside Diameter	RD	Road		
		RDWY	Roadway		

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

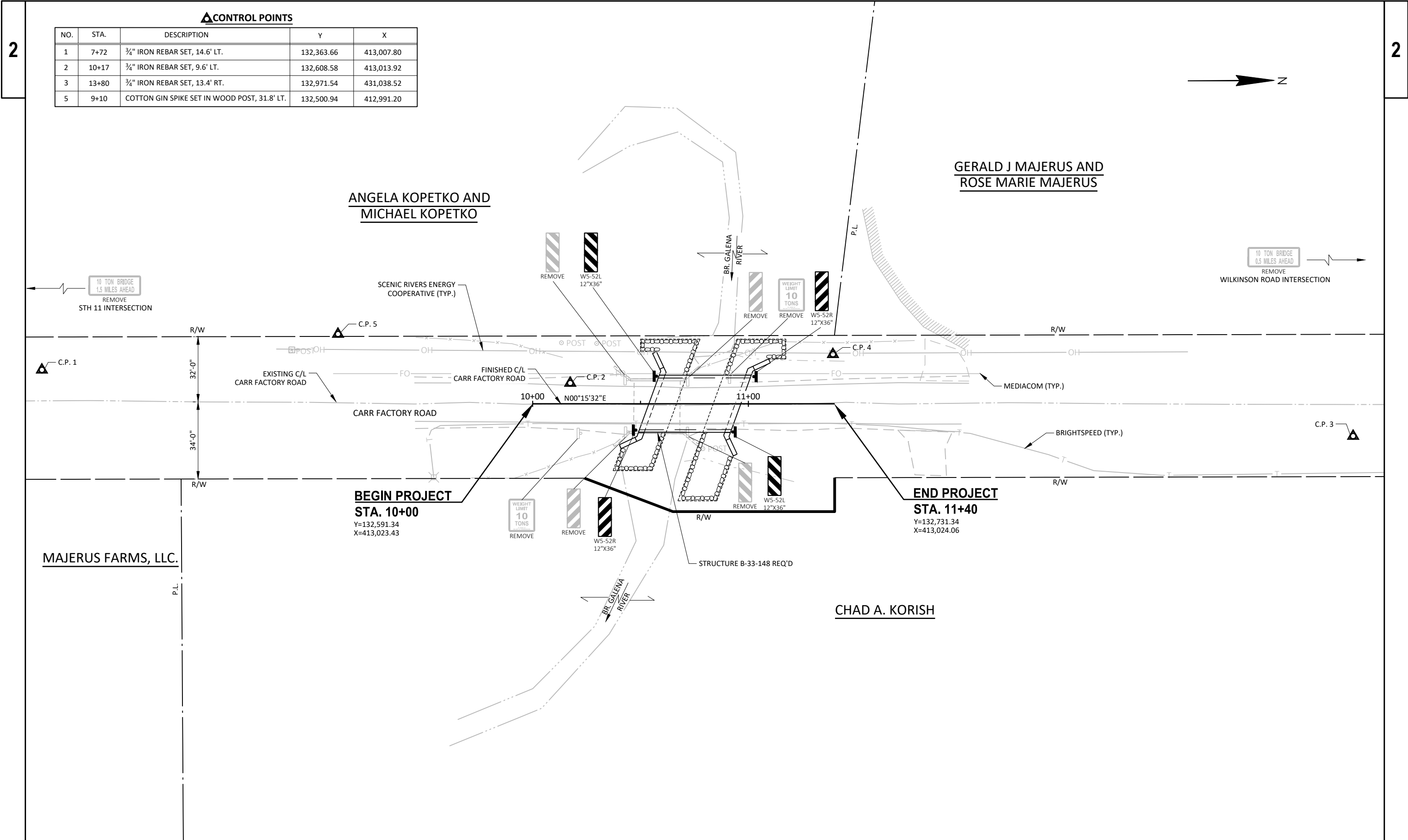
TOTAL PROJECT AREA= 0.25 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.19 ACRES



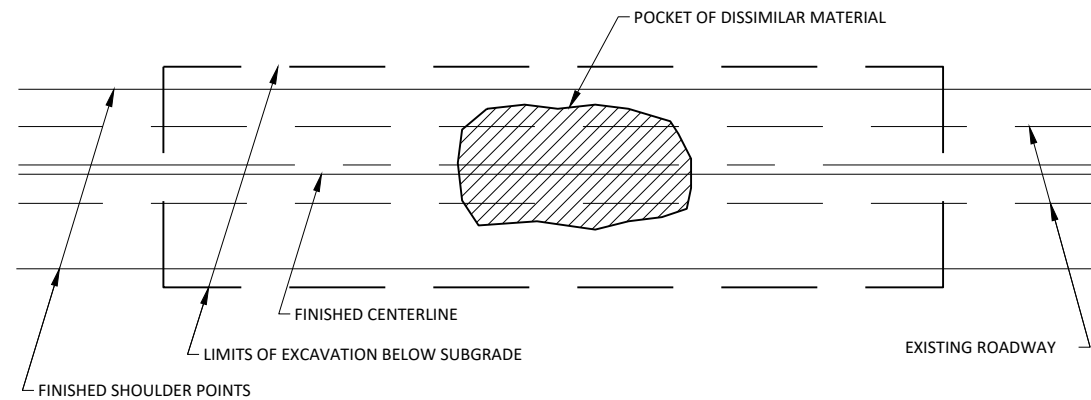
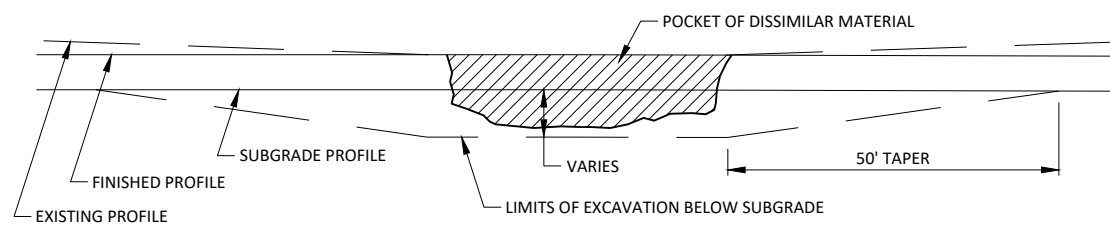
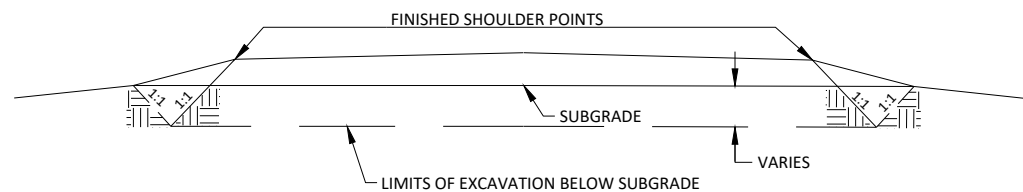
TYPICAL EXISTING SECTION
CARR FACTORY ROAD
STA. 10+00 - STA. 11+40



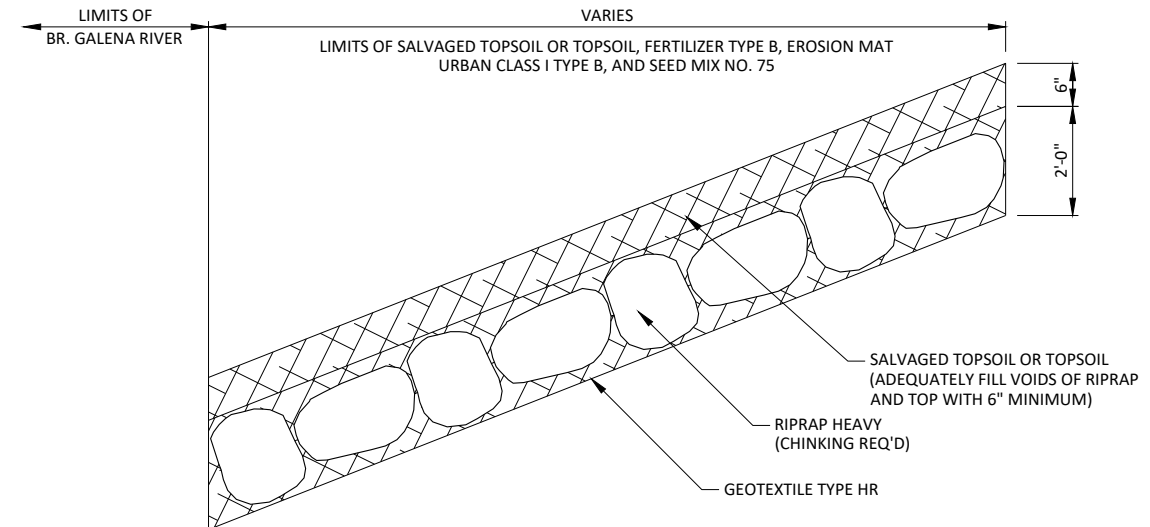
TYPICAL FINISHED SECTION
CARR FACTORY ROAD
STA. 10+00 - STA. 11+40



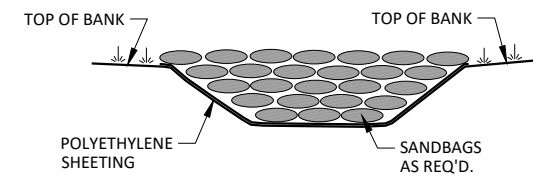
CONTROL POINTS				
NO.	STA.	DESCRIPTION	Y	X
1	7+72	¾" IRON REBAR SET, 14.6' LT.	132,363.66	413,007.80
2	10+17	¾" IRON REBAR SET, 9.6' LT.	132,608.58	413,013.92
3	13+80	¾" IRON REBAR SET, 13.4' RT.	132,971.54	431,038.52
5	9+10	COTTON GIN SPIKE SET IN WOOD POST, 31.8' LT.	132,500.94	412,991.20

**PLAN VIEW****PROFILE VIEW****CROSS SECTION VIEW**

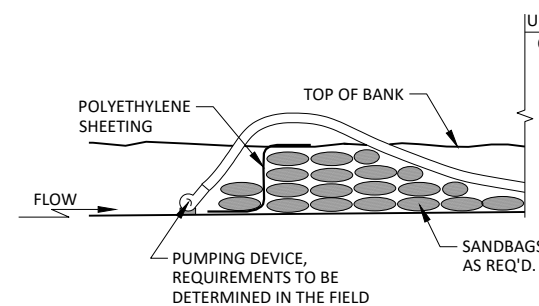
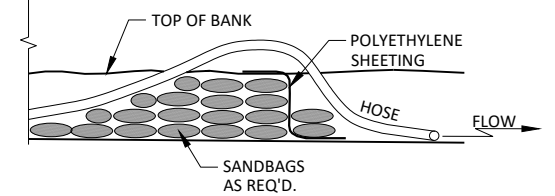
1. EXACT LOCATION OF E.B.S. (EXCAVATION BELOW SUBGRADE) SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER. BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.
3. THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED. LATERAL LIMITS OF EXCAVATION SHALL BE THE SUBGRADE SHOULDER POINTS.

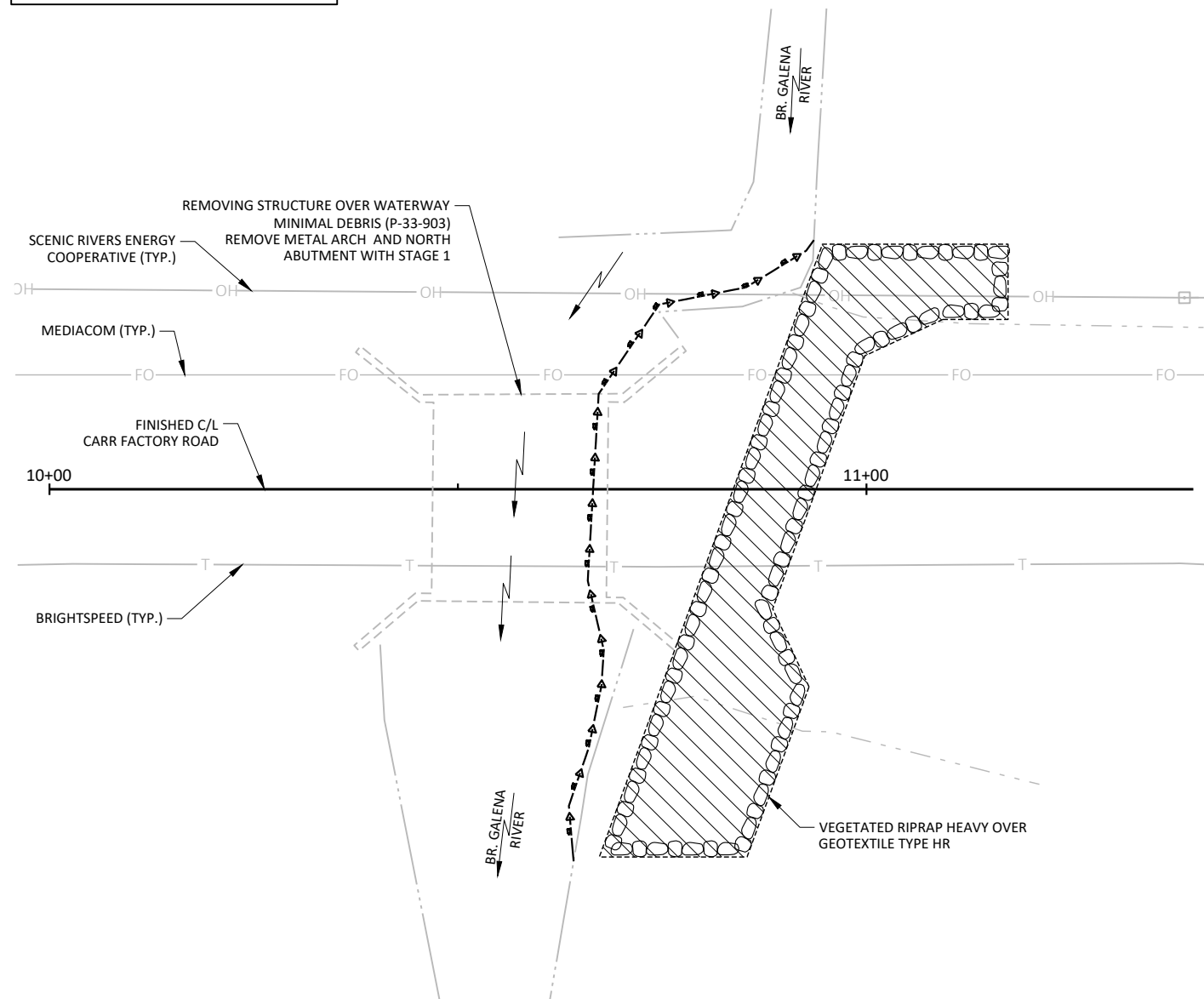
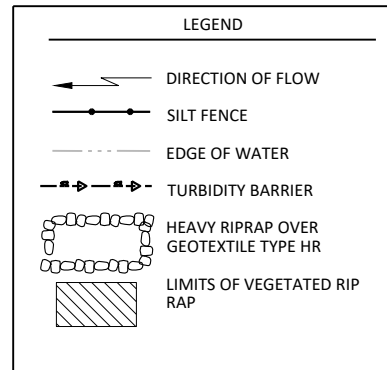
EXCAVATION BELOW SUBGRADE (E.B.S.) DETAIL**VEGETATED RIPRAP DETAIL**

(SEE PLAN AND PROFILE FOR LOCATION)

**TYPICAL SANDBAG INSTALLATION
IN EXISTING CHANNEL****PUMPING/DEWATERING OPERATION NOTES:**

1. PUMPING SYSTEM AND DEVICE, OR ENGINEER APPROVED EQUAL, WILL BE PAID FOR UNDER THE BID ITEM "PUMPING/DEWATERING".

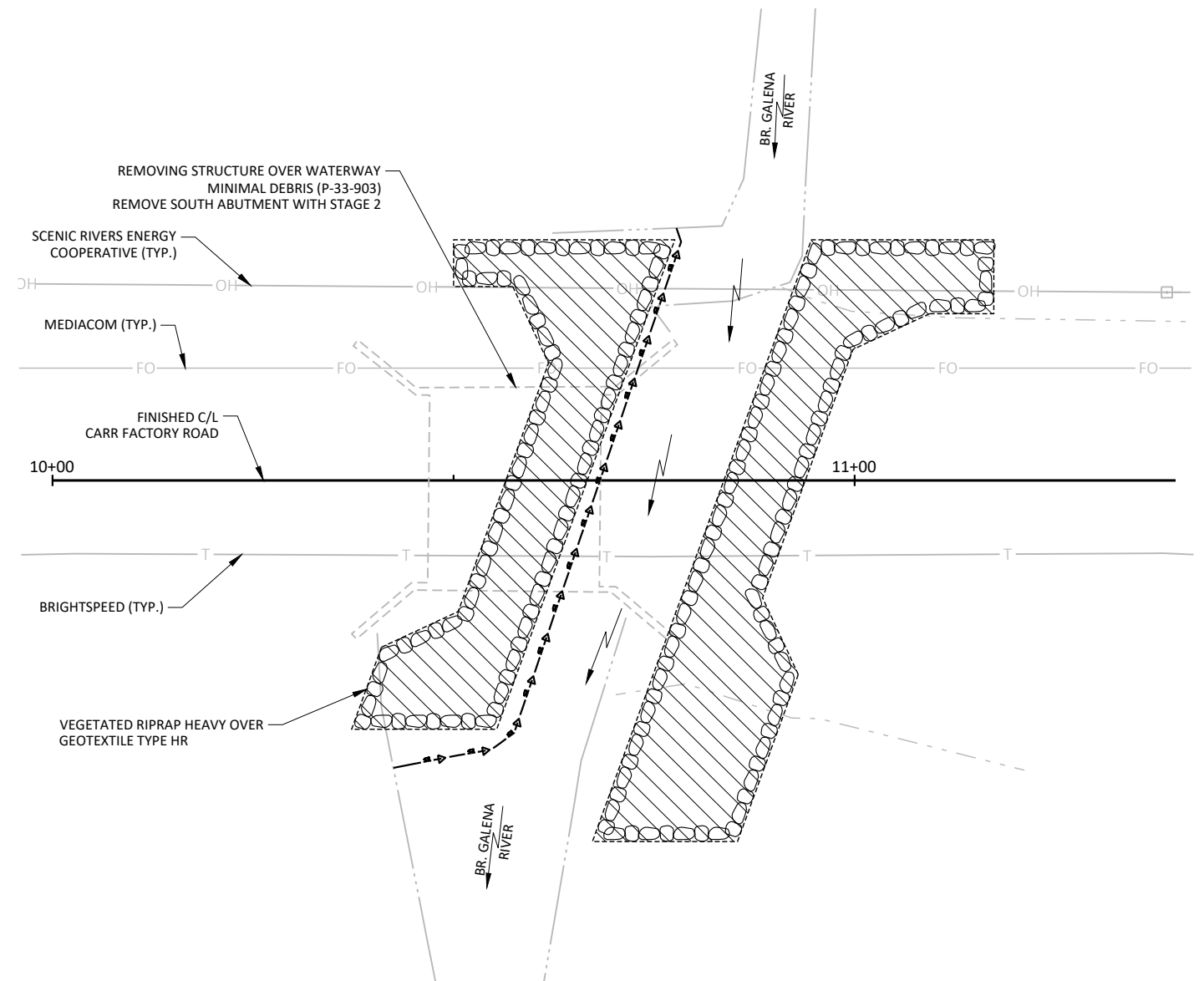
**SANDBAG LOCATION INLET DETAIL
(TO STOP FLOW INTO WORK AREA)****SANDBAG LOCATION OUTLET DETAIL
(TO STOP BACKWASH INTO WORK AREA)****PUMPING / DEWATERING DETAILS**



STAGE 1 CONSTRUCTION

NOTE:
CONSTRUCTION DETAILS SHOWN ON THIS SHEET PRESENT ONE POSSIBLE CONSTRUCTION METHOD. ALTERNATIVE METHODS AND LOCATIONS MAY BE ACCEPTABLE PROVIDED THEY MEET THE APPROVAL OF THE FIELD ENGINEER.

ALL EARTHWORK FOR CHANNEL REALIGNMENT SHALL BE INCLUDED IN BID ITEM 206.1001 EXCAVATION FOR STRUCTURES BRIDGES (B-33-0148)



STAGE 2 CONSTRUCTION

Estimate Of Quantities By Plan Sets

5625-00-75					
Line	Item	Item Description	Unit	Total	Qty
0006	203.0250	Removing Structure Over Waterway Remove Debris (structure) 01. P-33-0903	EACH	1.000	1.000
0010	205.0100	Excavation Common	CY	110.000	110.000
0012	206.1001	Excavation for Structures Bridges (structure) 01. B-33-0148	EACH	1.000	1.000
0016	208.0100	Borrow	CY	45.000	45.000
0018	210.1500	Backfill Structure Type A	TON	300.000	300.000
0020	213.0100	Finishing Roadway (project) 01. 5625-00-75	EACH	1.000	1.000
0024	305.0110	Base Aggregate Dense 3/4-Inch	TON	15.000	15.000
0026	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	290.000	290.000
0030	455.0605	Tack Coat	GAL	12.000	12.000
0032	465.0105	Asphaltic Surface	TON	56.000	56.000
0034	502.0100	Concrete Masonry Bridges	CY	129.000	129.000
0036	502.3200	Protective Surface Treatment	SY	178.000	178.000
0040	505.0400	Bar Steel Reinforcement HS Structures	LB	4,200.000	4,200.000
0042	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	19,190.000	19,190.000
0048	513.4061	Railing Tubular Type M	LF	90.000	90.000
0050	516.0500	Rubberized Membrane Waterproofing	SY	12.000	12.000
0052	550.0020	Pre-Boring Rock or Consolidated Materials	LF	180.000	180.000
0056	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	210.000	210.000
0058	606.0300	Riprap Heavy	CY	195.000	195.000
0060	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	140.000	140.000
0062	618.0100	Maintenance and Repair of Haul Roads (project) 01. 5625-00-75	EACH	1.000	1.000
0066	619.1000	Mobilization	EACH	0.350	0.350
0068	624.0100	Water	MGAL	5.000	5.000
0070	625.0105	Topsoil	CY	50.000	50.000
0072	625.0500	Salvaged Topsoil	SY	500.000	500.000
0074	627.0200	Mulching	SY	500.000	500.000
0076	628.1504	Silt Fence	LF	260.000	260.000
0078	628.1520	Silt Fence Maintenance	LF	520.000	520.000
0080	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0082	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0084	628.2008	Erosion Mat Urban Class I Type B	SY	270.000	270.000
0086	628.5505	Polyethylene Sheeting	SY	500.000	500.000
0088	628.6005	Turbidity Barriers	SY	240.000	240.000
0090	628.7504	Temporary Ditch Checks	LF	24.000	24.000
0092	629.0210	Fertilizer Type B	CWT	1.000	1.000
0096	630.0175	Seeding Mixture No. 75	LB	6.000	6.000
0098	630.0200	Seeding Temporary	LB	9.000	9.000
0100	630.0300	Seeding Borrow Pit	LB	1.000	1.000
0102	630.0500	Seed Water	MGAL	10.000	10.000
0104	633.5100	Markers ROW	EACH	5.000	5.000
0106	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0108	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0110	638.2602	Removing Signs Type II	EACH	8.000	8.000
0112	638.3000	Removing Small Sign Supports	EACH	8.000	8.000
0114	642.5001	Field Office Type B	EACH	0.500	0.500
0116	643.0420	Traffic Control Barricades Type III	DAY	1,080.000	1,080.000
0118	643.0705	Traffic Control Warning Lights Type A	DAY	1,680.000	1,680.000
0120	643.0900	Traffic Control Signs	DAY	840.000	840.000
0122	643.5000	Traffic Control	EACH	0.500	0.500

Estimate Of Quantities By Plan Sets

5625-00-75					
Line	Item	Item Description	Unit	Total	Qty
0124	645.0111	Geotextile Type DF Schedule A	SY	88.000	88.000
0126	645.0120	Geotextile Type HR	SY	330.000	330.000
0130	650.4500	Construction Staking Subgrade	LF	96.000	96.000
0132	650.5000	Construction Staking Base	LF	96.000	96.000
0134	650.6501	Construction Staking Structure Layout (structure) 01. B-33-0148	EACH	1.000	1.000
0138	650.9911	Construction Staking Supplemental Control (project) 01. 5625-00-75	EACH	1.000	1.000
0142	650.9920	Construction Staking Slope Stakes	LF	96.000	96.000
0144	690.0150	Sawing Asphalt	LF	36.000	36.000
0146	715.0502	Incentive Strength Concrete Structures	DOL	1,290.000	1,290.000
0150	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0152	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000

EARTHWORK SUMMARY

FROM/TO STA	LOCATION	205.0100	AVAILABLE MATERIAL (CY) (1)	UNEXPANDED FILL (CY) (2)	EXPANDED	MASS ORDINATE +/- (CY) (3)	208.0100 BORROW (CY)
		COMMON EXCAVATION CUT (2) (CY)			FILL FACTOR 1.25 (2)		
10+00 - 11+40	MAINLINE	110	110	124	155	-45	45
TOTALS =		110	110	124	155	-45	45

NOTES:
1.) AVAILABLE MATERIAL=CUT
2.) EXPANDED FILL FACTOR 1.25: EXPANDED FILL = (UNEXPANDED FILL)*1.25
3.) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE CATEGORY.
MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE CATEGORY.

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110	305.0120
		BASE AGGREGATE DENSE 3/4-INCH (TON)	BASE AGGREGATE DENSE 1 1/4-INCH (TON)
10+00 - 11+40	MAINLINE	15	290
TOTALS =		15	290

FINISHING ITEMS

STATION - STATION	LOCATION	625.0105	625.0500	627.0200	628.2008	628.5505	629.0210	630.0175	630.0200	630.0300	630.0500
		TOPSOIL (CY)	SALVAGED TOPSOIL (SY)	MULCHING (SY)	EROSION MAT URBAN CLASS I TYPE B (SY)	POLYETHYLENE SHEETING (SY)	FERTILIZER TYPE B (CWT)	SEEDING MIXTURE NO. 75 (LB)	SEEDING TEMPORARY (LB)	SEEDING BORROW PIT (LB)	SEED WATER (MGAL)
10+00 - 11+40	MAINLINE	-	400	400	-	400	0.3	3	7	-	6
10+37 - 11+17	VEGITATED RIPRAP	40	-	-	220	-	0.2	2	-	-	3
-	BORROW PIT	-	-	-	-	-	0.1	-	-	1	-
-	UNDISTRIBUTED	10	100	100	50	100	0.4	1	2	-	1
TOTALS =		50	500	500	270	500	1.0	6	9	1	10

WATER

STATION - STATION	LOCATION	624.0100
10+00 - 11+40	MAINLINE	5
TOTAL =		5

TEMPORARY DITCH CHECKS

STATION - STATION	LOCATION	628.7504
10+89	MAINLINE RT.	8
11+17	MAINLINE LT.	8
	UNDISTRIBUTED	8
TOTAL =		24

ASPHALTIC SURFACE

STATION - STATION	LOCATION	455.0605	465.0105
		TACK COAT (GAL)	ASPHALTIC SURFACE (TON)
10+00 - 11+40	MAINLINE	12	56
TOTALS =		12	56

SILT FENCE

STATION - STATION	LOCATION	628.1504	628.1520
		SILT FENCE (LF)	SILT FENCE MAINTENANCE (LF)
10+00 - 10+87	MAINLINE, LT.	80	160
10+00 - 10+43	MAINLINE, RT.	45	90
10+67 - 11+40	MAINLINE, LT.	80	160
-	UNDISTRIBUTED	55	110
TOTALS =		260	520

MOBILIZATION EROSION CONTROL

PROJECT	628.1905	628.1910
	MOBILIZATION EROSION CONTROL (EACH)	MOBILIZATION EMERGENCY EROSION CONTROL (EACH)
5625-00-75	4	2
TOTALS =		4

TURBIDITY BARRIER

	628.6005
LOCATION	(SY)
SOUTH RIVER BANK	90
NORTH RIVER BANK	105
UNDISTRIBUTED	45
TOTALS =	240

MARKERS ROW

PT #	STATION	LOCATION	633.5100
			OFFSET FROM FINISHED C/L FT
2	10+24	LEFT	31.48
4	11+40	RIGHT	34.28
5	11+40	RIGHT	50.00
6	10+65	RIGHT	50.00
7	10+24	RIGHT	34.52
TOTAL =			5

SAWING ASPHALT

STATION	LOCATION	690.0150
10+00	MAINLINE	18
11+40	MAINLINE	18
TOTAL =		36

PERMANENT SIGNING

APPROX. STATION	POSITION	LOCATION	SIGN CODE	SIGN DESCRIPTION	ORDER LINES	SIGN SIZE	634.0612 POSTS WOOD 4X6- INCH X 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)
-	RIGHT	AT STH 11	R12-55	XX TON BRIDGE XX MILES AHEAD	10/1.5		—	—	1	1
10+21	RIGHT	MAINLINE	R12-1	WEIGHT LIMIT XX TONS	10	24X30	—	—	1	1
10+48	RIGHT	MAINLINE	W5-52R	BRIDGE HASH MARKS		12X36	1	3.00	—	—
10+57	LEFT	MAINLINE	W5-52L	BRIDGE HASH MARKS		12X36	1	3.00	—	—
10+43	RIGHT	MAINLINE	W5-52R	BRIDGE HASH MARKS		12X36	—	—	1	1
10+43	LEFT	MAINLINE	W5-52L	BRIDGE HASH MARKS		12X36	—	—	1	1
10+72	RIGHT	MAINLINE	W5-52L	BRIDGE HASH MARKS		12X36	—	—	1	1
10+73	LEFT	MAINLINE	W5-52R	BRIDGE HASH MARKS		12X36	—	—	1	1
10+93	RIGHT	MAINLINE	W5-52L	BRIDGE HASH MARKS		12X36	1	3.00	—	—
11+02	LEFT	MAINLINE	W5-52R	BRIDGE HASH MARKS		12X36	1	3.00	—	—
10+91	LEFT	MAINLINE	R12-1	WEIGHT LIMIT XX TONS	10	24X30	—	—	1	1
-	LEFT	AT WILKINSON RD	R12-55	XX TON BRIDGE XX MILES AHEAD	10/0.5		—	—	1	1
TOTALS =							4	12.00	8	8

TRAFFIC CONTROL

	643.0420 BARRICADES TYPE III	643.0705 WARNING LIGHTS TYPE A	643.0900 SIGNS	643.5000 TRAFFIC CONTROL
LOCATION	(DAY)	(DAY)	(DAY)	(EACH)
PROJECT	1,080	1,680	840	0.5
TOTALS =	1,080	1,680	840	0.5

CONSTRUCTION STAKING

STATION -STATION	LOCATION	650.4500 SUBGRADE	650.5000 BASE	*650.6501 STRUCTURE LAYOUT (B-33-0148)	650.9911 SUPPLEMENTAL CONTROL (5625-00-75)	650.9920 SLOPES STAKES
		(L.F.)	(L.F.)	(EACH)	(EACH)	(L.F.)
10+00 - 10+53	MAINLINE	53	53	-	-	53
10+97 - 11+40	MAINLINE	43	43	-	-	43
5625-00-75	PROJECT	-	-	1	1	-
TOTAL =		96	96	1	1	96

*CATEGORY 020

CONVENTIONAL SYMBOLS			
SECTION LINE	---	SECTION CORNER SYMBOL	
QUARTER LINE	---	R/W MONUMENT (TO BE SET)	●
SIXTEENTH LINE	---	NON-MONUMENTED R/W POINT	○
NEW REFERENCE LINE	---	FOUND IRON PIN (1-INCH UNLESS NOTED)	IP
NEW R/W LINE	---	GEODETIC SURVEY MONUMENT	
EXISTING R/W OR HE LINE	---	SIXTEENTH CORNER MONUMENT	
PROPERTY LINE	---	SIGN	
LOT, TIE & OTHER MINOR LINES	---	OFF-PREMISE SIGN	
SLOPE INTERCEPT	---	COMPENSABLE	
CORPORATE LIMITS	---	NON-COMPENSABLE	
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)	---	ELECTRIC POLE	
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	---	TELEPHONE POLE	
TEMPORARY LIMITED EASEMENT AREA	---	PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	---	ACCESS RESTRICTED BY ACQUISITION	
TRANSMISSION STRUCTURES	---	NO ACCESS (BY STATUTORY AUTHORITY)	
BUILDING	---	ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)	
TO BE REMOVED	---	NO ACCESS (NEW HIGHWAY)	
BRIDGE	---	PARCEL NUMBER (25)	
CULVERT	---	UTILITY NUMBER (40)	
PARALLEL OFFSETS	---		

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	PAGE	P
MONUMENT	MON	POINT OF TANGENCY	PT
NATIONAL GEODETIC SURVEY	NGS	PERMANENT LIMITED EASEMENT	PLE
NUMBER	NO		
OUTLOT	OL	POINT OF BEGINNING	POB
NOTES		POINT OF CURVATURE	PC

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

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

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, LAFAYETTE COUNTY, NAD 83 (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 MONUMENTS (TYPICALLY 3/4 X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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."

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE LAFAYETTE COUNTY HIGHWAY DEPARTMENT.

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.

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

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

AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT-OF-WAY TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

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

FILE NAME : S:\Projects\W11678 WisDOT - Carr Factory Road Bridge, Lafayette Co\RW\DWG\W11678_CARR FACTORY ROAD_RW_TITLE.dwg

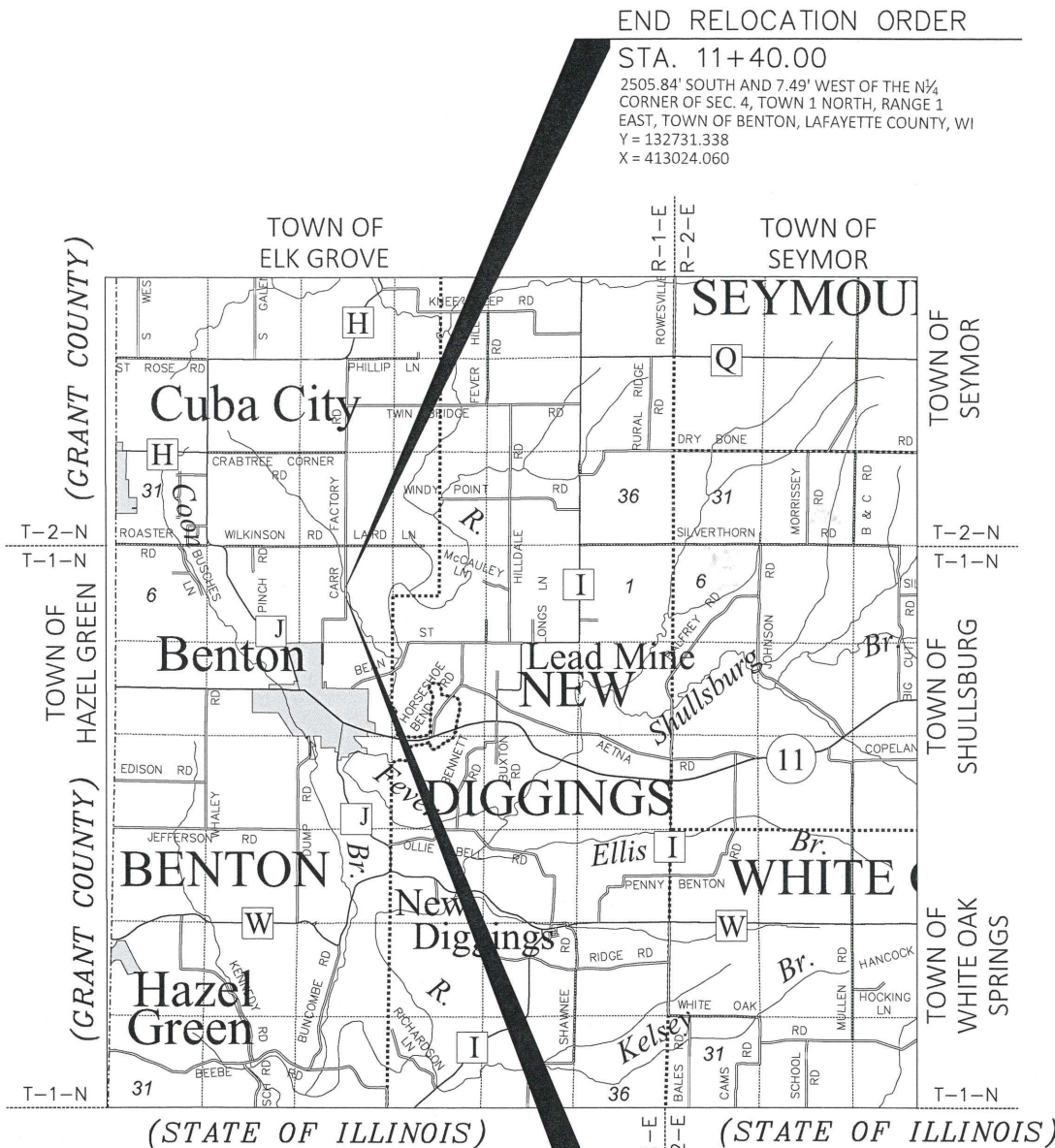
PLOT DATE : 2/13/2024 8:33 AM

PLOT BY : Tim Velte

PLOT NAME :

PLOT SCALE : 1:1

WISDOT/CADDs SHEET 50



END RELOCATION ORDER

STA. 11+40.00

2505.84' SOUTH AND 7.49' WEST OF THE N1/4 CORNER OF SEC. 4, TOWN 1 NORTH, RANGE 1 EAST, TOWN OF BENTON, LAFAYETTE COUNTY, WI
Y = 132731.338
X = 413024.060

BEGIN RELOCATION ORDER

STA. 10+24.00

2832.84' NORTH AND 5.50' EAST OF THE S1/4 CORNER OF SEC. 4, TOWN 1 NORTH, RANGE 1 EAST, TOWN OF BENTON, LAFAYETTE COUNTY, WI
Y = 132615.337
X = 413023.535

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
5625-00-05		
FEDERAL PROJECT NUMBER	4.01	2
PLAT OF RIGHT-OF-WAY REQUIRED FOR		
TOWN OF BENTON, CARR FACTORY ROAD		
BR. GALENA RIVER BRIDGE B-33-0148		
CARR FACTORY ROAD		LAFAYETTE COUNTY
CONSTRUCTION PROJECT NUMBER		
5625-00-75		

RECEIVED

MAR 11 2024

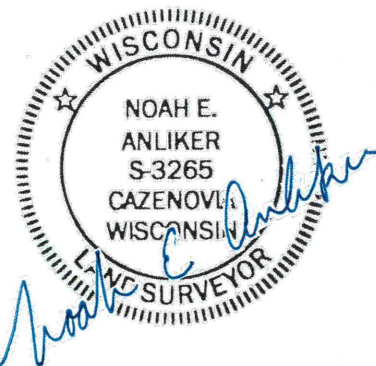
LAFAYETTE CO. CLERK

Carla Jacobson
Lafayette Co. Clerk

JEWELL
associates engineers, inc.
Engineers - Architects - Surveyors

560 SUNRISE DRIVE
SPRING GREEN, WI 53588
PHONE : 608.588.7484

I HEREBY CERTIFY THAT THIS PLAT WAS MADE FOR TOWN OF BENTON, WISCONSIN AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

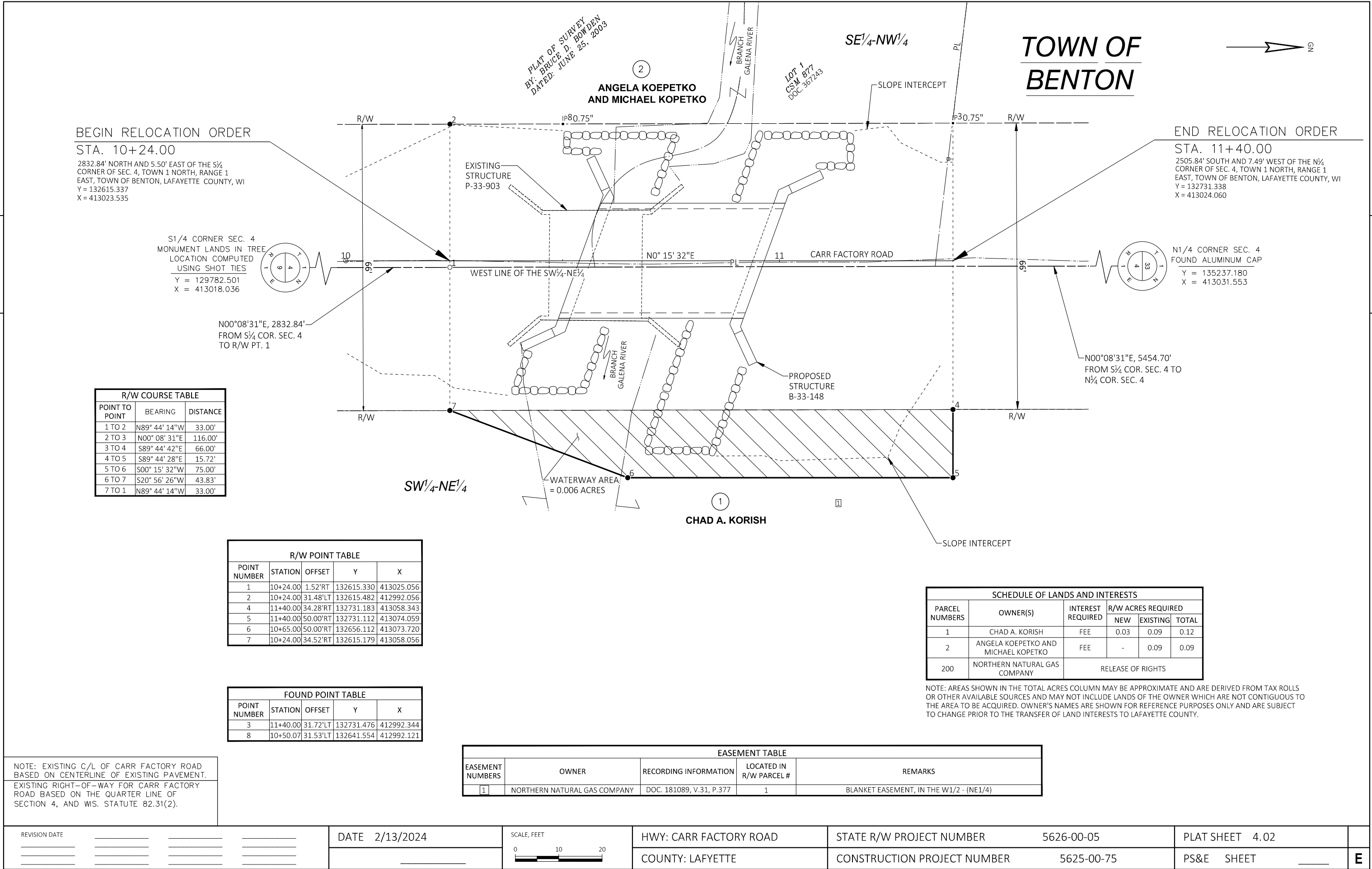


DATE: 2-13-2024

APPROVED FOR TOWN OF BENTON

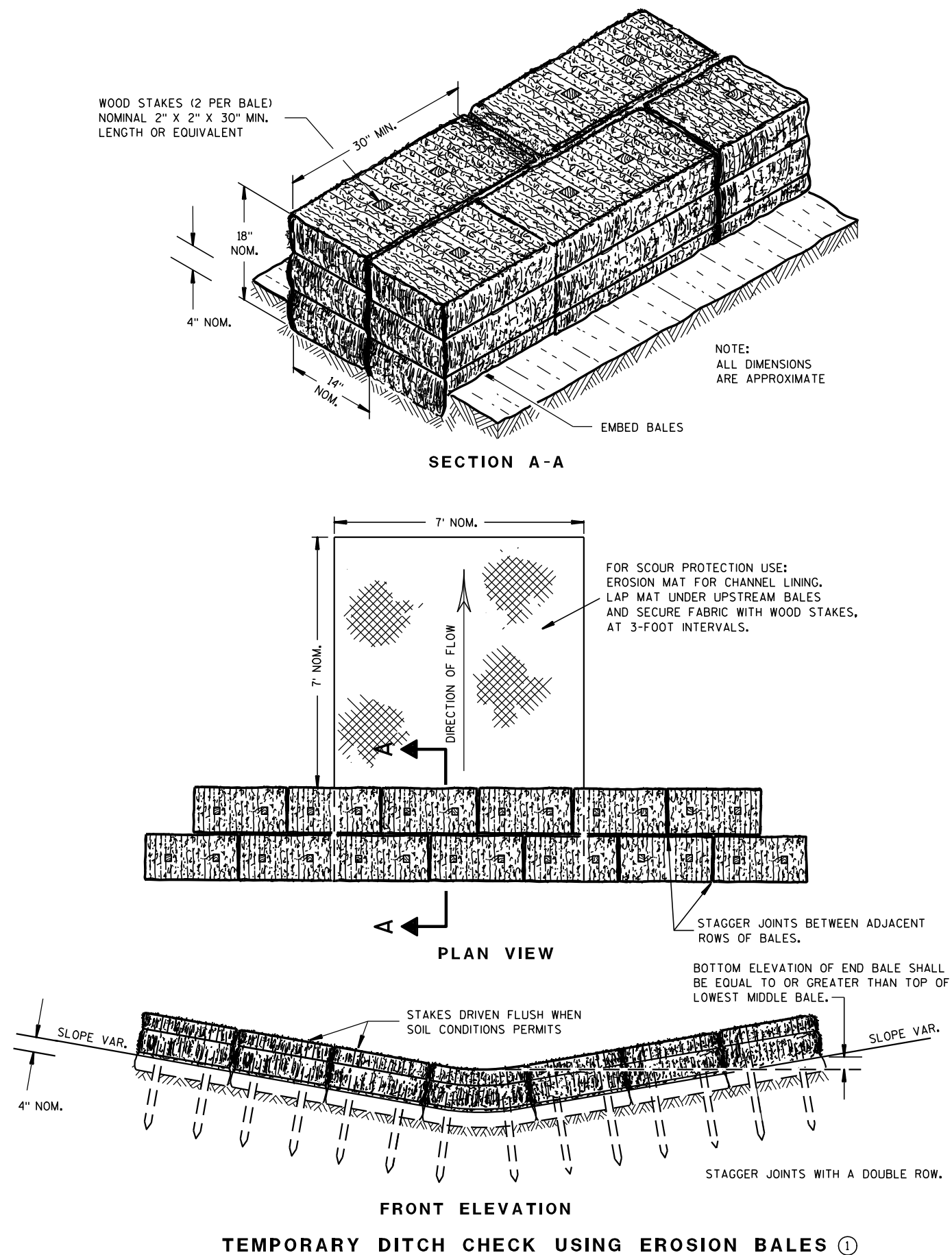
DATE: 3-8-24 Larry Redman Chairman
(NAME/TITLE)

E



Standard Detail Drawing List

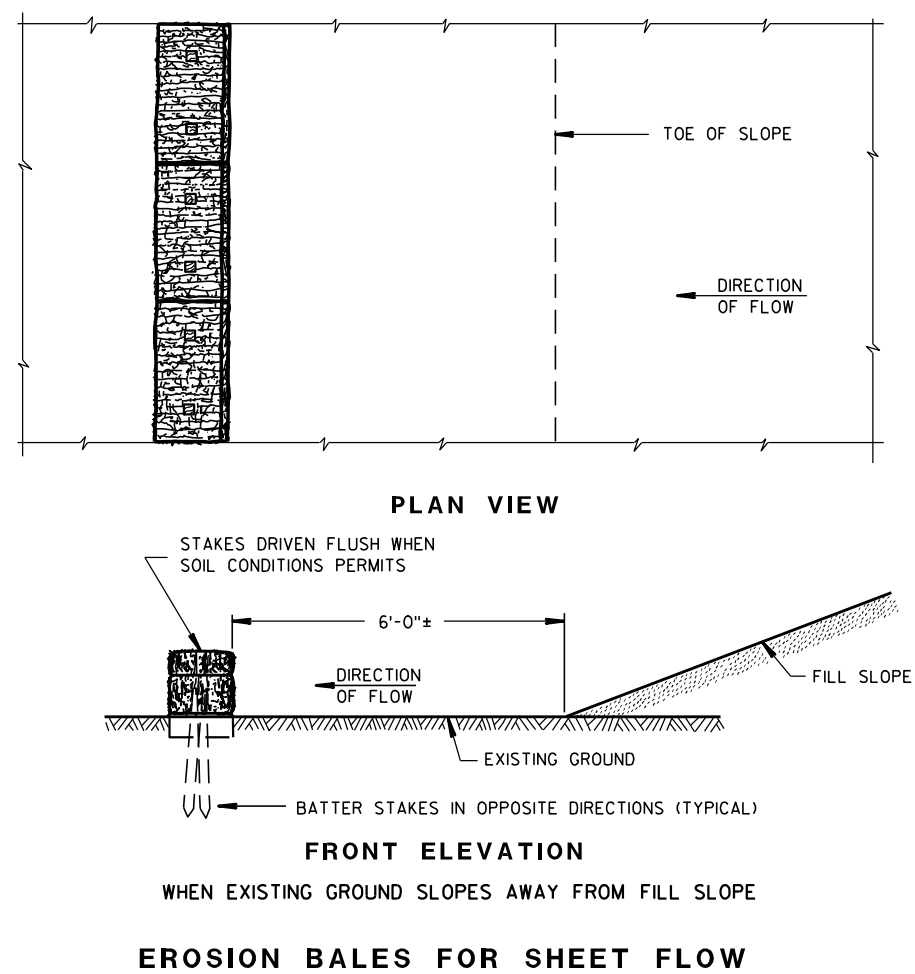
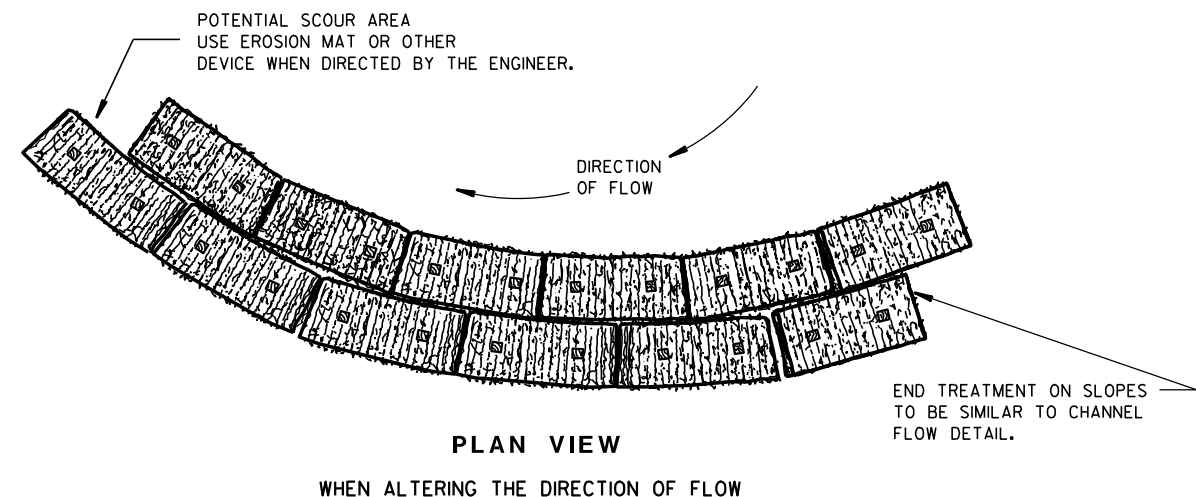
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-12	SIGNING & MARKING FOR TWO LANE BRIDGES
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS



GENERAL NOTES

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

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

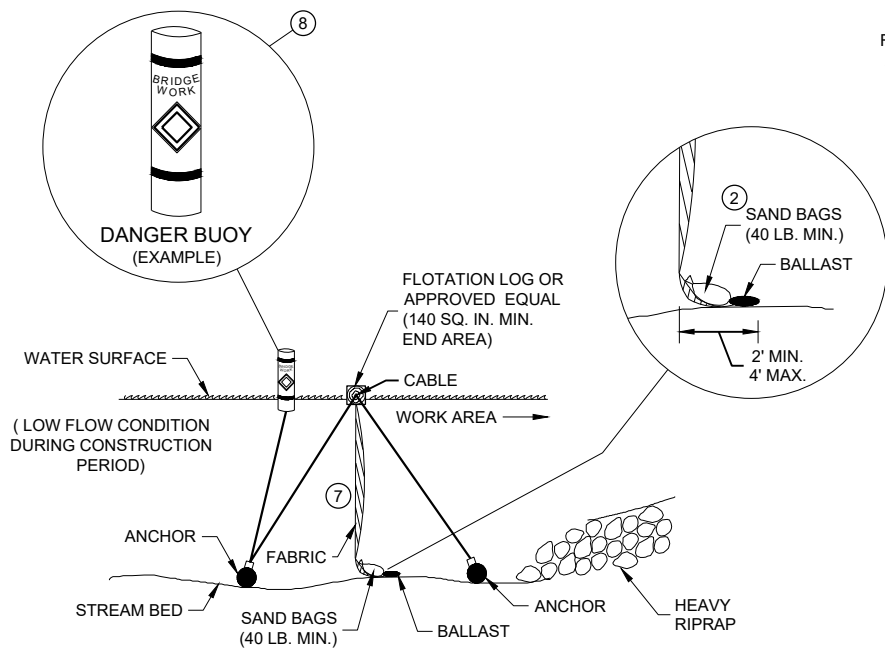
FHWA



- 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 1½" X 1½" 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.

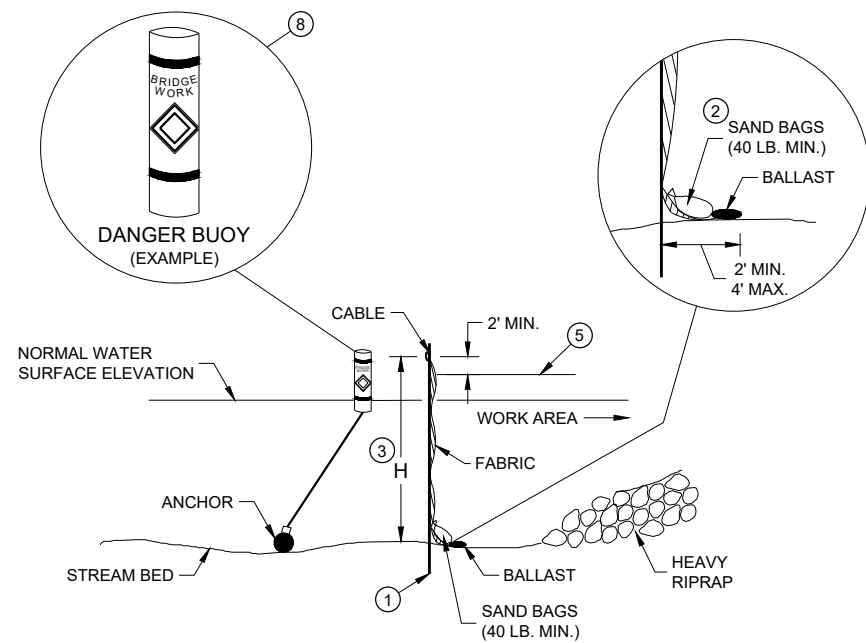


<p>SILT FENCE</p>	
<p>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</p>	
<p>APPROVED 4-29-05 DATE</p>	<p>/s/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER</p>



SECTION B - B

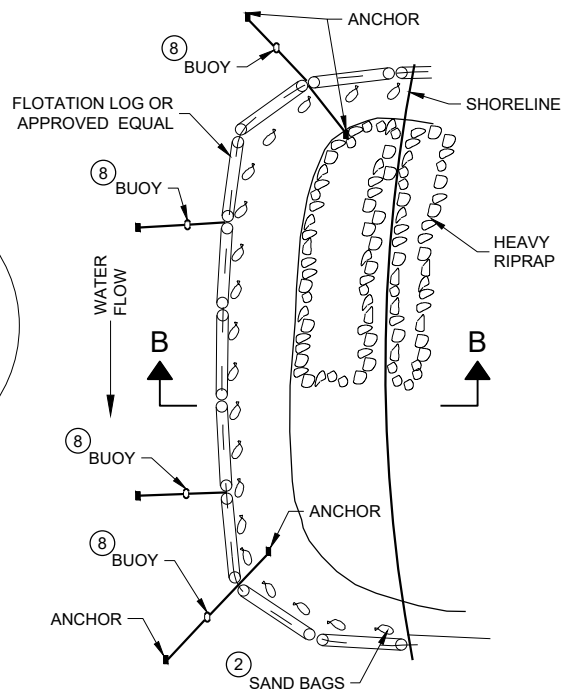
TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



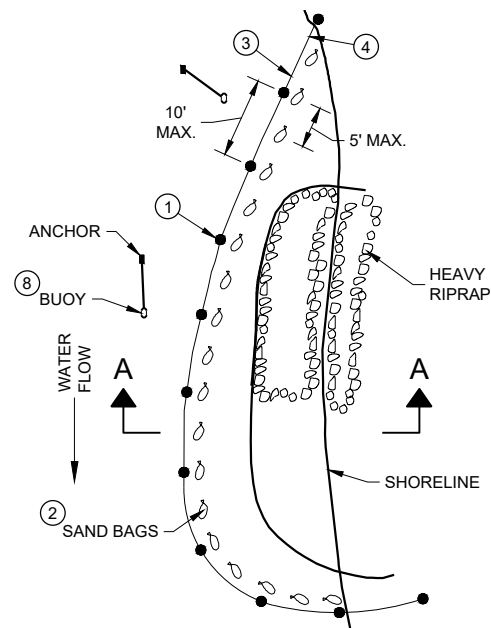
SECTION A - A

TURBIDITY BARRIER - STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS



PLAN VIEW



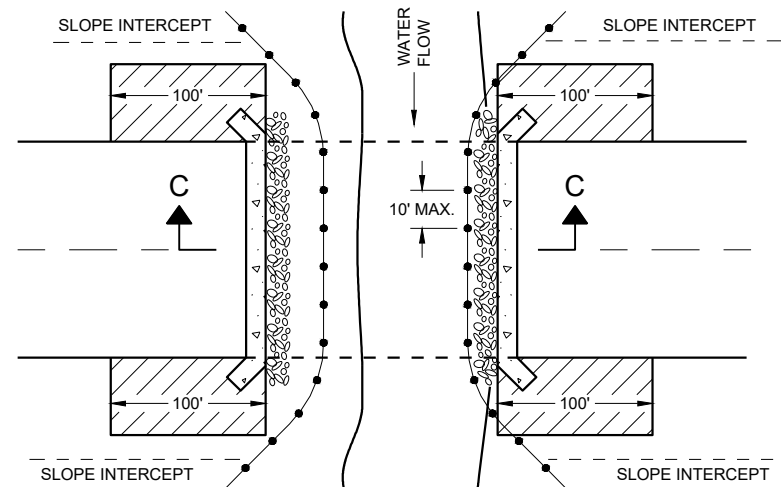
PLAN VIEW

GENERAL NOTES

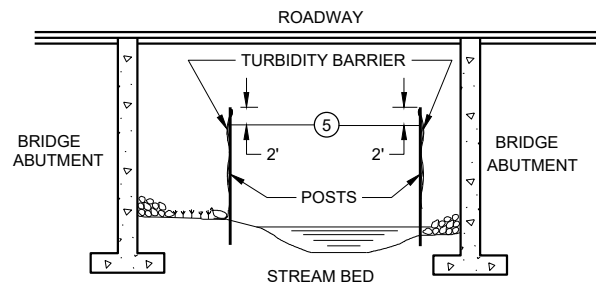
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

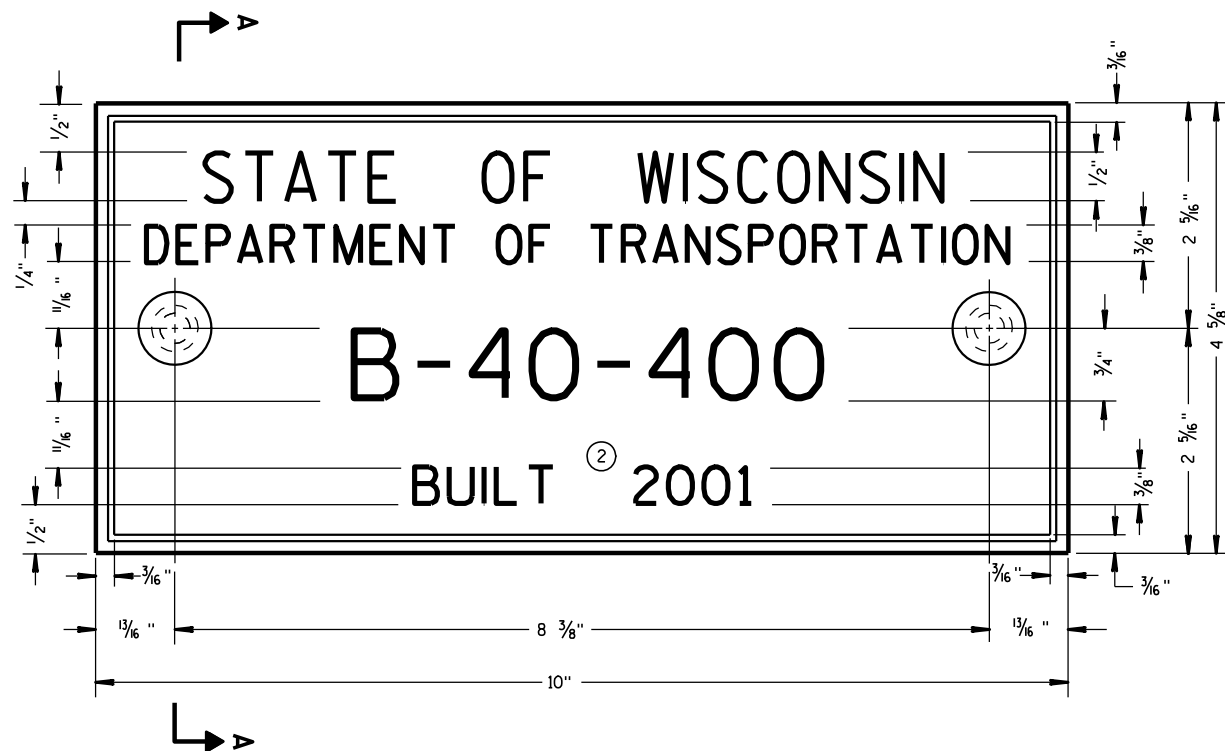
TURBIDITY BARRIER DETAIL SHOWING
TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

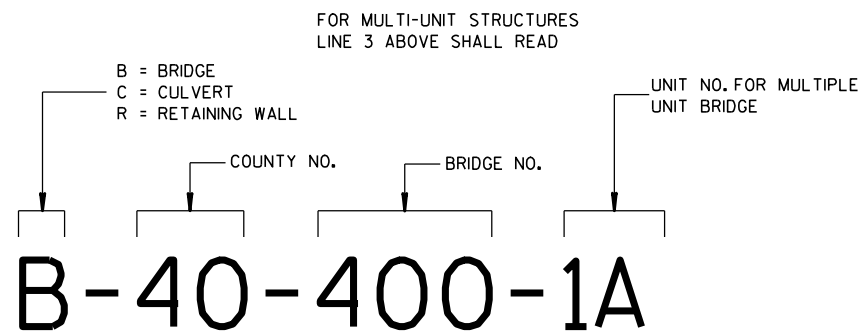
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



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



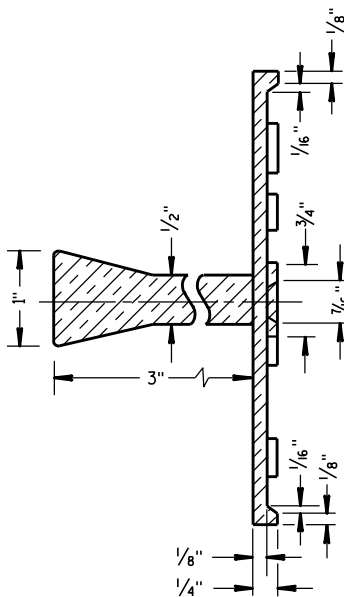
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

GENERAL NOTES

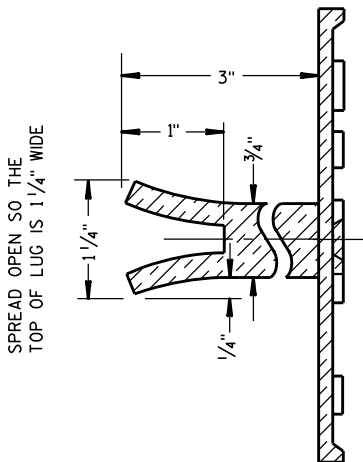
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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.

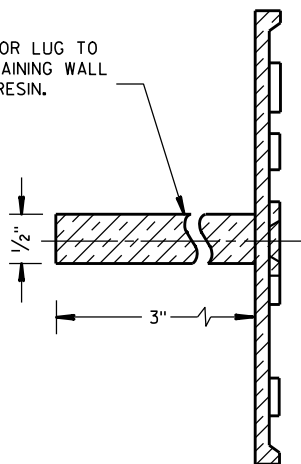


SECTION A-A



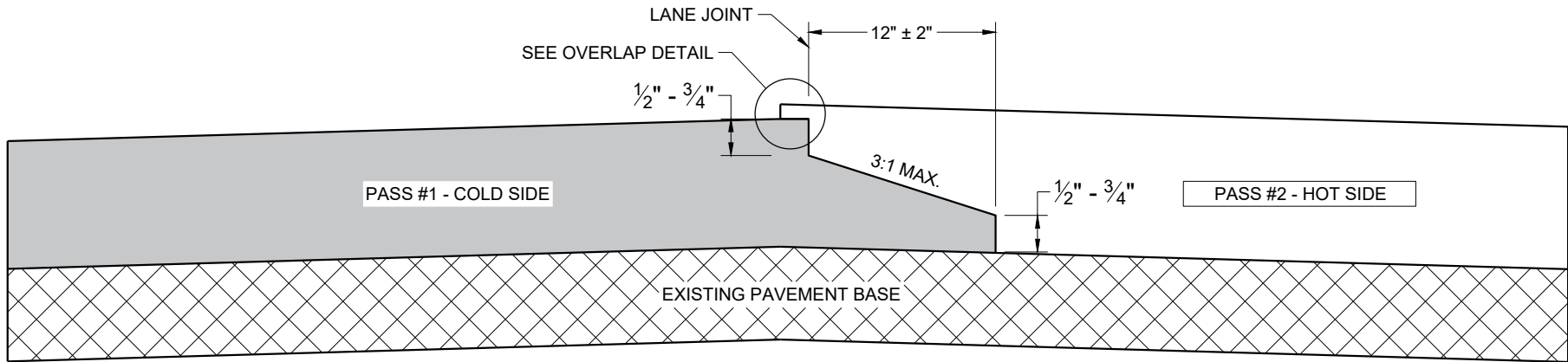
ALTERNATE LUG

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

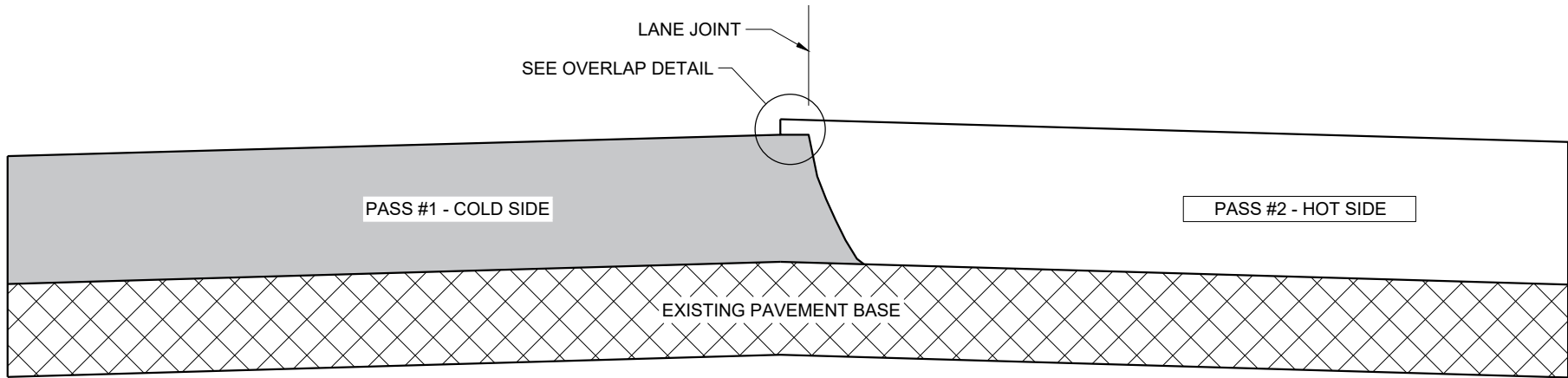


ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

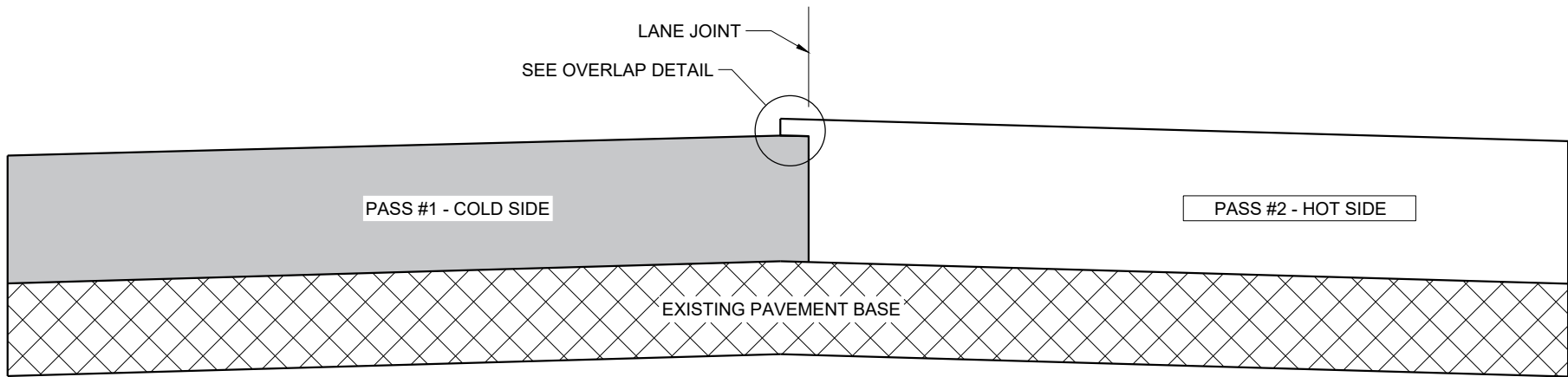
NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/26/10 DATE	/S/ Scot Becker CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA	



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)**

GENERAL NOTES

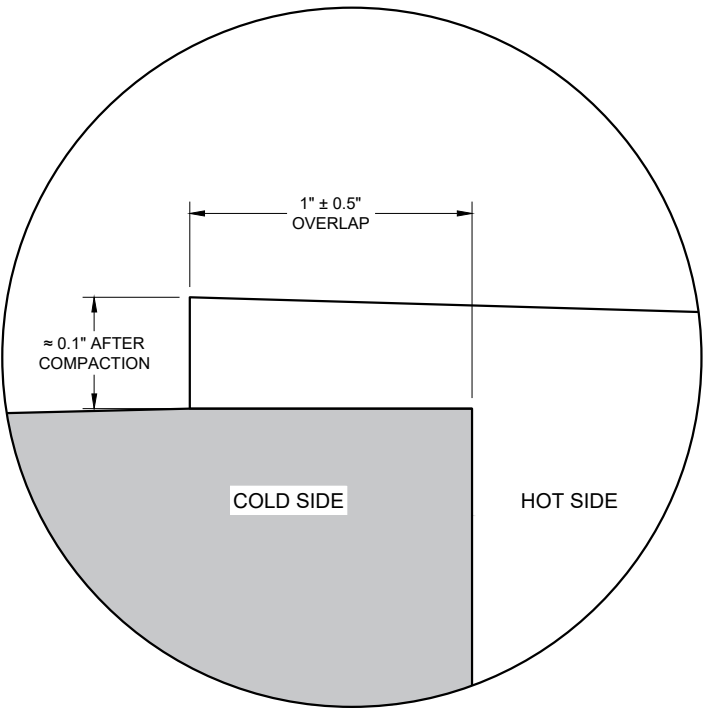
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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.

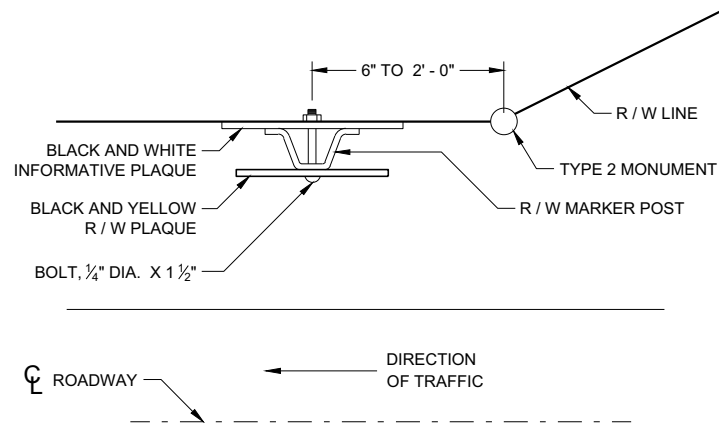


OVERLAP DETAIL (TYPICAL)

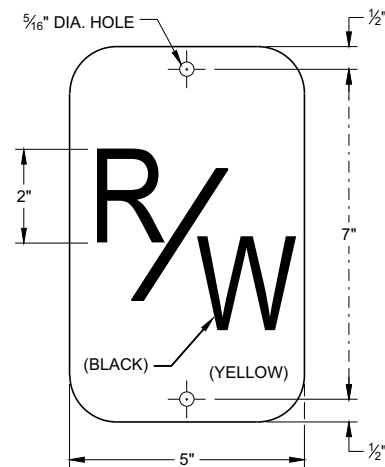
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE /S/ Steven Hefel
HMA PAVEMENT ENGINEER
FHWA

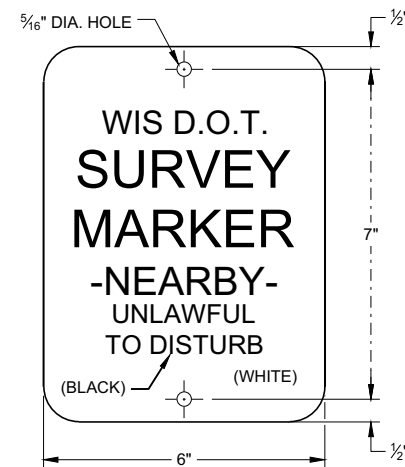


**PLAN VIEW
STEEL MARKER POST**



R / W PLAQUE

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



INFORMATIVE PLAQUE

GENERAL NOTES

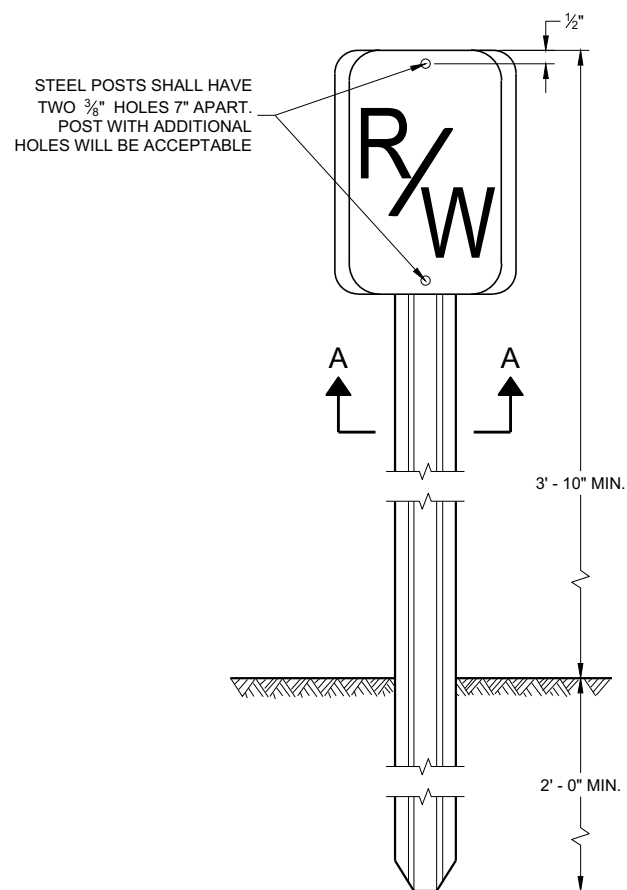
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A STEEL MARKER POST FOR RIGHT -OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

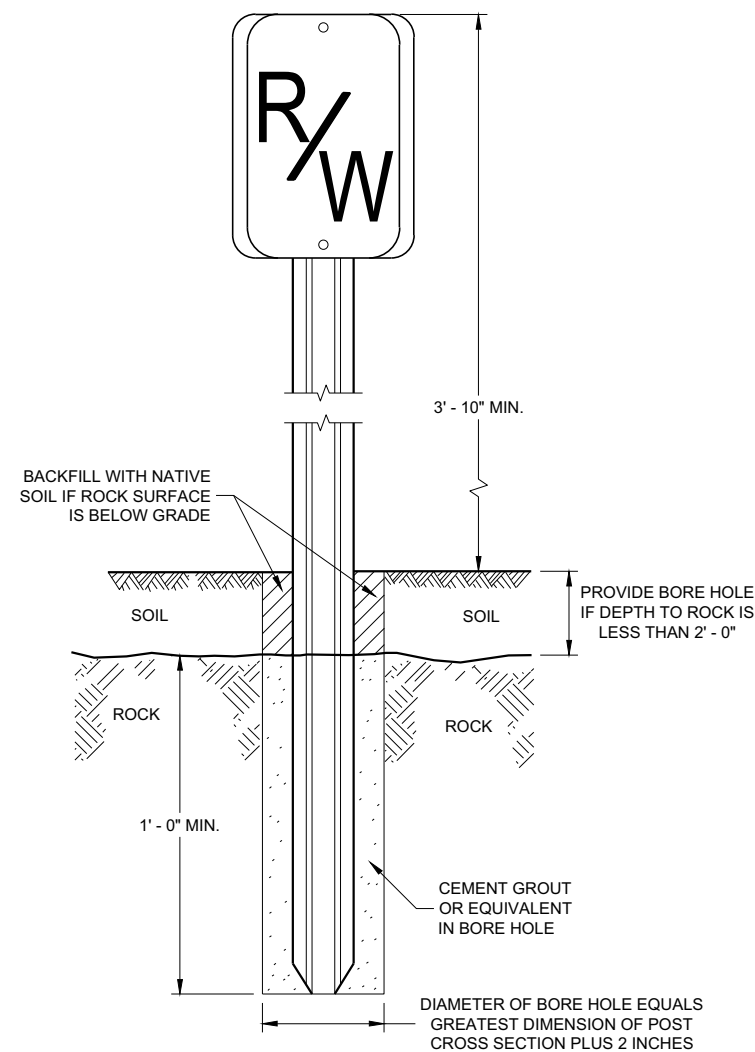
THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFORMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. "R/W" AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

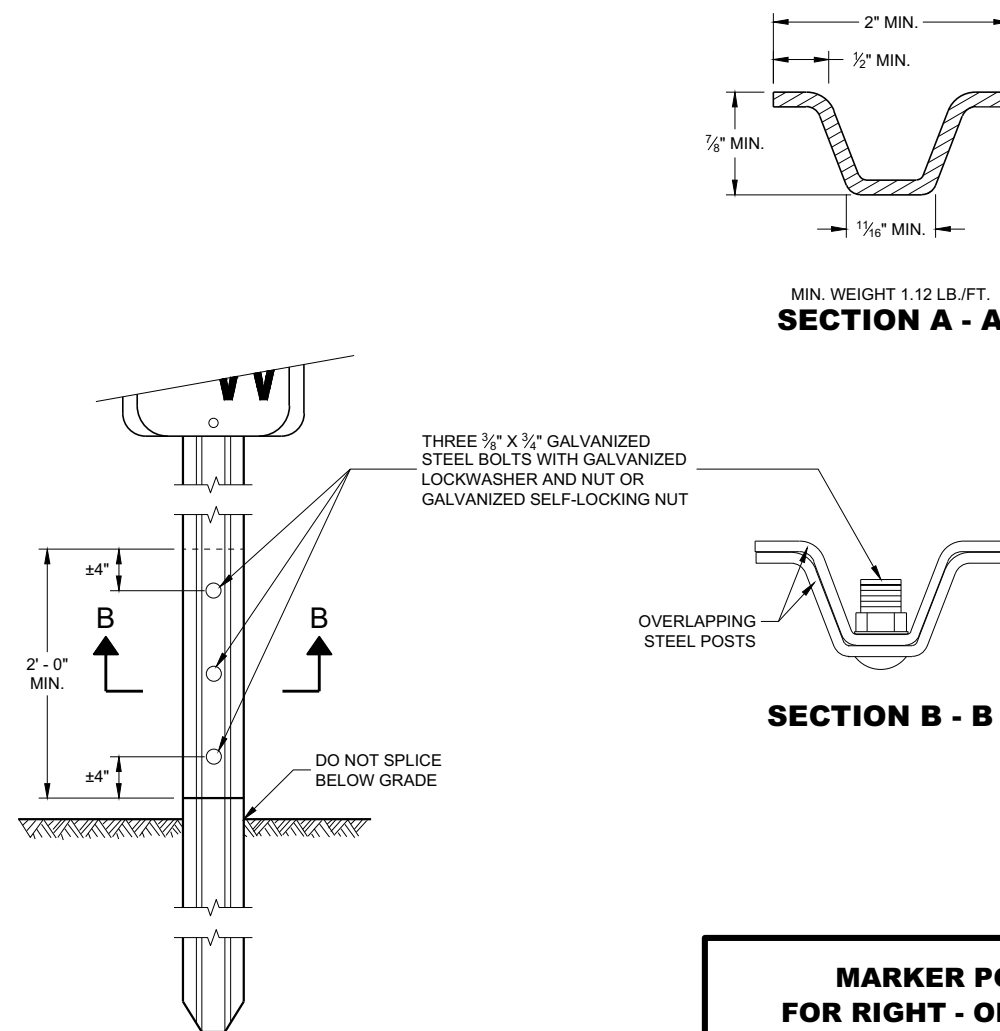
- ① IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3' - 10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR. FILL THE BORE HOLE WITH CEMENT GROUT OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.



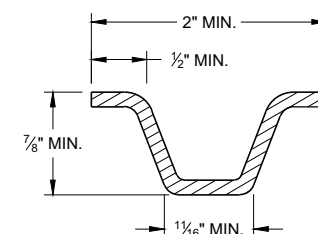
**FRONT VIEW
STEEL MARKER POST**



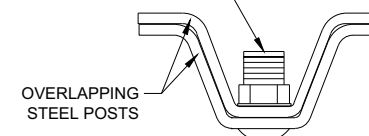
**FRONT VIEW
ROCK INSTALLATION** ①



**FRONT VIEW
SPLICE DETAIL**



MIN. WEIGHT 1.12 LB./FT.
SECTION A - A



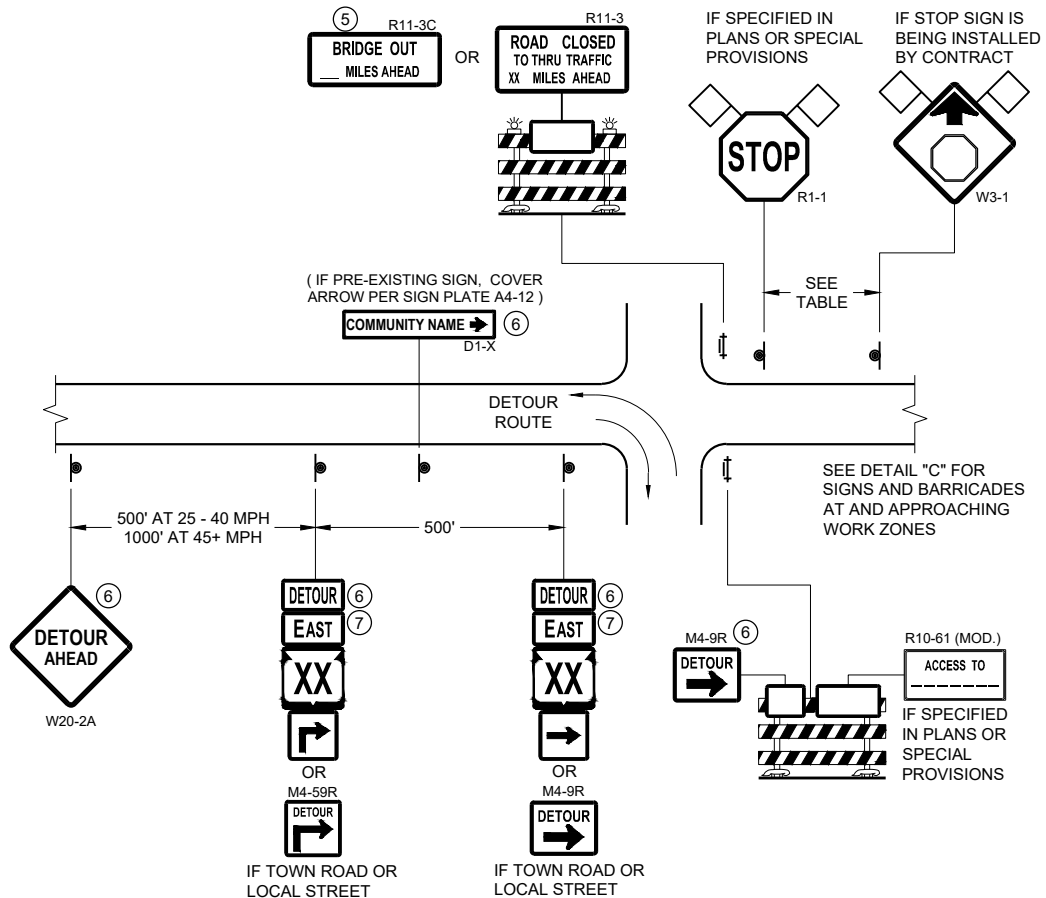
SECTION B - B

MARKER POST FOR RIGHT - OF - WAY

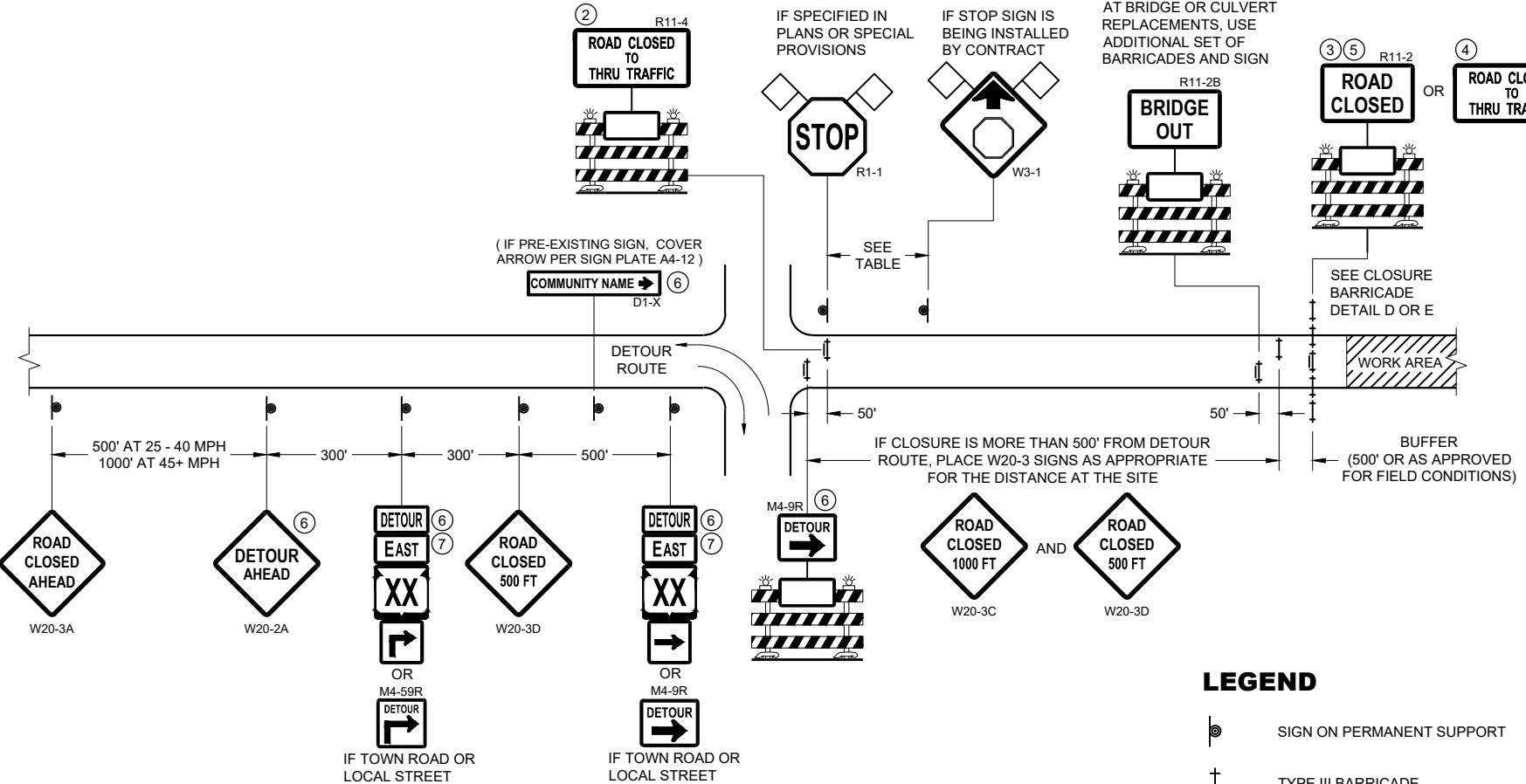
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/18/2016
DATE
/S/ Ray Kumapayi
CHIEF SURVEYING AND MAPPING
ENGINEER

FHWA



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



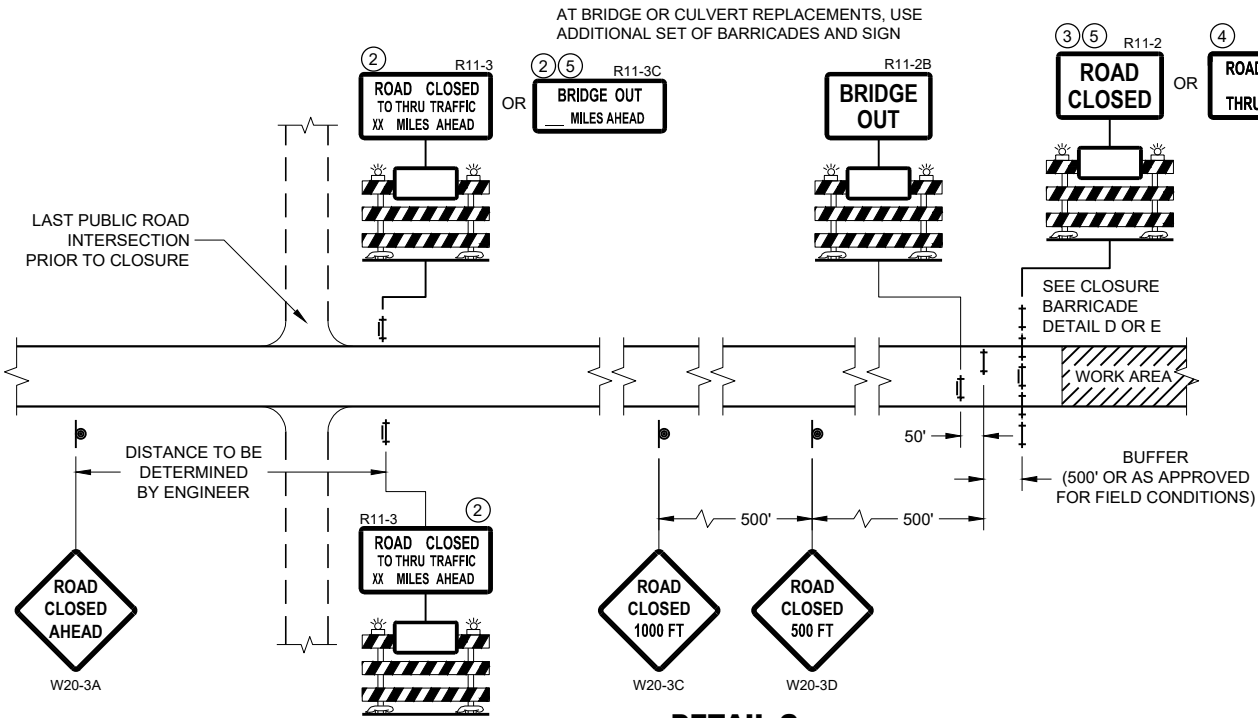
DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

- LEGEND**
- SIGN ON PERMANENT SUPPORT
 - TYPE III BARRICADE
 - TYPE III BARRICADE WITH ATTACHED SIGN
 - TYPE "A" WARNING LIGHT (FLASHING)
 - WORK AREA
 - FLAGS, 16" X 16" MIN. (ORANGE)

- DETOUR M4 - 8
- EAST M3 - X
- XX M1 - 4 OR XX M1 - 6 OR COUNTY M1 - 5A
- OR M05 - 1 OR M06 - 1

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



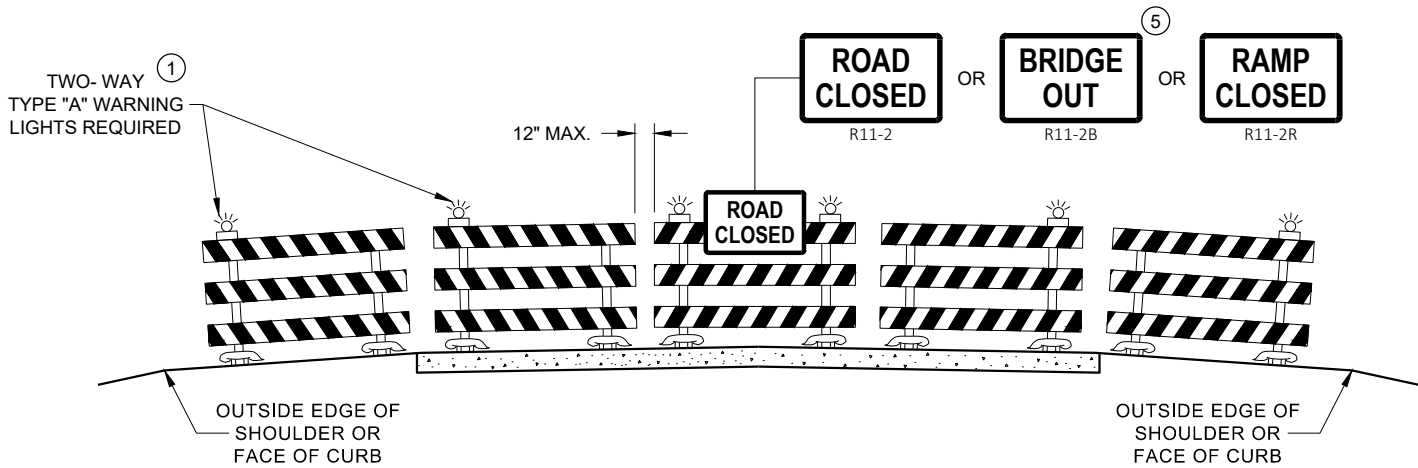
DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

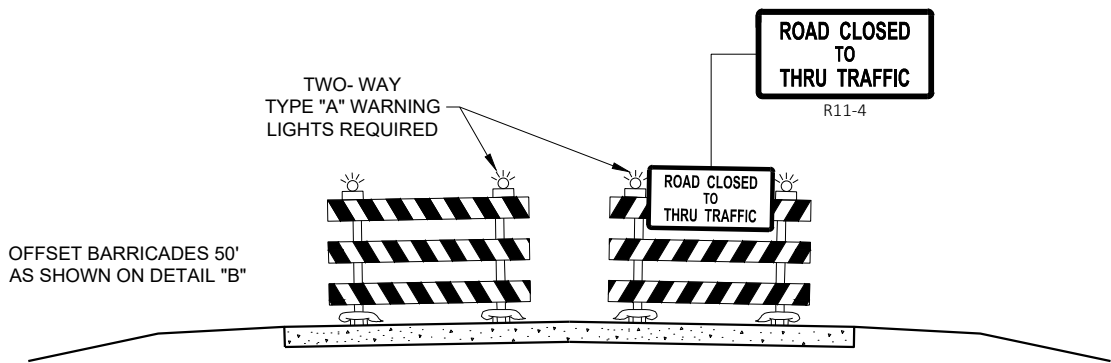
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /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.

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

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

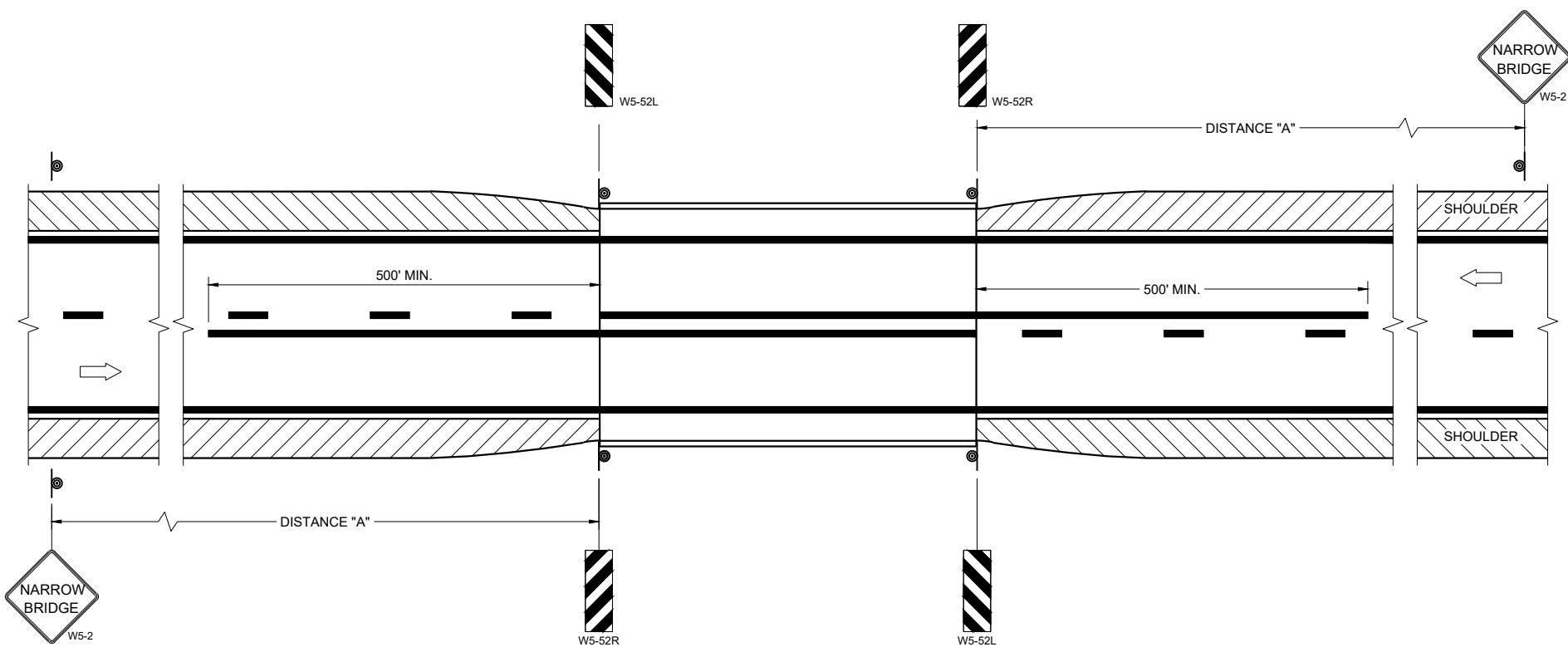
- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- 2 THESE SIGNS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

BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES

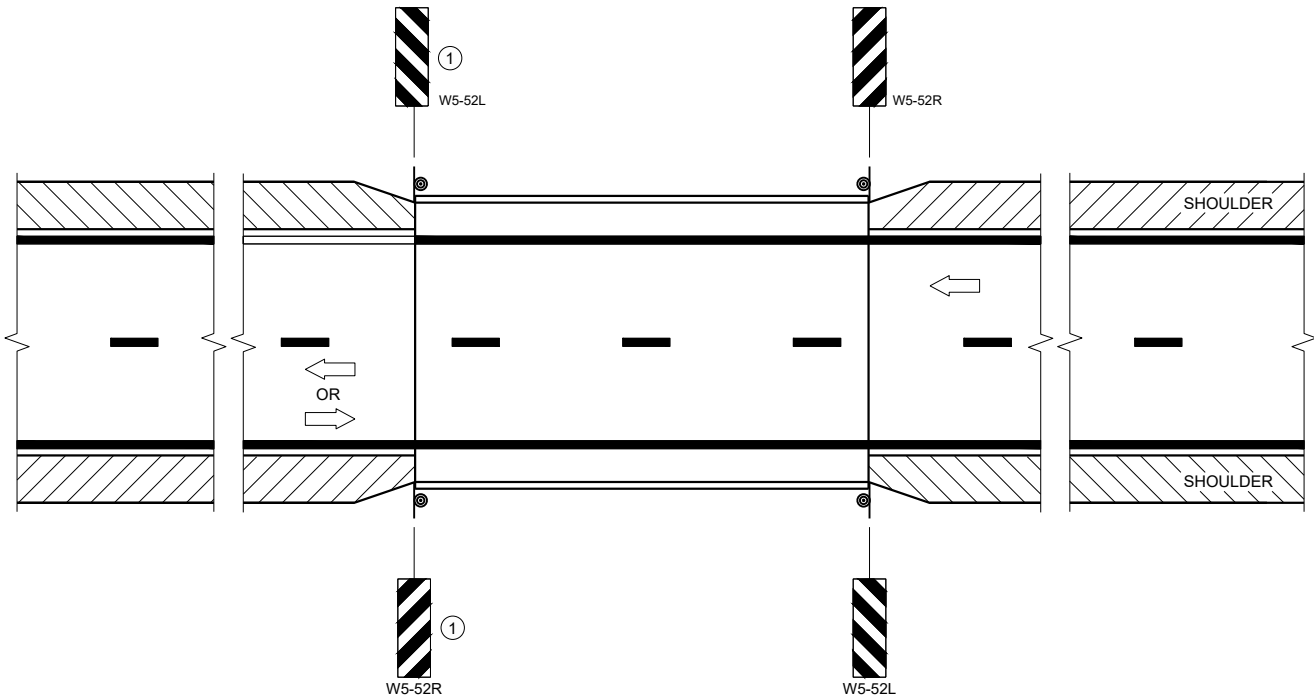
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE 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

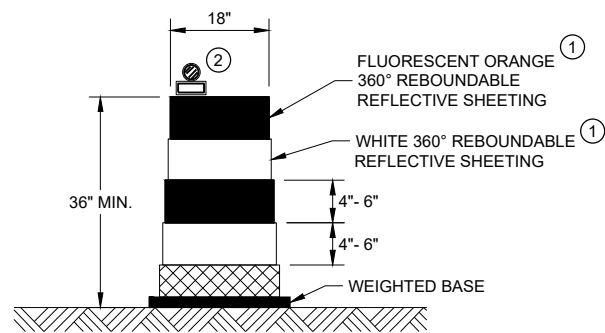
DISTANCE TABLE

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**

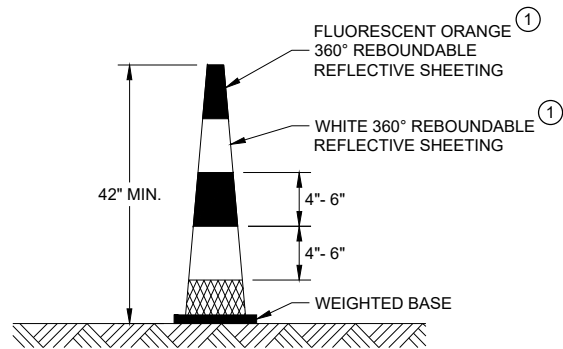
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



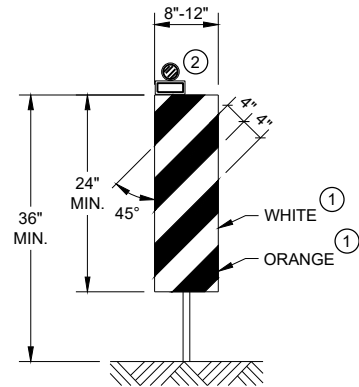
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



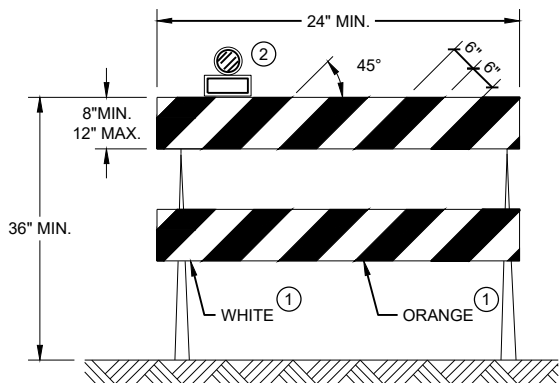
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS
BALLAST WIDTHS
RANGE FROM 14"-20"



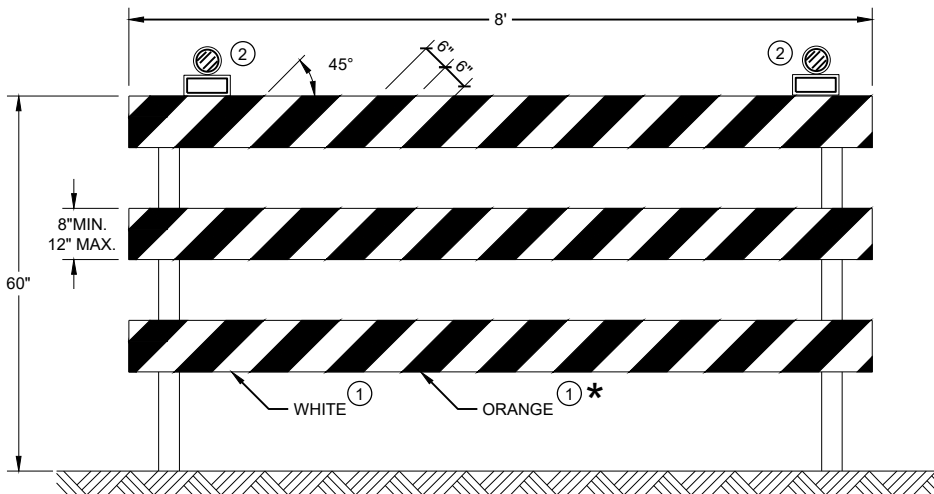
VERTICAL PANEL

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



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

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.

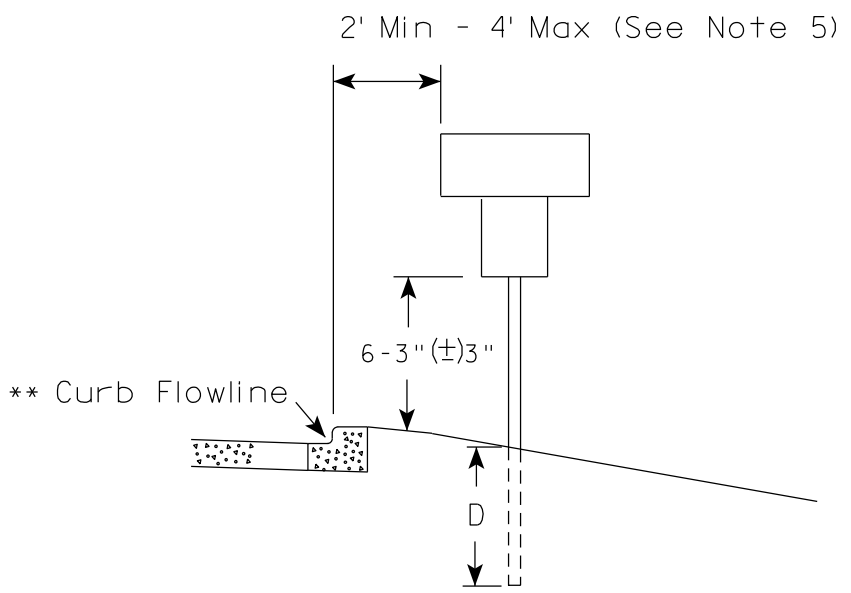
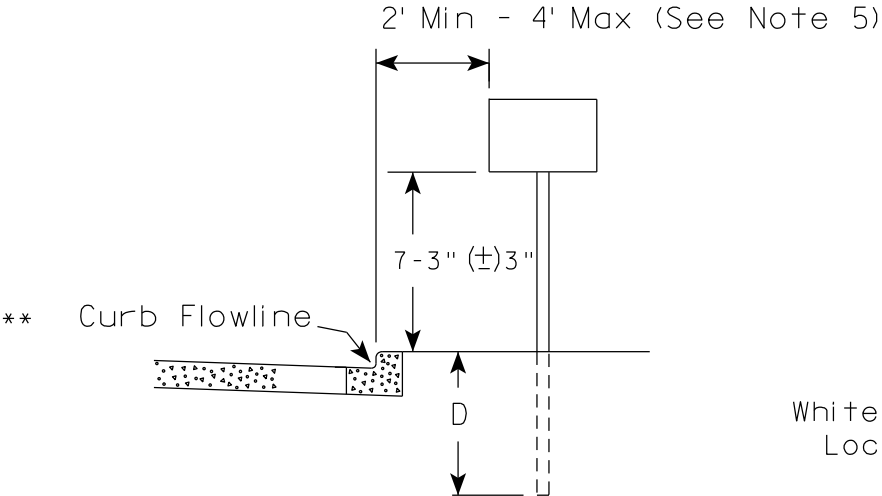
**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

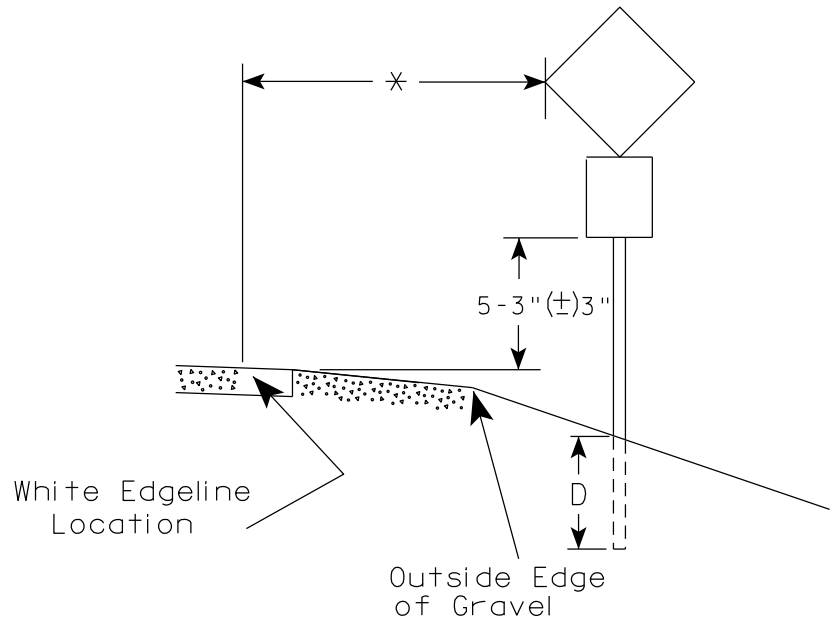
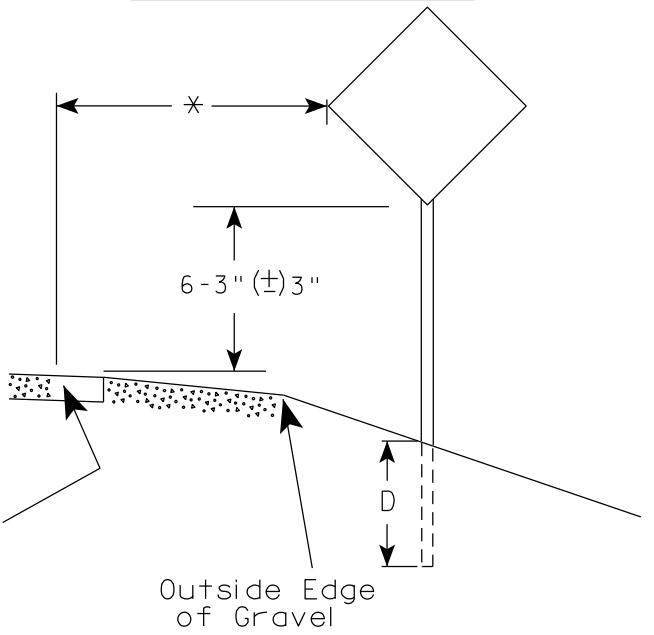
APPROVED
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

URBAN AREA



RURAL AREA (See Note 2)



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.

POST EMBEDMENT DEPTH

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

* * The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

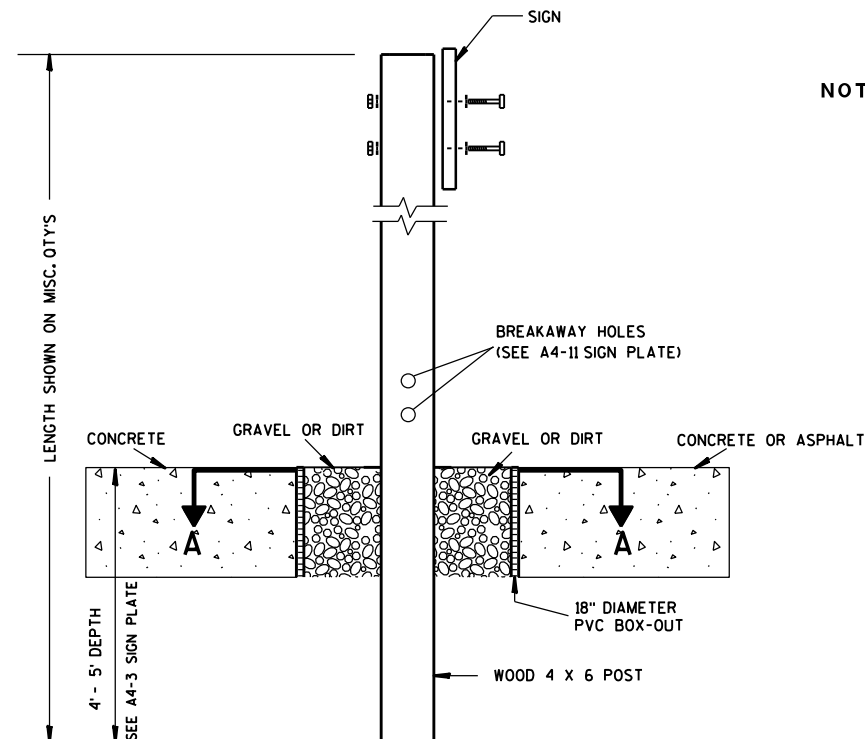
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

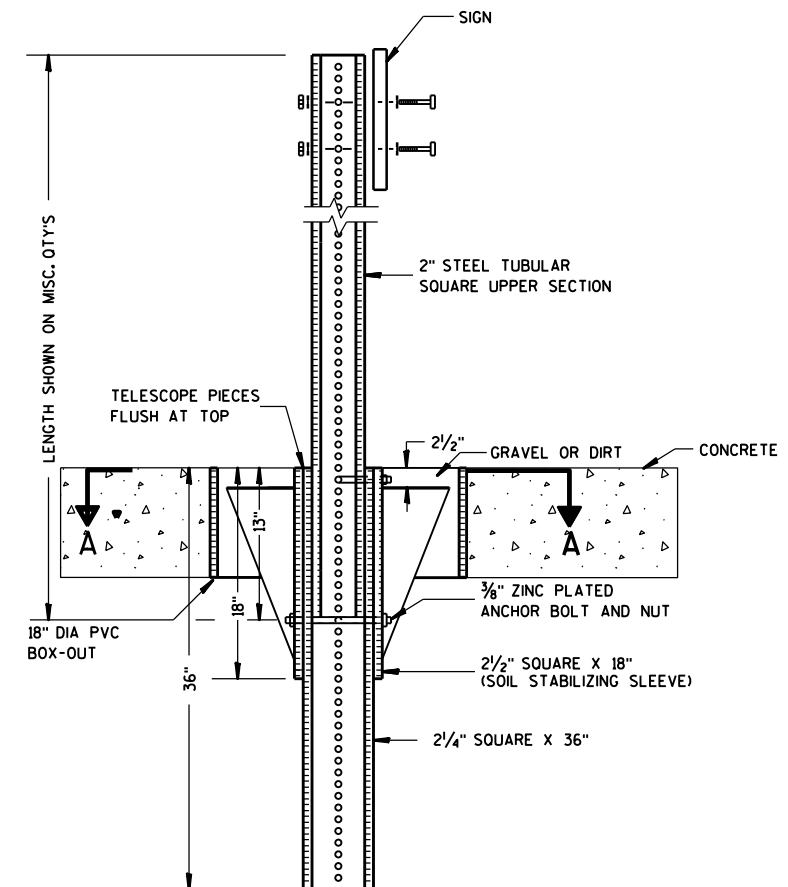
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

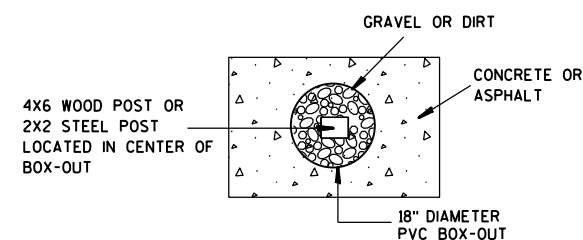
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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 PLATE NO. A4-3B.1

PROJECT NO:

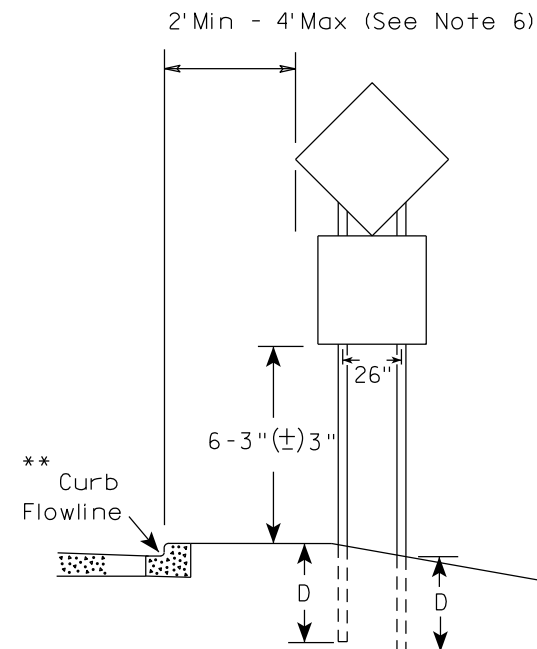
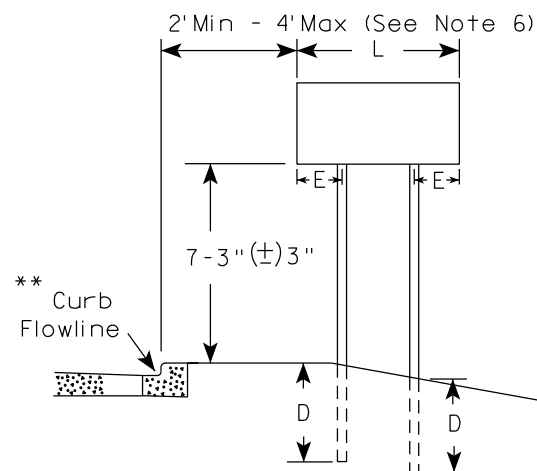
HWY:

COUNTY:

SHEET NO:

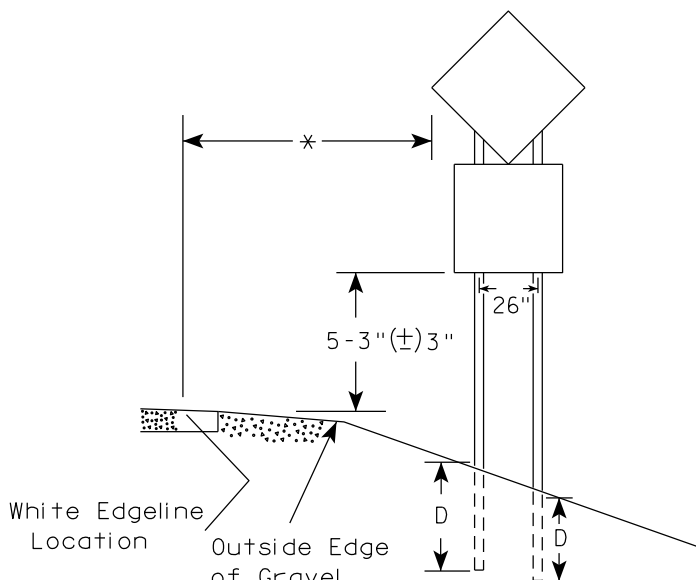
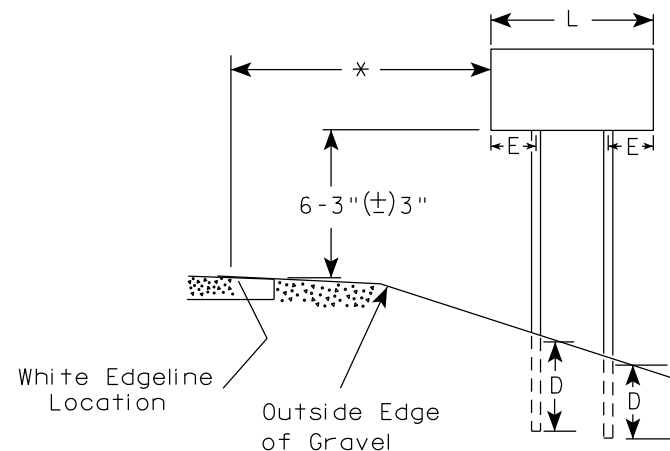
E

URBAN AREA

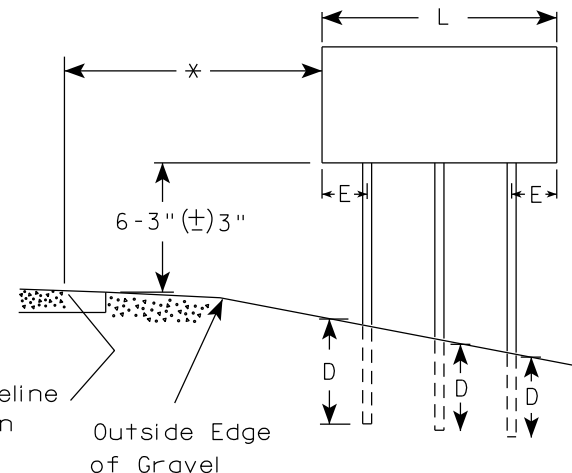


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)



48" DIAMOND WARNING SIGN



GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".

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

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

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

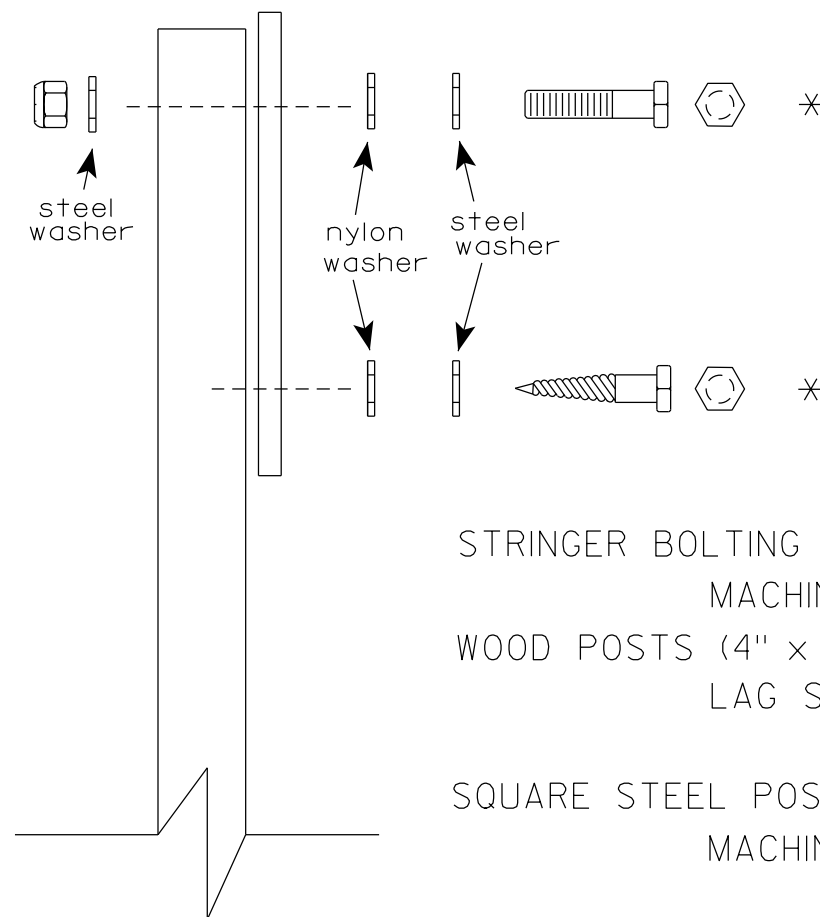
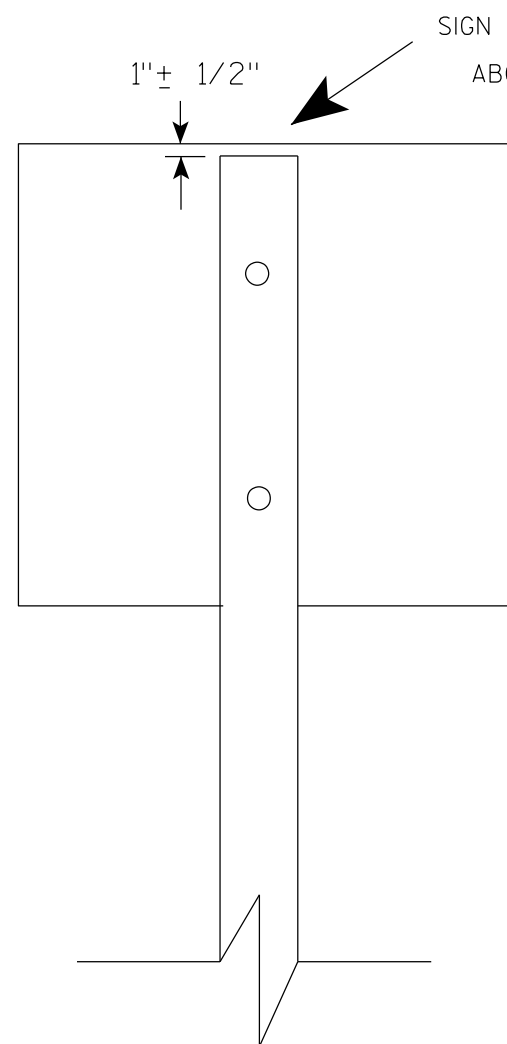
Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16



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.

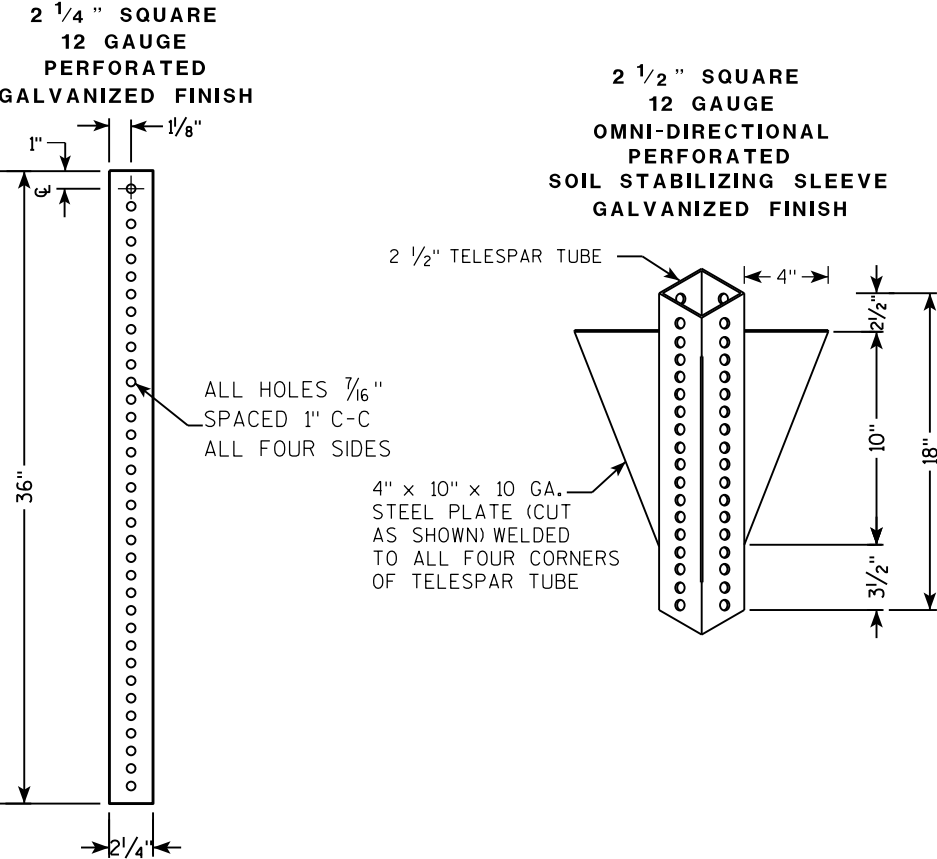
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- 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

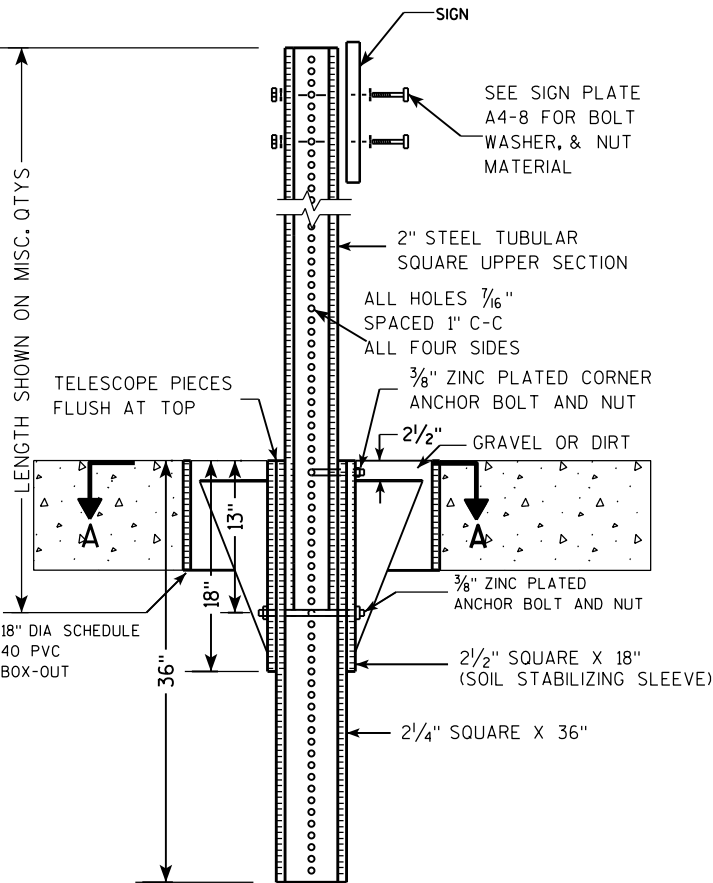
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

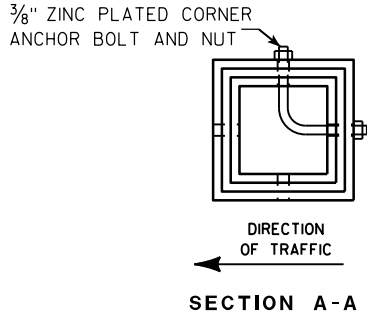
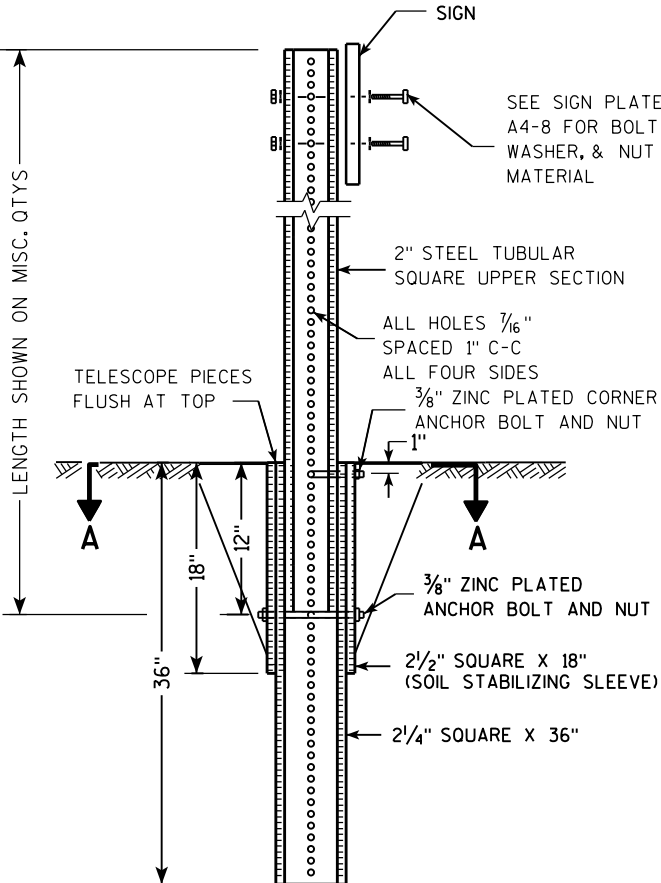
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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).

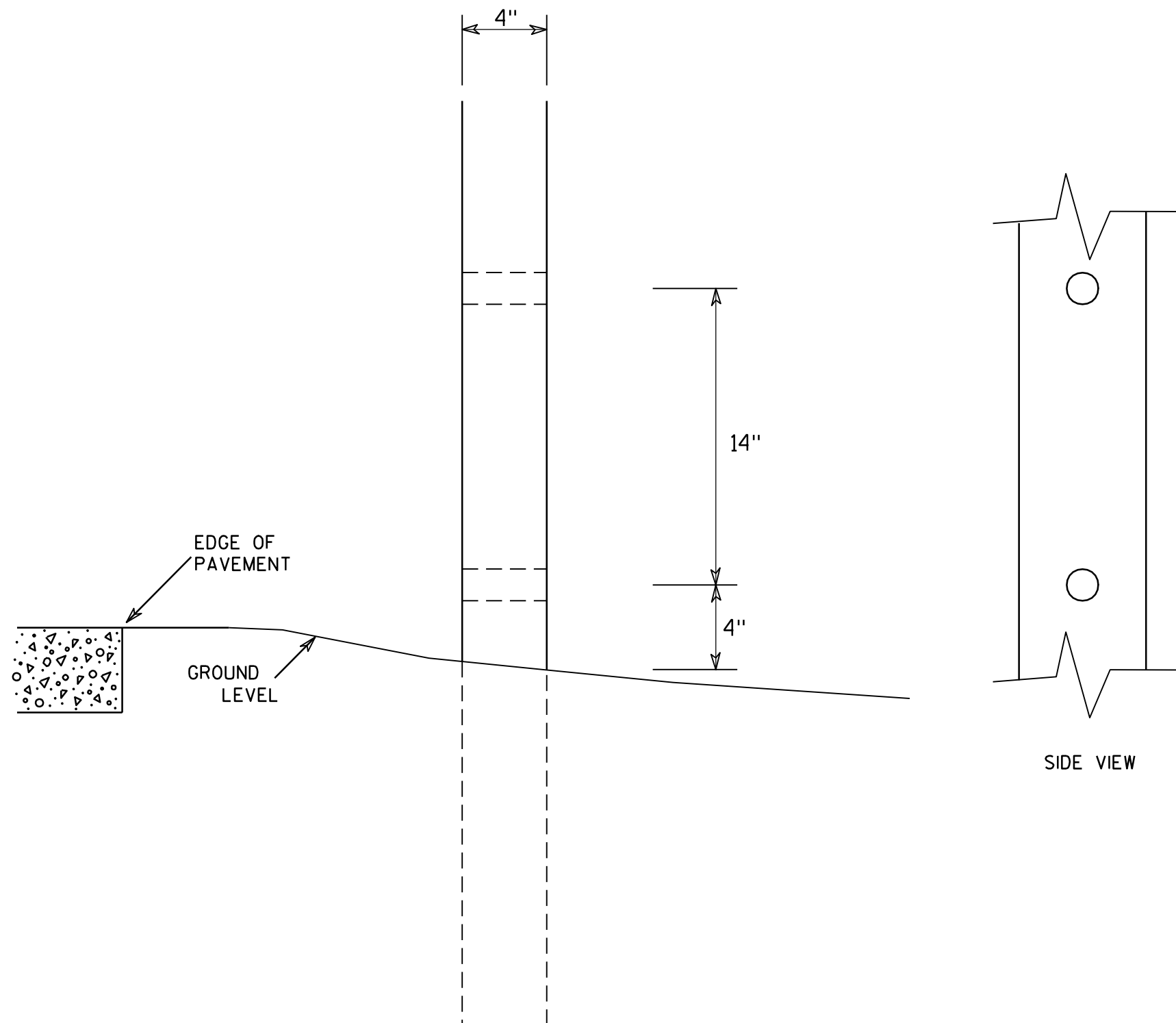
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

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:

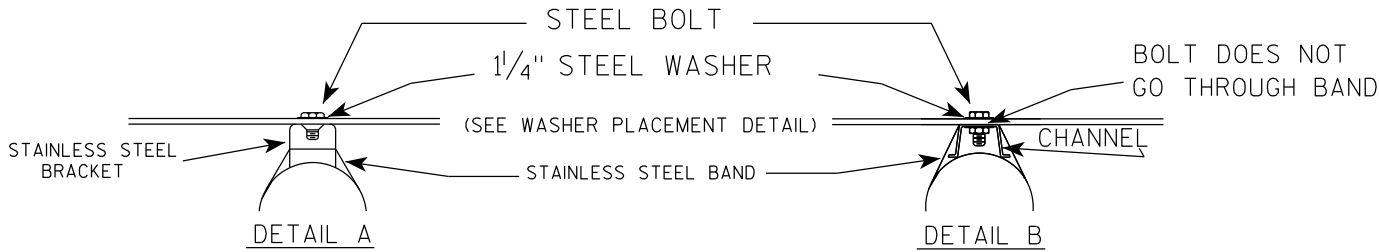
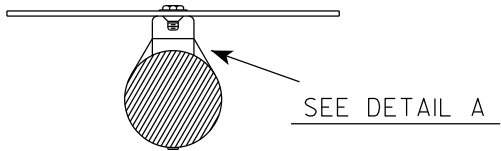
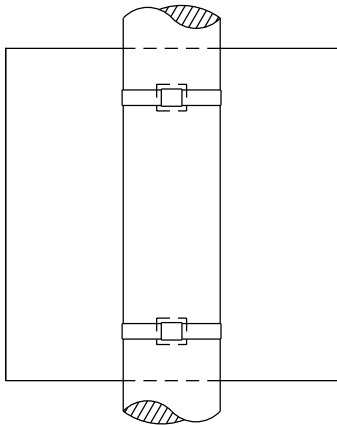
COUNTY:

SHEET NO:

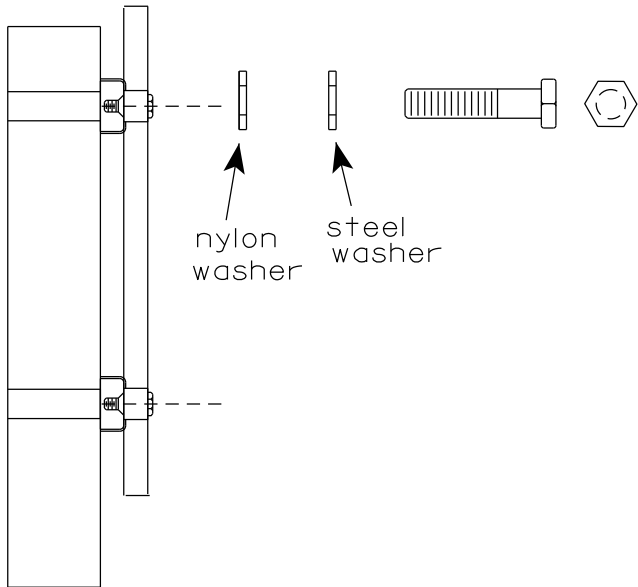
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

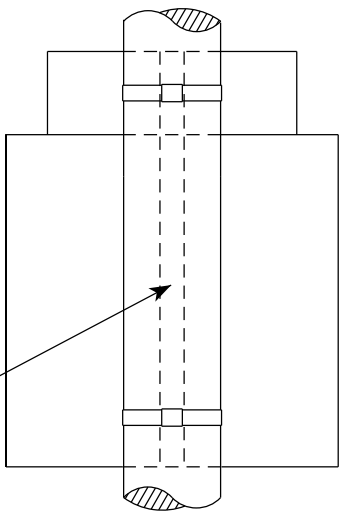


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

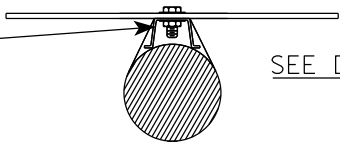
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 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

"J" ASSEMBLY



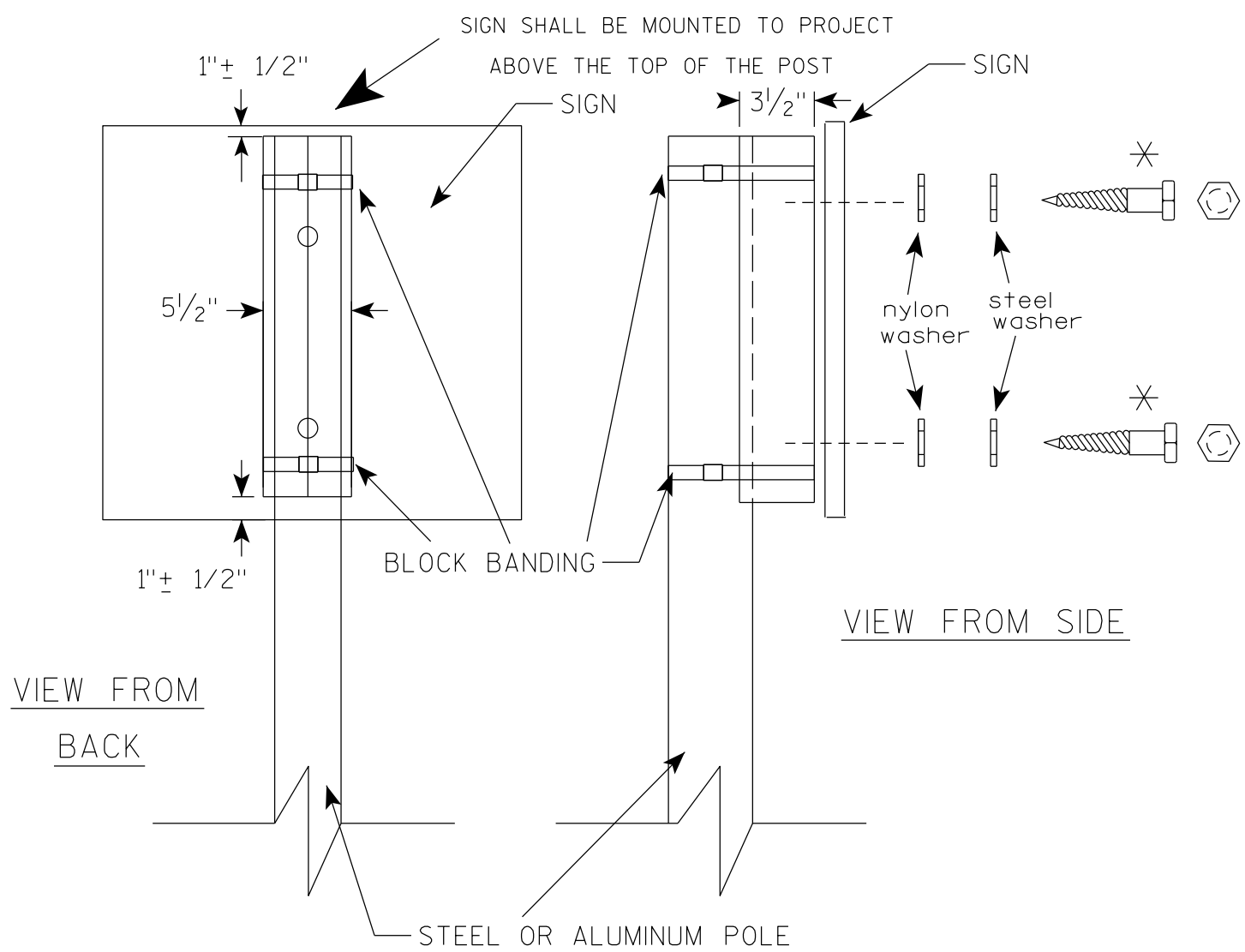
CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



STANDARD SIGN
SIGN BANDING DETAILS

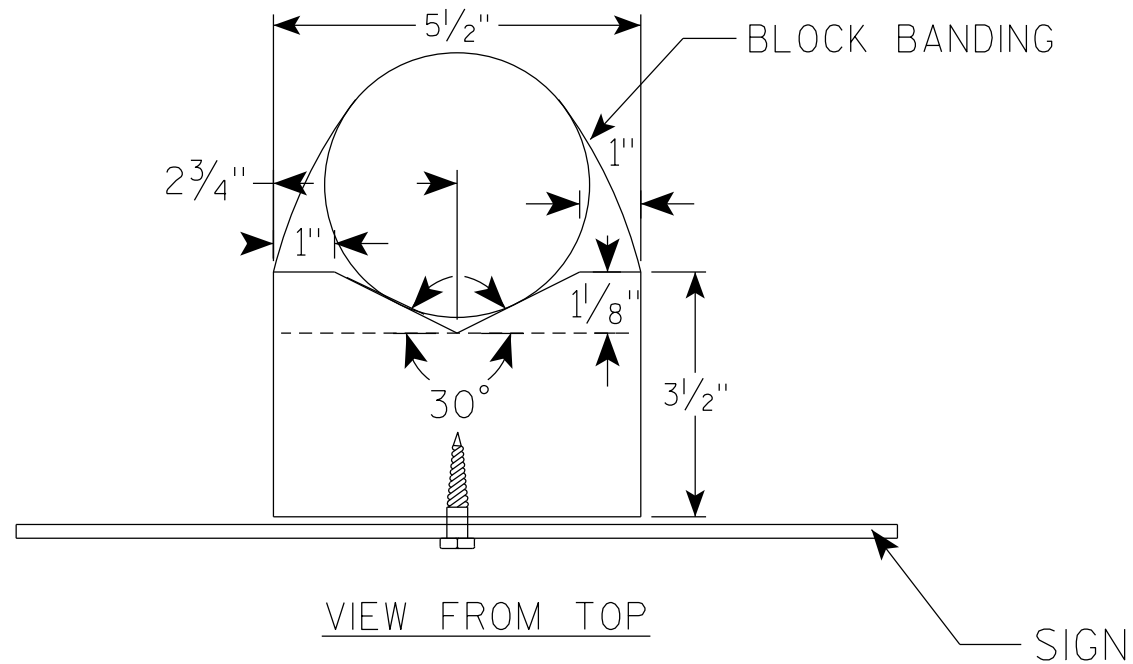
WISCONSIN DEPT OF TRANSPORTATION

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

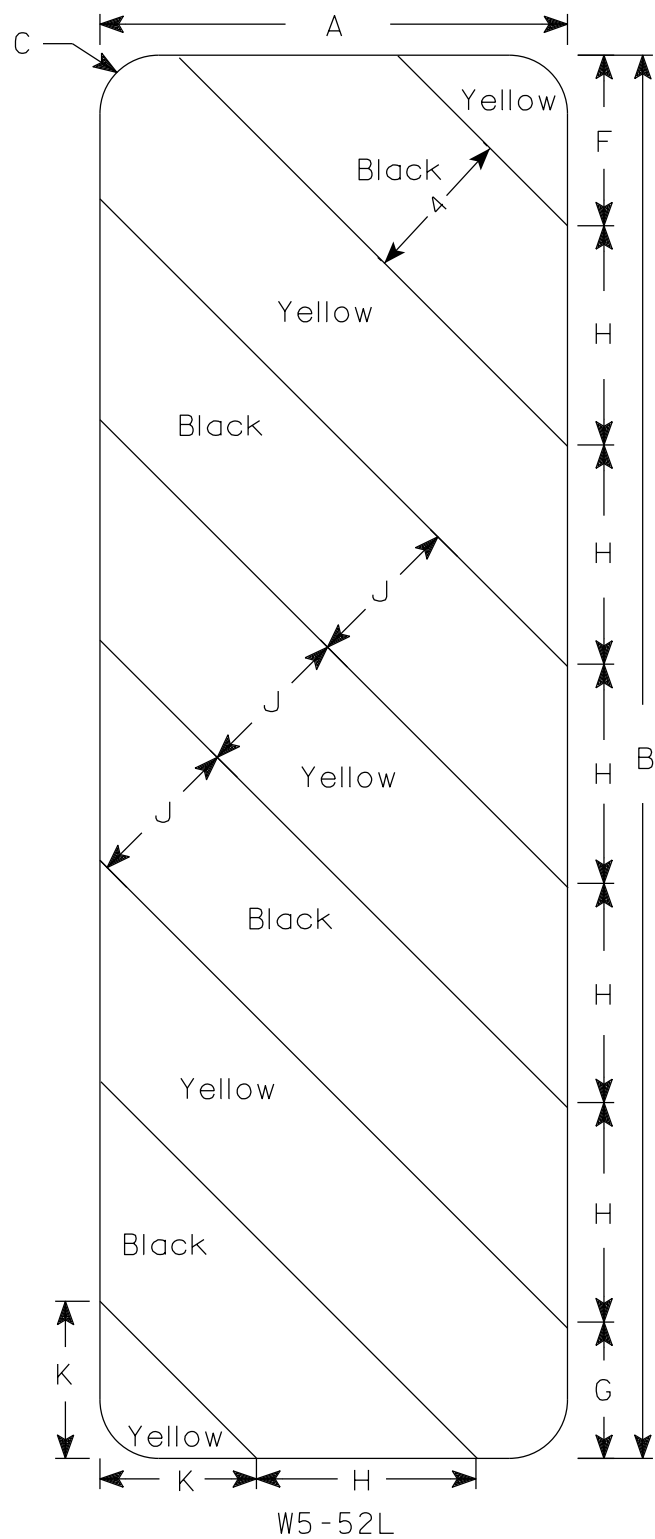
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

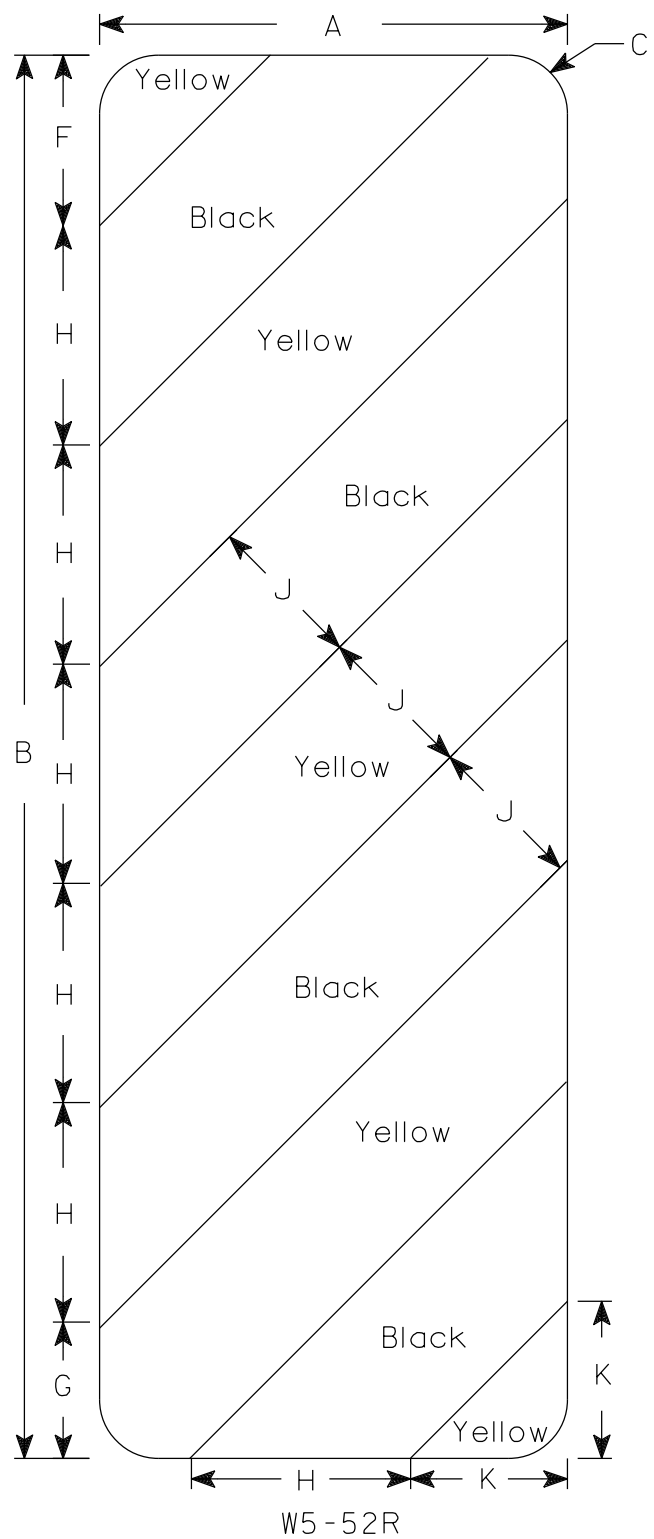
PROJECT NO:

SHEET NO:

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 9/16																6.75
4																											
5																											

STANDARD SIGN
W5-52L & W5-52R

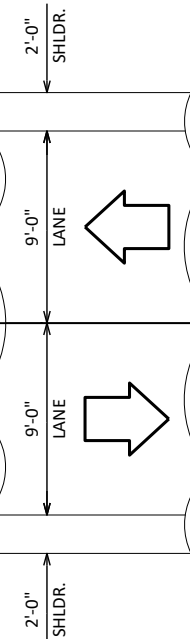
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

INDICATES WING NUMBER

REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS (P-33-903)
BOTTOMLESS CORRUGATED STEEL ARCH ON CONCRETE FOOTINGS
23.5' OVERALL DECK WIDTH
22.6' OVERALL LENGTH



END OF EXIST.
STRUCTURE
STA. 10+46.91±

C/L S. ABUT.
STA. 10+55.18

END OF SLAB
STA. 10+53.85

END OF EXIST.
STRUCTURE
STA. 10+68.31±

C/L N. ABUT.
STA. 10+95.18

END OF SLAB
STA. 10+96.51

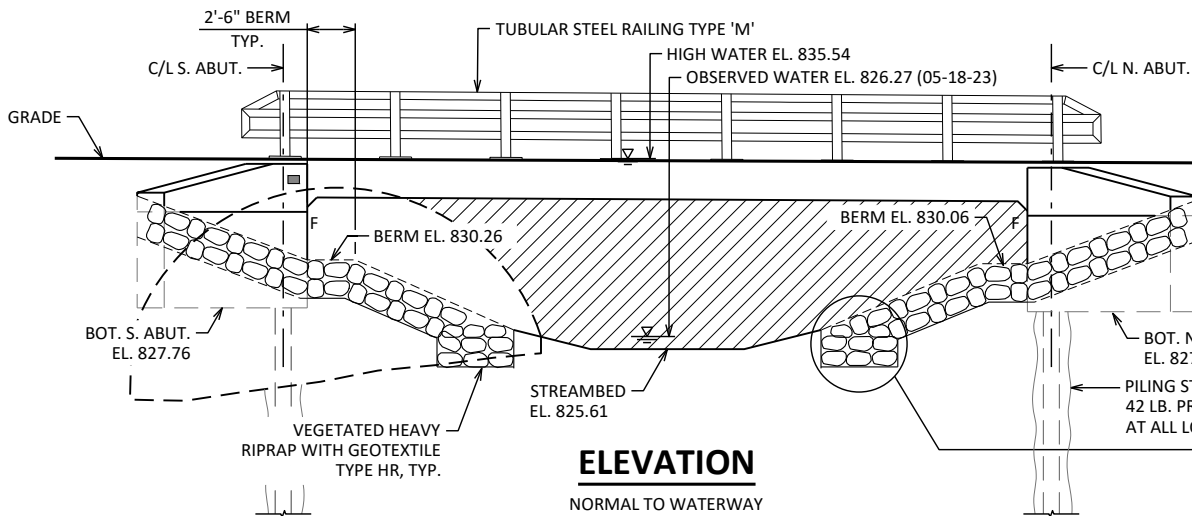
BRIGHTSPEED
TO BE RELOCATED, TYP.

NAME PLATE AND BENCH
MARK CAP. SEE "SOUTH
ABUTMENT" SHEET FOR
DETAILS

LIMITS OF VEGETATED
HEAVY RIPRAP AND
GEOTEXTILE TYPE HR, TYP.

PLAN

SINGLE SPAN FLAT SLAB



ELEVATION

NORMAL TO WATERWAY

THIS SHEET WAS CREATED BY THE WISDOT BUREAU OF STRUCTURES STANDARD BRIDGE DESIGN TOOL VERSION 1.0.0.0

RIPRAP HEAVY LAYOUT

POINT	STATION	OFFSET
A	10+50	24' LT.
B	10+50	30' LT.
C	10+78	30' LT.
D	10+95	30' LT.
E	11+17	30' LT.
F	11+17	21' LT.
G	10+85	45' RT.
H	10+67	45' RT.
I	10+55	31' RT.
J	10+37	31' RT.

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.06
OPERATING RATING FACTOR: RF = 1.37
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: _____ f'c = 4,000 P.S.I.
SUPERSTRUCTURE _____ f'c = 3,500 P.S.I.
ALL OTHER _____
BAR STEEL REINFORCEMENT: _____ fy = 60,000 P.S.I.
GRADE 60

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 x 42 STEEL PILING SEATED IN PREBORED
HOLES CORED TO EL. 815. PILE DRIVING IS NOT REQUIRED. THE FACTORED AXIAL
REISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS 180 TONS MULTIPLIED
BY A RESISTANCE FACTOR OF 0.5. ESTIMATED 15'-0" LONG.

TRAFFIC VOLUME

CARR FACTORY ROAD
ADT = 100 (2045)
R.D.S. = 40 M.P.H.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q₁₀₀ = 2070 C.F.S.
VEL. = 8.5 F.P.S.
HW₁₀₀ = EL. 835.50
WATERWAY AREA = 203.4 SQ. FT.
DRAINAGE AREA = 3.46 SQ. MI.
ROADWAY OVERTOPPING = 342 C.F.S.
SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY

Q₂ = 200 C.F.S.
VEL. = 3.8 F.P.S.
HW₂ = EL. 829.15

ROAD OVERTOPPING FREQUENCY

FREQUENCY = 31 YEARS
Q₃₁ = 1,288 C.F.S.
HW₃₁ = EL. 834.76

LIST OF DRAWINGS

- GENERAL PLAN
- CROSS SECTION & QUANTITIES
- SUBSURFACE EXPLORATION
- SOUTH ABUTMENT
- SOUTH ABUTMENT DETAILS
- NORTH ABUTMENT
- NORTH ABUTMENT DETAILS
- SUPERSTRUCTURE
- SUPERSTRUCTURE DETAILS
- TUBULAR STEEL RAILING TYPE 'M'

STRUCTURE DESIGN CONTACTS:

PATRICK BOLAND 608-588-7484
AARON BONK 608-261-0261

THESE PLANS ARE BASED UPON STANDARD
BRIDGE PLANS DEVELOPED AND MAINTAINED BY
THE WISCONSIN DEPARTMENT OF
TRANSPORTATION THROUGH THE USE OF THE
WISDOT STANDARD BRIDGE DESIGN TOOL. THE
UNDERSIGNED DESIGNER CERTIFIES THE
ACCURACY OF THE BRIDGE TYPE, SIZE AND
LOCATION, HYDRAULICS AND FOUNDATION
SUPPORT, AND INFORMATION IN THE PLANS
THAT IS NOT PART OF THE STANDARD PLANS
SUPPLIED BY THE DEPARTMENT. THE DESIGNER
FURTHER CERTIFIES THAT USE OF THE STANDARD
BRIDGE DESIGN TOOL FOR DEVELOPMENT OF
THIS PLAN IS CONSISTENT WITH THE GUIDANCE
PROVIDED IN THE WISDOT BRIDGE MANUAL.



JEWELL
associates engineers, inc.
Engineers - Architects - Surveyors

560 SUNRISE DRIVE
SPRING GREEN, WI 53588
OFFICE: (608) 588-7484
www.JewellAssoc.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED *[Signature]* SDR 07/30/24
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-33-148

CARR FACTORY ROAD OVER BR. GALENA RIVER

COUNTY LAFAYETTE TOWN BENTON

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATION
DESIGNED BY MAN CK'D PTB DRAWN BY CTMP PLANS CK'D PTB

GENERAL PLAN

SHEET 1 OF 10

I.D. 5625-00-05

DATE:

SCALE = 10

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 ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES B-33-148 " 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 REQUIRE 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.

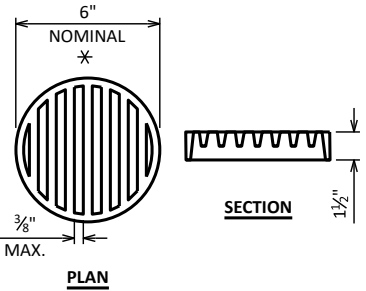
THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY VEGETATED RIPRAP AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS. SEE ROADWAY PLANS FOR DETAIL.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO ENTIRE EXPOSED TOP OF SLAB, INCLUDING THE SLAB EDGE AND 1'-0" UNDER THE SLAB, THE TOP AND EXTERIOR EXPOSED FACE OF WINGS AND FRONT FACE OF ABUTMENT TO 1'-0" PAST THE EDGE OF SLAB.

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
1	7+72	3/4" IRON REBAR SET, 14.6' LT.	838.94
2	10+17	3/4" IRON REBAR SET, 9.6' LT.	835.18
3	13+80	3/4" IRON REBAR SET, 13.4' RT.	834.74
5	9+10	COTTEN GIN SPIKE SET IN WOOD POST, 31.8' LT.	835.89



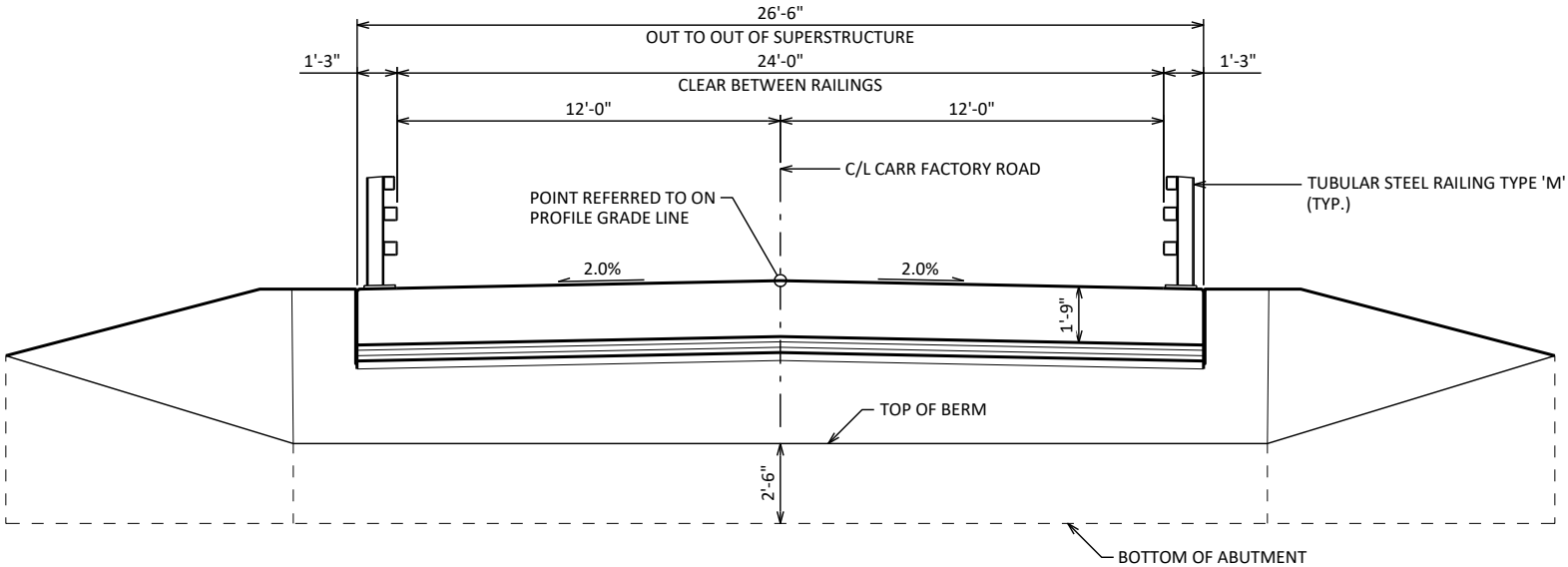
RODENT SHIELD DETAIL

✱ 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".

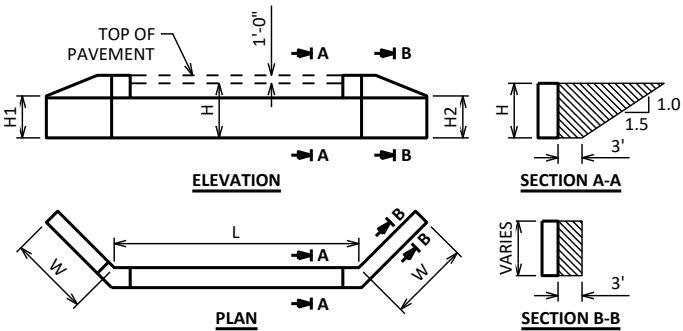
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH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

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-148			
DRAWN BY		CTMP	PLANS CK'D PTB
CROSS SECTION & QUANTITIES		SHEET 2 OF 10	



CROSS SECTION THRU ROADWAY

LOOKING UPSTATION
(PILING NOT SHOWN FOR CLARITY)

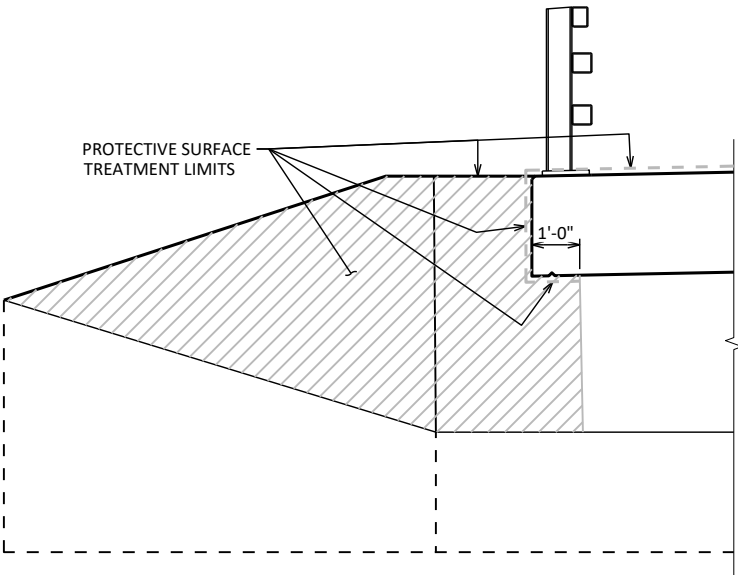


ABUTMENT BACKFILL DIAGRAM

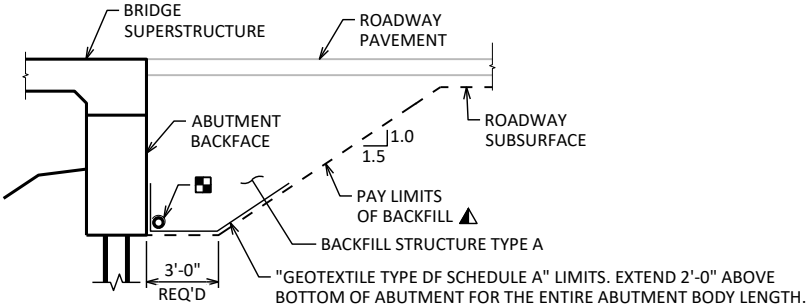
- L = ABUTMENT BODY LENGTH AT BACKFACE (FT)
- H = AVERAGE ABUTMENT FILL HEIGHT (FT)
- H1 = WING 1 HEIGHT AT TIP (FT)
- H2 = WING 2 HEIGHT AT TIP (FT)
- W = WING LENGTH (FT)
- EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
- $V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H) + (3')(0.5)(H1+H2+H+H)(W)$
- $V_{CY} = V_{CF}(EF)/27$
- $V_{TON} = V_{CY}(2.0)$

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER	SOUTH ABUT.	NORTH ABUT.	TOTALS
203.0250	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS P-33-903	EACH	---	---	---	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-33-148	EACH	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	---	150	150	300
502.0100	CONCRETE MASONRY BRIDGES	CY	77	26	26	129
502.3200	PROTECTIVE SURFACE TREATMENT	SY	148	15	15	178
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	2,100	2,100	4,200
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	16,170	1,510	1,510	19,190
513.4061	RAILING TUBULAR TYPE M	LF	90	---	---	90
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	6	6	12
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	---	90	90	180
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	---	105	105	210
606.0300	RIPRAP HEAVY	CY	---	85	110	195
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	---	70	70	140
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	--	44	44	88
645.0120	GEOTEXTILE TYPE HR	SY	---	145	185	330
NON-BID ITEMS						
	FILLER	SIZE	---	---	---	½", ¾"



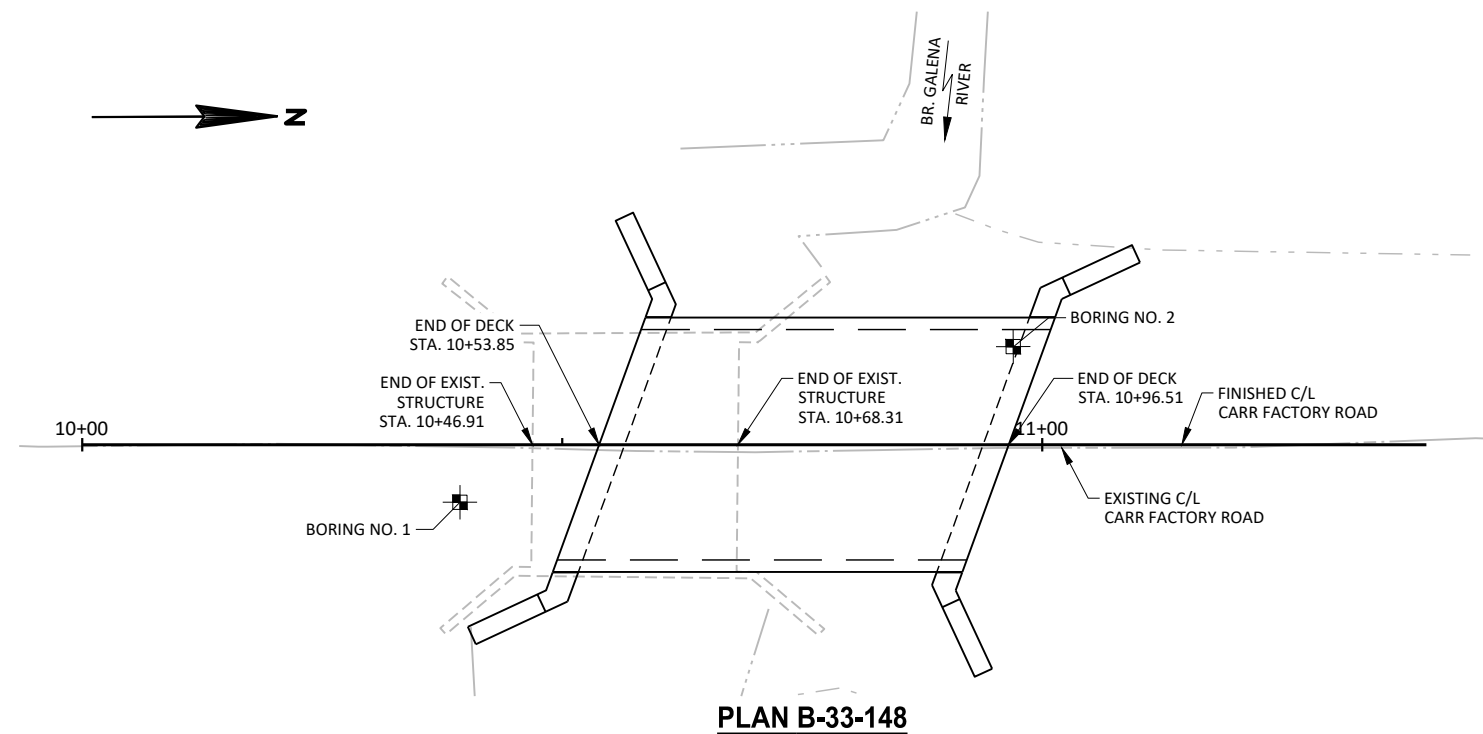
PROTECTIVE SURFACE TREATMENT DETAILS



TYPICAL SECTION THRU ABUTMENT

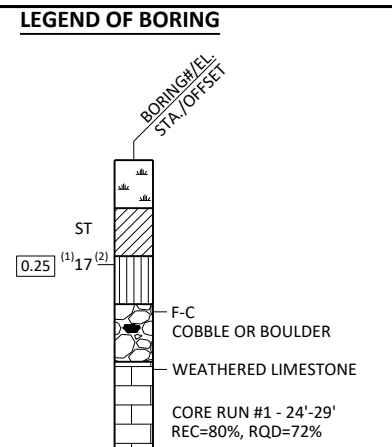
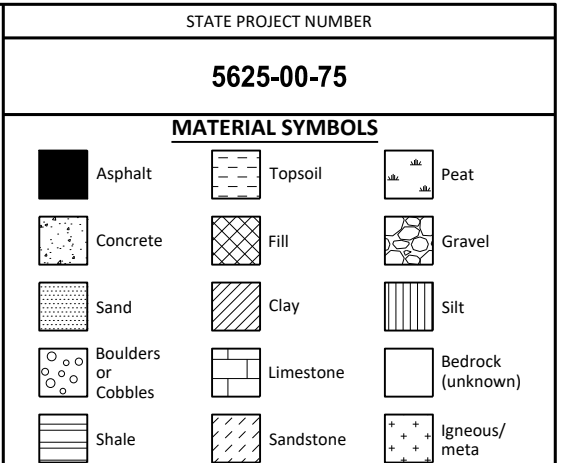
▲ BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

■ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



BORING NUMBER	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	06/27/23	132,630.7	413,029.6
2	06/26/23	132,688.4	413,013.7




BORINGS & REPORT COMPLETED BY:	AMERICAN ENGINEERING TESTING, INC. 4203 SCHOFIELD AVENUE, SUITE 1 SCHOFIELD, WI 54476
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(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.

GROUND WATER ELEVATIONS

 AT TIME OF DRILLING
 END OF DRILLING
 AFTER DRILLING

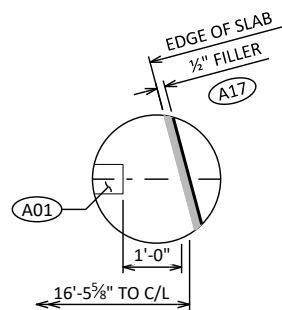
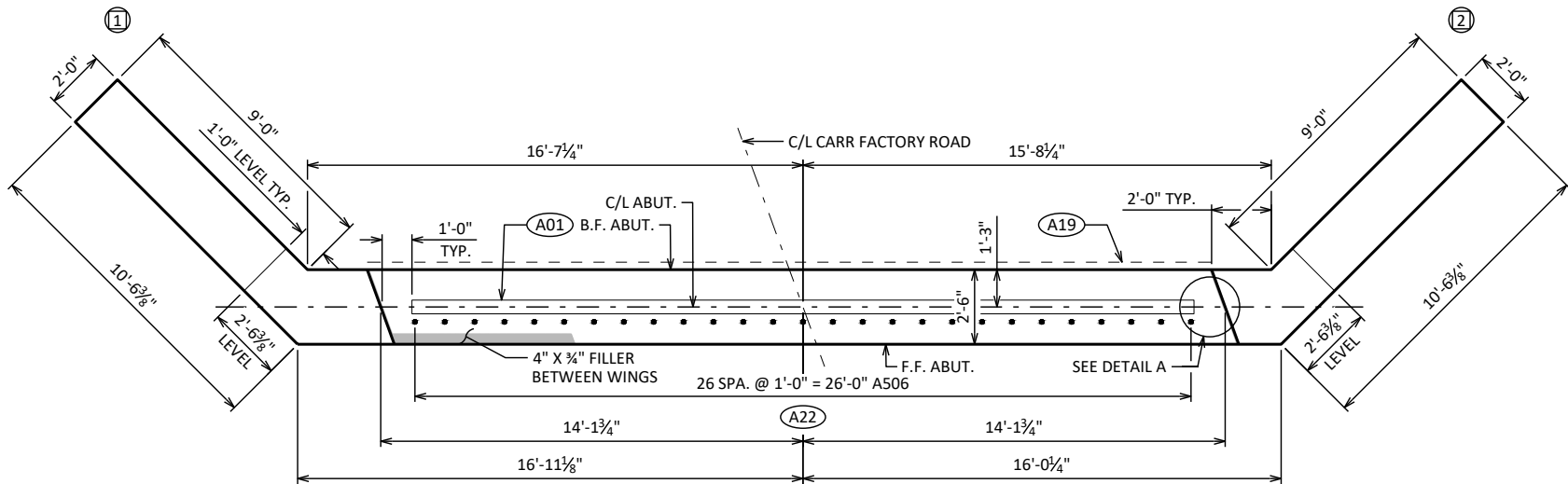
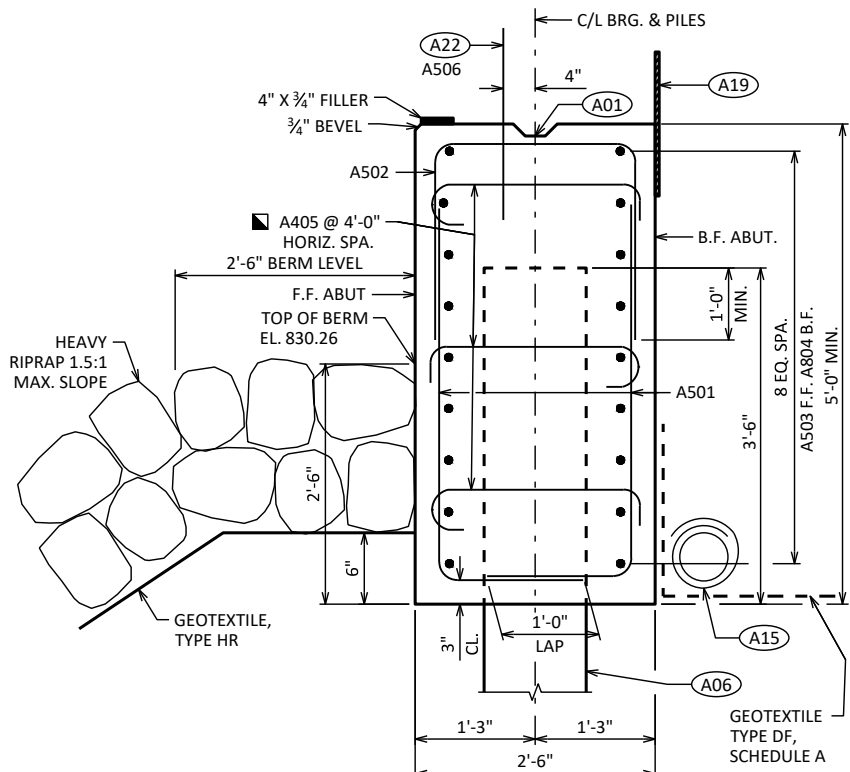
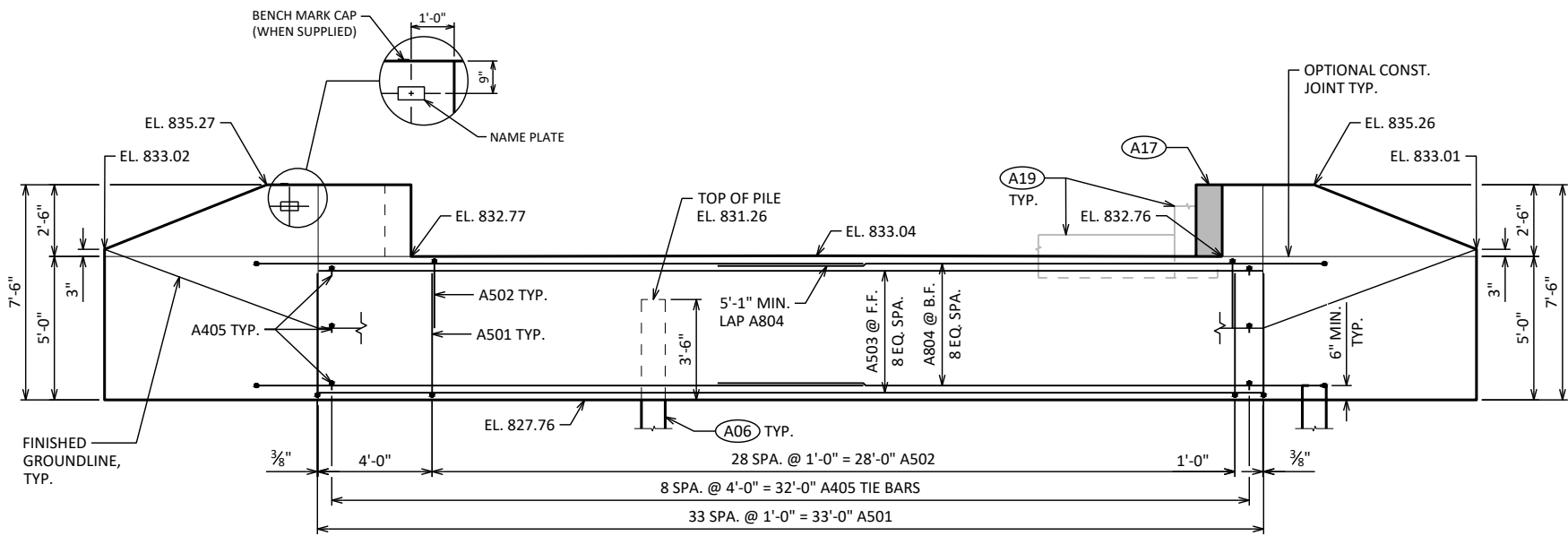
ABBREVIATIONS

F-FINE M-MEDIUM C-COURSE 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-33-148			
		DRAWN BY	PTB
		CTMP	PLANS CK'D.
SUBSURFACE EXPLORATION		SHEET 3 OF 10	



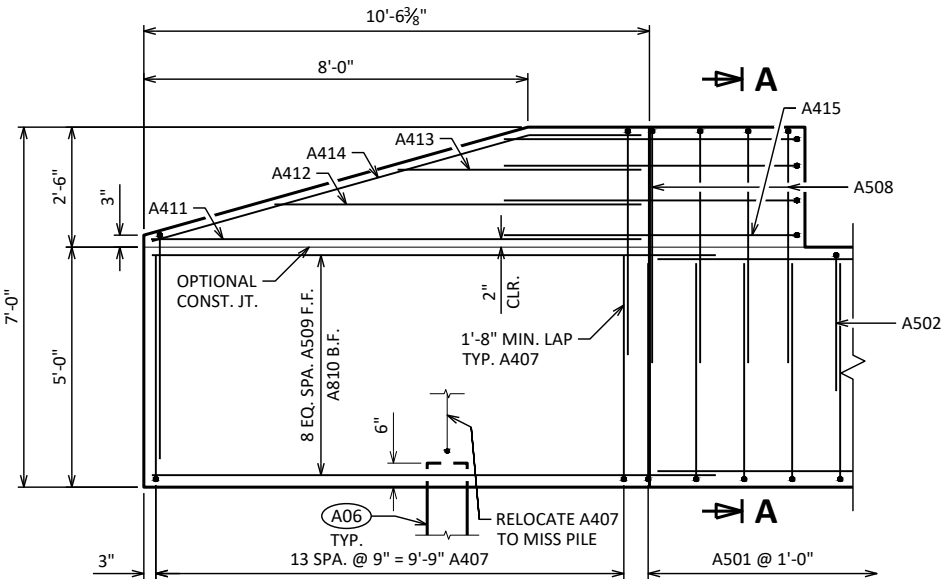
- A01** CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6.
- A06** SUPPORT ABUTMENT ON 10 X 42 STEEL PILING SEATED IN PREBORED HOLES TO EL. 815. ESTIMATED 15'-0" LONG WITH A FACTORIAL AXIAL RESISTANCE OF 180 TONS PER PILE. PILE DRIVING IS NOT REQUIRED
- A15** PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A17** 1/2" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 3/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- A19** 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- A22** A506 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-148			
DRAWN BY		MAN	PLANS CK'D PTB
SOUTH ABUTMENT		SHEET 4 OF 10	

BILL OF BARS

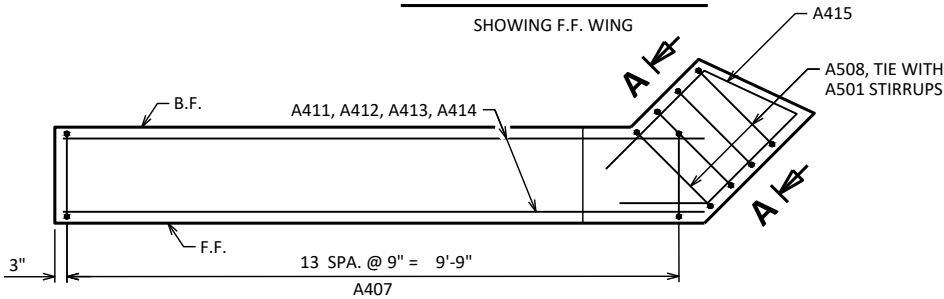
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		68	6'-0"	X		ABUT BODY STIRRUPS
A502		29	7'-7"	X		ABUT BODY STIRRUPS - TOP U-BAR
A503		9	32'-11"			ABUT BODY HORIZ. - F.F.
A804		18	22'-5"	X		ABUT BODY HORIZ. - B.F.
A405		27	3'-0"	X		ABUT BODY TIE BARS
A506	X	27	2'-0"			ABUT BODY DOWEL BARS
A407	X	56	10'-10"	X		WING STIRRUPS
A508	X	5	11'-7"	X		WING CORNER STIRRUPS
A509	X	18	11'-9"	X		WING LOWER HORIZ. - F.F.
A810	X	18	13'-3"	X		WING LOWER HORIZ. - B.F.
A411	X	4	10'-1"			WING UPPER HORIZ.
A412	X	4	7'-7"			WING UPPER HORIZ.
A413	X	4	5'-0"			WING UPPER HORIZ.
A414	X	4	9'-8"	X		WING TOP HORIZ.
A415	X	4	9'-4"	X		WING 1 UPPER HORIZ. CORNER
A416	X	4	7'-6"	X		WING 2 UPPER HORIZ. CORNER



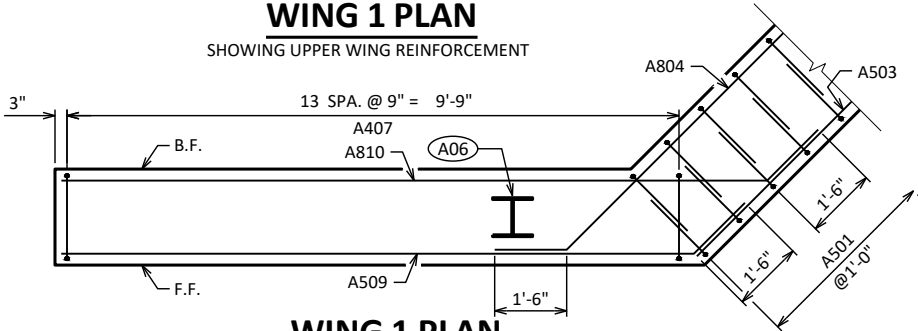
WING 1 ELEVATION

SHOWING F.F. WING



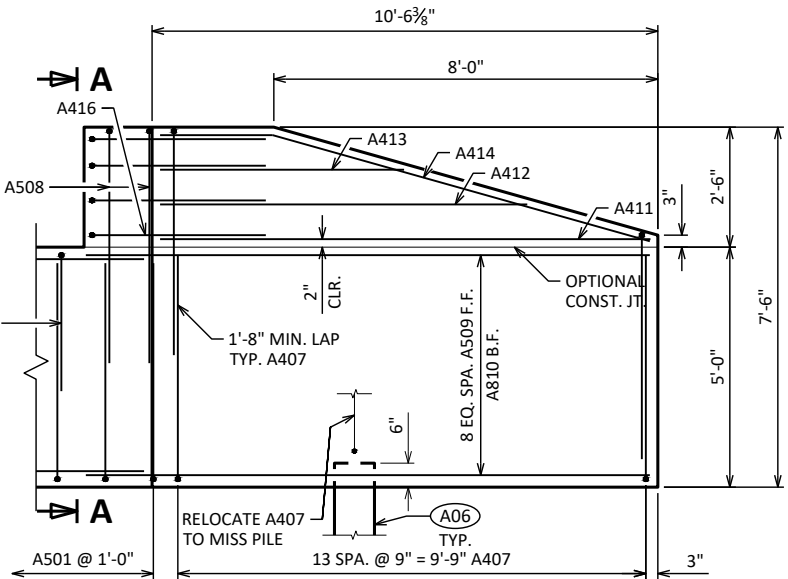
WING 1 PLAN

SHOWING UPPER WING REINFORCEMENT



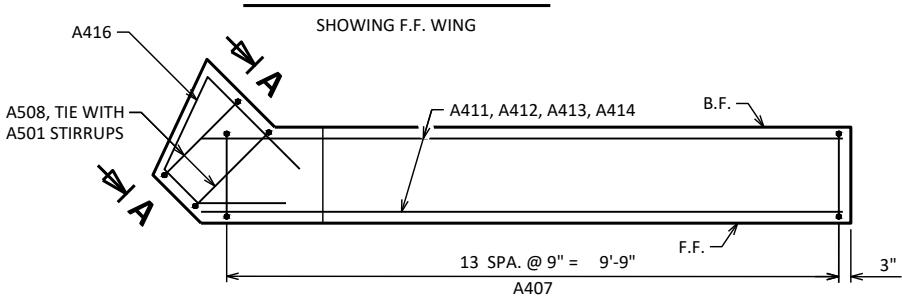
WING 1 PLAN

SHOWING LOWER WING REINFORCEMENT
WING 2 SIMILAR



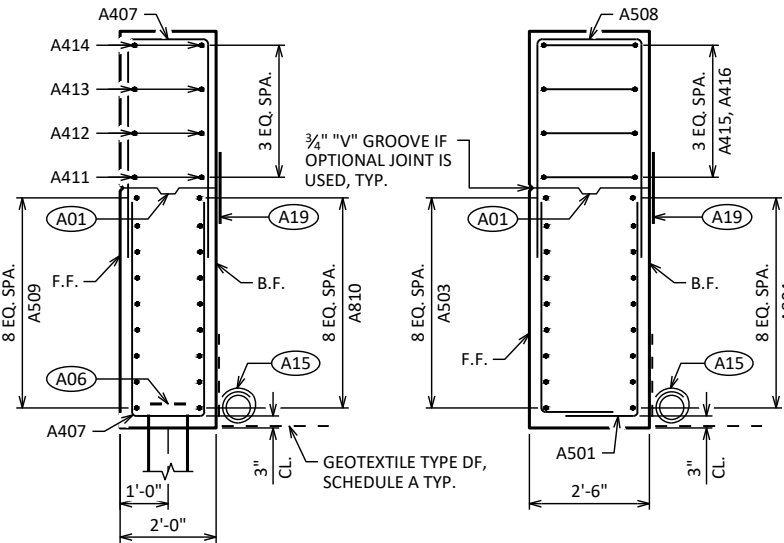
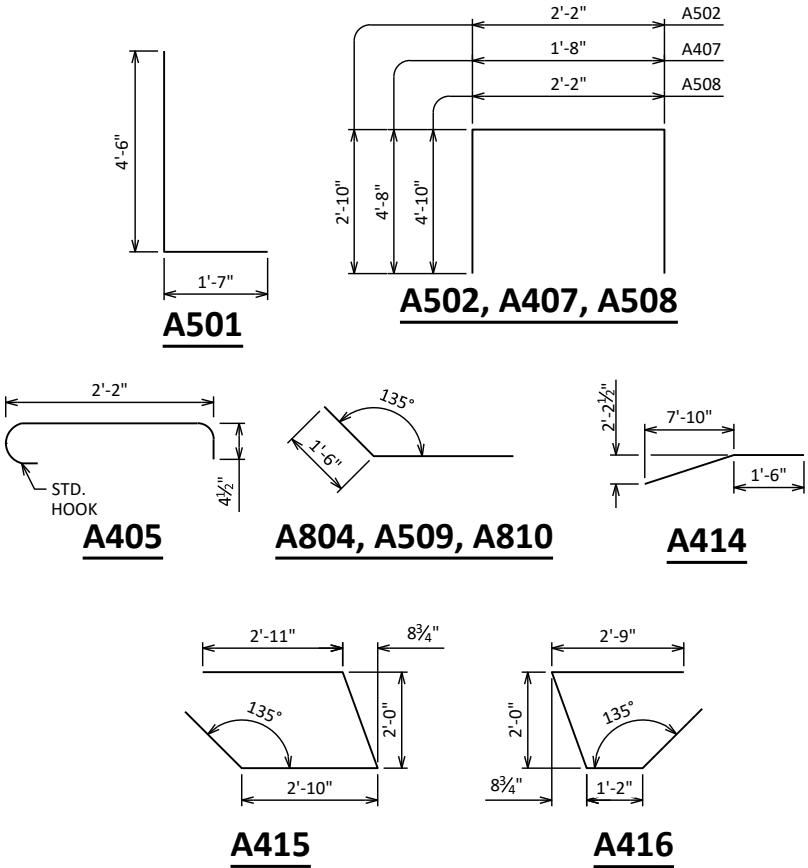
WING 2 ELEVATION

SHOWING F.F. WING



WING 2 PLAN

SHOWING UPPER WING REINFORCEMENT

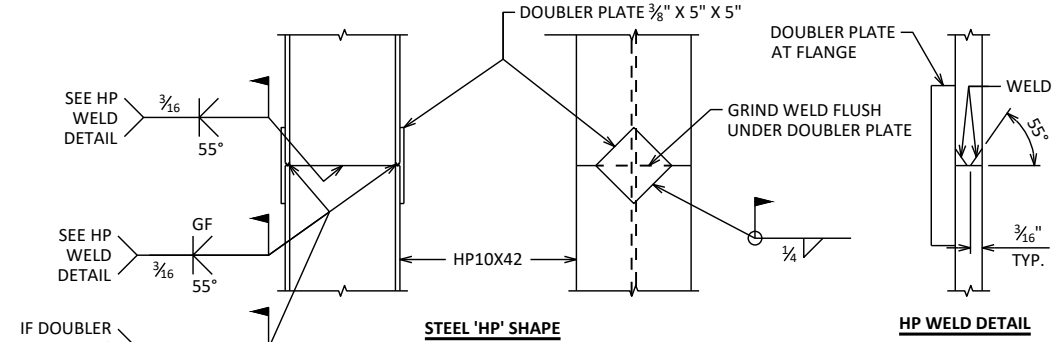


SECTION THRU WING 1

TYPICAL BOTH WINGS

SECTION A-A

- A01 OPTIONAL CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6. PROVIDE 3/4" "V" GROOVE ON F.F. OF WINGWALL IF JOINT IS USED.
- A06 SUPPORT ABUTMENT ON 10 X 42 STEEL PILING SEATED IN PREBORED HOLES TO EL. 815. ESTIMATED 15'-0" LONG WITH A FACTORIAL AXIAL RESISTANCE OF 180 TONS PER PILE. PILE DRIVING IS NOT REQUIRED
- A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A19 18" RUBBERIZED MEMBRANE WATERPROOFING, ONLY IF OPTIONAL CONSTRUCTION JOINT IS USED. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY STRUCTURES".



'HP' PILE DETAILS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-148			
DRAWN BY		MAN	PLANS CK'D PTB
SOUTH ABUTMENT DETAILS		SHEET 5 OF 10	

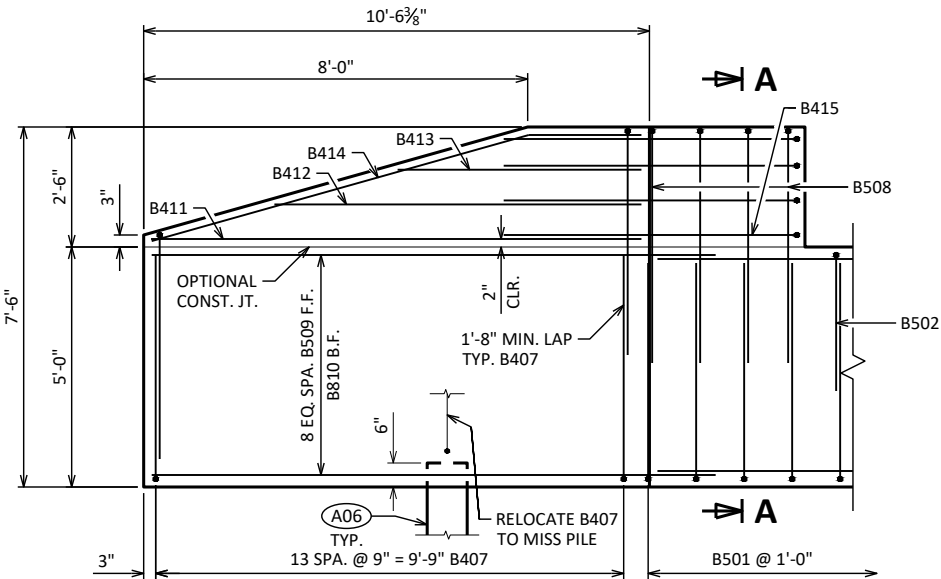


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|--|------|-----------------|---------------|
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| NO. | DATE | REVISION | BY |
| STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION | | | |
| STRUCTURE | | B-33-148 | |
| | | DRAWN
BY | PLANS
CK'D |
| | | MAN | PTB |
| NORTH
ABUTMENT | | SHEET 6 OF 10 | |
| | | | |

BILL OF BARS

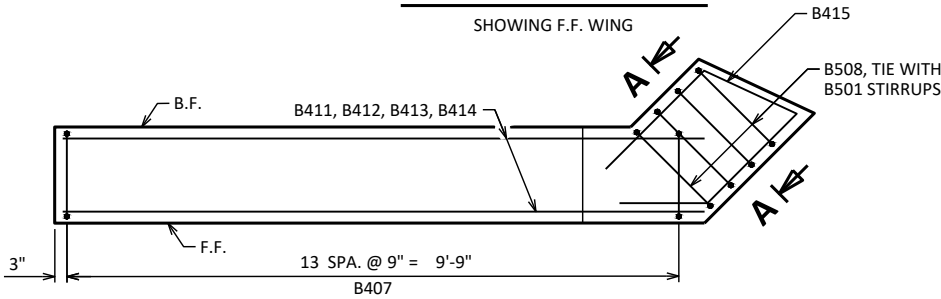
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		68	6'-0"	X		ABUT BODY STIRRUPS
B502		29	7'-7"	X		ABUT BODY STIRRUPS - TOP U-BAR
B503		9	32'-11"			ABUT BODY HORIZ. - F.F.
B804		18	22'-5"	X		ABUT BODY HORIZ. - B.F.
B405		27	3'-0"	X		ABUT BODY TIE BARS
B506	X	27	2'-0"			ABUT BODY DOWEL BARS
B407	X	56	10'-10"	X		WING STIRRUPS
B508	X	5	11'-7"	X		WING CORNER STIRRUPS
B509	X	18	11'-9"	X		WING LOWER HORIZ. - F.F.
B810	X	18	13'-3"	X		WING LOWER HORIZ. - B.F.
B411	X	4	10'-1"			WING UPPER HORIZ.
B412	X	4	7'-7"			WING UPPER HORIZ.
B413	X	4	5'-0"			WING UPPER HORIZ.
B414	X	4	9'-8"	X		WING TOP HORIZ.
B415	X	4	9'-4"	X		WING 3 UPPER HORIZ. CORNER
B416	X	4	7'-6"	X		WING 4 UPPER HORIZ. CORNER



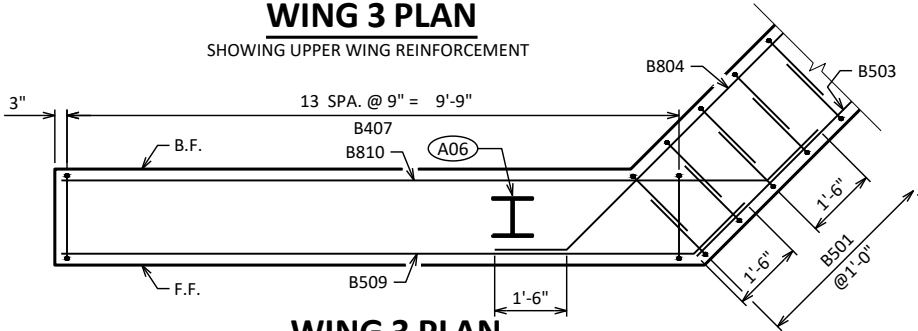
WING 3 ELEVATION

SHOWING F.F. WING



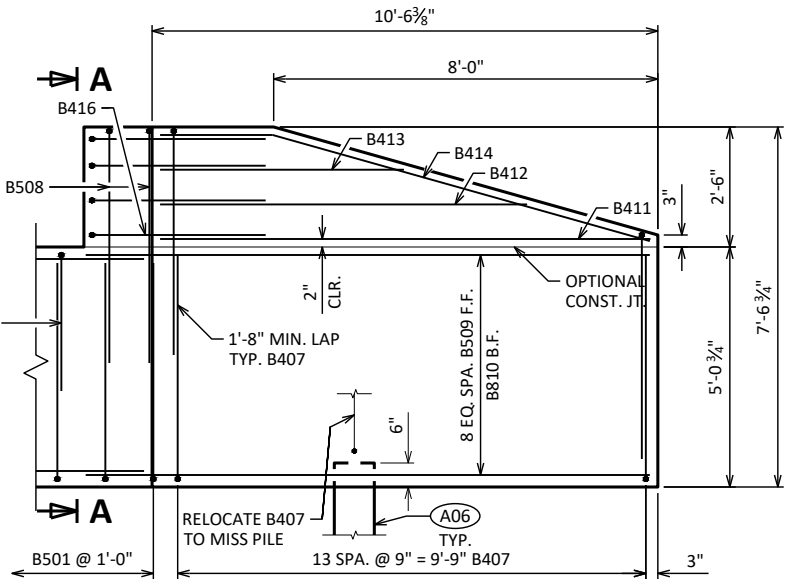
WING 3 PLAN

SHOWING UPPER WING REINFORCEMENT



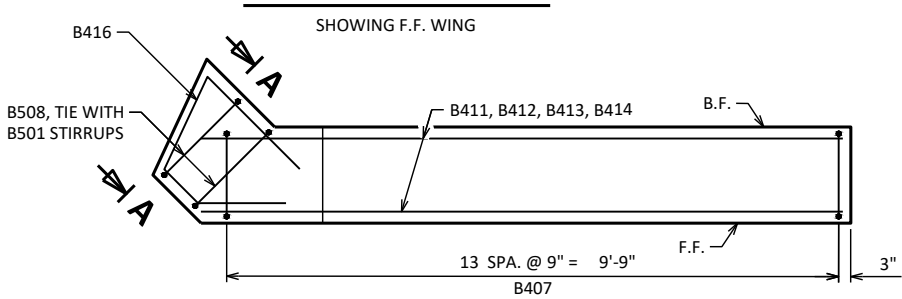
WING 3 PLAN

SHOWING LOWER WING REINFORCEMENT
WING 4 SIMILAR



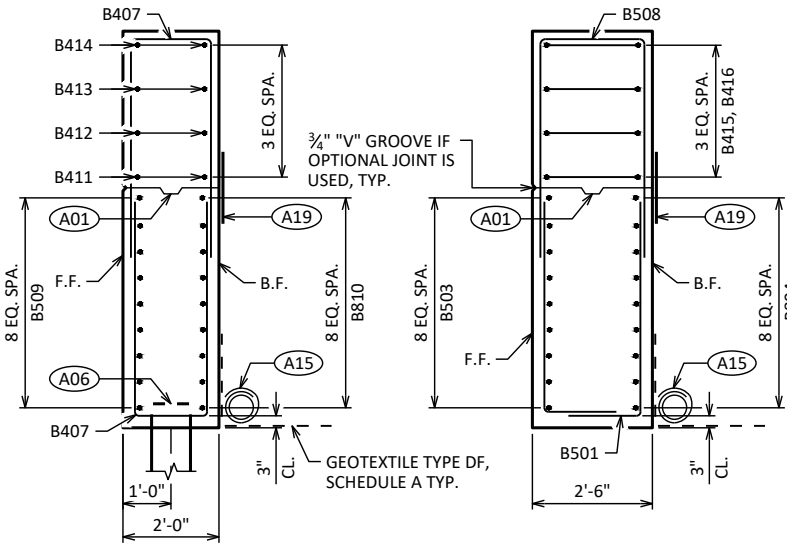
WING 4 ELEVATION

SHOWING F.F. WING



WING 4 PLAN

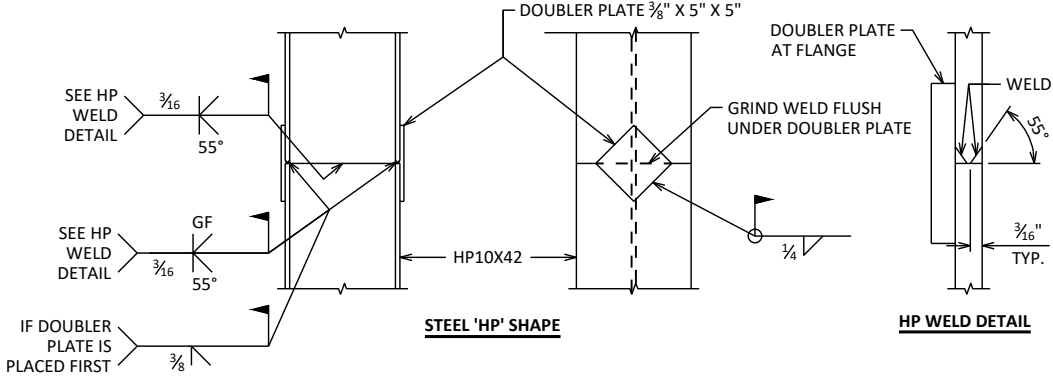
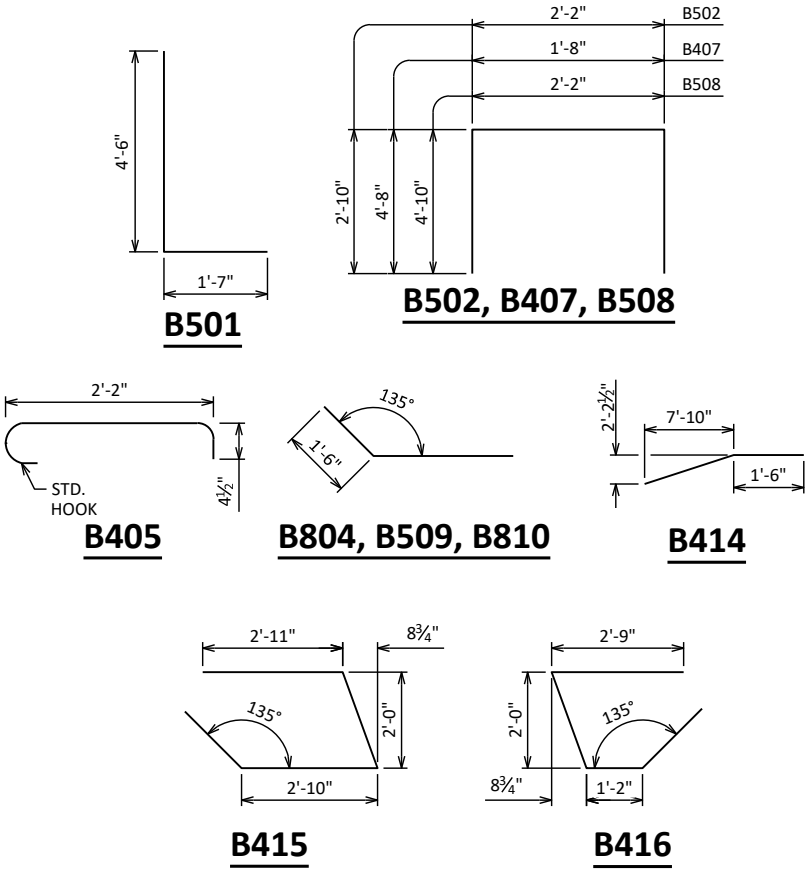
SHOWING UPPER WING REINFORCEMENT



SECTION THRU WING 3

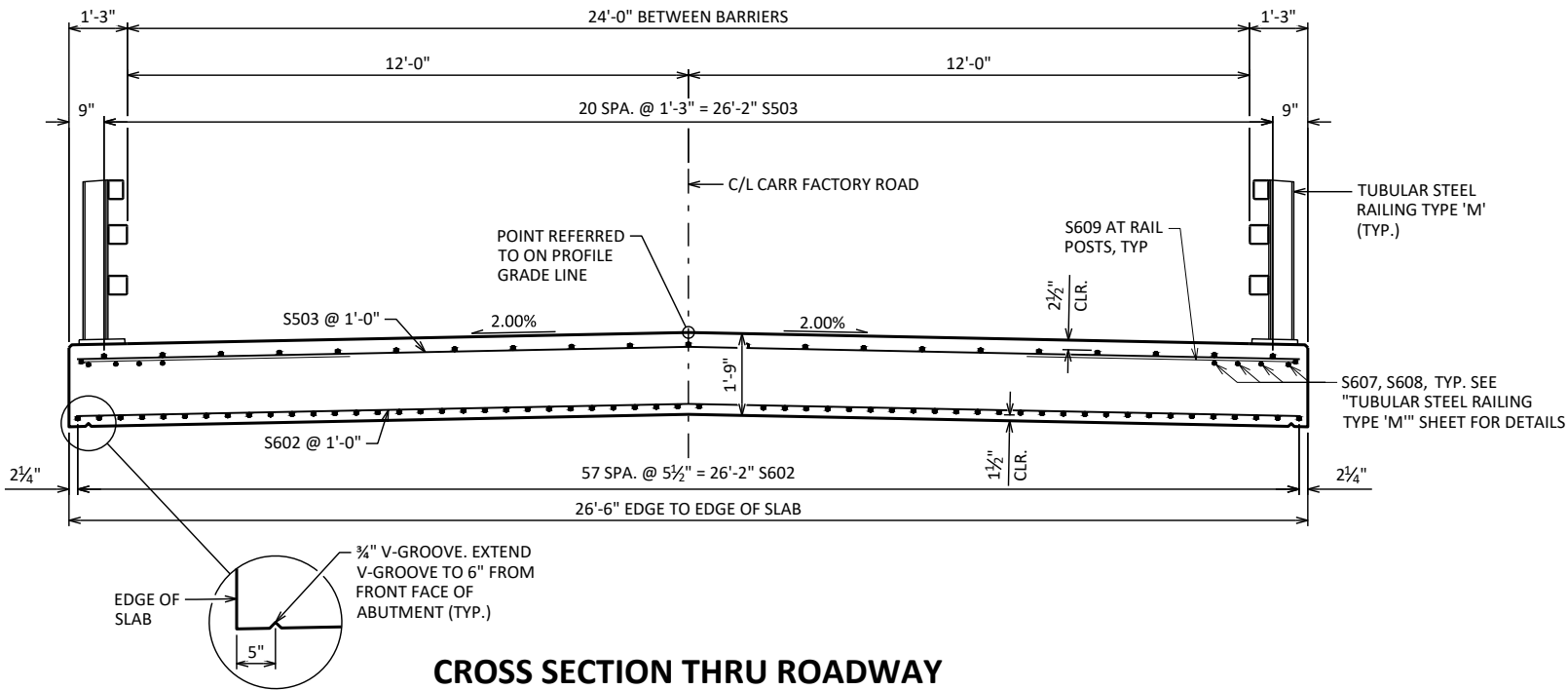
TYPICAL BOTH WINGS

SECTION A-A

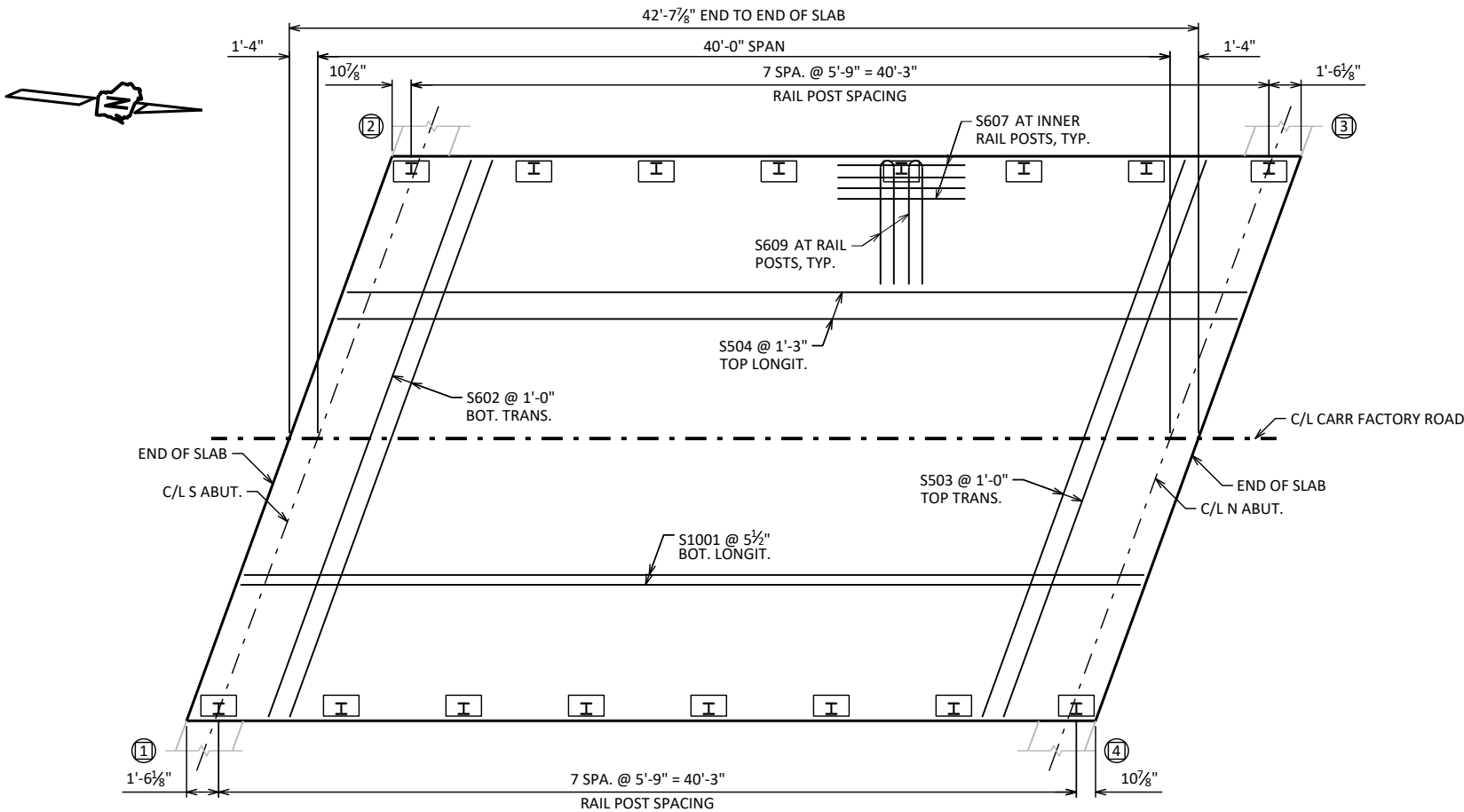


'HP' PILE DETAILS

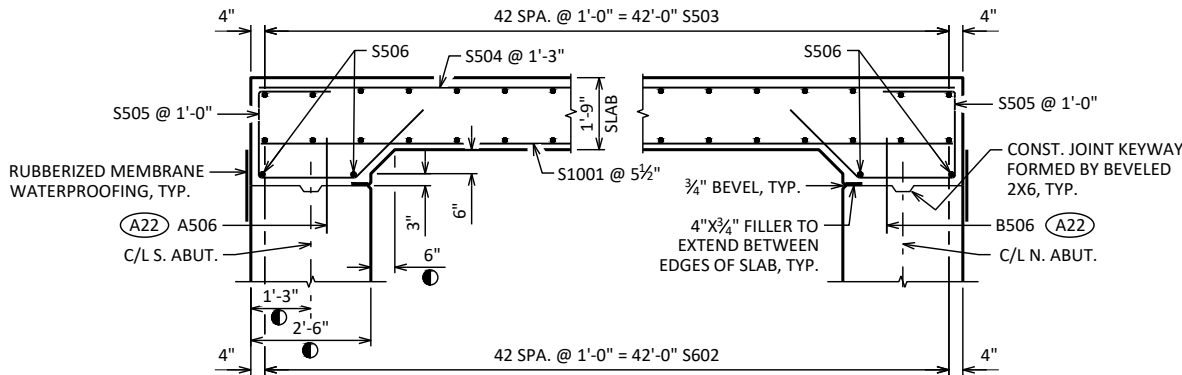
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-148			
DRAWN BY		MAN	PLANS CK'D PTB
NORTH ABUTMENT DETAILS		SHEET 7 OF 10	



CROSS SECTION THRU ROADWAY



PLAN

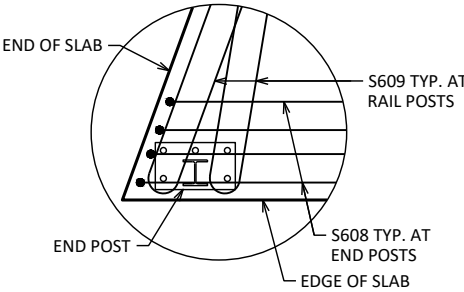


LONGITUDINAL SECTION

DIMENSIONS ARE GIVEN PARALLEL TO ε ROADWAY UNLESS OTHERWISE NOTED.

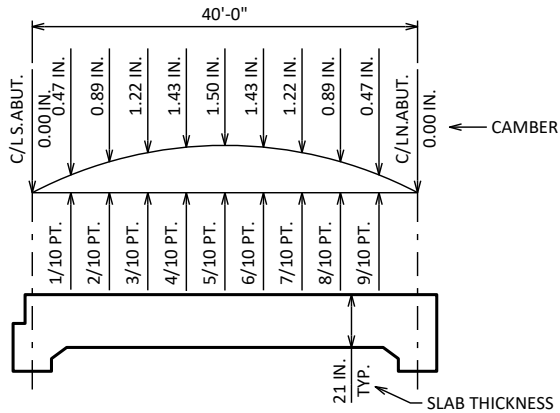
MEASURED NORMAL TO THE ε OF ABUTMENT. DIMENSIONS ARE TYPICAL FOR BOTH ABUTMENTS.

(A22) A506, B506 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)



END POST DETAILS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-148			
DRAWN BY		MAN	PLANS CK'D PTB
SUPERSTRUCTURE		SHEET 8 OF 10	



CAMBER AND SLAB THICKNESS DIAGRAM

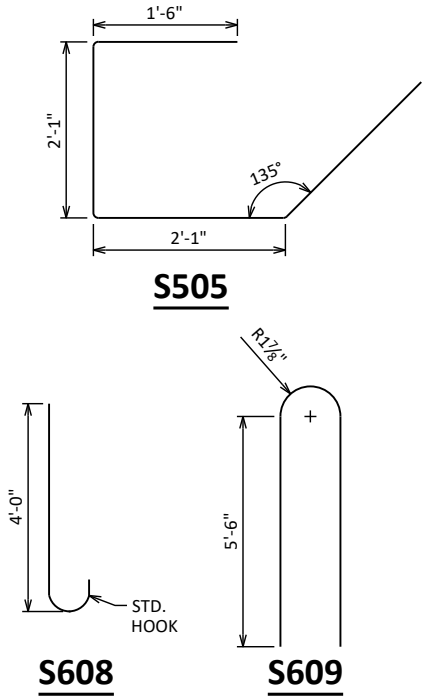
CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT. PARAPETS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED, EXCEPT FOR STAGED CONSTRUCTION.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

LESS	TOP OF SLAB ELEVATION AT FINAL GRADE
PLUS	SLAB THICKNESS
PLUS	CAMBER
PLUS	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS	TOP OF SLAB FALSEWORK ELEVATION

TOP OF SLAB ELEVATIONS

LOCATION	C/L BRG. S. ABUT.	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	C/L BRG. N. ABUT.
L. EDGE OF DECK	835.26	835.25	835.24	835.23	835.21	835.19	835.17	835.14	835.12	835.09	835.06
CROWN OR R/L	835.54	835.53	835.52	835.51	835.50	835.48	835.46	835.44	835.42	835.39	835.36
R. EDGE OF DECK	835.27	835.27	835.26	835.25	835.24	835.23	835.22	835.20	835.18	835.15	835.13



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
S1001	X	58	42'-3"			SLAB BOTTOM LONGITUDINAL
S602	X	43	27'-10"			SLAB BOTTOM TRANSVERSE
S503	X	43	27'-10"			SLAB TOP TRANSVERSE
S504	X	21	42'-3"			SLAB TOP LONGITUDINAL
S505	X	54	7'-5"	X		ABUTMENT DIAPHRAGM STIRRUPS
S506	X	4	27'-10"			ABUTMENT DIAPHRAGM LONGITUDINAL
S607	X	48	6'-0"			SLAB TOP LONGIT. UNDER RAIL POSTS
S608	X	16	4'-8"	X		SLAB TOP LONGIT. UNDER RAIL END POSTS
S609	X	32	12'-0"	X		SLAB TOP HOOKS UNDER RAIL POSTS

SURVEY TOP OF SLAB ELEVATIONS

LOCATION	ABUTMENT	5/10 PT.	ABUTMENT
L. GUTTER			
CROWN OR R/L			
R. GUTTER			

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS, THE C/L OF PIERS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR R/L. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

NOTES

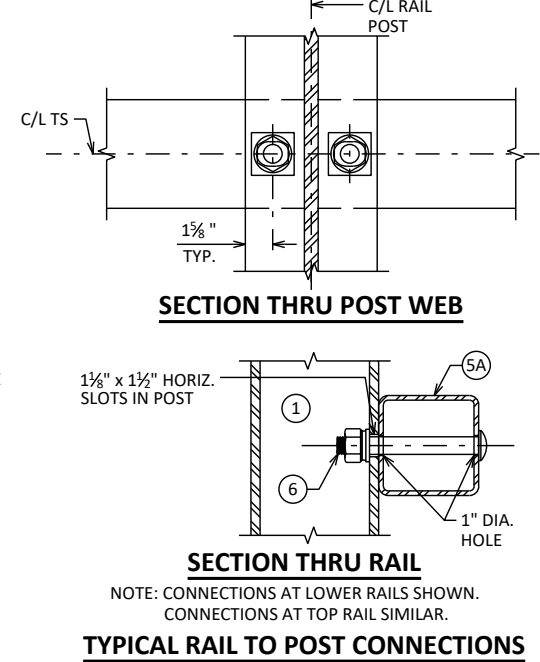
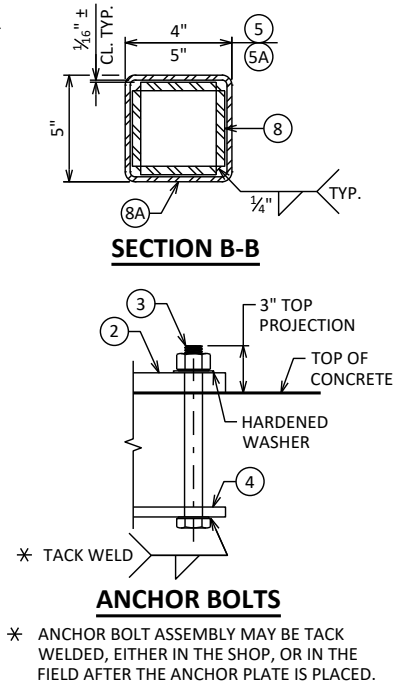
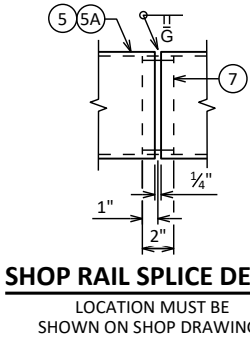
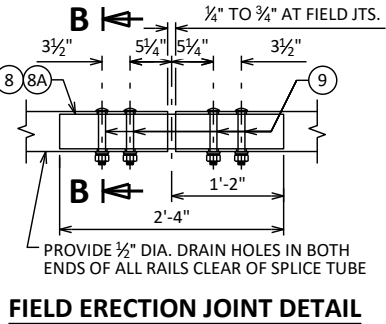
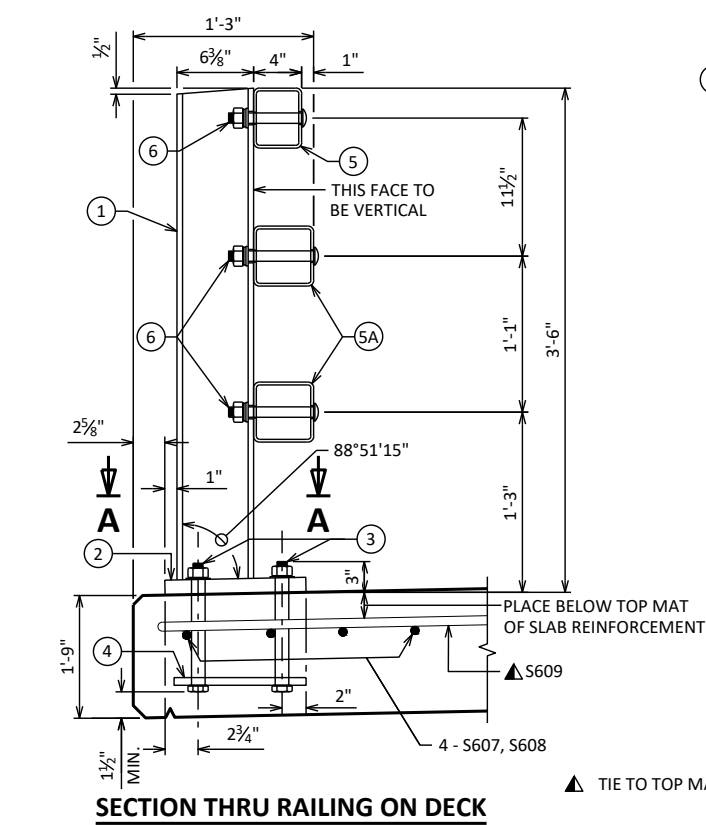
FILL IN THE TABLE OF "SURVEY TOP OF SLAB ELEVATIONS" FOR EACH SPAN ON AS BUILT PLANS.

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

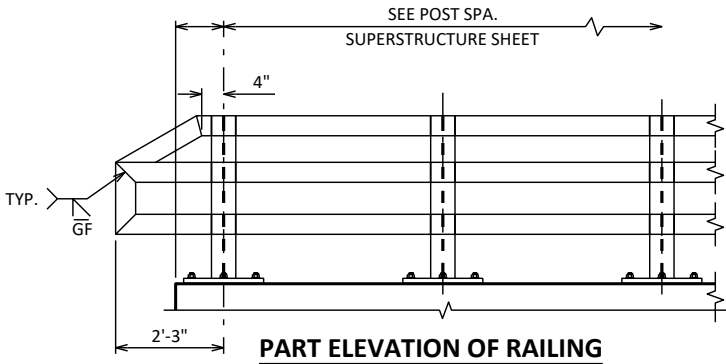
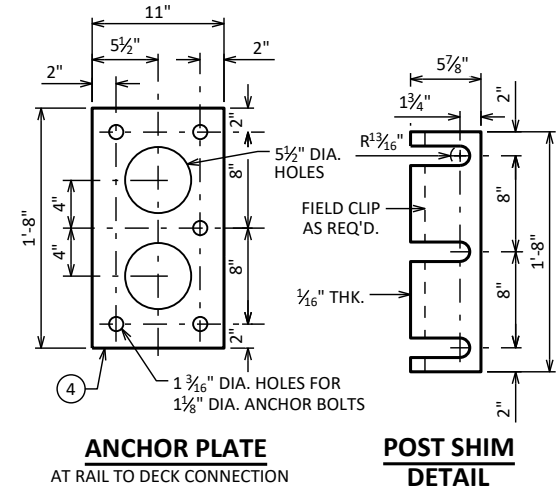
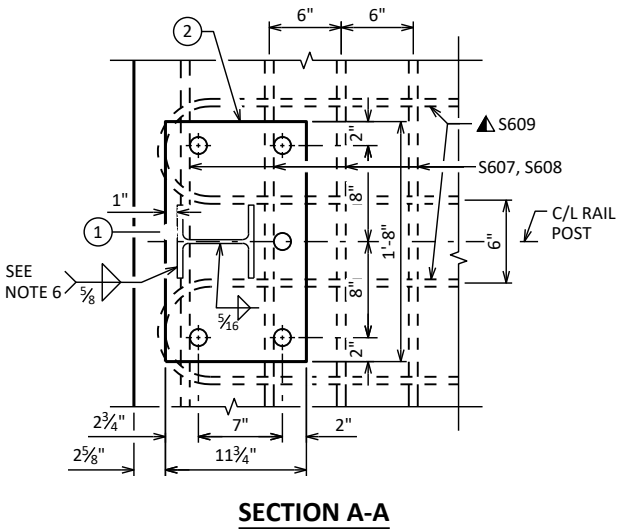
ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

NO.	DATE	REVISION	BY
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STRUCTURE B-33-148			
DRAWN BY		MAN	PLANS CK'D PTB
SUPERSTRUCTURE DETAILS		SHEET 9 OF 10	

SCALE =



- LEGEND**
- 1 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.
 - 2 PLATE 1 1/4" x 11 3/4" x 1'-8" WITH 1 7/16" OVERSIZED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN.
 - 3 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. 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.
 - 4 5/8" x 11" x 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1 3/16" DIA. HOLES FOR ANCHOR BOLTS NO. 3.
 - 5 TS 5 x 4 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
 - 5A TS 5 x 5 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
 - 6 7/8" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, 3/16" x 1 5/8" x 1 5/8" MIN. WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION).
 - 7 SPLICE SLEEVE FABRICATED FROM 1/4" PLATE. PROVIDE "SLIDING FIT".
 - 8 3/8" x 3 5/8" x 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.
 - 8A 3/8" x 2 5/8" x 2'-4" PLATE USED IN NO. 5, 3/8" x 3 5/8" x 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.
 - 9 7/8" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 1 5/16" x 1 1/4" LONGIT. SLOTTED HOLES IN PLATE NO. 10A AT FIELD JOINTS AND 1 5/16" x 2 1/4" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 8A. PROVIDE 1 5/16" DIA. ROUND HOLES IN TUBES NO. 5 AND NO. 5A.



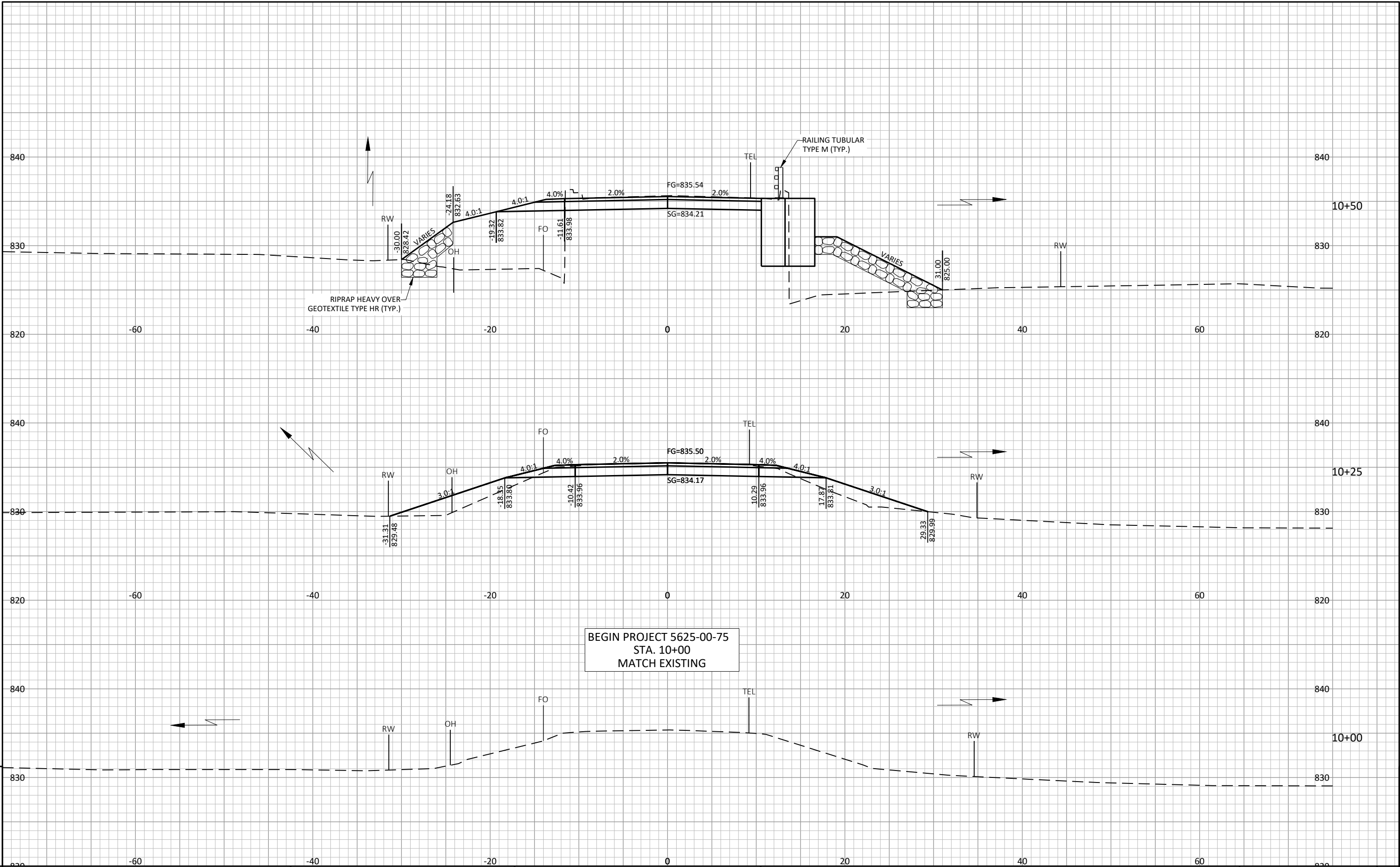
- GENERAL NOTES**
- 1. BID ITEM SHALL BE "RAILING TUBULAR TYPE M" WHICH INCLUDES ALL ITEMS SHOWN.
 - 2. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY = 50 KSI. ANCHOR PLATES, AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.
 - 3. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/2 TURN.
 - 4. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE.
 - 5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
 - 6. WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
 - 7. 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.
 - 8. 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.
 - 9. 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.

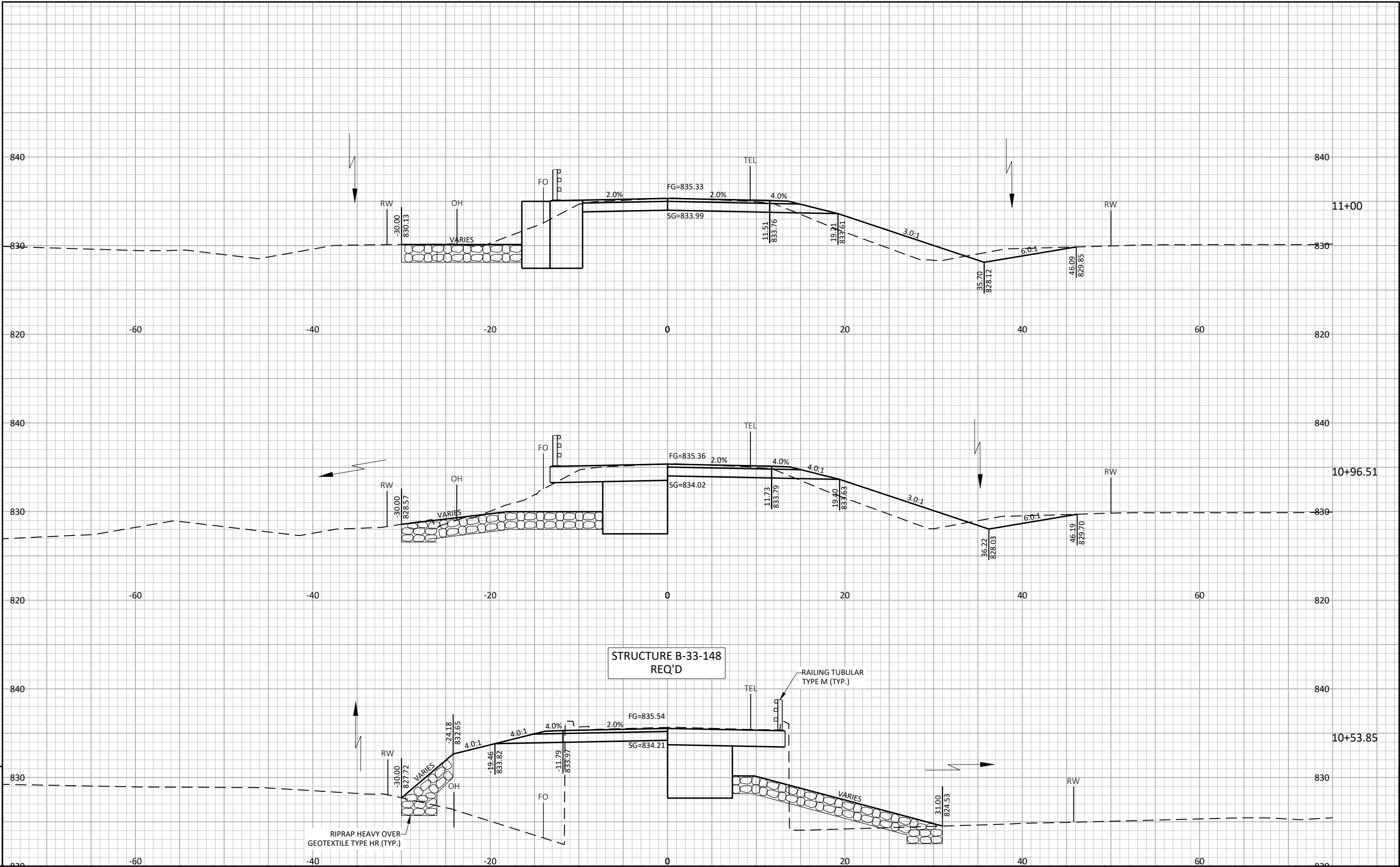
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-148			
DRAWN BY		MAN	PLANS CK'D PTB
TUBULAR STEEL RAILING TYPE 'M'		SHEET 10 OF 10	

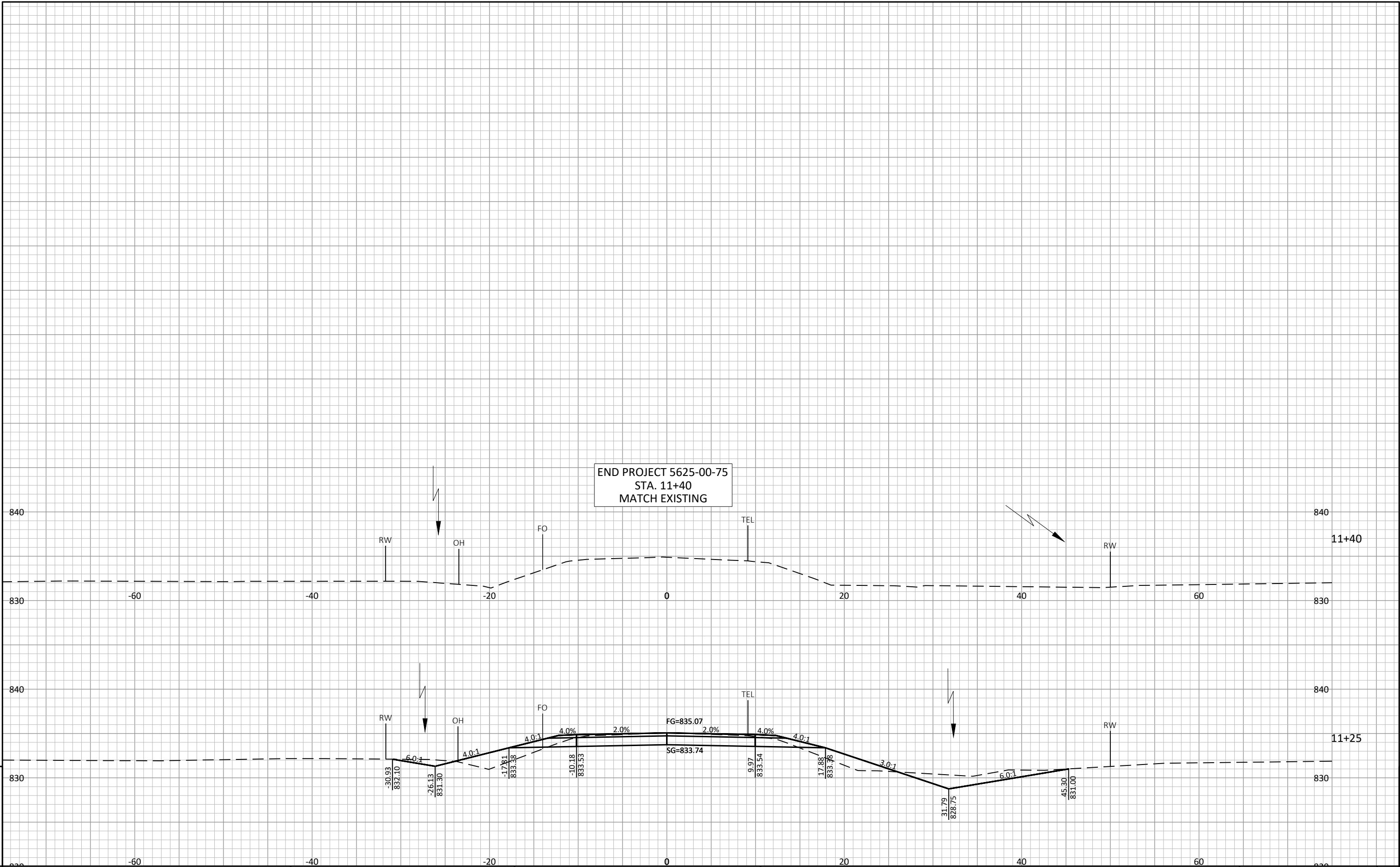
EARTHWORK-CARR FACTORY ROAD

STATION	AREA (SF)		INCREMENTAL VOL (CY)			CUMMULATIVE VOLUME (CY)			
	CUT	FILL	CUT NOTE 1	FILL	FILL (25%) NOTE 2	CUT 1.00 NOTE 1	FILL	FILL (25%) NOTE 2	MASS ORDINATE NOTE 3
10+00	0	0	16	16	20	16	16	20	-4
10+25	34	35	31	60	75	47	76	95	-48
10+50	33	92	5	14	18	52	90	113	-61
10+54	33	92	0	0	0	52	90	113	-61
10+97	35	28	4	4	5	56	94	118	-62
11+00	35	28	40	23	29	96	117	146	-51
11+25	48	20	14	7	9	110	124	155	-45
11+40	0	0	0	0	0	110	124	155	-45
COLUMN TOTALS =			110	124	155				-45

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - FILL 25%	(UNEXPANDED FILL)*1.25
3 - MASS ORDINATE	CUT + ROCK (10%) +REDUCED MARSH (60%) - FILL (25%)









Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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

MAD

PROJECT ID:
WITH: 5625-00-75

5695-00-74

COUNTY:
LAFAYETTE

December 2024
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 = 50



DESIGN DESIGNATION 5695-00-04

A.A.D.T.	2025	=	300
A.A.D.T.	2045	=	320
D.H.V.		=	29
D.D.		=	60/40
T.		=	10%
DESIGN SPEED		=	40 M.P.H.
ESALS		=	227,800

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

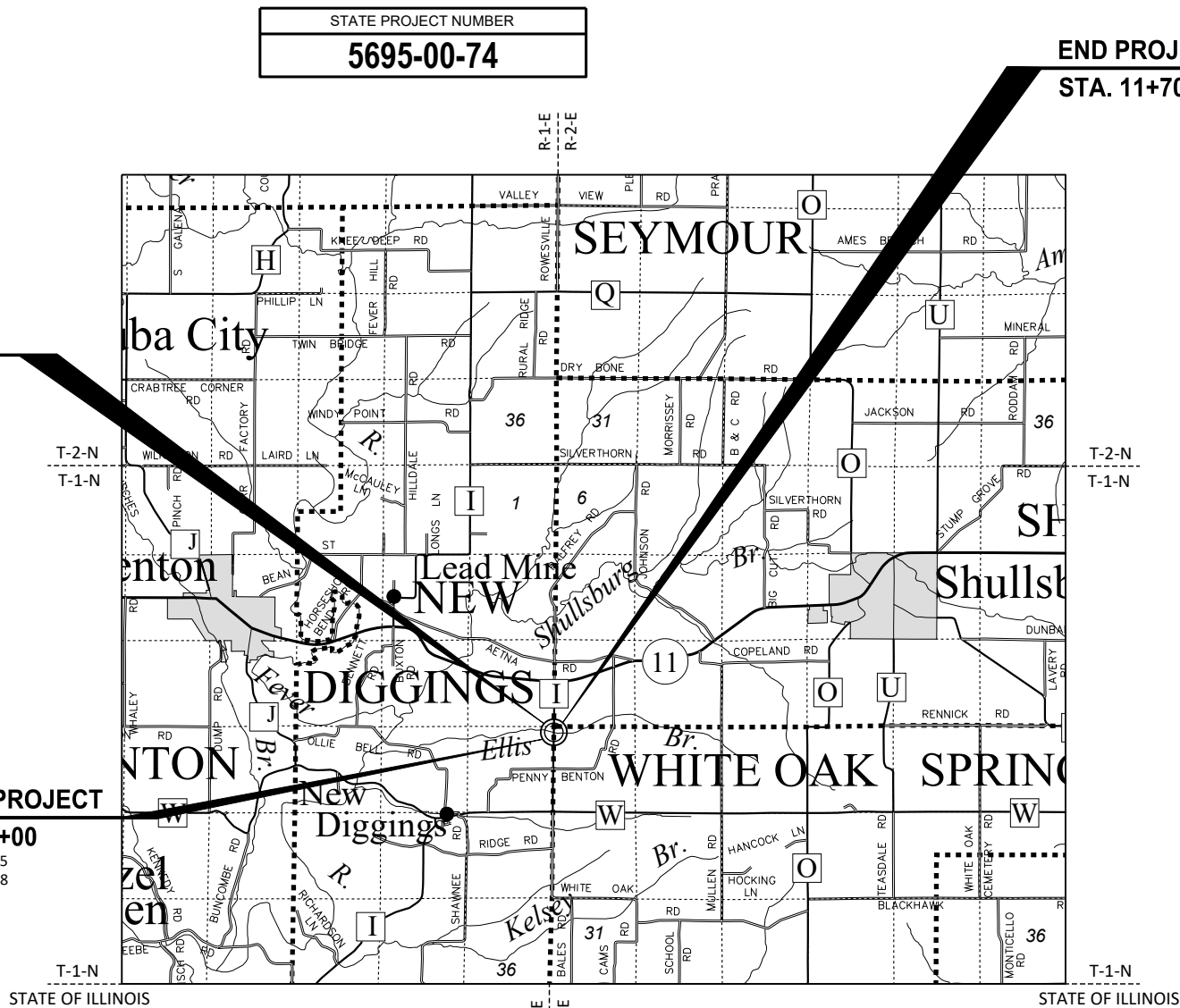
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

STRUCTURE B-33-147

BEGIN PROJECT

STA. 10+00

Y = 118,730.05
X = 431,424.78



LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.032 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, LAFAYETTE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCE MAY BE USED AS GROUND DISTANCES.

ELEVATION SHOWN OF THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD (2012).

STATE PROJECT

5695-00-74

5625-00-75

FEDERAL PROJECT

PROJECT

WISC 2025097

CONTRACT

1

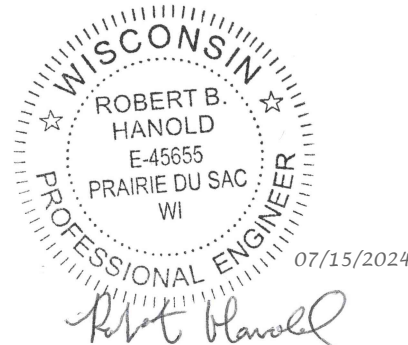
ACCEPTED FOR

COUNTY of LAFAYETTE

7/23/24 Dan Rully
(Date) (Highway Commissioner)

ORIGINAL PLANS PREPARED BY

JEWELL
associates engineers, inc
Engineers - Architects - Surveyors



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	JEWELL ASSOCIATES ENGINEERS, INC.
Surveyor	JEWELL ASSOCIATES ENGINEERS, INC.
Designer	ZACHARY PEARSON, P.E.
Project Manager	SW REGION
Regional Examiner	KYLE KEMP, P.E.
Regional Supervisor	

APPROVED FOR THE DEPARTMENT
07/24/24 ZACHARY PEARSON
DATE: (Signature)

E

GENERAL NOTES

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

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE, AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION. EXACT LOCATIONS OF EBS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

THE QUANTITY OF THE ITEMS FOR EROSION PROTECTION INCLUDES AN UNDISTRIBUTED AMOUNT FOR PROTECTION, CONTROL AND ABATEMENT OF WATER POLLUTION RESULTING FROM SOIL EROSION. THE DISTRIBUTION AND LOCATION OF THESE MATERIALS ARE TO BE DETERMINED BY THE ENGINEER.

UNLESS SHOWN OTHERWISE, DISTURBED AREAS SHOWN WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS ARE TO BE FERTILIZED (TYPE B), SEEDED (USE SEED MIX NO. 20), AND MULCHED AS DIRECTED BY THE ENGINEER.

WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE DENSE OR ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

SILT FENCE AND TURBIDITY BARRIER SHALL BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER IN THE FIELD. SILT FENCE AND TURBIDITY BARRIER SHALL BE PLACED PRIOR TO CONSTRUCTION AND SHALL BE IN PLACE PRIOR TO STRUCTURE REMOVAL.

REMOVAL OF ASPHALTIC SURFACES WHERE AN ABUTTING ASPHALTIC SURFACE IS TO REMAIN IN PLACE SHALL REQUIRE A SAWCUT MEETING THE APPROVAL OF THE ENGINEER IN THE FIELD.

WETLANDS ARE PRESENT IN THE PROJECT LIMITS. THE CONTRACTOR SHALL NOT OPERATE EQUIPMENT OR STOCKPILE MATERIALS BEYOND THE EXISTING SLOPE INTERCEPT FROM STA. 10+00 - STA. 10+77, RT., STA. 10+96 - STA. 11+70, RT., STA. 10+98 - 11+70, LT., STA. 10+00 - 10+77, LT., AND STA. 10+96 - 11+70, LT.

THE LOCATION OF ALL PERMANENT SIGNING SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD PRIOR TO PLACEMENT.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTION AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, BIKE, OR PARKING LANE.

4-INCHES OF ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH A 2 ¼-INCH LOWER LAYER AND A 1 ¾-INCH UPPER LAYER.

ADJUST DITCH GRADING AS NECESSARY TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER IN THE FIELD.

ASPHALTIC SURFACE QUANTITIES WERE CALCULATED USING 115 LB/SY/IN.

CONTACTS

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PHONE: (608) 776-4917
EMAIL: dan.rielly@lafayettecountywi.gov

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DNR SERVICE CENTER
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FITCHBURG WI 53711
ATTN: SHELLEY NELSON
PHONE: (608) 444-2835
EMAIL: shelley.nelson@wisconsin.gov

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ALLIANT ENERGY
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PLATTEVILLE WI, 53818
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EMAIL: curtisvacha@alliantenergy.com

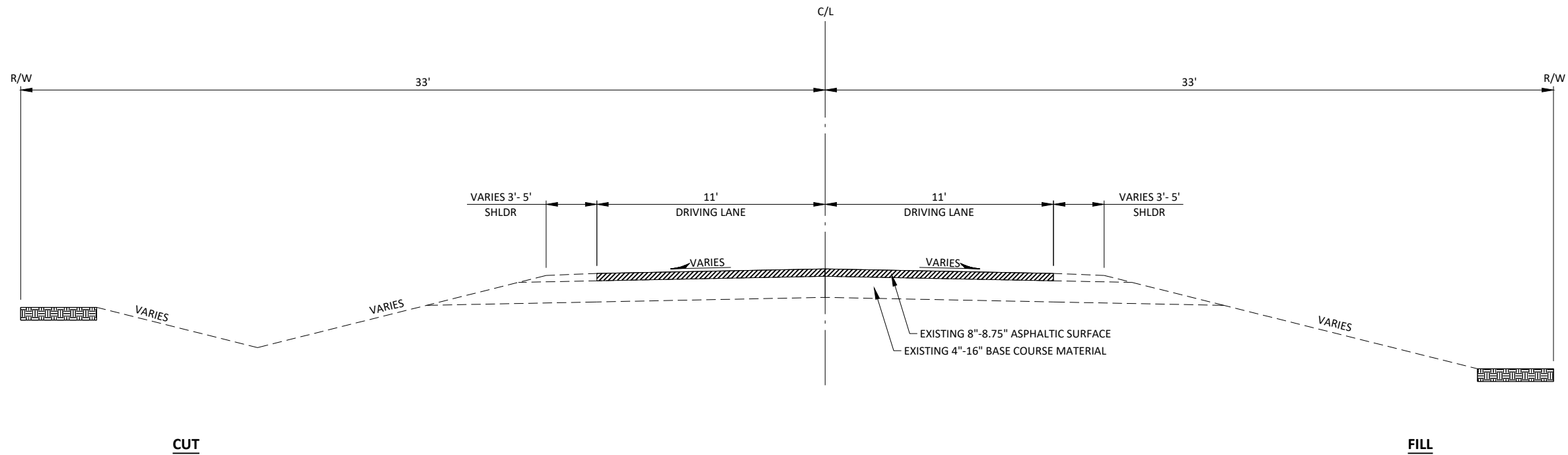
FIBER OPTIC
BRIGHTSPEED
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BERLIN, WI 54923
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EMAIL: scott.heinzelman@brightspeed.com

ATC
ATTN: TONY MARCINIAK
2489 RINDEN ROAD
COTTAGE GROVE, WI 53527
PHONE: (608) 877-7650
EMAIL: amarciniak@atcllc.com



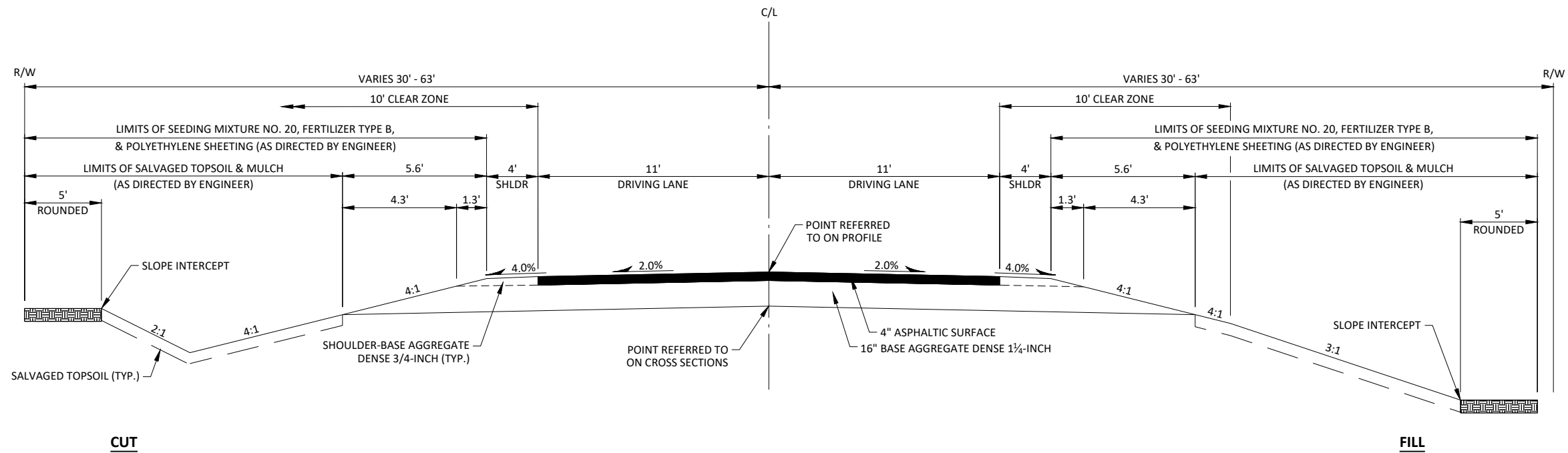
LIST OF STANDARD ABBREVIATIONS

ABUT	Abutment	INV	Invert	SALV	Salvaged
AC	Acre	IP	Iron Pipe or Pin	SAN S	Sanitary Sewer
AGG	Aggregate	IRS	Iron Rod Set	SEC	Section
AH	Ahead	JT	Joint	SHLDR	Shoulder
<	Angle	JCT	Junction	SHR	Shrinkage
ASPH	Asphaltic	LHF	Left-Hand Forward	SW	Sidewalk
AVG	Average	L	Length of Curve	S	South
ADT	Average Daily Traffic	LIN FT or LF	Linear Foot	SQ	Square
BAD	Base Aggregate Dense	LC	Long Chord of Curve	SF or SQ FT	Square Feet
BK	Back	MH	Manhole	SY or SQ YD	Square Yard
BF	Back Face	MB	Mailbox	STD	Standard
BM	Bench Mark	ML or M/L	Match Line	SDD	Standard Detail Drawings
BR	Bridge	N	North	STH	State Trunk Highways
C or C/L	Center Line	Y	North Grid Coordinate	STA	Station
CC	Center to Center	O.A.L.	Overall Length	SS	Storm Sewer
CTH	County Trunk Highway	OD	Outside Diameter	SG	Subgrade
CR	Creek	PLE	Permanent Limited Easement	SE	Superelevation
CR	Crushed		Point	SL or S/L	Survey Line
CY or CU YD	Cubic Yard	PT	Point of Curvature	SV	Septic Vent
CP	Culvert Pipe	PC	Point of Intersection	T	Tangent
C & G	Curb and Gutter	PI	Point of Reverse Curvature	TEL	Telephone
D	Degree of Curve	PRC	Point of Tangency	TEMP	Temporary
DHV	Design Hour Volume	PT	Point On Curve	TI	Temporary Interest
DIA	Diameter	POC	Point on Tangent	TLE	Temporary Limited Easement
E	East	POT	Polyvinyl Chloride	t	Ton
X	East Grid Coordinate	PVC	Portland Cement Concrete	T or TN	Town
ELEC	Electric (al)	PCC	Pound	TRANS	Transition
EL or ELEV	Elevation	LB	Pounds Per Square Inch	TL or T/L	Transit Line
ESALS	Equivalent Single Axle Loads	PSI	Private Entrance	T	Trucks (percent of)
EBS	Excavation Below Subgrade	PE	Radius	TYP	Typical
ESTR	Existing Sign to Remain	R	Railroad	UNCL	Unclassified
FF	Face to Face	RR	Range	UG	Underground Cable
FE	Field Entrance	R	Reference Line	USH	United States Highway
F	Fill	RL or R/L	Reference Point	VAR	Variable
FG	Finished Grade	RP	Reinforced Concrete Culvert	V	Velocity or Design Speed
FL or F/L	Flow Line	RCCP	Pipe	VERT	Vertical
FT	Foot	REQ'D	Required	VC	Vertical Curve
FTG	Footing	RES	Residence or Residential	VOL	Volume
GN	Grid North	RW	Retaining Wall	WM	Water Main
HT	Height	RT	Right	WV	Water Valve
CWT	Hundredweight	RHF	Right-Hand Forward	W	West
HYD	Hydrant	R/W	Right-of-Way	WB	Westbound
INL	Inlet	R	River	YD	Yard
ID	Inside Diameter	RD	Road		
		RDWY	Roadway		



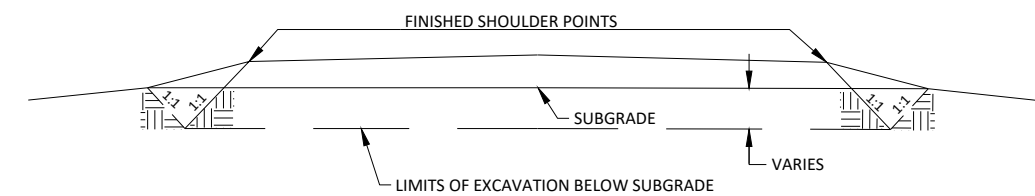
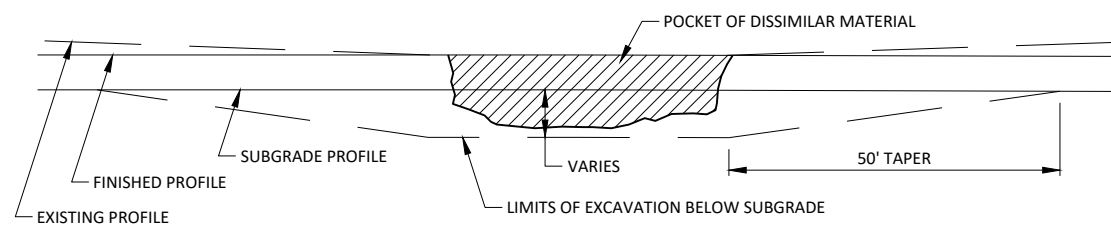
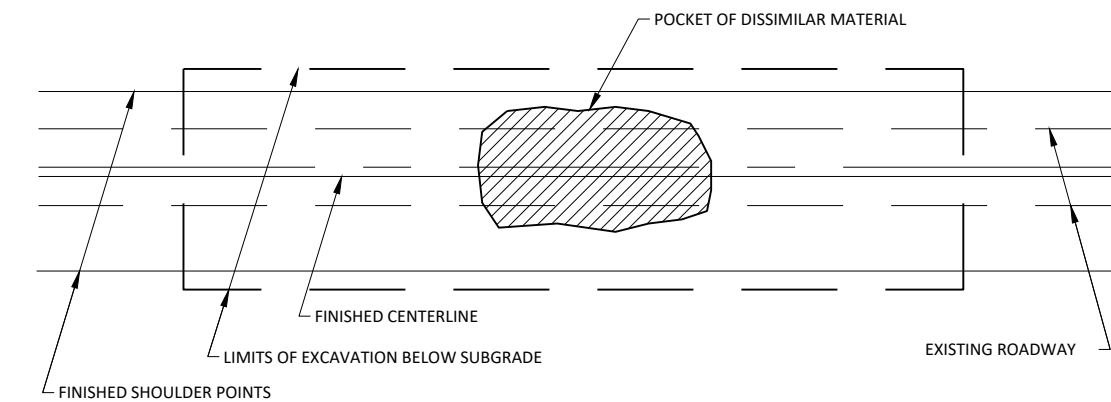
TYPICAL EXISTING SECTION

CTH I
STA. 10+00 - STA. 11+70



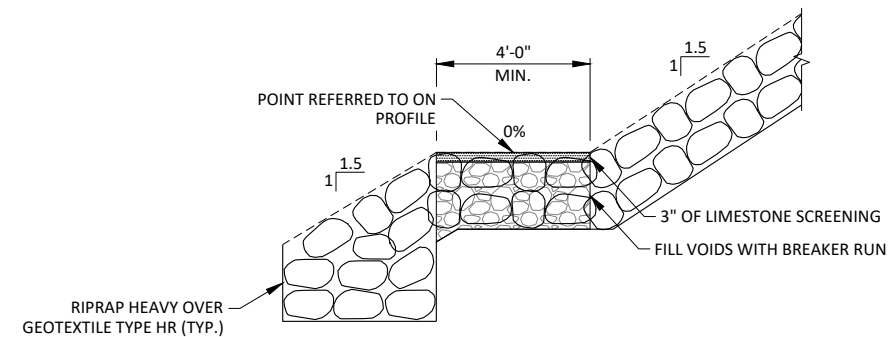
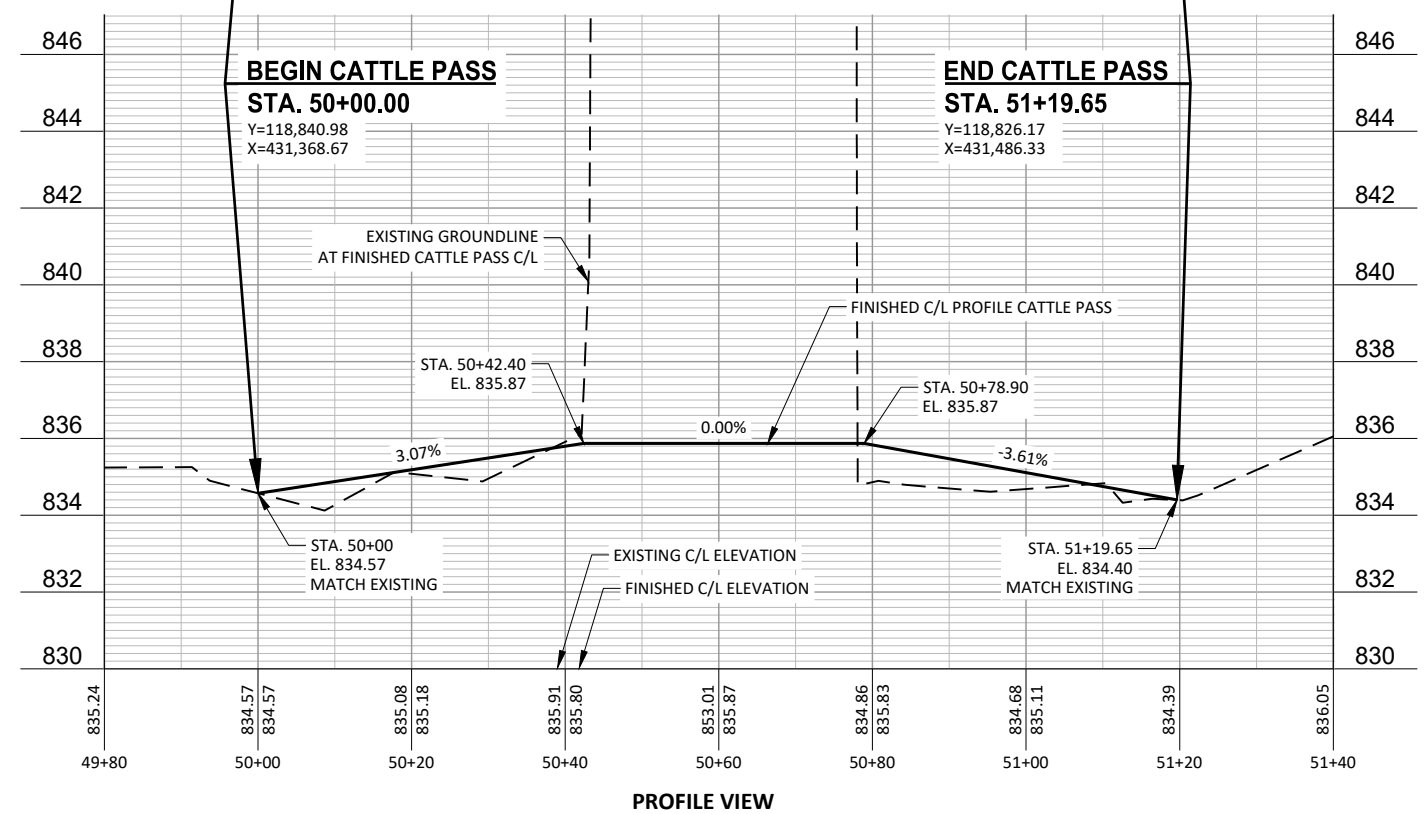
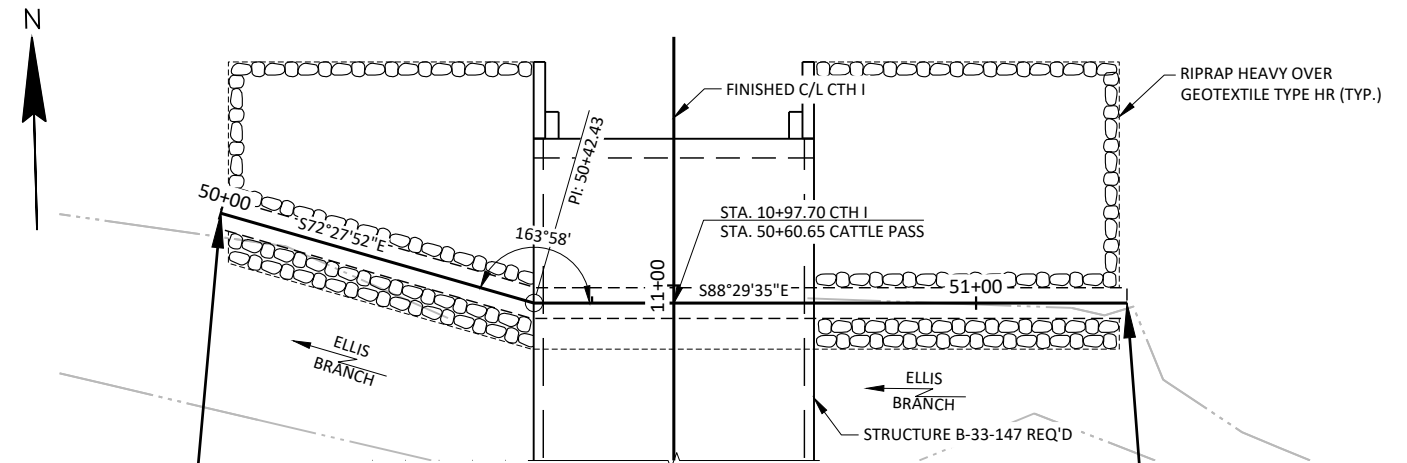
TYPICAL FINISHED SECTION

CTH I
STA. 10+00 - STA. 11+70

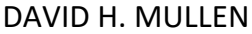


1. EXACT LOCATION OF E.B.S. (EXCAVATION BELOW SUBGRADE) SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER. BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.
3. THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED. LATERAL LIMITS OF EXCAVATION SHALL BE THE SUBGRADE SHOULDER POINTS.

EXCAVATION BELOW SUBGRADE (E.B.S.) DETAIL



CATTLE PASS DETAIL

DAVID H. MULLEN

Estimate Of Quantities By Plan Sets

5695-00-74					
Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0205	Grubbing	STA	2.000	2.000
0008	203.0250	Removing Structure Over Waterway Remove Debris (structure) 02. P-33-0223	EACH	1.000	1.000
0010	205.0100	Excavation Common	CY	310.000	310.000
0014	206.1001	Excavation for Structures Bridges (structure) 02. B-33-0147	EACH	1.000	1.000
0018	210.1500	Backfill Structure Type A	TON	420.000	420.000
0022	213.0100	Finishing Roadway (project) 02. 5695-00-74	EACH	1.000	1.000
0024	305.0110	Base Aggregate Dense 3/4-Inch	TON	22.000	22.000
0026	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	450.000	450.000
0028	311.0110	Breaker Run	TON	13.000	13.000
0030	455.0605	Tack Coat	GAL	17.000	17.000
0032	465.0105	Asphaltic Surface	TON	83.000	83.000
0034	502.0100	Concrete Masonry Bridges	CY	158.000	158.000
0036	502.3200	Protective Surface Treatment	SY	315.000	315.000
0038	503.0137	Prestressed Girder Type I 36W-Inch	LF	264.000	264.000
0040	505.0400	Bar Steel Reinforcement HS Structures	LB	3,480.000	3,480.000
0042	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	18,960.000	18,960.000
0044	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	8.000	8.000
0046	506.4000	Steel Diaphragms (structure) 02. B-33-0147	EACH	3.000	3.000
0048	513.4061	Railing Tubular Type M	LF	180.000	180.000
0050	516.0500	Rubberized Membrane Waterproofing	SY	14.000	14.000
0052	550.0020	Pre-Boring Rock or Consolidated Materials	LF	95.000	95.000
0054	550.0500	Pile Points	EACH	7.000	7.000
0056	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	280.000	280.000
0058	606.0300	Riprap Heavy	CY	590.000	590.000
0060	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	200.000	200.000
0064	618.0100	Maintenance and Repair of Haul Roads (project) 02. 5695-00-74	EACH	1.000	1.000
0066	619.1000	Mobilization	EACH	0.650	0.650
0068	624.0100	Water	MGAL	8.000	8.000
0072	625.0500	Salvaged Topsoil	SY	610.000	610.000
0074	627.0200	Mulching	SY	610.000	610.000
0076	628.1504	Silt Fence	LF	250.000	250.000
0078	628.1520	Silt Fence Maintenance	LF	500.000	500.000
0080	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0082	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0086	628.5505	Polyethylene Sheeting	SY	740.000	740.000
0088	628.6005	Turbidity Barriers	SY	300.000	300.000
0090	628.7504	Temporary Ditch Checks	LF	60.000	60.000
0092	629.0210	Fertilizer Type B	CWT	1.000	1.000
0094	630.0120	Seeding Mixture No. 20	LB	20.000	20.000
0098	630.0200	Seeding Temporary	LB	20.000	20.000
0102	630.0500	Seed Water	MGAL	18.000	18.000
0104	633.5100	Markers ROW	EACH	10.000	10.000
0106	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0108	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0110	638.2602	Removing Signs Type II	EACH	4.000	4.000
0112	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0114	642.5001	Field Office Type B	EACH	0.500	0.500
0116	643.0420	Traffic Control Barricades Type III	DAY	1,280.000	1,280.000

Estimate Of Quantities By Plan Sets

5695-00-74					
Line	Item	Item Description	Unit	Total	Qty
0118	643.0705	Traffic Control Warning Lights Type A	DAY	1,990.000	1,990.000
0120	643.0900	Traffic Control Signs	DAY	1,000.000	1,000.000
0122	643.5000	Traffic Control	EACH	0.500	0.500
0124	645.0111	Geotextile Type DF Schedule A	SY	65.000	65.000
0126	645.0120	Geotextile Type HR	SY	940.000	940.000
0128	646.1020	Marking Line Epoxy 4-Inch	LF	215.000	215.000
0130	650.4500	Construction Staking Subgrade	LF	103.000	103.000
0132	650.5000	Construction Staking Base	LF	103.000	103.000
0136	650.6501	Construction Staking Structure Layout (structure) 02. B-33-0147	EACH	1.000	1.000
0140	650.9911	Construction Staking Supplemental Control (project) 02. 5695-00-74	EACH	1.000	1.000
0142	650.9920	Construction Staking Slope Stakes	LF	103.000	103.000
0144	690.0150	Sawing Asphalt	LF	45.000	45.000
0146	715.0502	Incentive Strength Concrete Structures	DOL	1,350.000	1,350.000
0148	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 02. 5695-00-74, Station 10+87	EACH	1.000	1.000
0150	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0152	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000
0154	SPV.0035	Special 02. Limestone Screening 5695-00-74	CY	5.000	5.000

3

				EARTHWORK SUMMARY										ALL ITEMS 010 UNLESS OTHERWISE NOTED															
CLEARING & GRUBBING														WATER															
STATION-STATION		LOCATION		201.0105 CLEARING (STA)	201.0205 GRUBBING (STA)	FROM/TO STA		LOCATION		205.0100 COMMON EXCAVATION CUT (CY)	AVAILABLE MATERIAL (CY) (1)	UNEXPANDED FILL (CY)	EXPANDED FILL (CY) FACTOR 1.25 (2)	MASS ORDINATE +/- (CY) (3)	STATION - STATION		LOCATION		624.0100 (MGAL)										
10+00 - 11+70		MAINLINE		2	2	10+00 - 11+70		MAINLINE		310	310	224	280	30	10+00 - 11+70		MAINLINE		8										
TOTALS =				2	2	TOTALS =				310	310	224	280	30	TOTAL =				8										
										NOTES: 1.) AVAILABLE MATERIAL=CUT 2.) EXPANDED FILL FACTOR 1.25: EXPANDED FILL = (UNEXPANDED FILL)*1.25 3.) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE CATEGORY. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE CATEGORY.																			
BASE AGGREGATE DENSE										ASPHALTIC SURFACE										SILT FENCE									
STATION - STATION		LOCATION		305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)	STATION - STATION		LOCATION		455.0605 TACK COAT (GAL)	465.0105 ASPHALTIC SURFACE (TON)	STATION - STATION		LOCATION		628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)												
10+00 - 11+70		MAINLINE		22	450	10+00 - 11+70		MAINLINE		17	83	10+40 - 10+77		MAINLINE, RT.		40	80												
												10+96 - 11+70		MAINLINE, RT.		80	160												
												11+07 - 11+70		MAINLINE, LT.		75	150												
												-		UNDISTRIBUTED		55	110												
TOTALS =				22	450	TOTALS =				17	83	TOTALS =				250	500												
FINISHING ITEMS										MOBILIZATION EROSION CONTROL										TURBIDITY BARRIER									
STATION - STATION		LOCATION		625.0500 SALVAGED TOPSOIL (SY)	627.0200 MULCHING (SY)	628.5505 POLYETHYLENE SHEETING (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0120 SEEDING MIXTURE NO. 20 (LB)	630.0200 SEEDING TEMPORARY (LB)	630.0500 SEED WATER (MGAL)	PROJECT		628.1905 MOBILIZATION EROSION CONTROL (EACH)	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL (EACH)	LOCATION		628.6005 (SY)												
10+00 - 11+70		MAINLINE		488	488	740	0.4	16	16	14	5695-00-74		3	3	SOUTH BANK		97												
-		UNDISTRIBUTED		122	122	-	0.6	4	4	4					NORTH BANK		143												
TOTALS =				610	610	740	1.0	20	20	18	TOTALS =				3	3	UNDISTRIBUTED		60										
TOTALS =				610	610	740	1.0	20	20	18	TOTALS =				3	3	TOTALS =		300										
TEMPORARY DITCH CHECKS				MARKERS ROW										PERMANENT SIGNING															
STATION		LOCATION		628.7504 (LF)	PT #		STATION	LOCATION	633.5100 OFFSET FROM MARKERS FINISHED C/L FT	ROW (EACH)	APPROX. STATION		LOCATION	SIGN CODE	SIGN DESCRIPTION	SIGN SIZE	634.0612 POSTS WOOD 4X6- INCH X 12-FT (EACH)	637.2230 SIGNS TYPE II REFLECTIVE F (SF)	638.2602 REMOVING SIGNS TYPE II (EACH)	638.3000 REMOVING SMALL SUPPORTS (EACH)									
10+10		MAINLINE, RT.		8	2		11+75	RIGHT	33.00	1	10+42		MAINLINE, RT.	W5-52R	BRIDGE HASH MARKS	12X36	1	3.00	-	--									
10+10		MAINLINE, LT.		8	3		11+75	RIGHT	63.00	1	10+42		MAINLINE, LT.	W5-52L	BRIDGE HASH MARKS	12X36	1	3.00	-	--									
10+25		MAINLINE, RT.		8	4		11+05	RIGHT	63.00	1	10+66		MAINLINE, RT.	W5-52R	BRIDGE HASH MARKS	12X36	--	--	1	1									
10+25		MAINLINE, LT.		8	5		10+00	RIGHT	45.00	1	10+72		MAINLINE, LT.	W5-52L	BRIDGE HASH MARKS	12X36	--	--	1	1									
10+40		MAINLINE, RT.		8	6		10+00	RIGHT	30.00	1	10+98		MAINLINE, LT.	W5-52R	BRIDGE HASH MARKS	12X36	--	--	1	1									
10+40		MAINLINE, LT.		8	7		10+00	LEFT	30.00	1	11+01		MAINLINE, RT.	W5-52L	BRIDGE HASH MARKS	12X36	--	--	1	1									
		UNDISTRIBUTED		12	8		10+00	LEFT	45.00	1	11+29		MAINLINE, RT.	W5-52L	BRIDGE HASH MARKS	12X36	1	3.00	-	--									
TOTALS =				60	9		11+15	LEFT	63.00	1	TOTALS =				4	12.00	4	4											
					10		11+75	LEFT	63.00	1																			
					11		11+75	LEFT	33.00	1																			
							TOTAL=			10																			
PROJECT NO: 5695-00-74				HWY: CTH I				COUNTY: LAFAYETTE				MISCELLANEOUS QUANTITIES				SHEET				E									

ALL ITEMS 010 UNLESS OTHERWISE NOTED

TRAFFIC CONTROL				
	643.0420 BARRICADES TYPE III (DAY)	643.0705 WARNING LIGHTS TYPE A (DAY)	643.0900 SIGNS (DAY)	643.5000 TRAFFIC CONTROL (EACH)
LOCATION				
PROJECT	1,280	1,990	1,000	0.5
TOTALS =	1,280	1,990	1,000	0.5

CONSTRUCTION STAKING						
		650.4500 SUBGRADE (L.F.)	650.5000 BASE (L.F.)	*650.6501 STRUCTURE LAYOUT (B-33-0147) (EACH)	650.9911 SUPPLEMENTAL CONTROL (5695-00-74) (EACH)	650.9920 SLOPES STAKES (L.F.)
STATION - STATION	LOCATION					
10+00 - 10+52	MAINLINE	52	52	-	-	52
11+19 - 11+70	MAINLINE	51	51	-	-	51
5695-00-74	PROJECT	-	-	1	1	-
	TOTAL =	103	103	1	1	103
*CATEGORY 020						

MARKING LINE EPOXY 4-INCH			
STATION - STATION	LOCATION	DESCRIPTION	646.1020 (LF)
10+00 - 11+70	MAINLINE	C/L YELLOW, SOLID	170
10+00 - 11+70	MAINLINE	C/L YELLOW, DASHED	45
		TOTAL =	215

SAWING ASPHALT		
STATION	LOCATION	690.0150 (LF)
10+00	MAINLINE	22
11+70	MAINLINE	23
	TOTAL =	45

SECTION LINE		SECTION CORNER SYMBOL		R/W MONUMENT (TO BE SET)	
QUARTER LINE		SECTION CORNER MONUMENT		NON-MONUMENTED R/W POINT	
SIXTEENTH LINE		GEODETIC SURVEY MONUMENT		FOUND IRON PIN (1-INCH UNLESS NOTED)	
NEW REFERENCE LINE		SIXTEENTH CORNER MONUMENT			
NEW R/W LINE		SIGN		OFF-PREMISE SIGN	
EXISTING R/W OR HE LINE					
PROPERTY LINE					
LOT, TIE & OTHER MINOR LINES					
SLOPE INTERCEPT					
CORPORATE LIMITS		ELECTRIC POLE		<u>COMPENSABLE</u>	<u>NON-COMPENSABLE</u>
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)		TELEPHONE POLE			
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)		PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)			
TEMPORARY LIMITED EASEMENT AREA		ACCESS RESTRICTED BY ACQUISITION			
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)		NO ACCESS (BY STATUTORY AUTHORITY)			
TRANSMISSION STRUCTURES		ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)			
BUILDING		NO ACCESS (NEW HIGHWAY)			
TO BE REMOVED		PARCEL NUMBER		UTILITY NUMBER	
BRIDGE		PARALLEL OFFSETS			
CULVERT					

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	TLE
GRID NORTH	GN	EASEMENT	
HIGHWAY EASEMENT	HE	TRANSPORTATION PROJECT PLAT	TPP
IDENTIFICATION	ID	UNITED STATES HIGHWAY	USH
LAND CONTRACT	LC	VOLUME	V
LEFT	LT	PAGE	P
MONUMENT	MON	POINT OF TANGENCY	PT
NATIONAL GEODETIC SURVEY	NGS	PERMANENT LIMITED	PLE
NUMBER	NO	EASEMENT	
OUTLOT	OL	POINT OF BEGINNING	POB

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

WATER	_____	W
GAS	_____	G
TELEPHONE	_____	T
OVERHEAD TRANSMISSION LINES	_____	OH
ELECTRIC	_____	E
CABLE TELEVISION	_____	TV
FIBER OPTIC	_____	FO
SANITARY SEWER	_____	SAN
STORM SEWER	_____	SS
ELECTRIC TOWER	_____	<input checked="" type="checkbox"/>

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, LAFAYETTE COUNTY, NAD 83 (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 MONUMENTS (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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."

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE LAFAYETTE COUNTY HIGHWAY DEPARTMENT.

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.

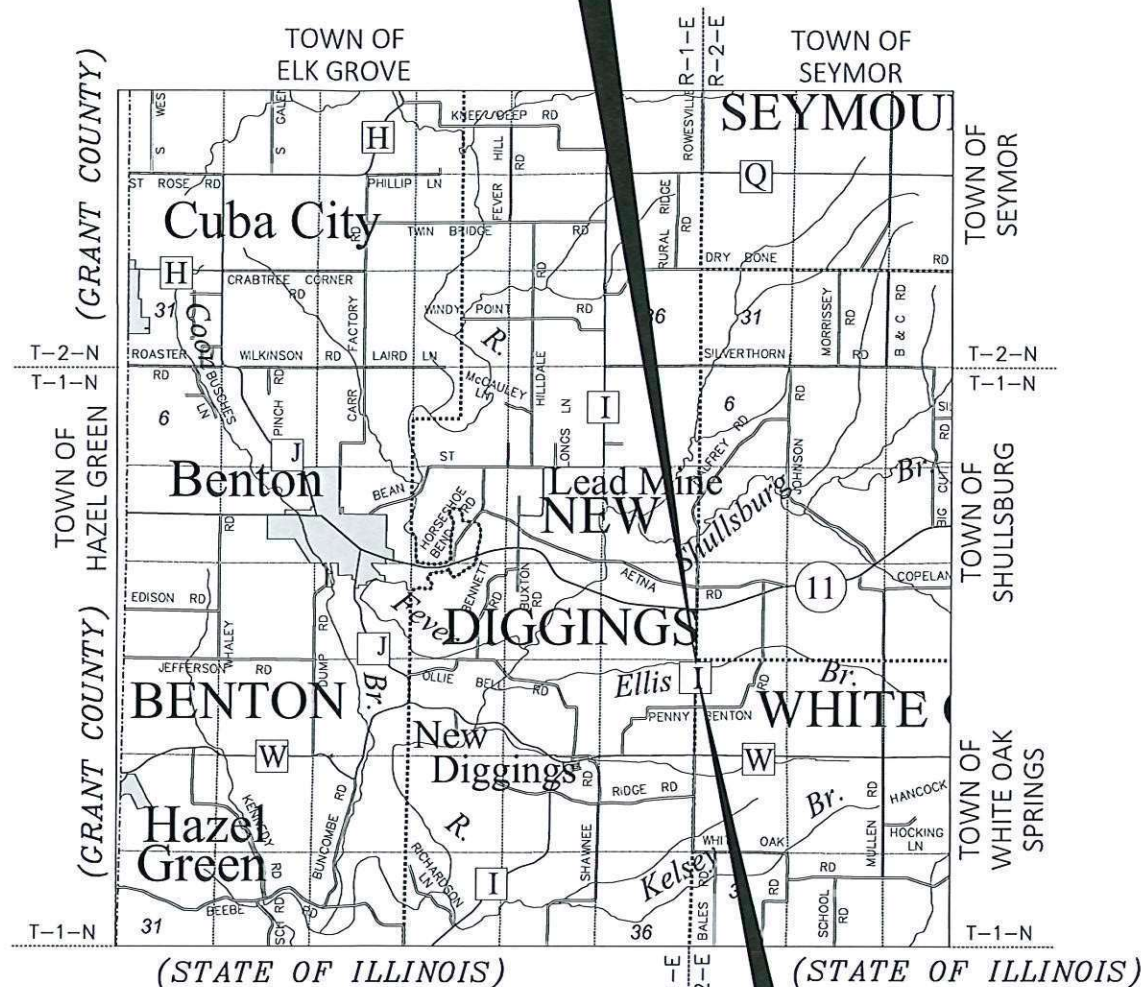
DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

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

AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED. INCLUDING THE RIGHT-OF-WAY TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

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

332.10' SOUTH AND 8.50' WEST OF THE NE CORNER
OF SEC. 24, TOWN 1 NORTH, RANGE 1 EAST, TOWN
OF NEW DIGGINS, LAFAYETTE COUNTY, WI
Y = 118904.994
X = 431429.379



507.04' SOUTH AND 13.10' WEST OF THE NE CORNER OF
SEC. 24, TOWN 1 NORTH, RANGE 1 EAST, TOWN OF NEW
DIGGINS, LAFAYETTE COUNTY, WI
Y = 118730.055
X = 431424.777

REVISION DATE

PLAT OF RIGHT-OF-WAY REQUIRED FOR
CTH W - STH 11 (CTH I)
ELLIS BRANCH BRIDGE B-33-0147

CTH 1 LAFAYETTE COUNTY

CONSTRUCTION PROJECT NUMBER
5695-00-74

RECEIVED

FEB 20 2024

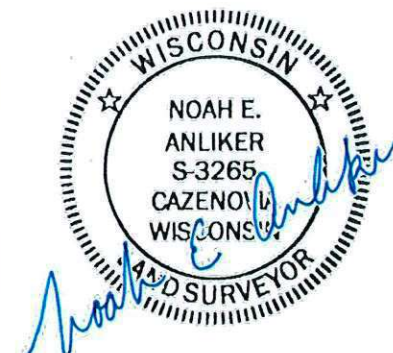
LAFAYETTE CO.
CLERK

JEWELL
associates engineers, inc.

Engineers - Architects - Surveyors

560 SUNRISE DRIVE
SPRING GREEN, WI 53588
PHONE : 608.588.7484
FAX : 608.588.9322

I HEREBY CERTIFY THAT THIS PLAT WAS
MADE FOR LAFAYETTE COUNTY, WISCONSIN
AND IS CORRECT TO THE BEST OF MY
KNOWLEDGE AND BELIEF.



DATE: 2-13-2024

APPROVED FOR LAFAYETTE COUNTY

DATE: 2/20/2017 Confidential Com
(NAME/TITLE)

FILE NAME : S:\Projects\W11682 WisDOT - CTH I Bridge, Lafayette Co\RW\DWG\W11682_CTH I_RW_TITLE.dwg

PLOT DATE : 2/13/2024 8:30 AM

PLOT BY : Tim Velte

PLOT NAME :

PLOT SCALE : 1:1

WISDOT/CADDS SHEET 50

R/W COURSE TABLE		
POINT TO POINT	COURSE BEARING	DISTANCE
1 TO 2	S88° 29' 35"E	27.36'
2 TO 3	S88° 29' 35"E	30.00'
3 TO 4	S01° 30' 25"W	70.00'
4 TO 5	S11° 14' 04"W	106.53'
5 TO 6	N88° 29' 35"W	15.00'
6 TO 7	N88° 29' 35"W	60.00'
7 TO 8	N88° 29' 35"W	15.00'
8 TO 9	N07° 23' 20"W	116.40'
9 TO 10	N01° 30' 25"E	60.00'
10 TO 11	S88° 29' 35"E	30.00'
11 TO 1	S88° 29' 35"E	38.64'

E1/4 CORNER SEC. 24
FOUND LAFAYETTE
COUNTY ALUMINUM
CAP MONUMENT
Y = 116585.553
X = 431415.038

BEGIN RELOCATION ORDER
STA. 10+00.00
507.04' SOUTH AND 13.10' WEST OF THE NE CORNER
OF SEC. 24, TOWN 1 NORTH, RANGE 1 EAST, TOWN
OF NEW DIGGINS LAFAYETTE COUNTY, WI
Y = 118730.055
X = 431424.777

S00°29'36"W, 2651.64'
FROM NE COR. SEC. 24
TO E¼ COR. SEC. 24



TOWN OF
NEW DIGGINS

NE¼-NE¼

NW¼-NW¼

TOWN OF
WHITE OAK SPRINGS

EXISTING
STRUCTURE
P-33-223

WATERWAY AREA
= 0.01 ACRES

PL

N1° 30' 25"E

EAST LINE OF THE NE¼-NE¼

PROPOSED
STRUCTURE
B-33-147

WATERWAY AREA
= 0.01 ACRES

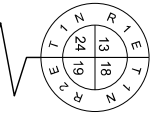
DAVID H. MULLEN, A
SINGLE PERSON

DAVID H. MULLEN, A
SINGLE PERSON

END RELOCATION ORDER

STA. 11+75.00
332.10' SOUTH AND 8.50' WEST OF THE NE CORNER
OF SEC. 24, TOWN 1 NORTH, RANGE 1 EAST, TOWN OF
NEW DIGGINS, LAFAYETTE COUNTY, WI
Y = 118904.994
X = 431429.379

NE CORNER SEC. 24
FOUND LAFAYETTE
COUNTY ALUMINUM
CAP MONUMENT
Y = 119237.094
X = 431437.874



S00°29'36"W, 332.26'
FROM NE COR. SEC. 24
TO R/W PT 1

ALLIANT ENERGY (TYP.)

R/W POINTS TABLE				
POINT NUMBER	STATION	OFFSET	Y	X
1	11+75.00	5.64'RT	118904.846	431435.013
2	11+75.00	33.00'RT	118904.126	431462.368
3	11+75.00	63.00'RT	118903.337	431492.357
4	11+05.00	63.00'RT	118833.361	431490.516
5	10+00.00	45.00'RT	118728.871	431469.761
6	10+00.00	30.00'RT	118729.265	431454.766
7	10+00.00	30.00'LT	118730.843	431394.787
8	10+00.00	45.00'LT	118731.238	431379.792
9	11+15.00	63.00'LT	118846.672	431364.823
10	11+75.00	63.00'LT	118906.651	431366.401
11	11+75.00	33.00'LT	118905.862	431396.391

NOTE: EXISTING C/L OF CTH I BASED ON
CENTERLINE OF EXISTING PAVEMENT.

EXISTING RIGHT-OF-WAY FOR CTH I BASED
ON THE CENTERLINE OF EXISTING PAVEMENT,
PREVIOUS PLAT SURVEYS AND FOUND
MONUMENTATION SHOWN ON SHEETS AND
WS. STATUTE 82.31(2).

EASEMENT TABLE				
PARCEL NUMBERS	OWNER	RECORDING INFORMATION	LOCATED IN R/W PARCEL #	REMARKS
1	WISCONSIN POWER AND LIGHT COMPANY	DOC. 209305, V.48, P.445	1	80' WIDE ELECTRIC LINE EASEMENT

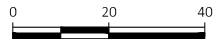
SCHEDULE OF LANDS AND INTERESTS					
PARCEL NUMBERS	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED		
			NEW	EXISTING	TOTAL
1	DAVID H. MULLEN, A SINGLE PERSON	FEE	0.20	0.17	0.37
200	ALLIANT ENERGY	RELEASE OF RIGHTS			

NOTE: AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED. OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO LAFAYETTE COUNTY.

REVISION DATE				

DATE 2/13/2024

SCALE, FEET



HWY: CTH I

COUNTY: LAFAYETTE

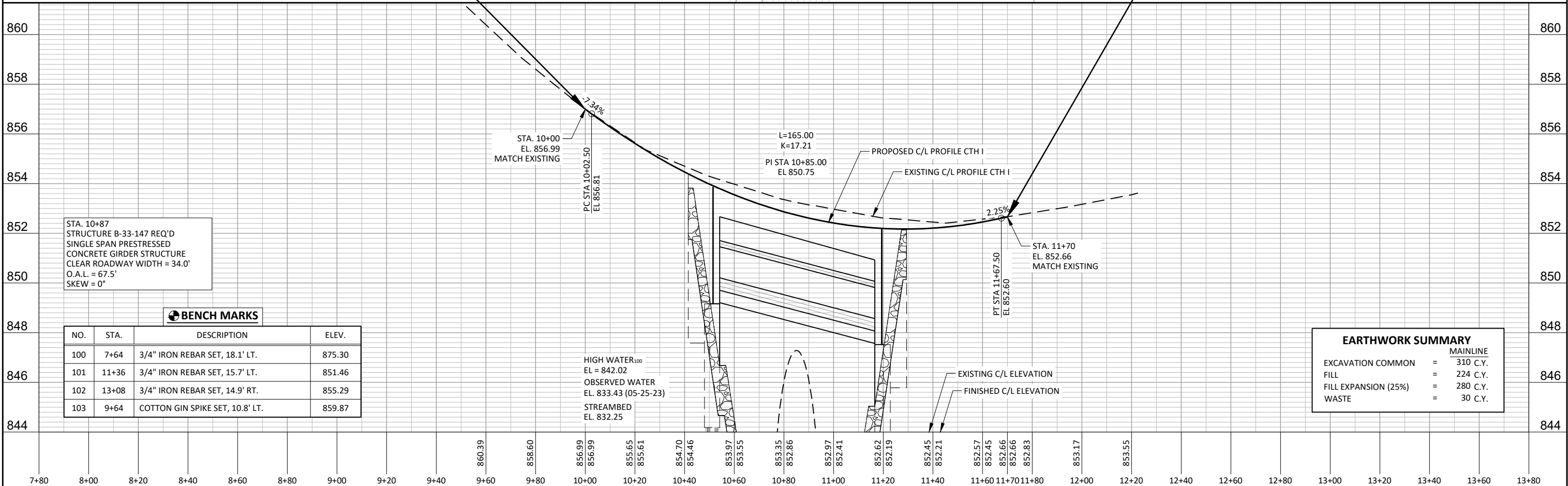
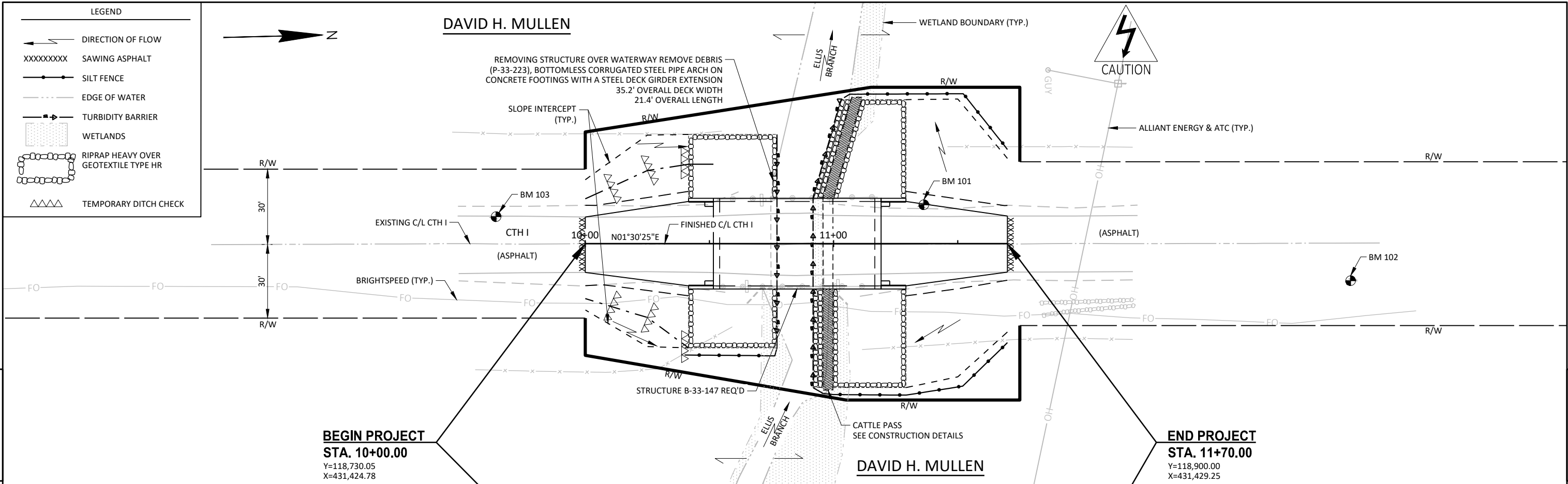
STATE R/W PROJECT NUMBER 5695-00-04

CONSTRUCTION PROJECT NUMBER 5695-00-74

PLAT SHEET 4.02

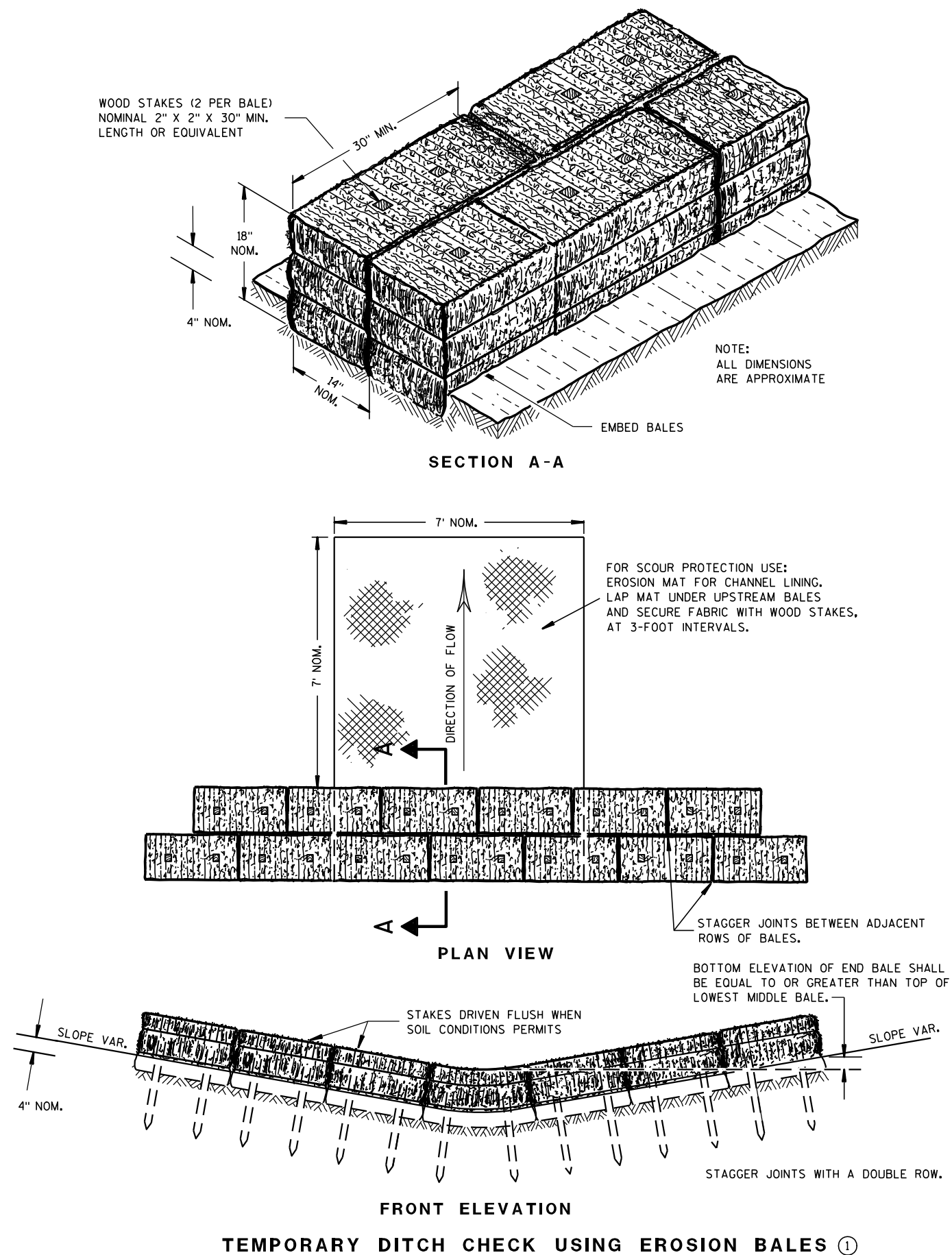
PS&E SHEET

E



Standard Detail Drawing List

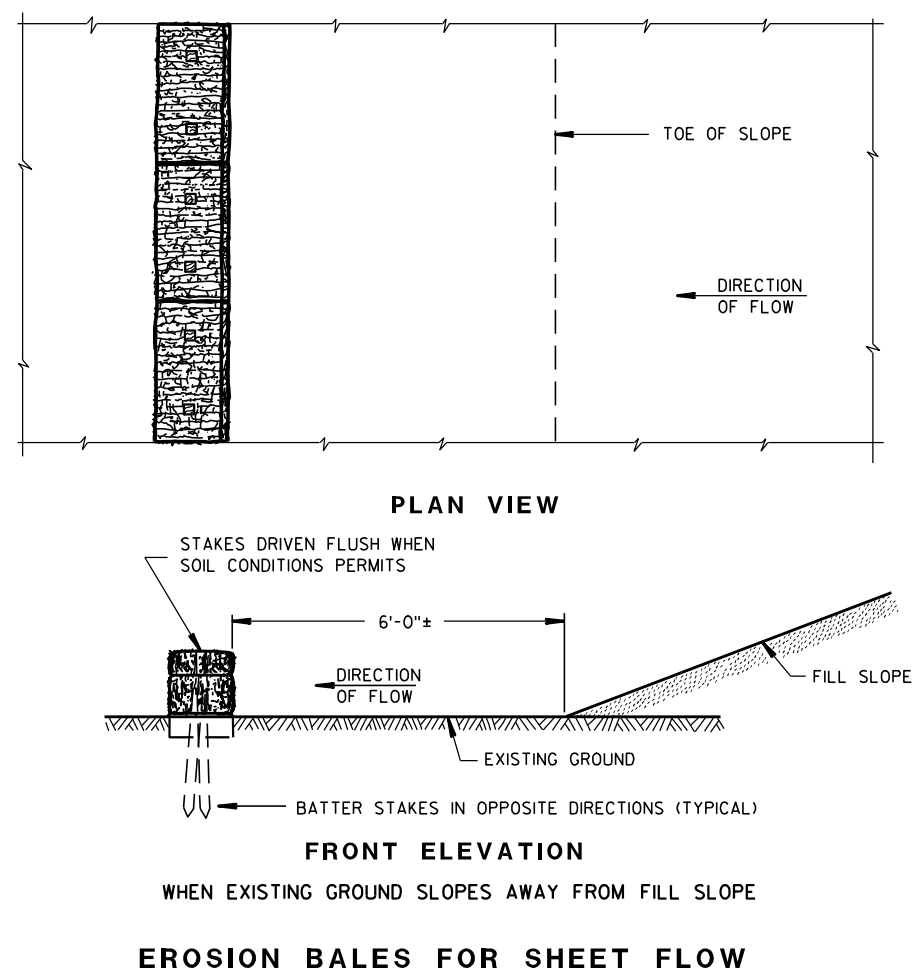
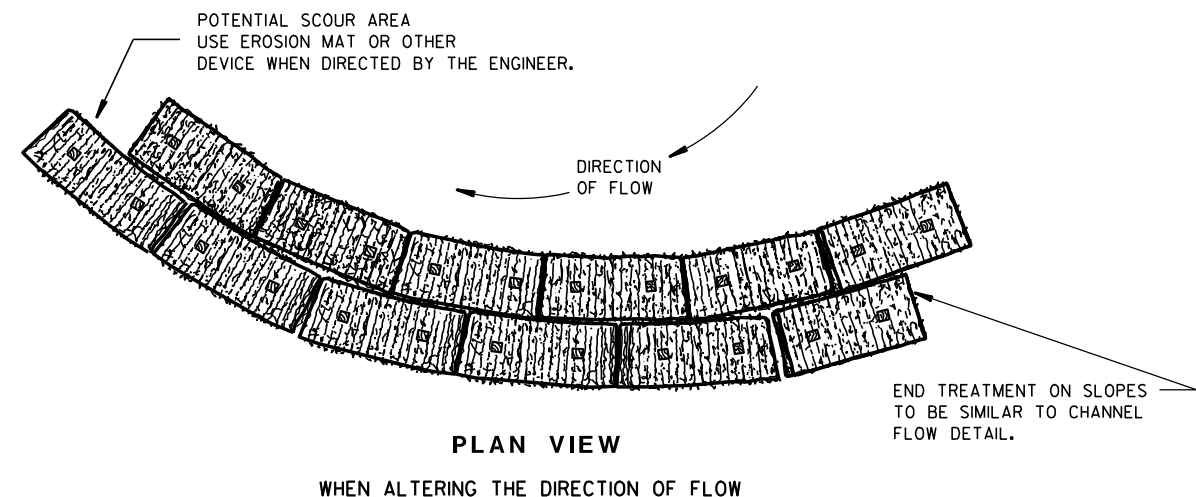
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-12	SIGNING & MARKING FOR TWO LANE BRIDGES
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS



GENERAL NOTES

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

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.



TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

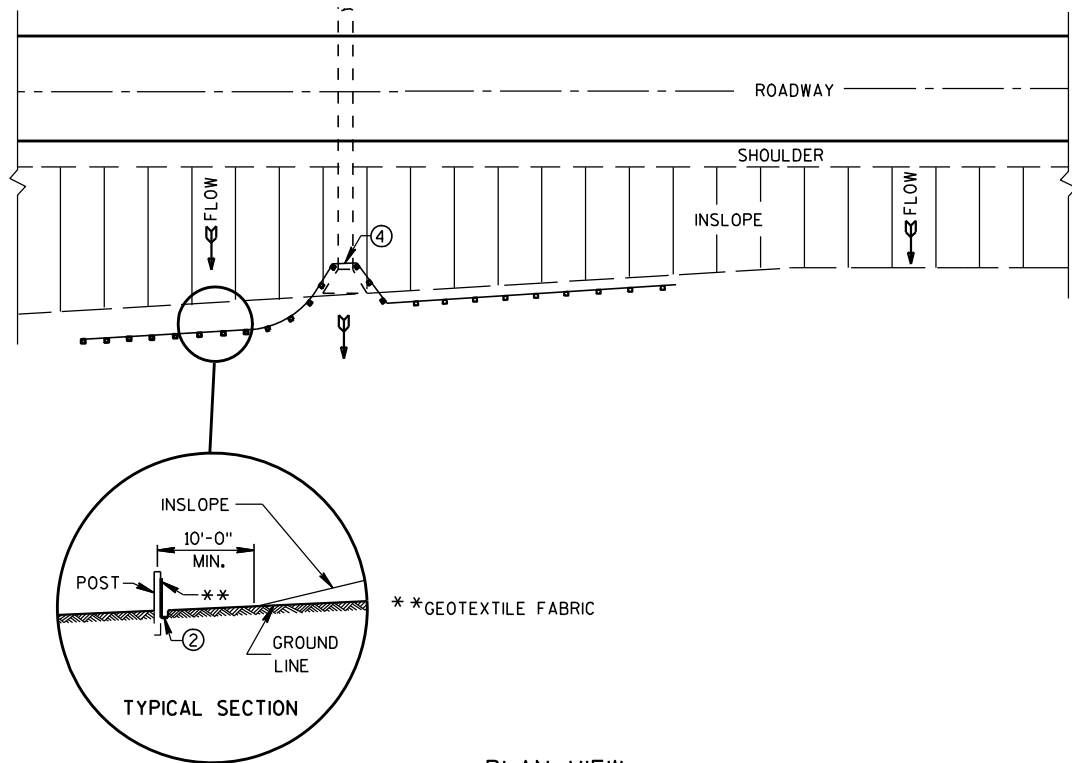
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

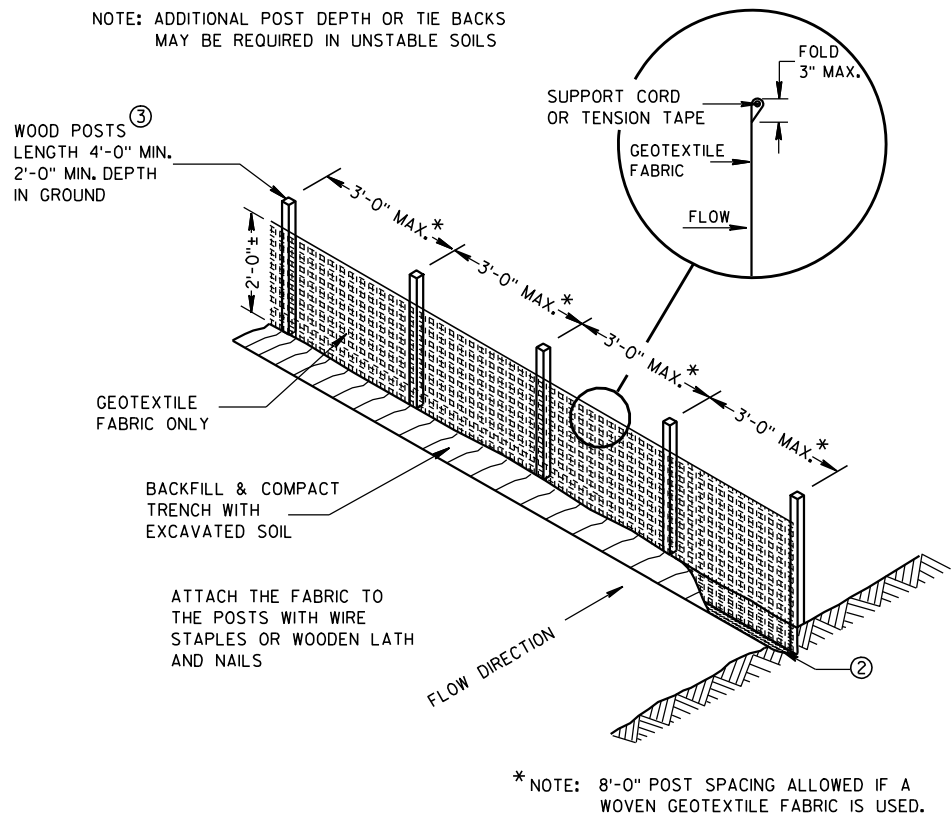
6/04/02
DATE

FHWA

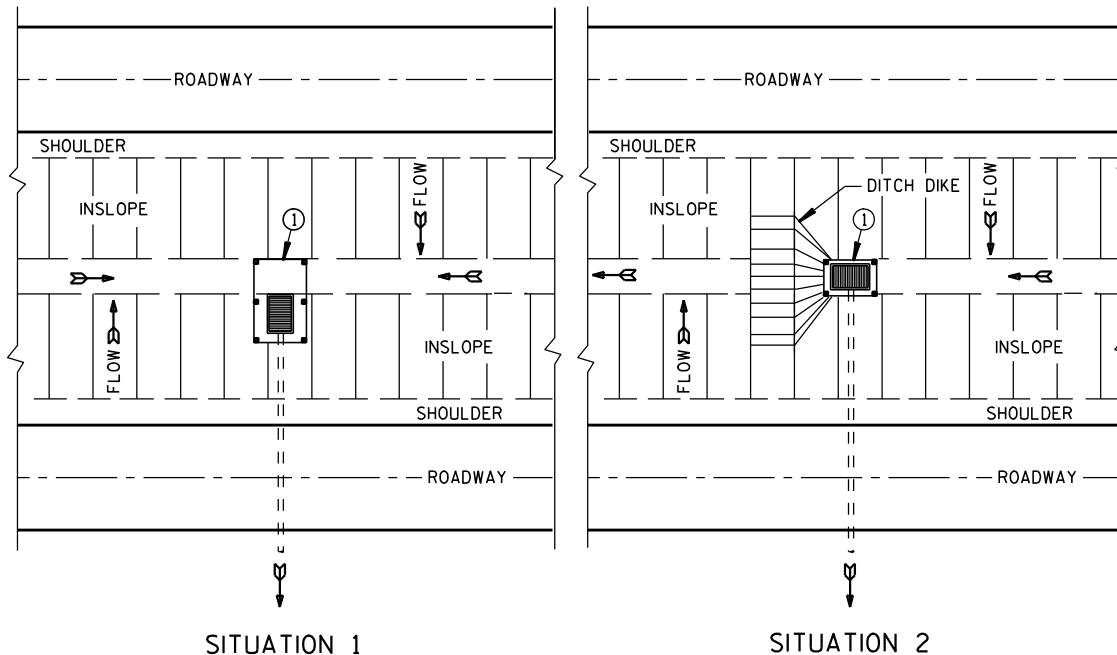
/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



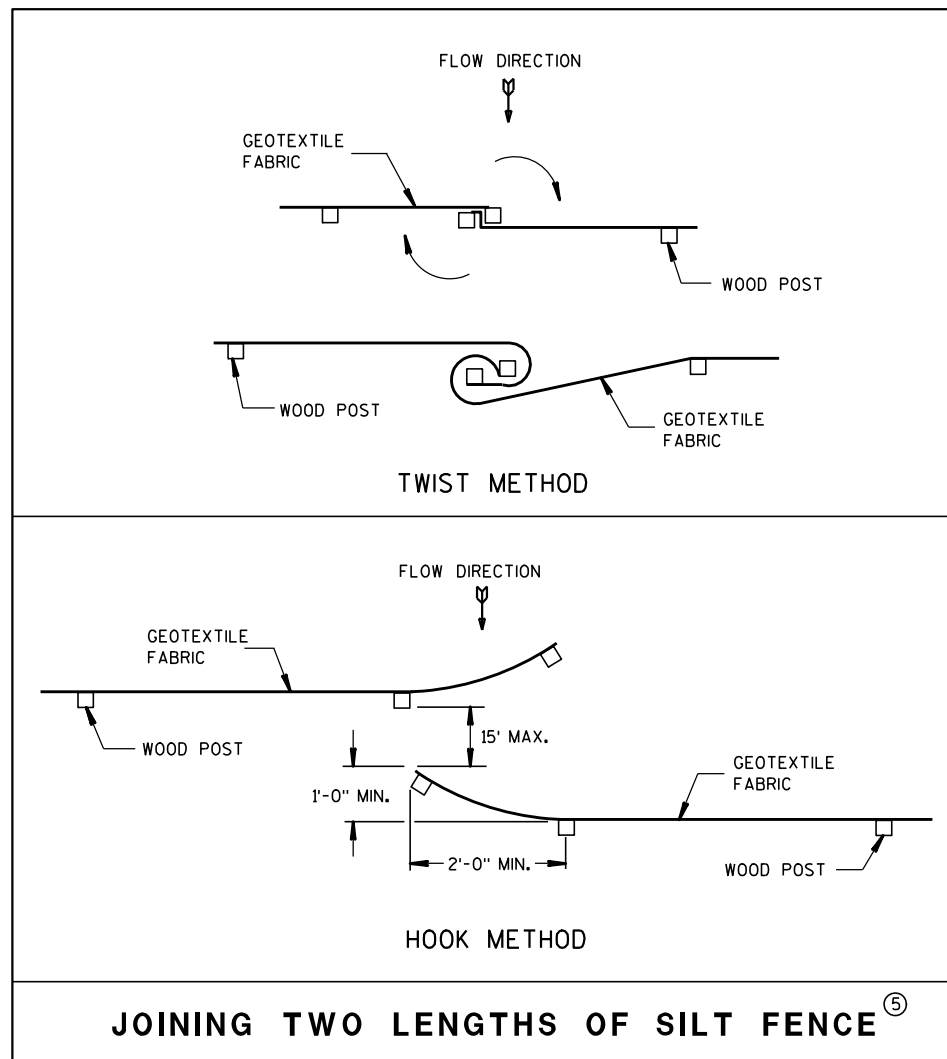
PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

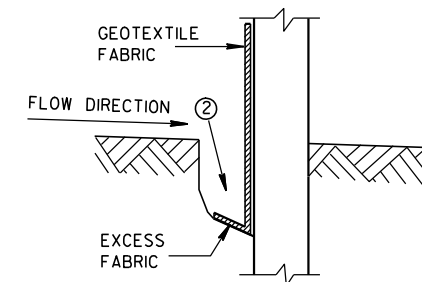


JOINING TWO LENGTHS OF SILT FENCE (5)

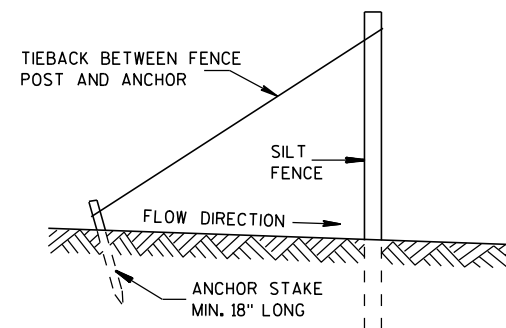
GENERAL NOTES

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.

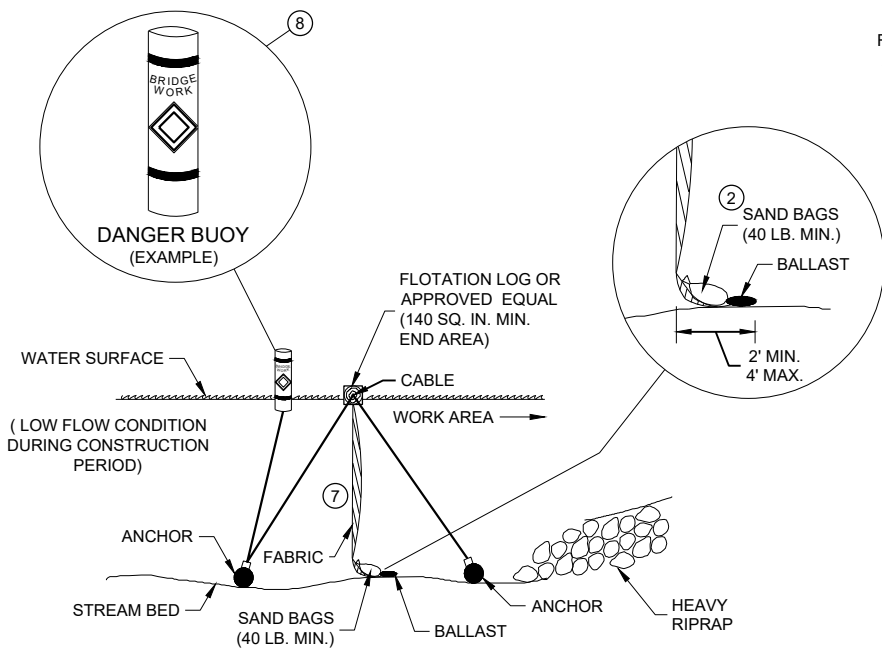


TRENCH DETAIL



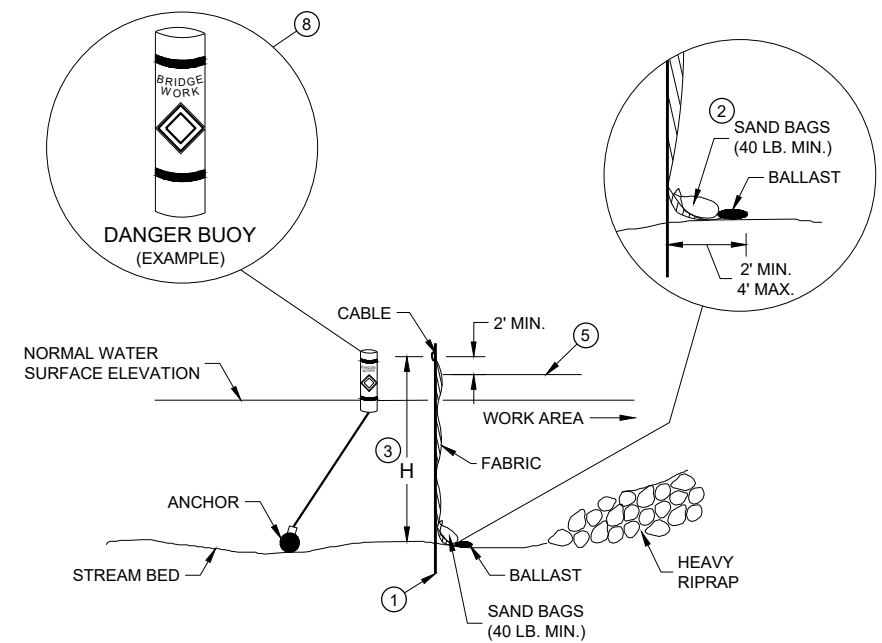
SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/S/ Beth Canestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	



SECTION B - B

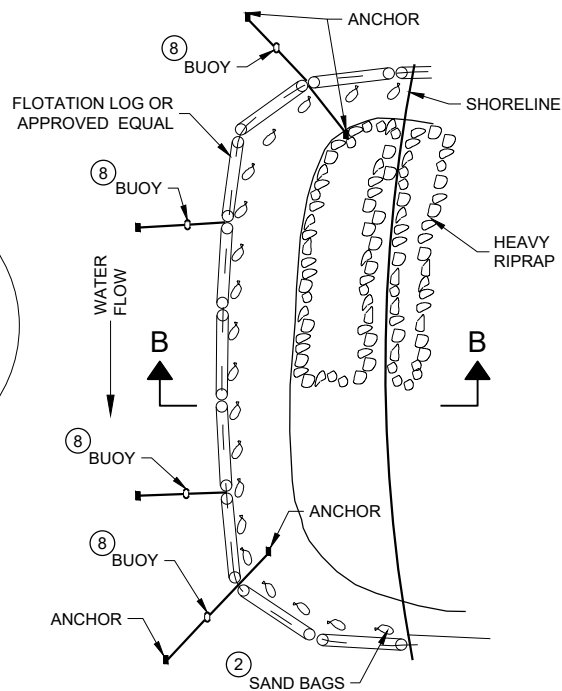
TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



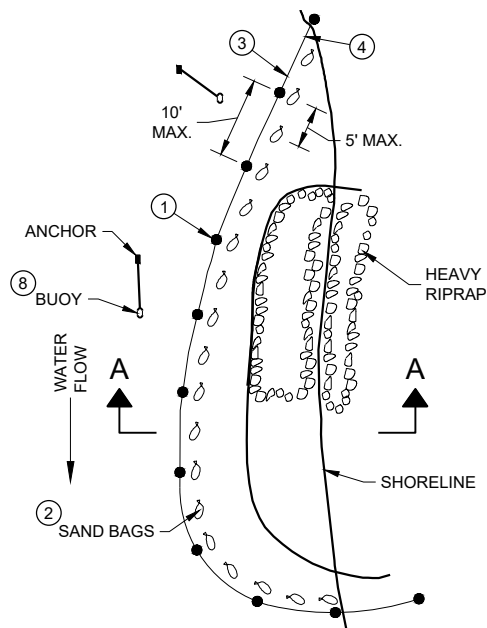
SECTION A - A

TURBIDITY BARRIER - STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS



PLAN VIEW



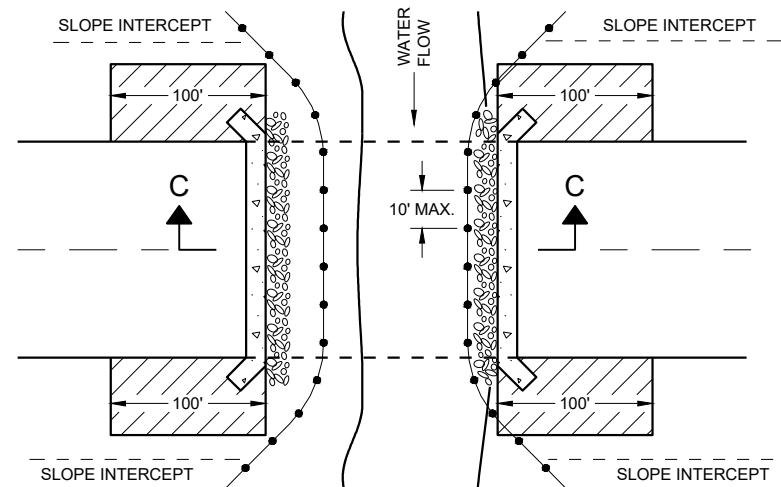
PLAN VIEW

GENERAL NOTES

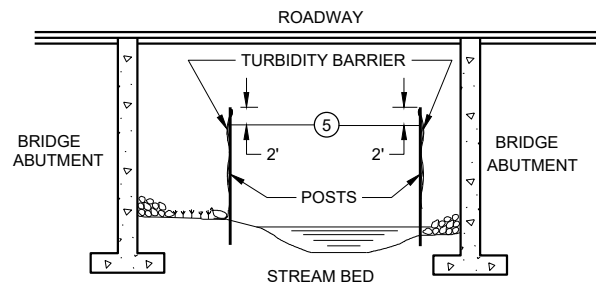
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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



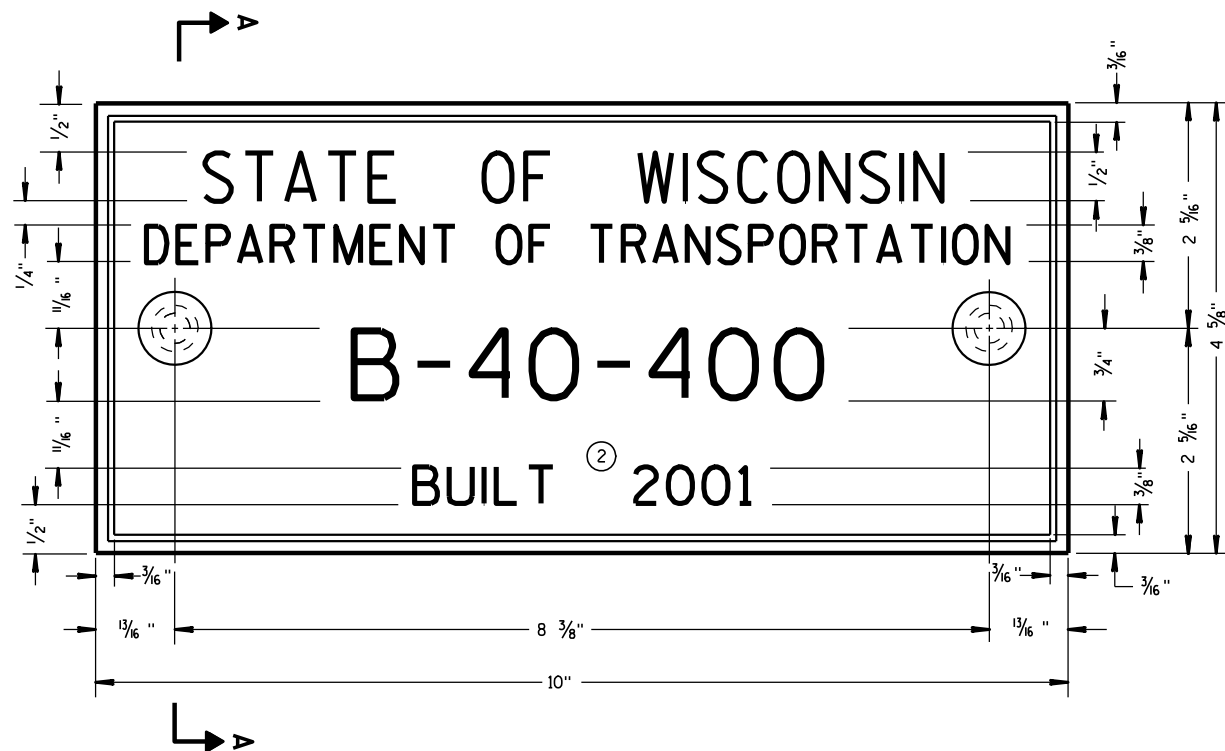
SECTION C - C

TURBIDITY BARRIER DETAIL SHOWING
TYPICAL PLACEMENT AT STRUCTURES

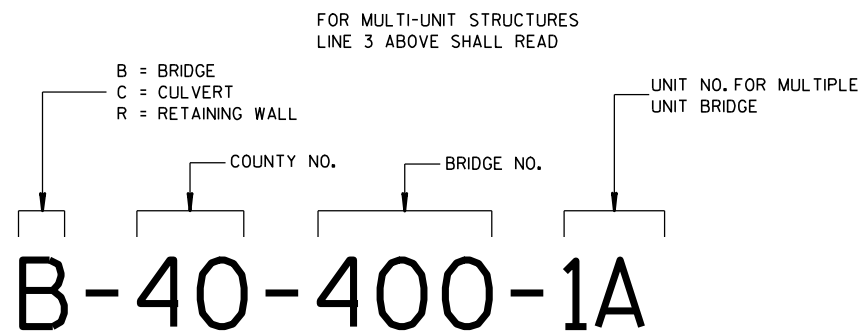
TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/4/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT
ENGINEER
FHWA



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



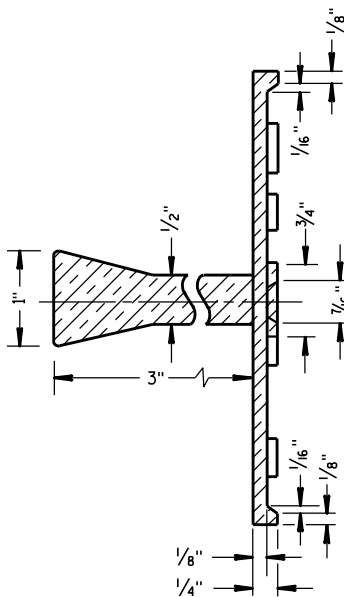
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

GENERAL NOTES

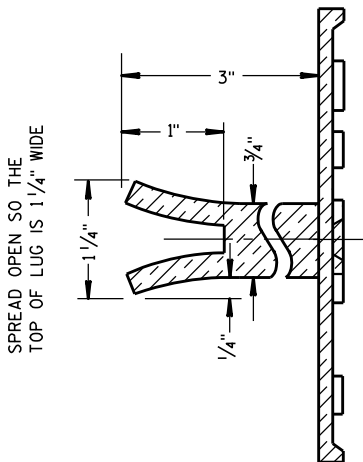
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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.

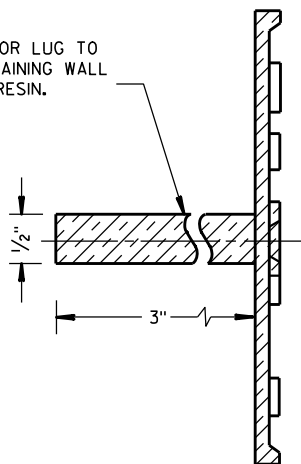


SECTION A-A



ALTERNATE LUG

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

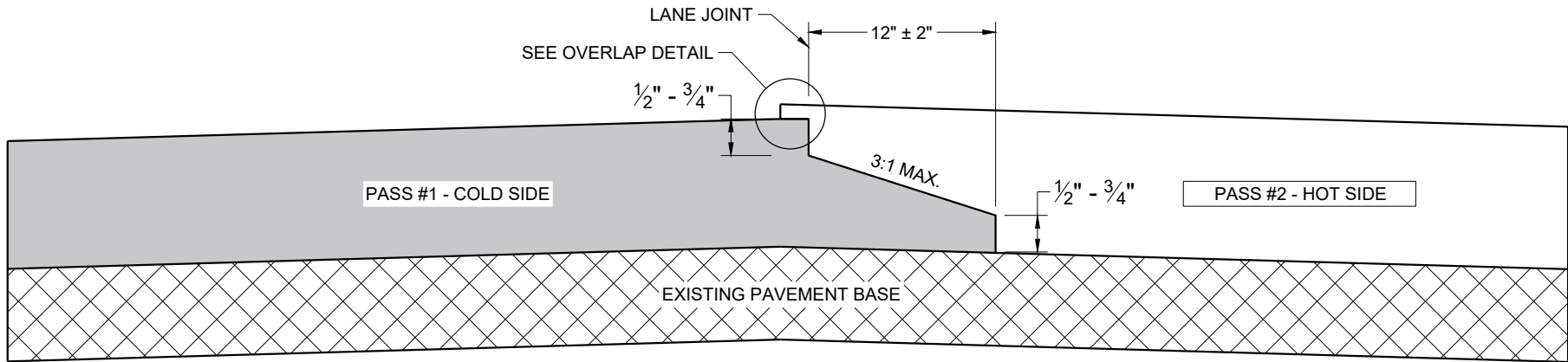


ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

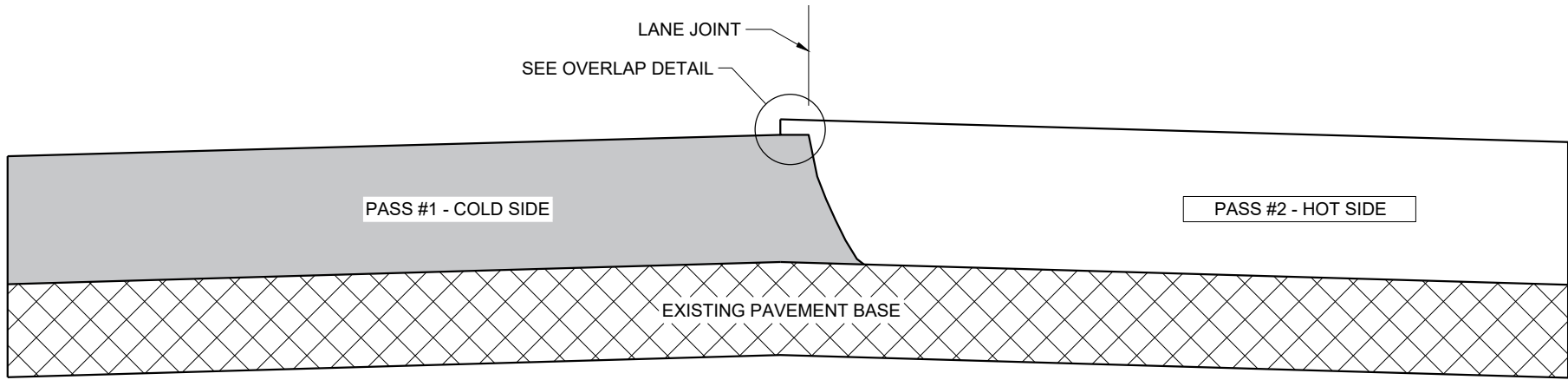
**NAME PLATE
(STRUCTURES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

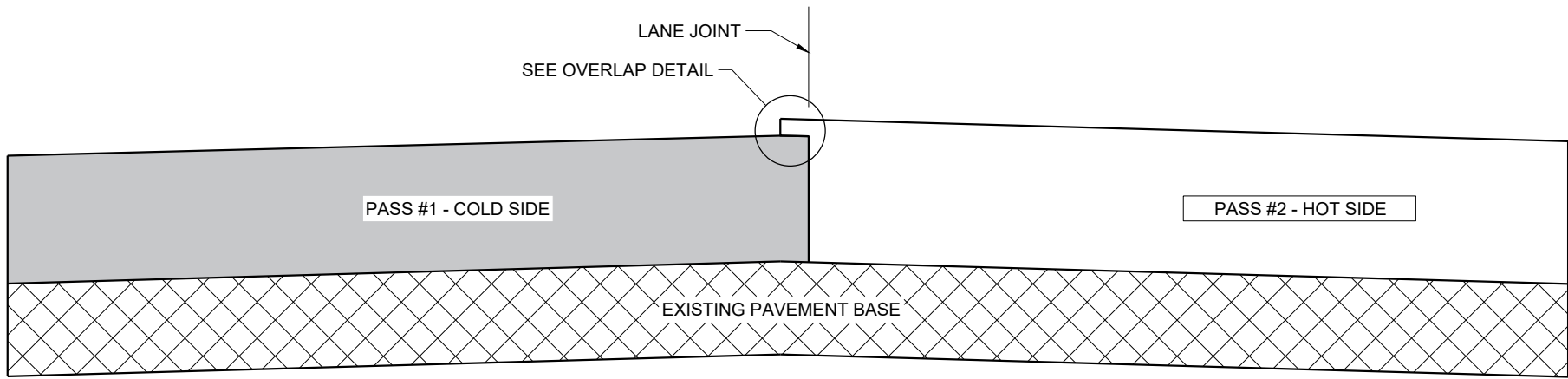
APPROVED
3/26/10
DATE
/S/ Scot Becker
CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)**

GENERAL NOTES

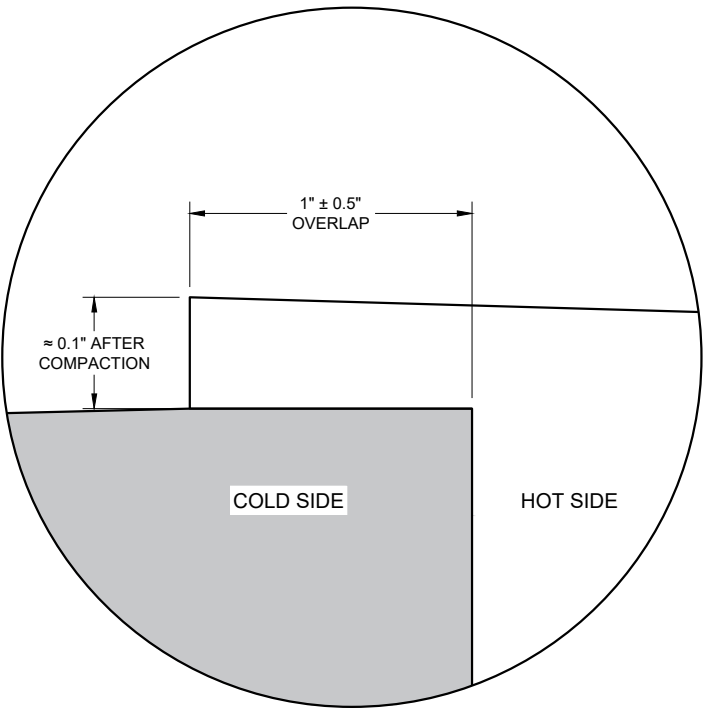
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



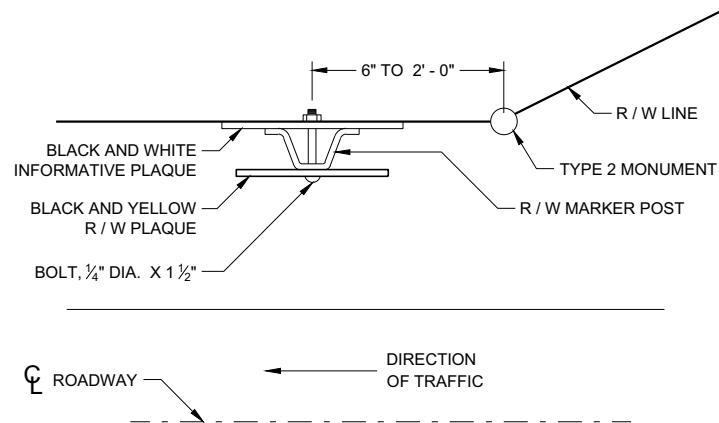
OVERLAP DETAIL (TYPICAL)

HMA LONGITUDINAL JOINTS

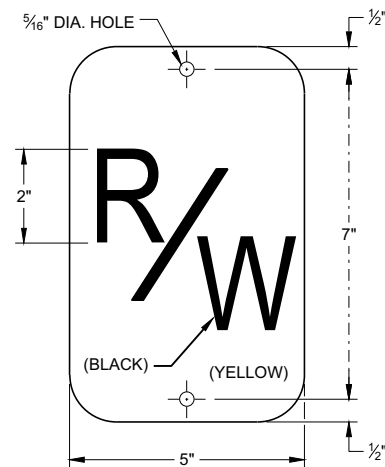
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE /S/ Steven Hefel
HMA PAVEMENT ENGINEER

FHWA

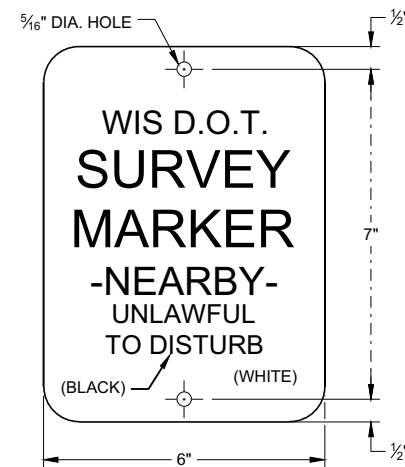


**PLAN VIEW
STEEL MARKER POST**



R / W PLAQUE

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



INFORMATIVE PLAQUE

GENERAL NOTES

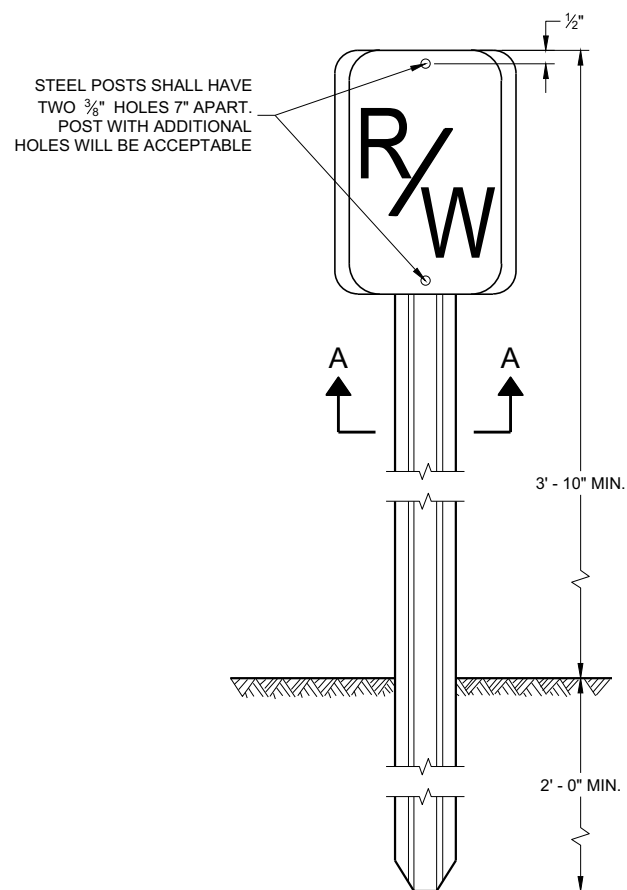
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A STEEL MARKER POST FOR RIGHT -OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

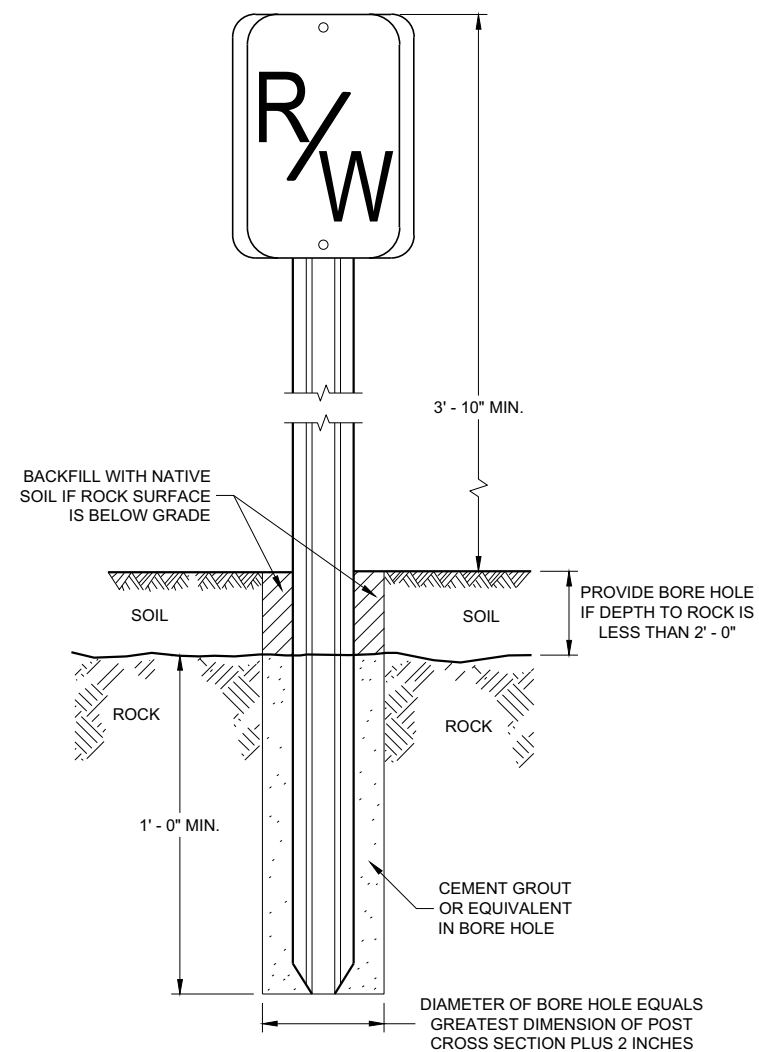
THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFORMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. "R/W" AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

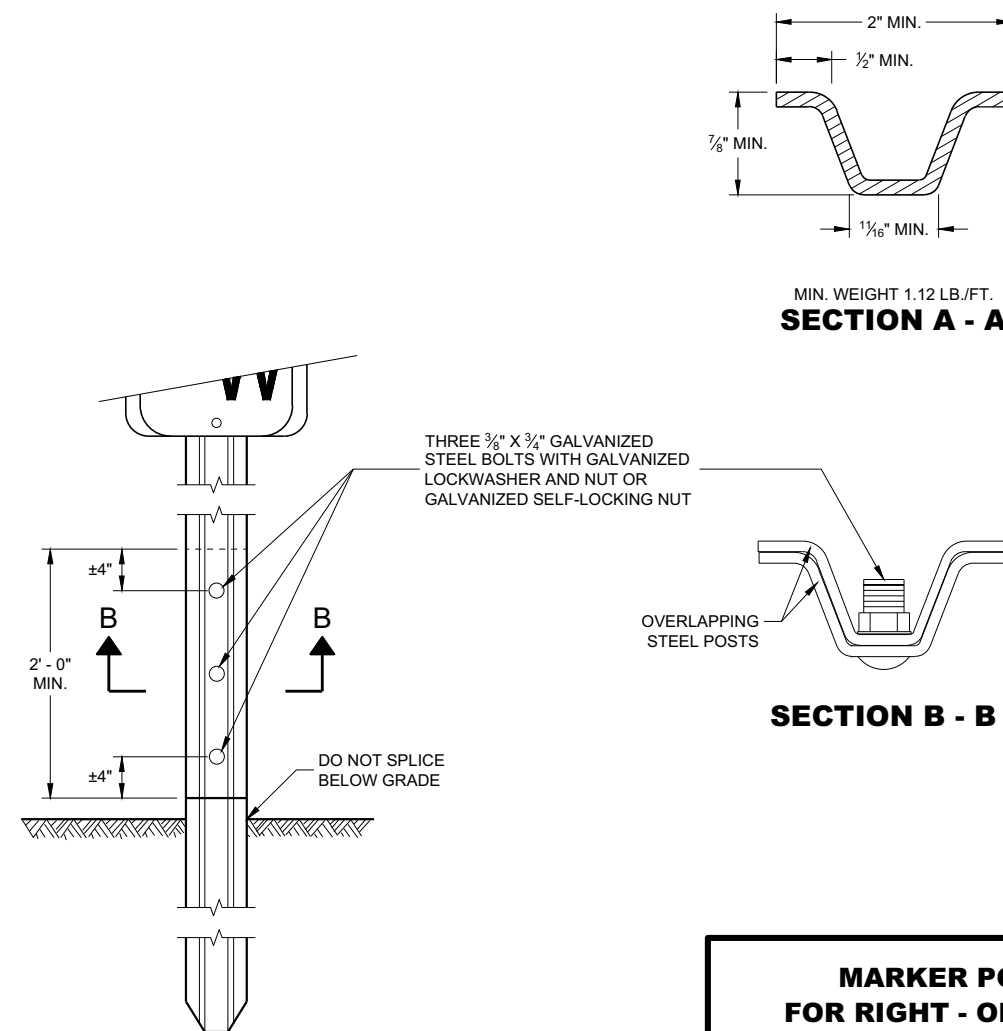
- ① IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3' - 10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR. FILL THE BORE HOLE WITH CEMENT GROUT OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.



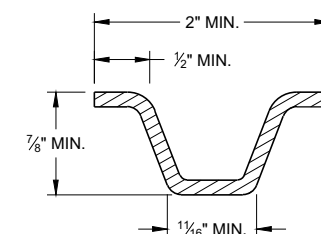
**FRONT VIEW
STEEL MARKER POST**



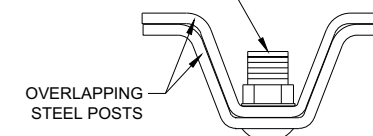
**FRONT VIEW
ROCK INSTALLATION** ①



**FRONT VIEW
SPLICE DETAIL**



MIN. WEIGHT 1.12 LB./FT.
SECTION A - A



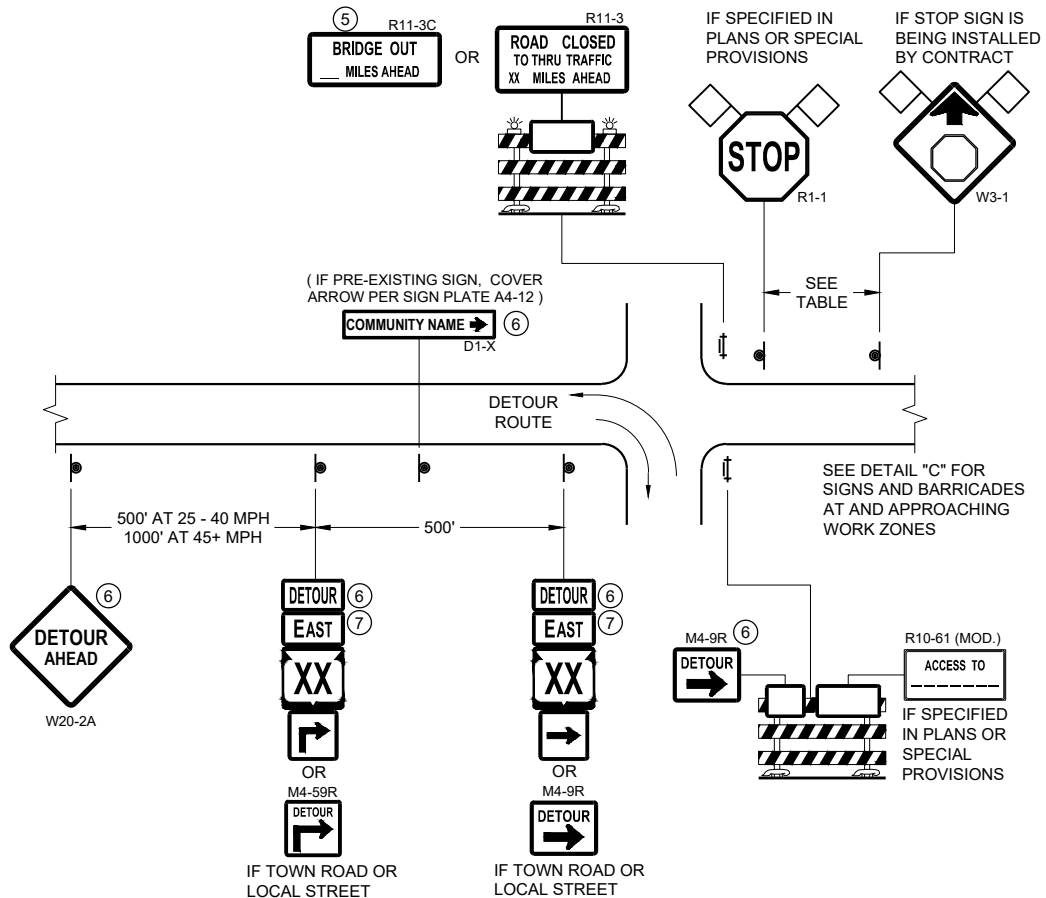
SECTION B - B

MARKER POST FOR RIGHT - OF - WAY

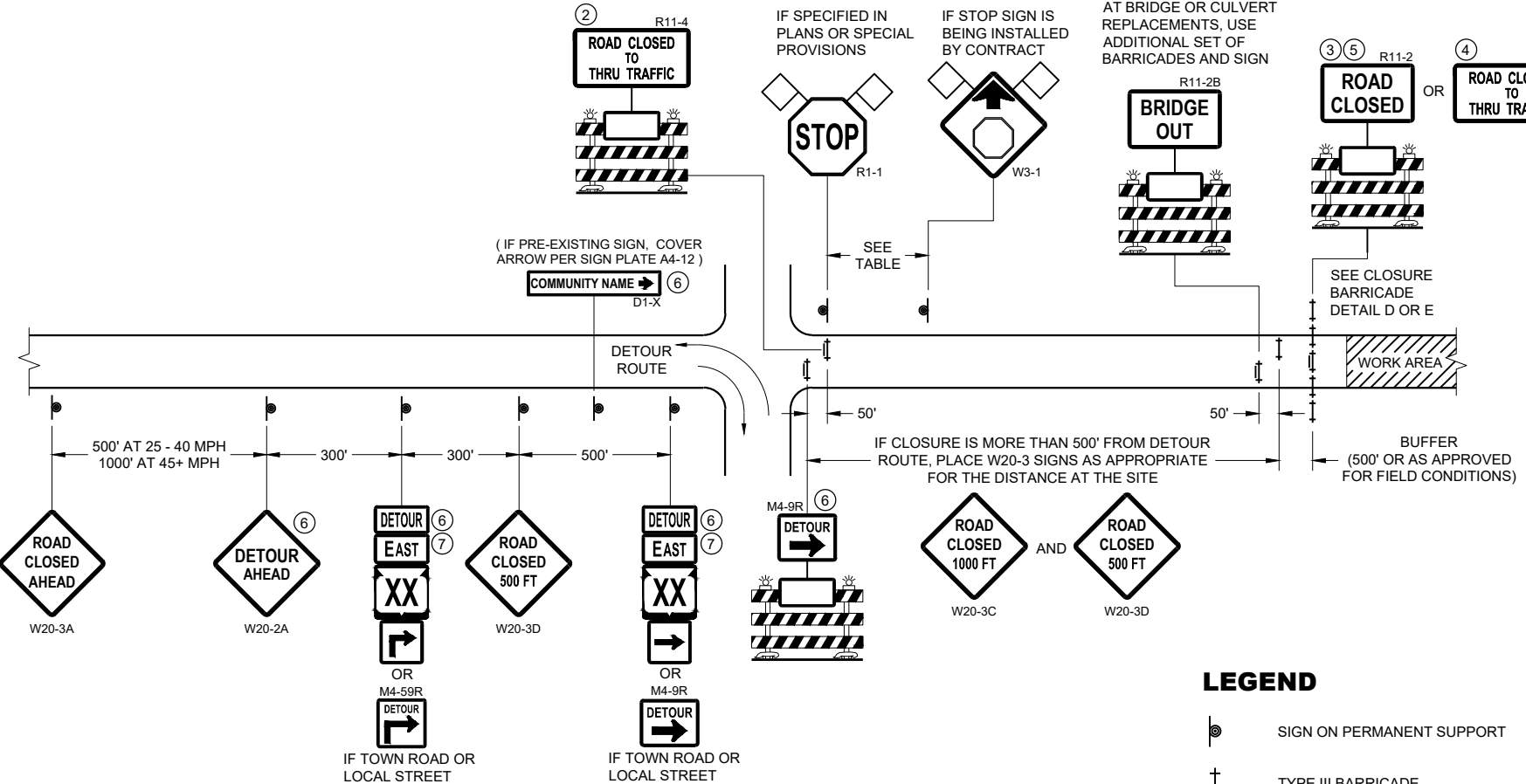
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/18/2016
DATE
/S/ Ray Kumapayi
CHIEF SURVEYING AND MAPPING
ENGINEER

FHWA



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



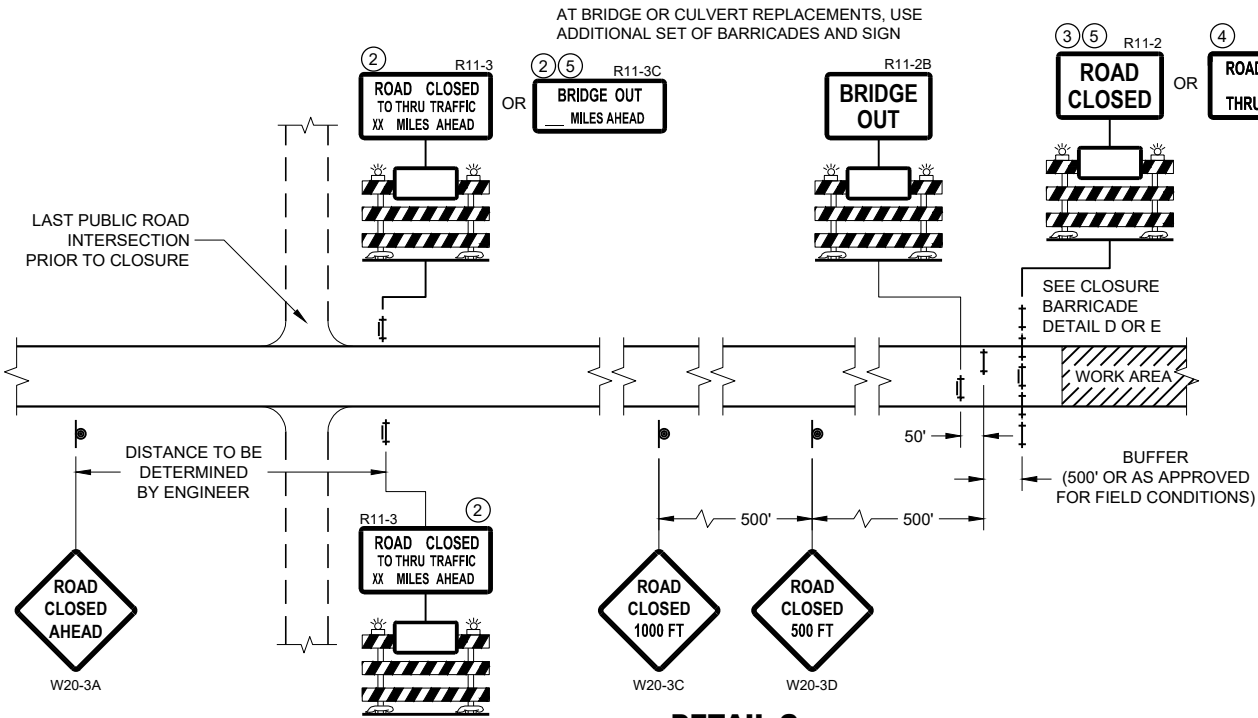
DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

- LEGEND**
- SIGN ON PERMANENT SUPPORT
 - TYPE III BARRICADE
 - TYPE III BARRICADE WITH ATTACHED SIGN
 - TYPE "A" WARNING LIGHT (FLASHING)
 - WORK AREA
 - FLAGS, 16" X 16" MIN. (ORANGE)

- DETOUR M4 - 8
- EAST M3 - X
- XX M1 - 4 OR XX M1 - 6 OR COUNTY M1 - 5A
- OR M05 - 1 OR M06 - 1

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



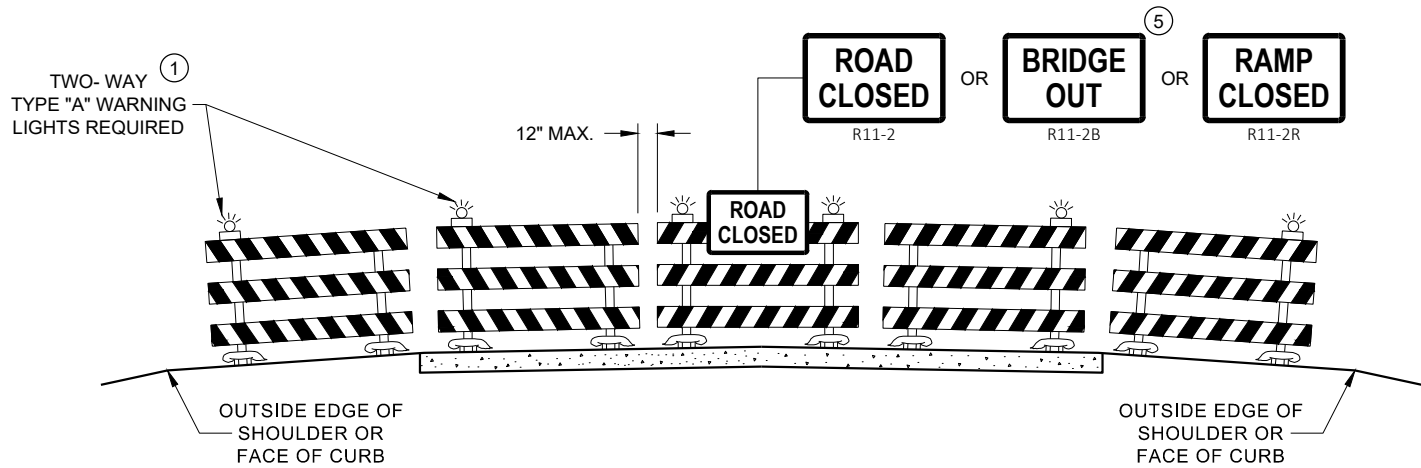
DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

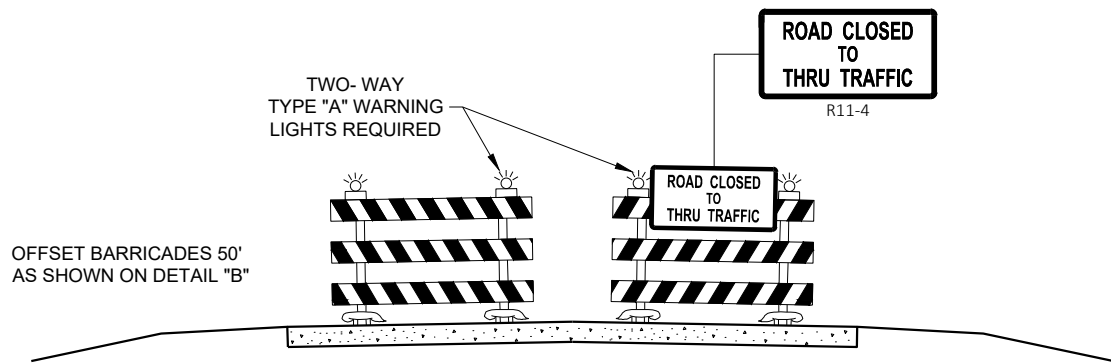
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /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.

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

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

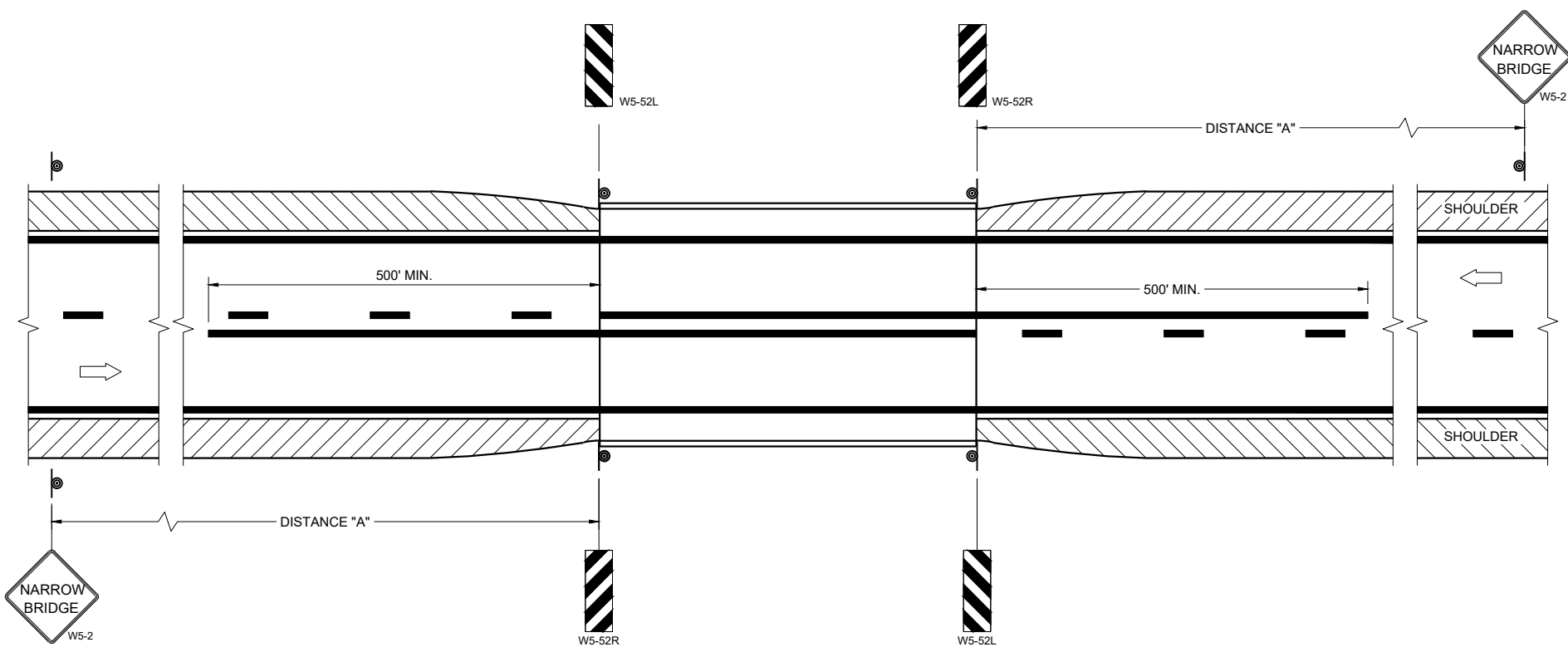
- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- 2 THESE SIGNS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

BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES

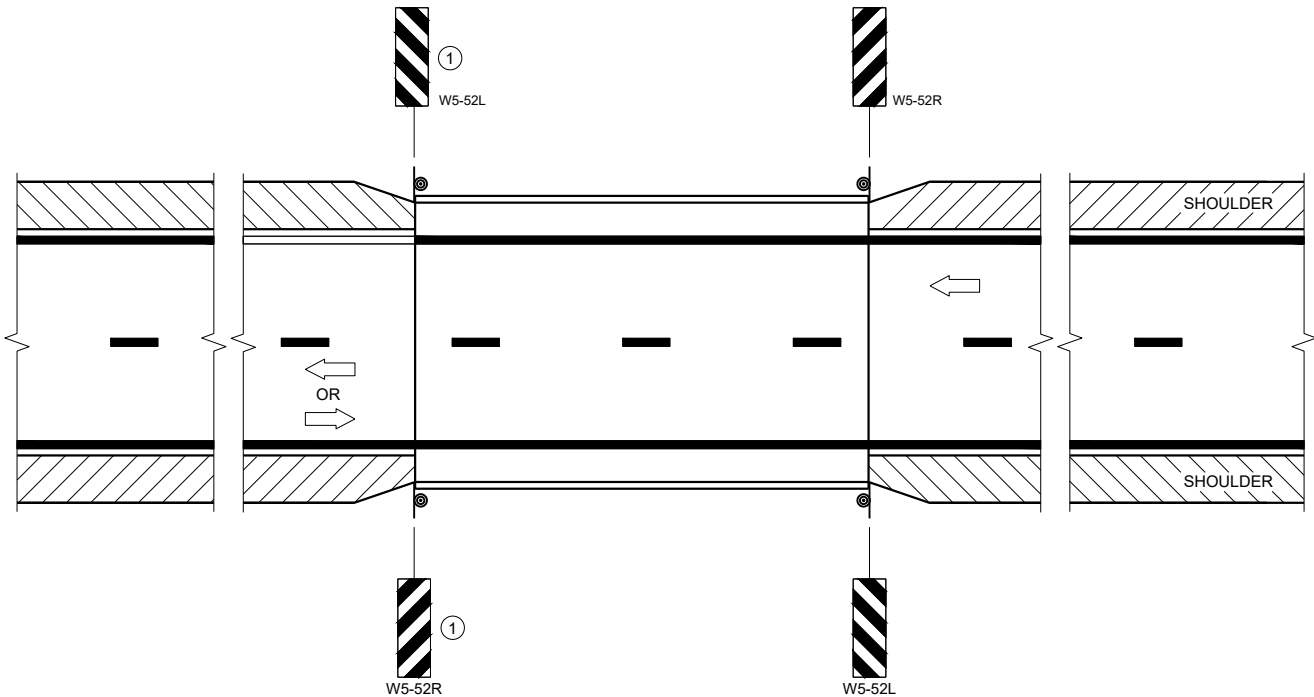
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE 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'

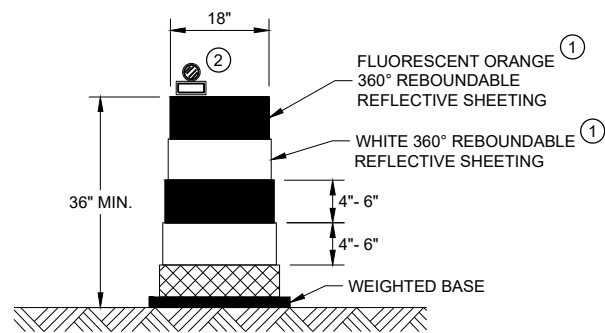
**SIGNING AND MARKING
FOR TWO LANE BRIDGES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

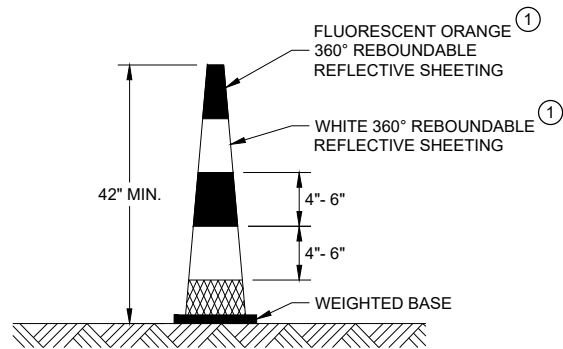
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA



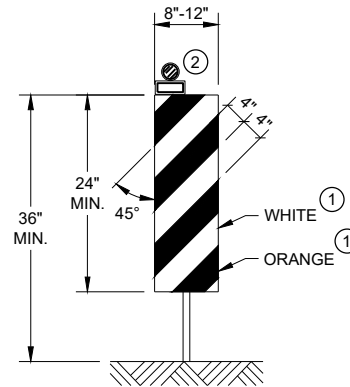
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



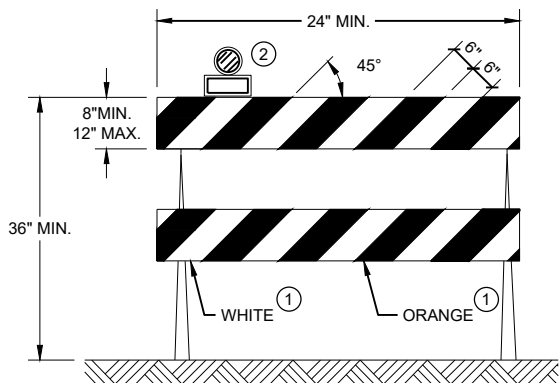
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS
BALLAST WIDTHS
RANGE FROM 14"-20"



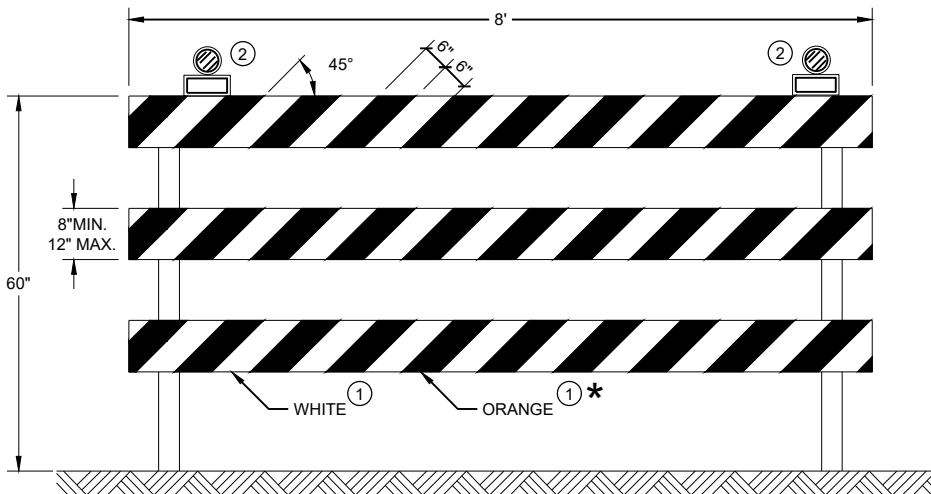
VERTICAL PANEL

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



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

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.

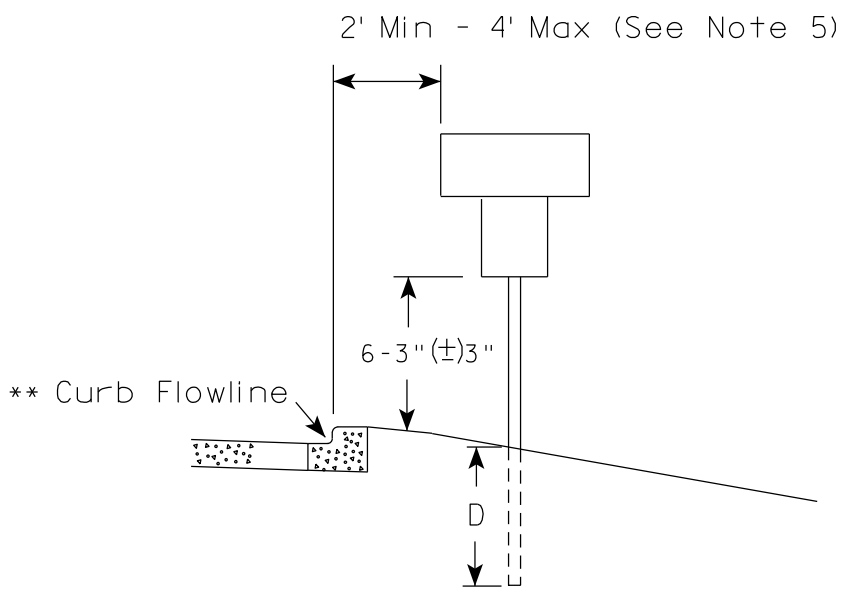
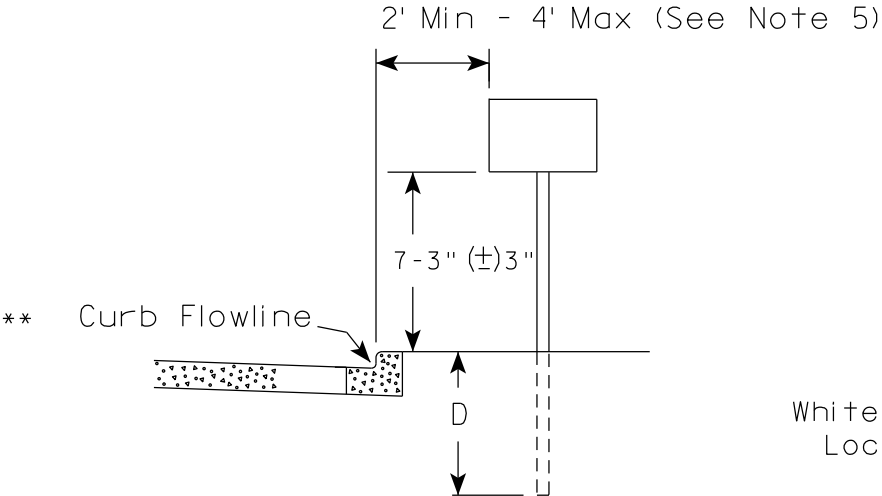
**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

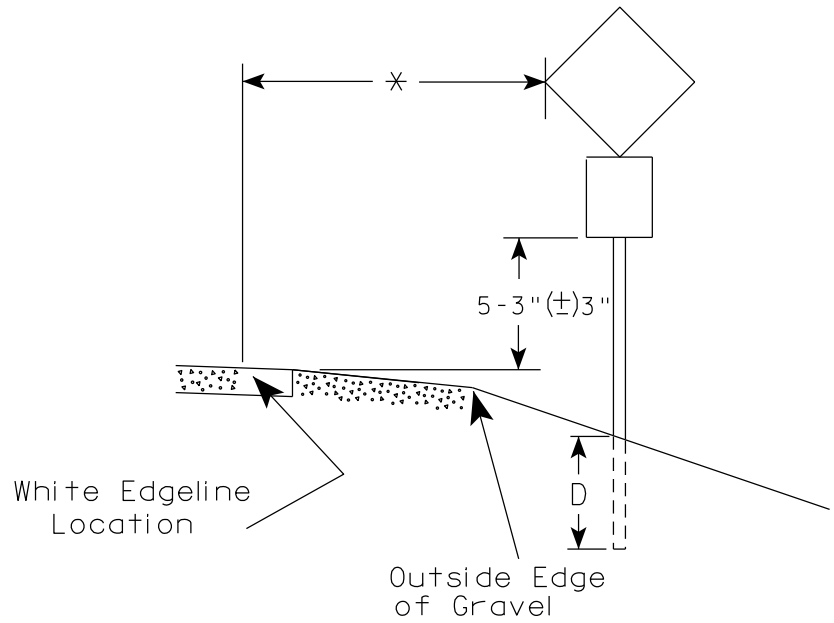
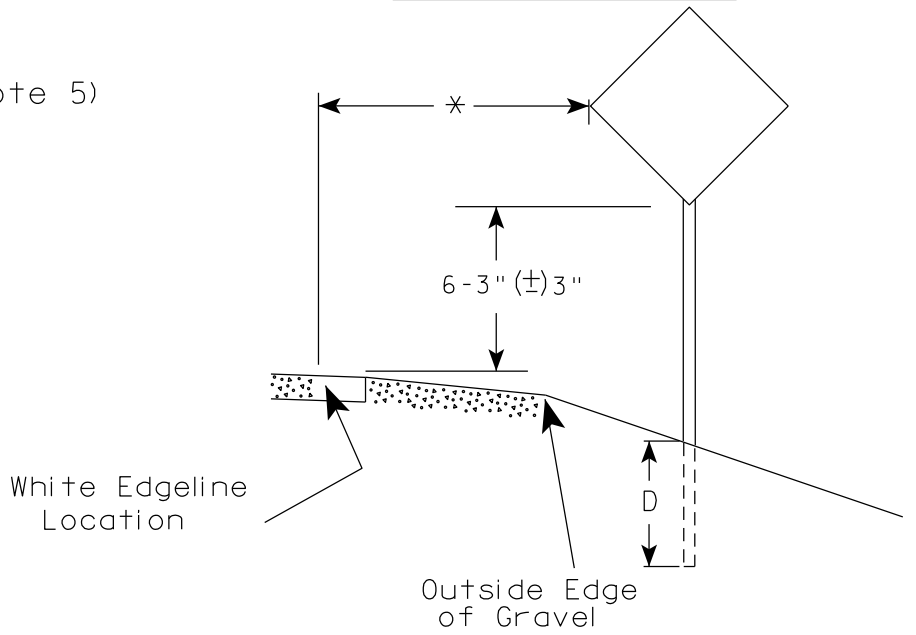
APPROVED
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

URBAN AREA



RURAL AREA (See Note 2)



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.

* * The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

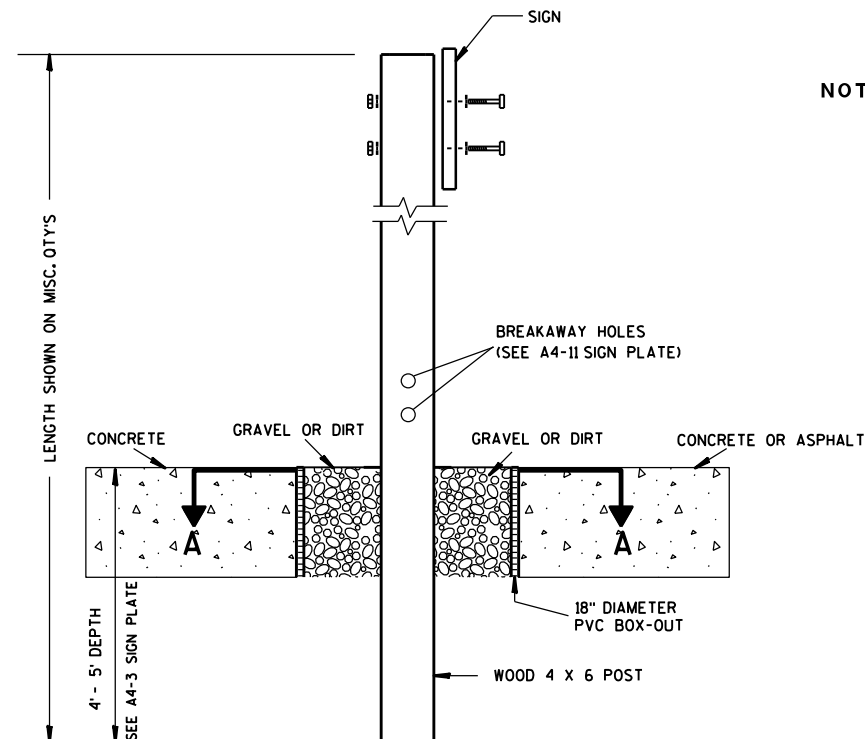
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED 
for State Traffic Engineer

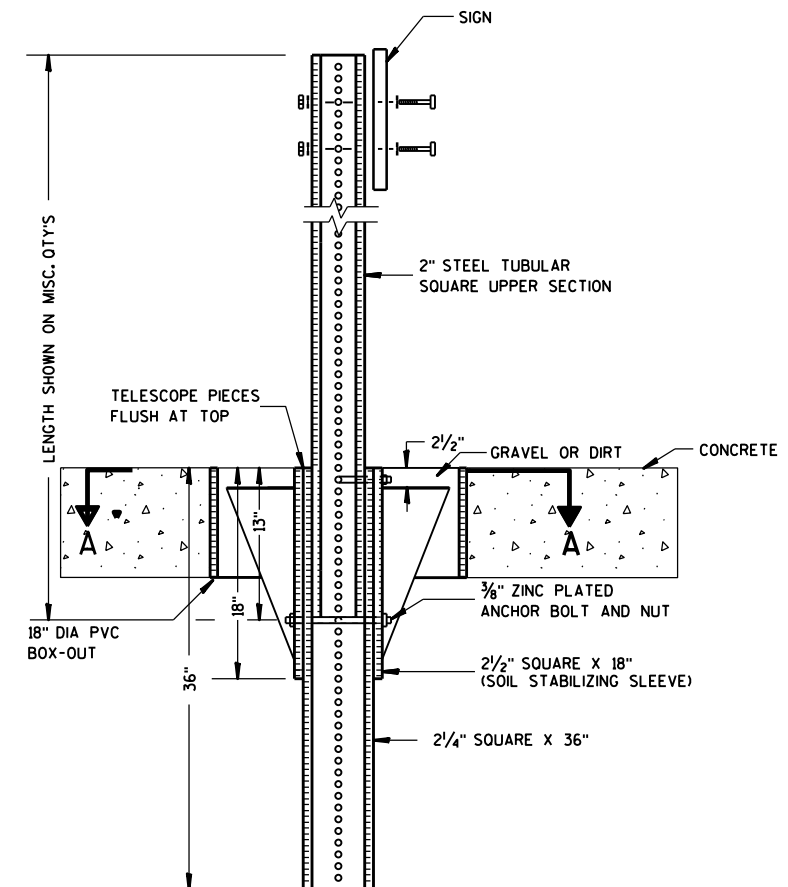
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

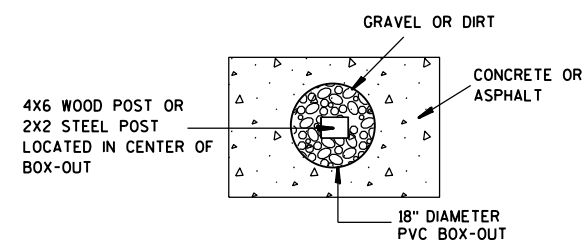
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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 PLATE NO. A4-3B.1

PROJECT NO:

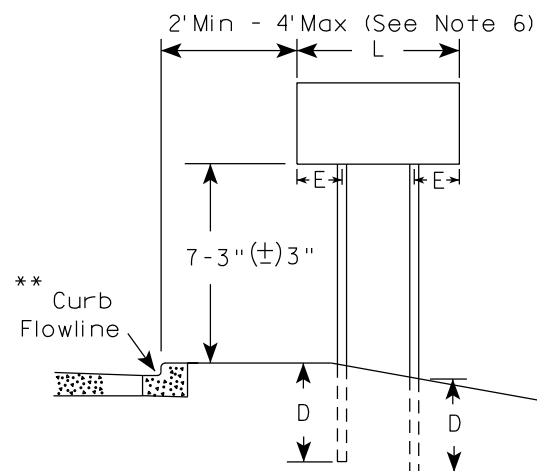
HWY:

COUNTY:

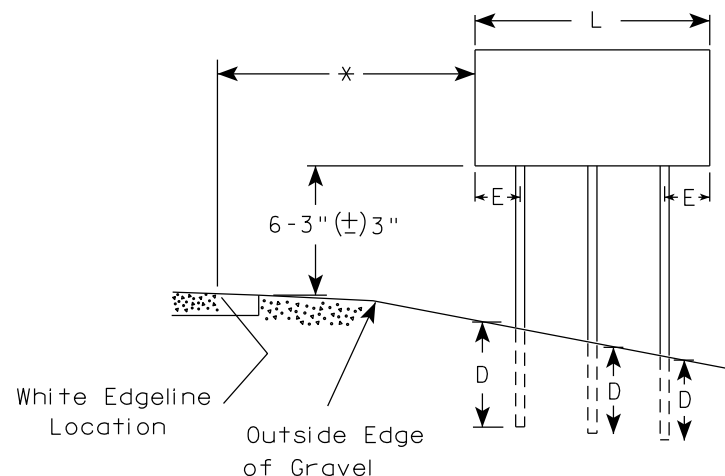
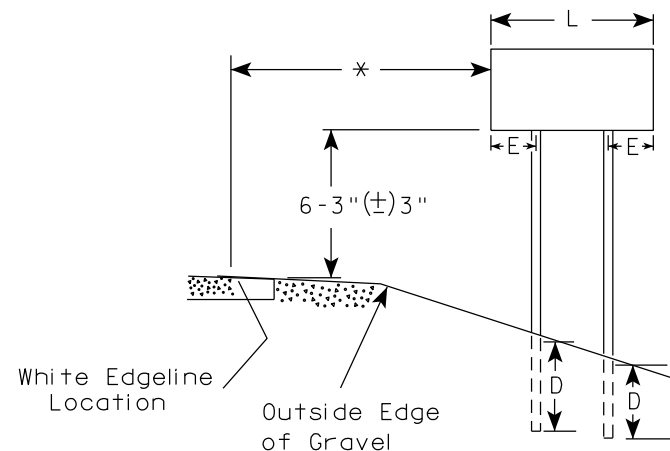
SHEET NO:

E

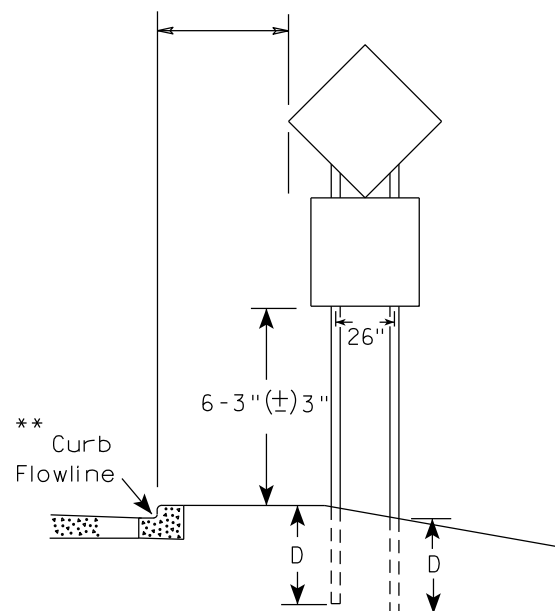
URBAN AREA



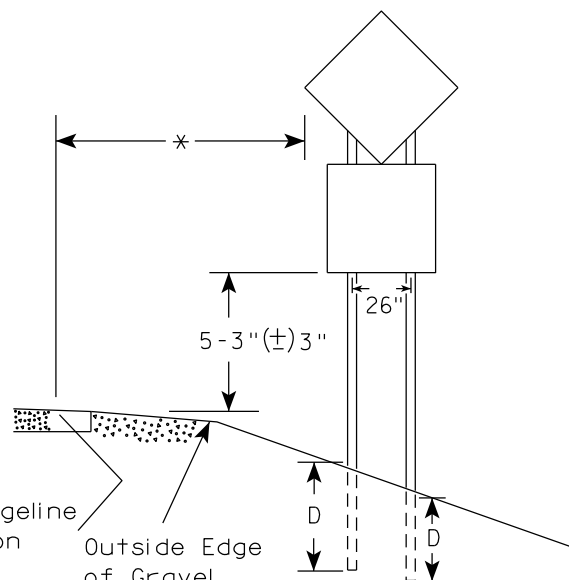
RURAL AREA (See Note 3)



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

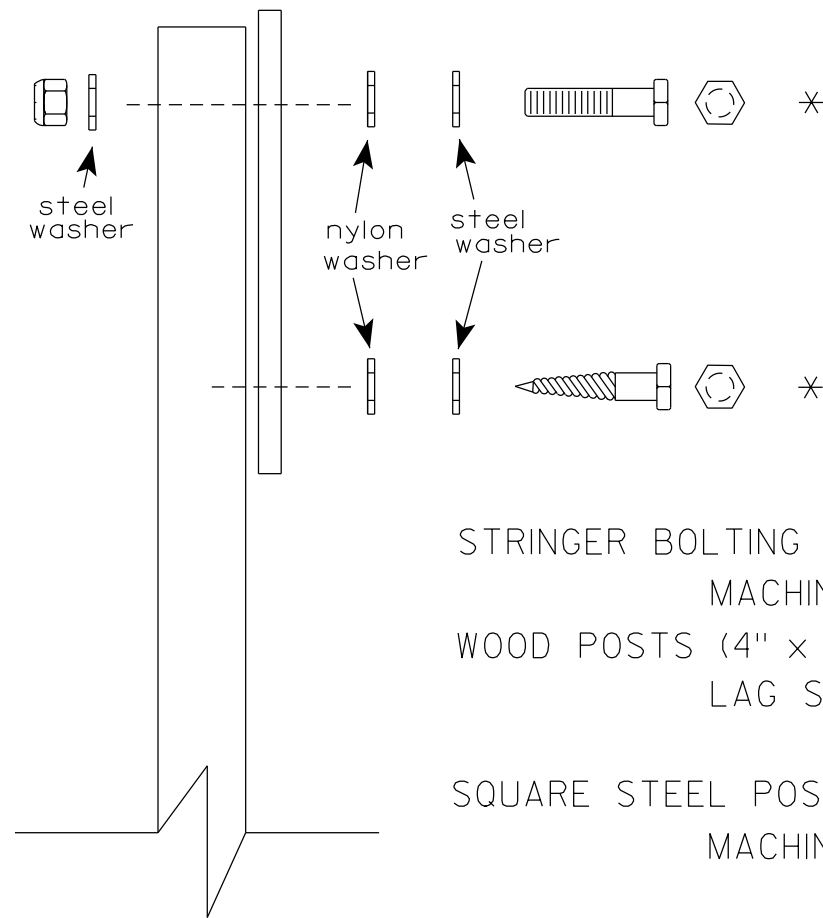
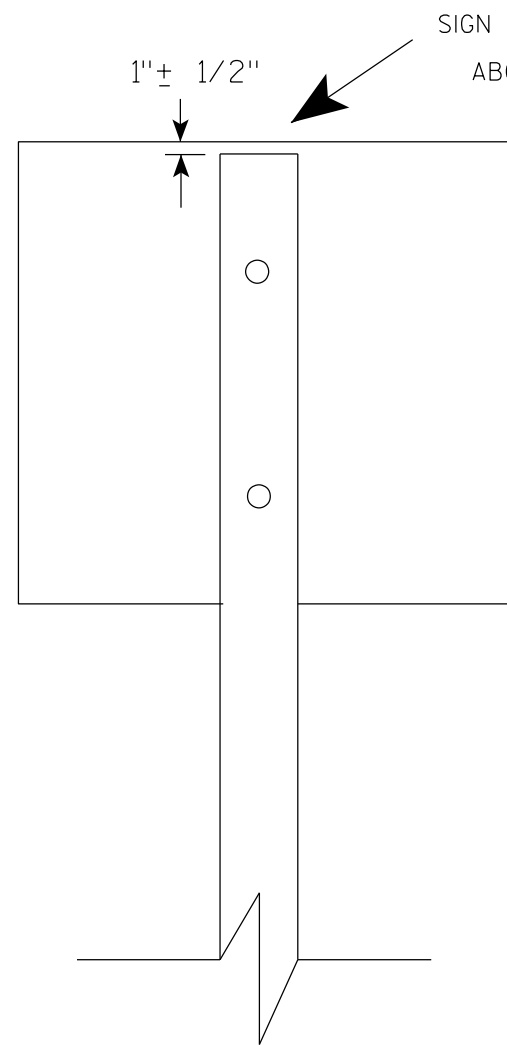
Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16



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

**2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**

1" $\frac{1}{8}$ "

ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES

4" x 10" x 10 GA. — 
STEEL PLATE (CUT
AS SHOWN) WELDED
TO ALL FOUR CORNERS
OF TELESPAR TUBE

**2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH**

LENGTH SHOWN ON MISC. QTY'S
 18" DIA SCHEDULE 40 PVC BOX-OUT
 TELESCOPE PIECES FLUSH AT TOP
 2" STEEL TUBULAR SQUARE UPPER SECTION
 ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES
 $\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT
 2" GRAVEL OR DIRT
 $\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT
 2" SQUARE X 18" (SOIL STABILIZING SLEEVE)
 2" SQUARE X 36"
 SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL
 SIGN

LENGTH SHOWN ON MISC. QTY'S

SIGN

SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL

2" STEEL TUBULAR SQUARE UPPER SECTION

ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES

$\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT

TELESCOPE PIECES FLUSH AT TOP

1"

$\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT

2 $\frac{1}{2}$ " SQUARE X 18" (SOIL STABILIZING SLEEVE)

2 $\frac{1}{4}$ " SQUARE X 36"

36"

18"

12"

A

B

Diagram illustrating the corner detail of the guardrail assembly, labeled **SECTION A-A**. The diagram shows a corner view of the guardrail structure, including the **3/8" ZINC PLATED CORNER ANCHOR BOLT AND NUT**. An arrow indicates the **DIRECTION OF TRAFFIC**.

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

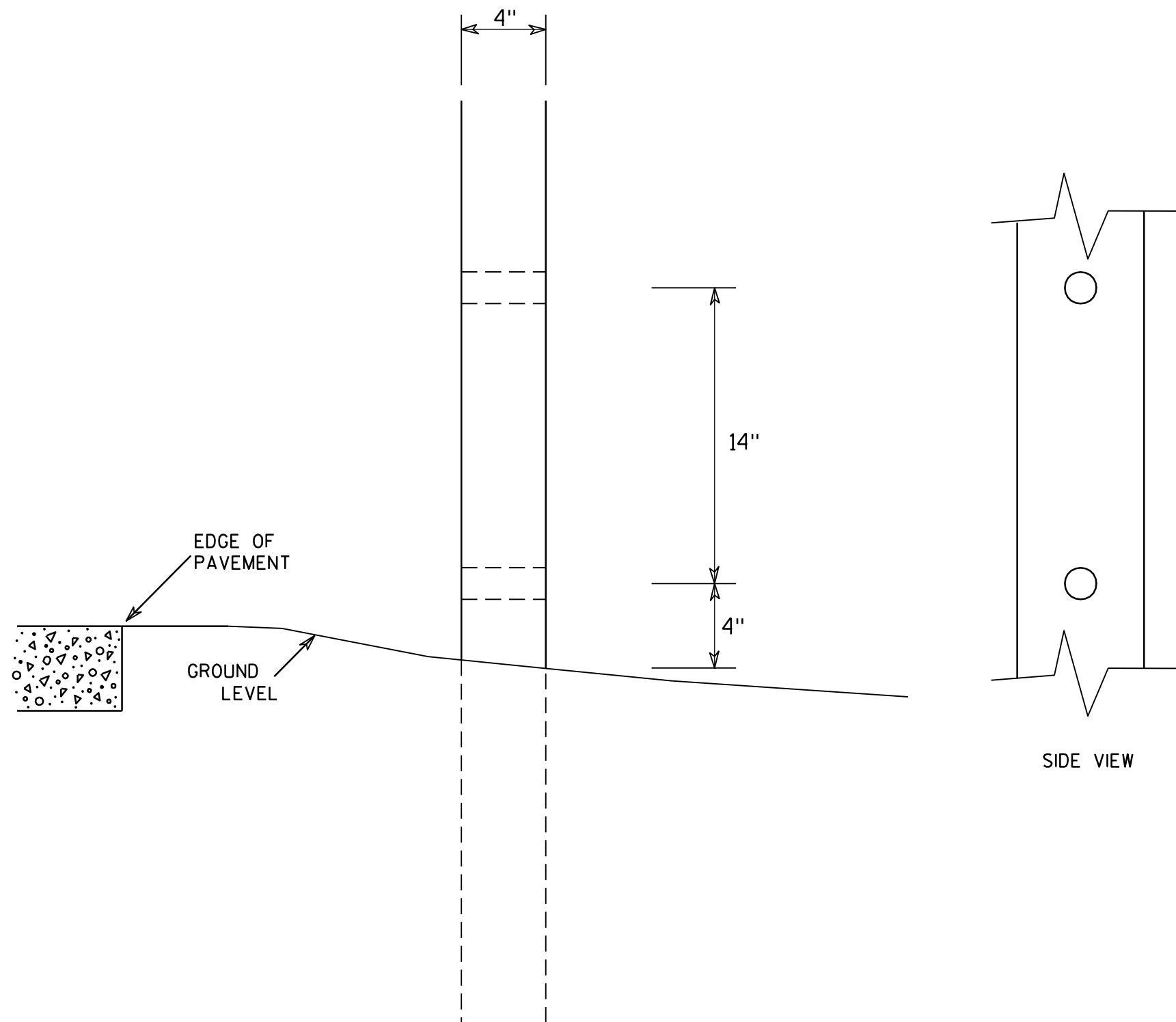
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

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:

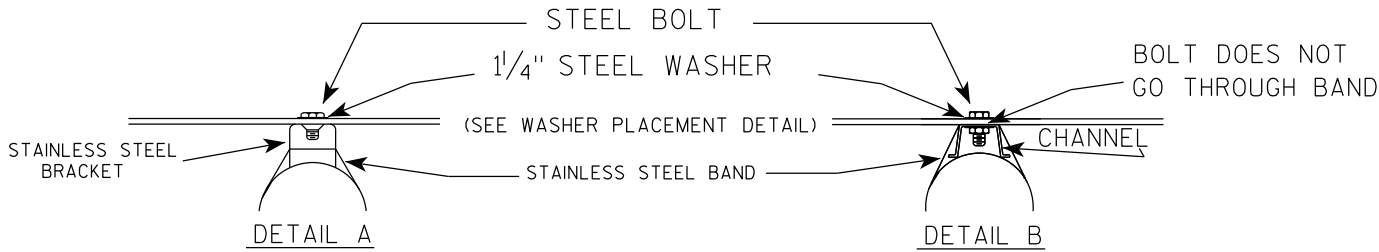
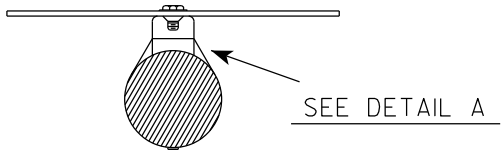
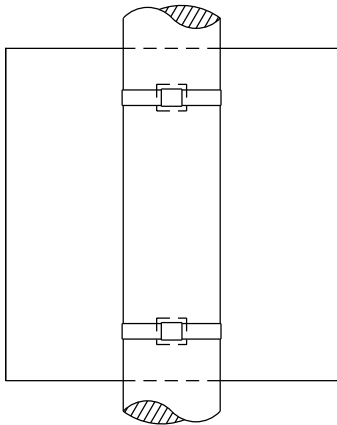
COUNTY:

SHEET NO:

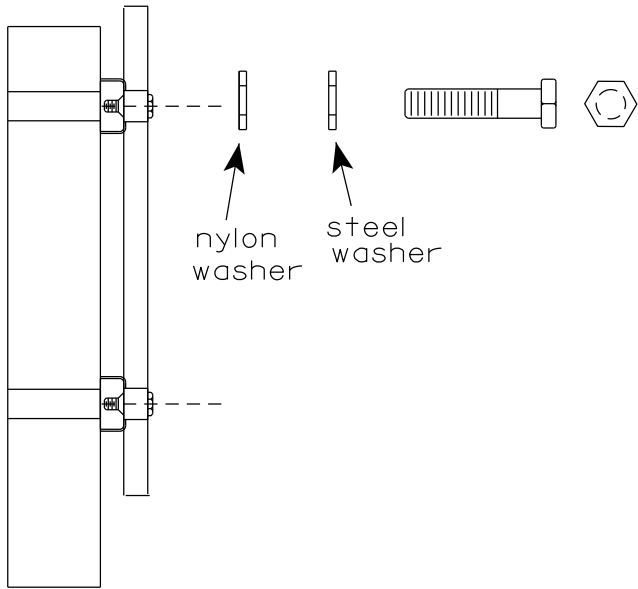
E

BANDING

SINGLE SIGN



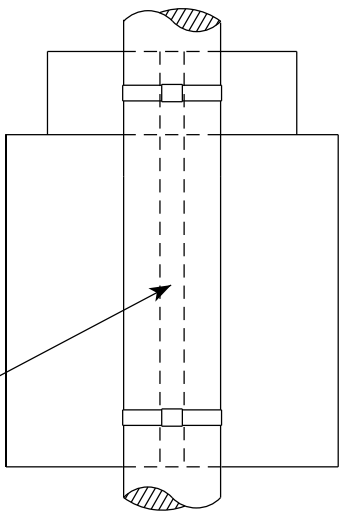
WASHER PLACEMENT



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



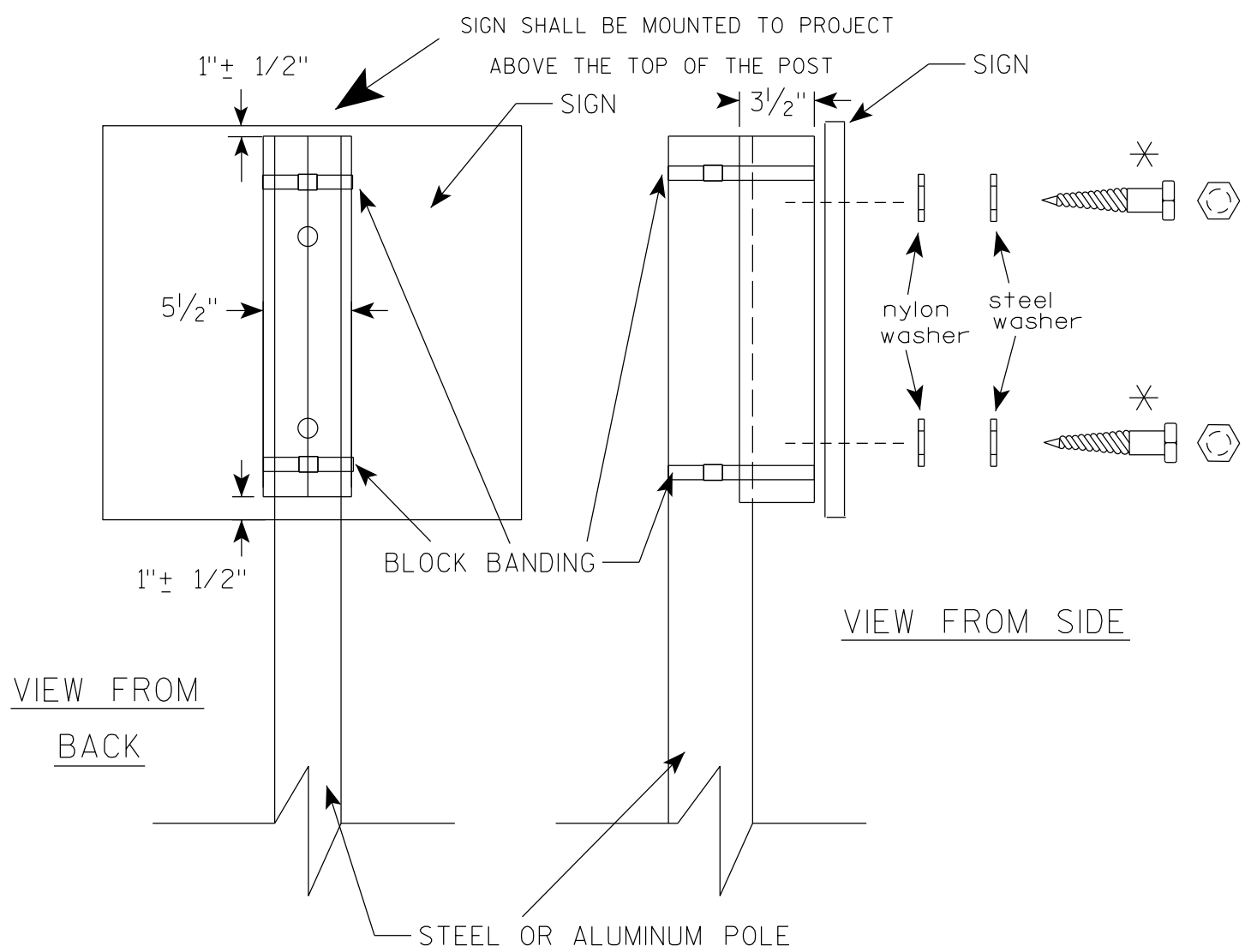
SEE DETAIL B

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

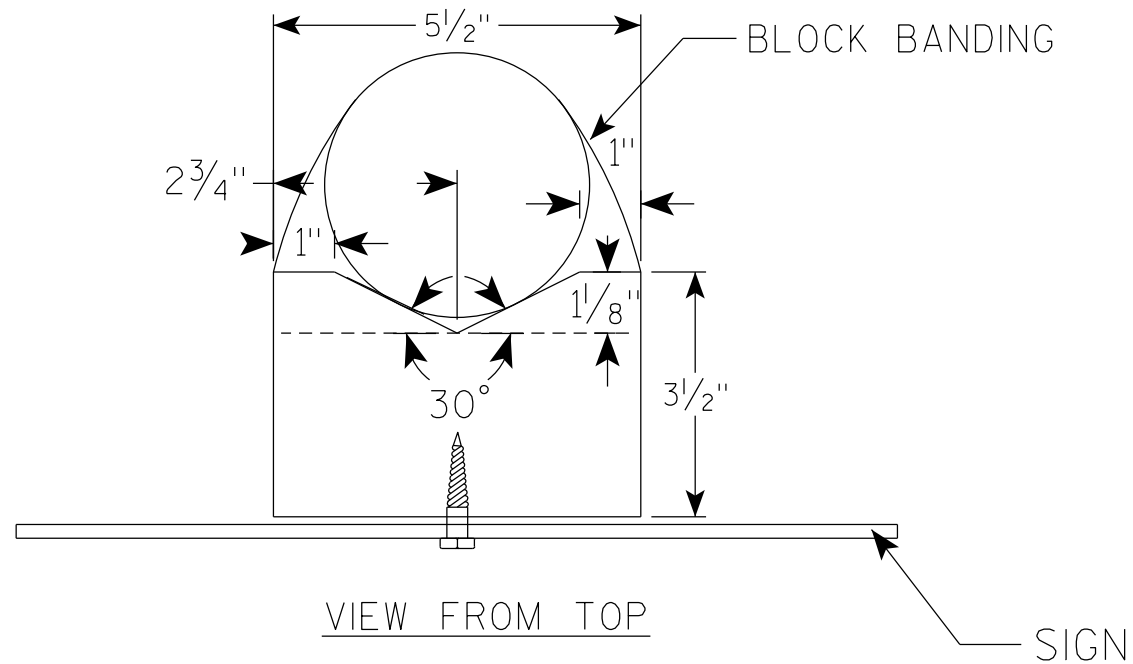
WISCONSIN DEPT OF TRANSPORTATION

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

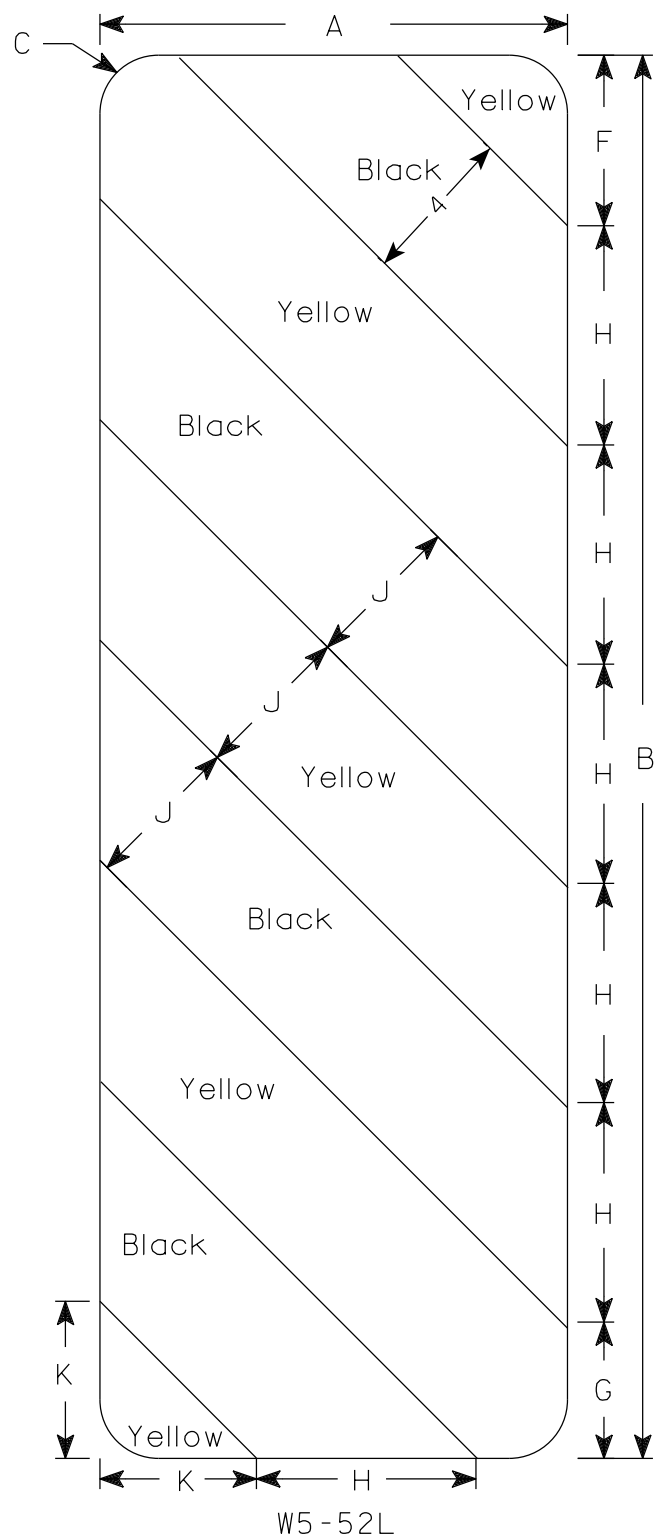
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

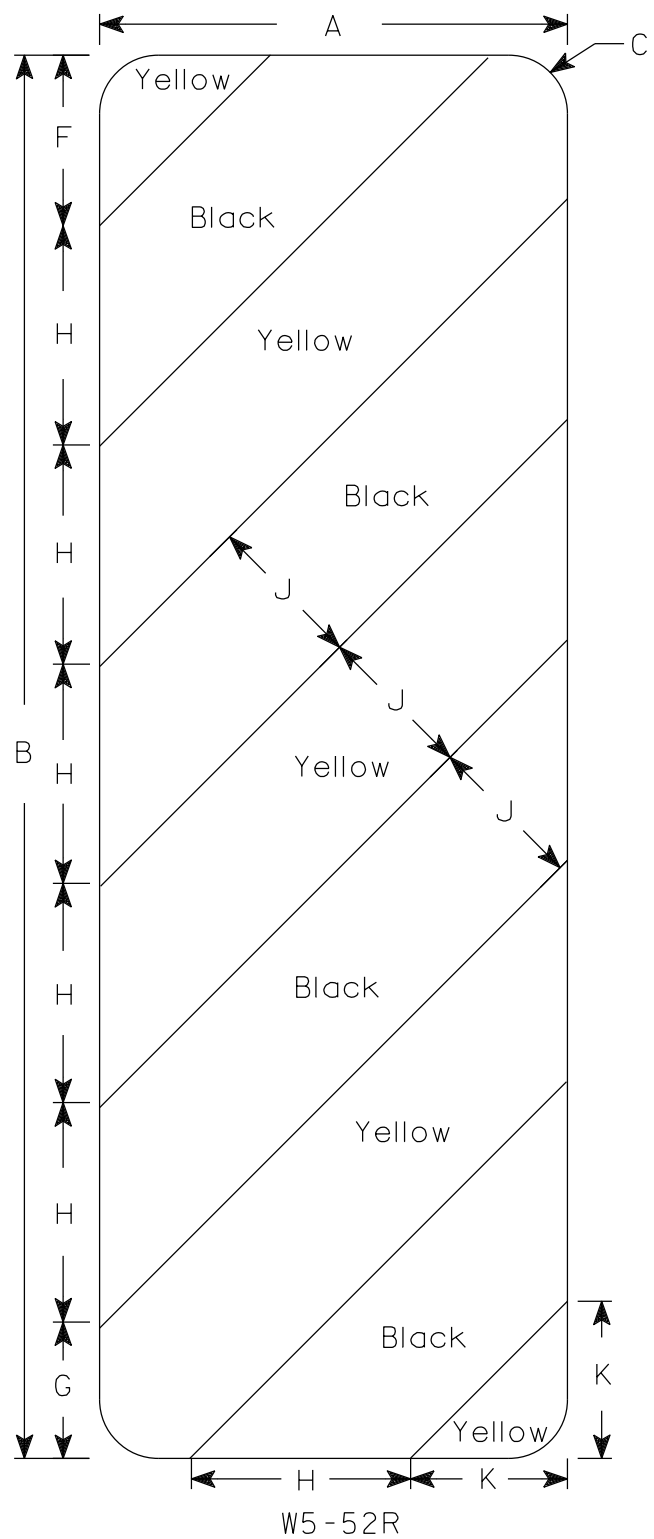
PROJECT NO:

SHEET NO:

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 9/16																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

RIPRAP HEAVY LAYOUT

DESIGN DATA

DESIGN LOADING _____	HL-93
INVENTORY RATING FACTOR _____	RF=1.15
OPERATING RATING FACTOR _____	RF=1.82
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) _____	250 KIPS

MATERIAL PROPERTIES:

HIGH-STRENGTH BAR STEEL	
REINFORCEMENT, GRADE 60	$f_y = 60,000$ P.S.I.
36W-INCH PRESTRESSED GIRDER	
CONCRETE MASONRY	$f'_c = 8,000$ P.S.I.
STRANDS 0.6 INCH DIA. WITH	
ULTIMATE TENSILE STRENGTH	$f_y = 270,000$ P.S.I.

SOUTH ABUTMENT TO BE SUPPORTED ON HP 10-INCH X 42 PILING SEALED IN PRE-BORED HOLES CORED A MINIMUM OF 3 FT INTO THE ROCK. PILE DRIVING NOT REQUIRED. THE FACTORED AXIAL RESISTANCE OF THE PILES IN COMPRESSION USED FOR DESIGN IS 170 TONS MULTIPLIED BY A RESISTANCE FACTOR OF 0.5. ESTIMATED 15 FT OF LENGTH.

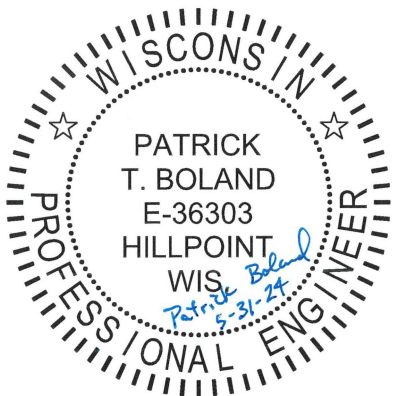
****THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.**

A.D.T. (2025)	300
A.D.T. (2045)	320
DESIGN SPEED	40 M.P.H.

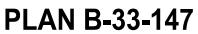
100 YEAR FREQUENCY _____	
DRAINAGE AREA _____	2.12 SQ. MI.
Q ₁₀₀ TOTAL _____	1,610 C.F.S.
THROUGH STRUCTURE _____	1,610 C.F.S.
OVERTOPPING ROADWAY _____	N/A
VELOCITY - THROUGH STRUCTURE _____	10.3 F.P.S.
WATERWAY AREA - THROUGH STRUCTURE _____	156.2 SQ. FT.
HIGH WATER ₁₀₀ ELEVATION _____	842.02
SCOUR CRITICAL CODE _____	5

Q ₂ _____	150 C.F.S.
VELOCITY ₂ _____	4.8 F.P.S.
HIGH WATER ₂ ELEVATION _____	836.26

GENERAL PLAN	1.
CROSS SECTION AND QUANTITIES	2.
SUBSURFACE EXPLORATION	3.
SOUTH ABUTMENT	4.
SOUTH ABUTMENT DETAILS	5.
NORTH ABUTMENT	6.
NORTH ABUTMENT DETAILS	7.
GIRDER LAYOUT	8.
36W-INCH PRESTRESSED GIRDER DETAILS	9.
STEEL DIAPHRAGM	10.
SUPERSTRUCTURE	11.
SUPERSTRUCTURE DETAILS	12.
TUBULAR RAILING TYPE M	13.

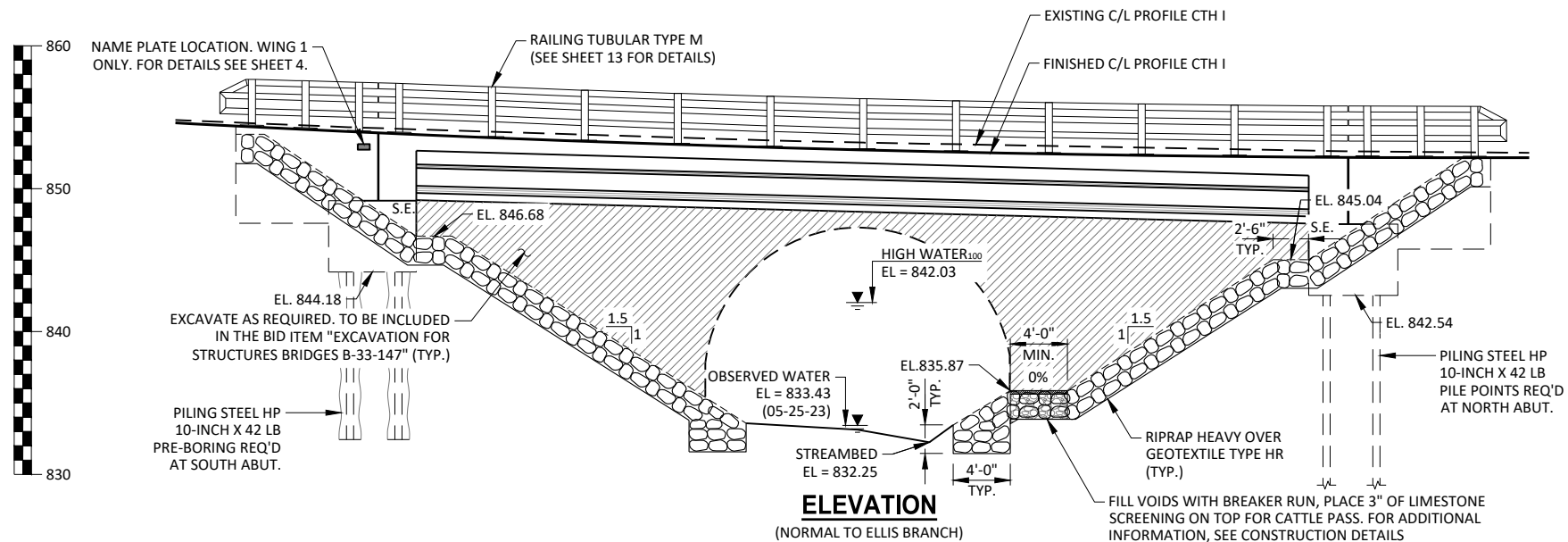


BRIDGE OFFICE CONTACT
AARON BONK, PE
(608) 261-0261



(SINGLE-SPAN 36W-INCH PRESTRESSED CONCRETE GIRDER STRUCTURE)

 INDICATES WING NUMBER



GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD 2012).

JOINT FILLER SHALL CONFORM TO A.A.S.H.T.O. DESIGNATION M153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M213.

THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS, OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

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

AT THE DECK, APPLY PROTECTIVE SURFACE TREATMENT TO THE TOP OF THE DECK (CONCRETE MATERIAL ONLY), THE SIDES OF THE DECK, AND THE EXTERIOR 12" OF THE UNDERSIDE OF THE DECK. AT THE ABUTMENTS, APPLY TO THE TOP AND EXTERIOR EXPOSED FACES OF WINGS AND THE FRONT FACE OF ABUTMENTS TO 12" PAST THE EDGE OF DECK. SEE THIS SHEET FOR DETAIL.

ALL STATIONS AND ELEVATIONS SHOWN ARE IN FEET.

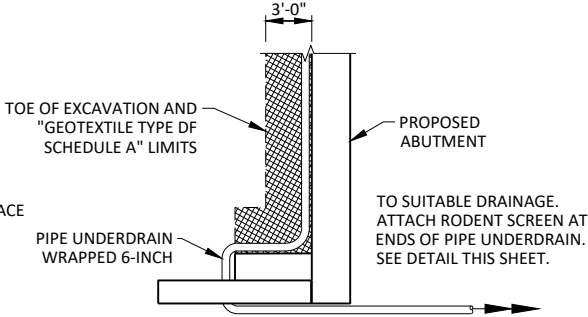
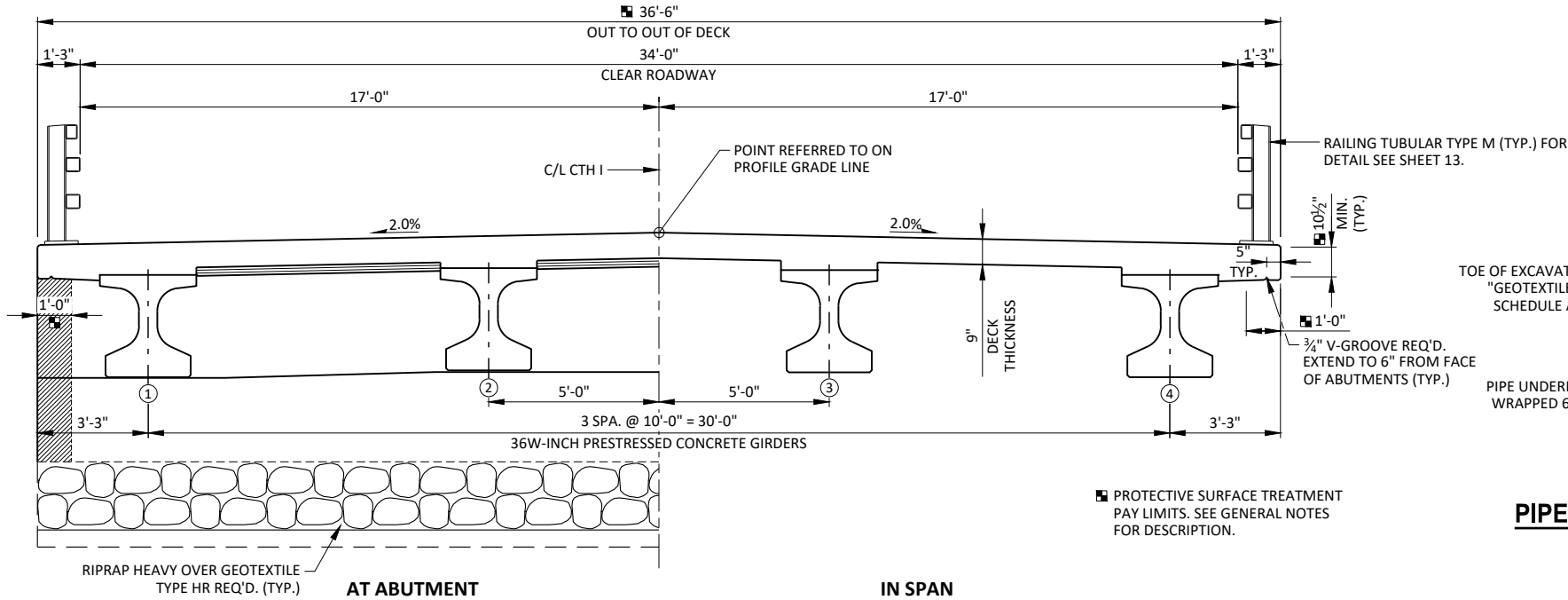
THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-33-147" SHALL BE THE EXISTING GROUNDLINE.

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

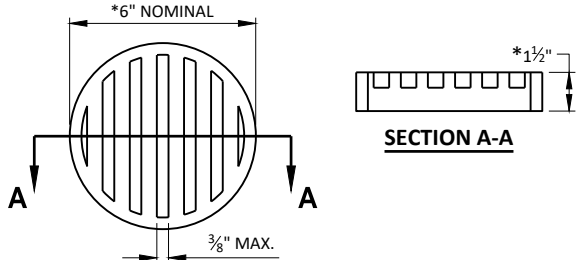
HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET, WHICH IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH THE CONTRACTOR WILL BE PAID.

LAYOUT THE CATTLE PASS AS SHOWN IN THE CONSTRUCTION DETAILS.

THE EXISTING STRUCTURE IS A BOTTOMLESS CORRUGATED STEEL ARCH ON CONCRETE FOOTINGS WITH A STEEL DECK GIRDER EXTENSION. THE STRUCTURE HAS AN OVERALL LENGTH OF 21.4' AND A DECK WIDTH OF 35.2' AND SHALL BE REMOVED.



PIPE UNDERDRAIN DETAIL



RODENT SCREEN

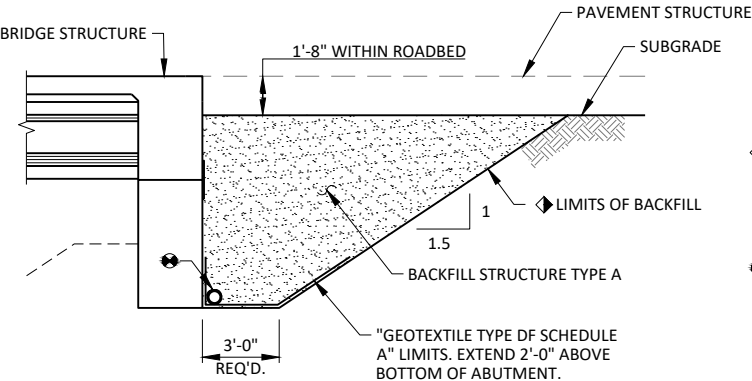
NOTES:

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

ORIENT SCREEN SO SLOTS ARE VERTICAL.

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

THE RODENT SCREEN 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 SCREEN TO THE EXPOSED ENDS OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

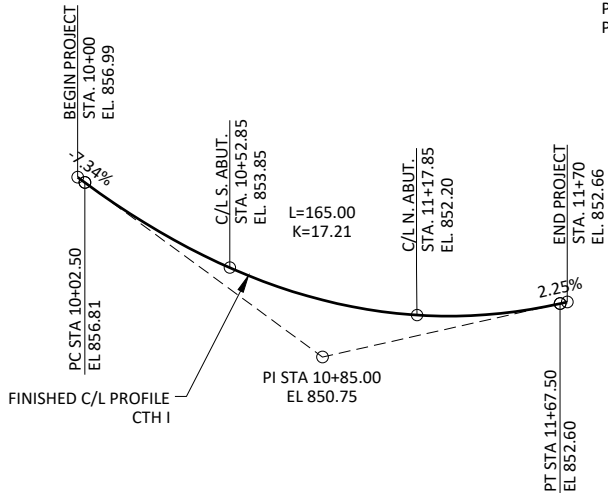


BACKFILL STRUCTURE DETAIL

(TYPICAL AT BOTH ABUTMENTS. ABUTMENT BODY SHOWN, - WING WALLS SIMILAR)

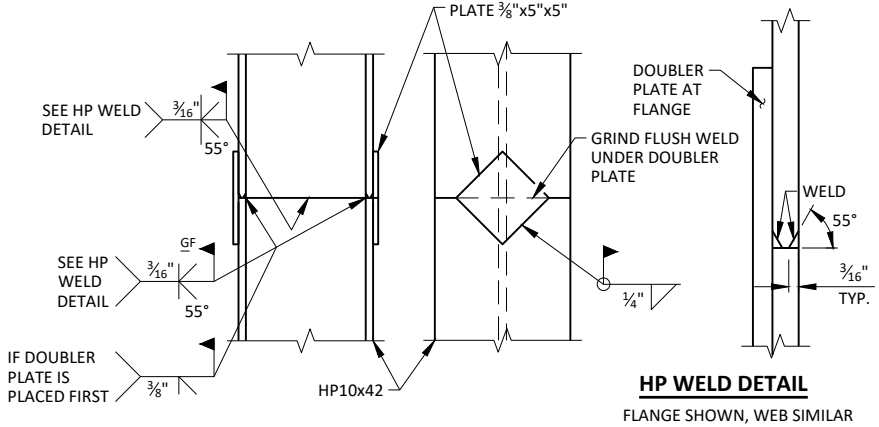
TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	S. ABUT.	SUPER.	N. ABUT.	TOTALS
203.0250	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS P-33-223	EACH	--	--	--	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-33-147	EACH	--	--	--	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	210	--	210	420
311.0110	BREAKER RUN	TON	--	--	13	13
502.0100	CONCRETE MASONRY BRIDGES	CY	28	102	28	158
502.3200	PROTECTIVE SURFACE TREATMENT	SY	--	315	--	315
503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	--	264	--	264
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1,740	--	1,740	3,480
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,120	16,730	1,110	18,960
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	4	--	4	8
506.4000	STEEL DIAPHRAGMS B-33-147	EACH	--	3	--	3
513.4061	RAILING TUBULAR TYPE M	LF	--	180	--	180
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	7	--	7	14
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	95	--	--	95
550.0500	PILE POINTS	EACH	--	--	7	7
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	105	--	175	280
606.0300	RIPRAP HEAVY	CY	245	--	345	590
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	100	--	100	200
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	32	--	33	65
645.0120	GEOTEXTILE TYPE HR	SY	395	--	545	940
SPV.0035.01	LIMESTONE SCREENING	CY	--	--	5	5
NON-BID ITEMS						
	FILLER	SIZE	--	--	--	1/2" & 3/4"
	NAME PLATE					



PROFILE GRADE LINE

CTH I



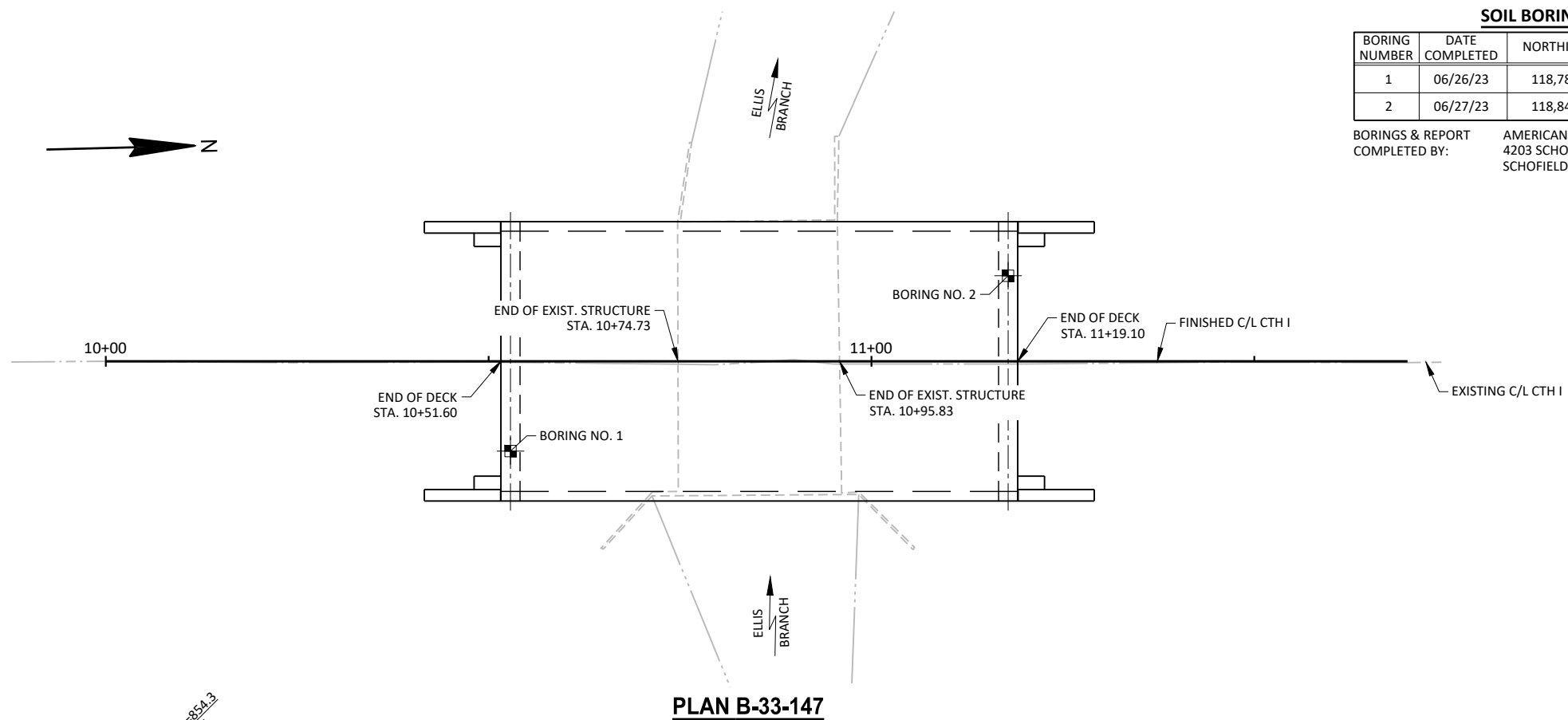
HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE SPLICE DETAIL

STEEL "HP" PILE MATERIAL SHALL BE ASTM A 572 GRADE 50.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-147			
DRAWN BY		CTMP	PLANS CK'D. PTB
CROSS SECTION AND QUANTITIES		SHEET 2 OF 13	


















BORING NUMBER	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	06/26/23	118,782.58	431,437.90
2	06/27/23	118,848.16	431,416.71

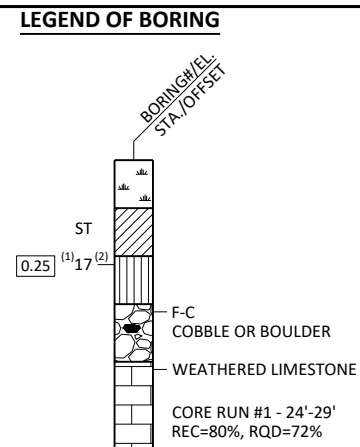
BORINGS & REPORT
COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.
4203 SCHOFIELD AVENUE, SUITE 1
SCHOFIELD, WI 54476

STATE PROJECT NUMBER

5695-00-74




MATERIAL SYMBOLS

			
Asphalt	Topsoil	Peat	
			
Concrete	Fill	Gravel	
			
Sand	Clay	Silt	
			
Boulders or Cobbles	Limestone	Bedrock (unknown)	
			
Shale	Sandstone	Igneous/ meta	



(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.

GROUND WATER ELEVATIONS

	AT TIME OF DRILLING
	END OF DRILLING
	AFTER DRILLING

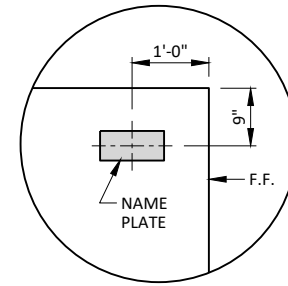
ABBREVIATIONS

F-FINE	M-MEDIUM	C-COURSE	ST-SHELBY TUBE
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**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-33-147			
		DRAWN BY	CTMP
		PLANS CK'D.	PTB
SUBSURFACE EXPLORATION		SHEET 3 OF 13	



(WING 1 ONLY)

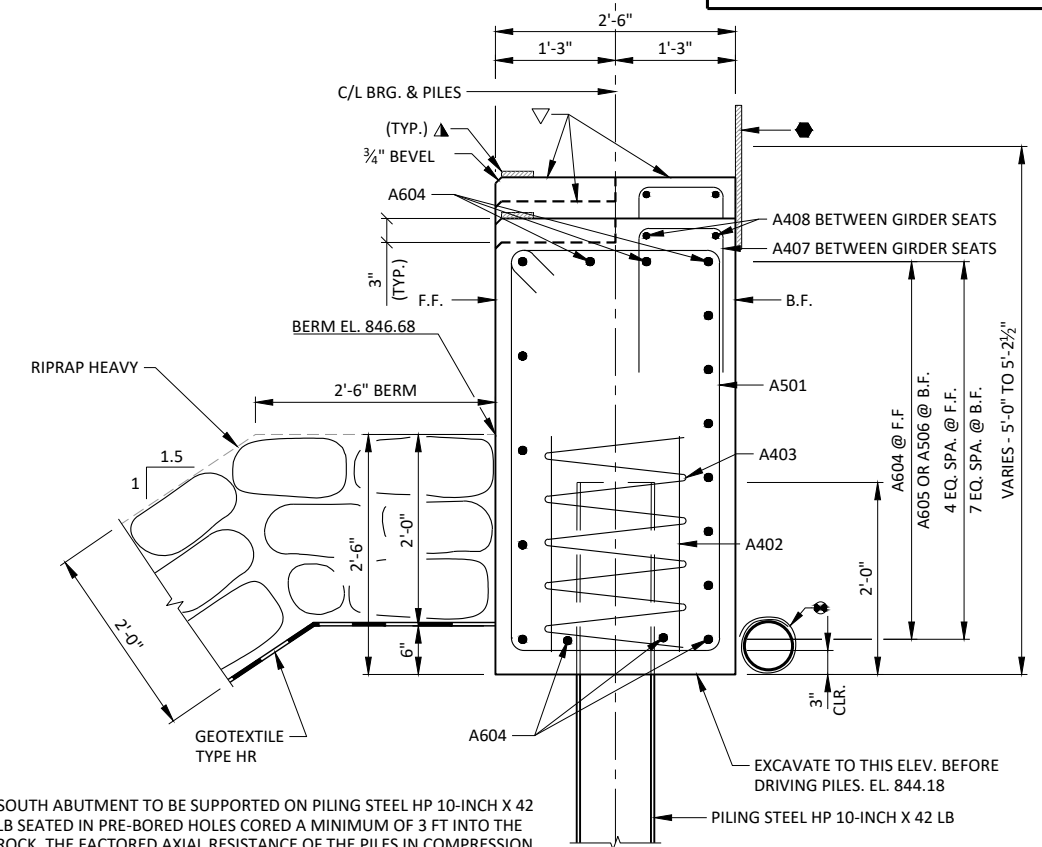
SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 5 FOR BILL OF BARS.

DO NOT PLACE FILL HIGHER THAN 3 FEET
FROM BOTTOM OF ABUTMENT UNTIL
SUPERSTRUCTURE IS IN PLACE.

SPACE REINFORCEMENT TO MISS PILING

F.F. - FRONT FACE

B.F. - BACK FACE



SOUTH ABUTMENT TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB SEATED IN PRE-BORED HOLES CORED A MINIMUM OF 3 FT INTO THE ROCK. THE FACTORED AXIAL RESISTANCE OF THE PILES IN COMPRESSION USED OR DESIGN IS 170 TONS MULTIPLIED BY A RESISTANCE FACTOR OF 0.5. ESTIMATED PILE DEPTH OF 15 FT.

Diagram illustrating the cross-section of a girder seat. Key dimensions and components are labeled:

- Overall Height:** 2'-6"
- Top Section Height:** 1'-3"
- Bottom Section Height:** 1'-3"
- Top Flange (B.F.):** Indicated by a dashed line.
- End of Girder (C):** Indicated by a dashed line.
- Girder Seat to be Sloped:** SEE TABLE FOR ELEVATION.
- Slope Top of Abut. between Girder Seats (Typ.):** Indicated by a dashed line.
- C/L Bearing & Piles:** Indicated by a dashed line.
- 1'-9" (Typ.):** Dimension for the bottom section.
- F.F. (Finished Floor):** Indicated by a dashed line.
- 1/2" Preformed Filler:** Indicated by a dashed line.
- C/L Girder:** Indicated by a dashed line.

INTERIOR GIRDER SHOWN.
EXTERIOR GIRDERS SIMILAR.



GIRDER NUMBER	ELEV. (A)	ELEV. (B)	ELEV. (C)	ELEV. (D)	ELEV. (E)
①	849.18	849.21	849.21	849.15	849.15
②	849.38	849.41	849.41	849.35	849.35
③	849.38	849.41	849.41	849.35	849.35
④	849.18	849.21	849.21	849.15	849.15

■ VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM 9" BELOW BRIDGE SEAT TO 1" BELOW TOP OF WINGS.

● 18" RUBBERIZED MEMBRANE WATERPROOFING. (HORIZONTAL)

▲ 1/2" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINUOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE)

▲ 1/2" x 4" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF DIAPHRAGM. USE 1/2" PREFORMED FILLER UNDER GIRDERS.

■ PILE SPACING MEASURED AT BASE OF ABUTMENT BODY.

PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 2. RODENT SCREEN TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."

☆ 3/4" CORK FILLER ON VERTICAL GIRDER SEAT FACES THAT RUN PARALLEL WITH GIRDER.

● 1/2"x8"x2'-10" NON-LAMINATED ELASTOMERIC BEARING PAD

▽ STEEL TROWEL ENTIRE TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

 INDICATES WING NUMBER.



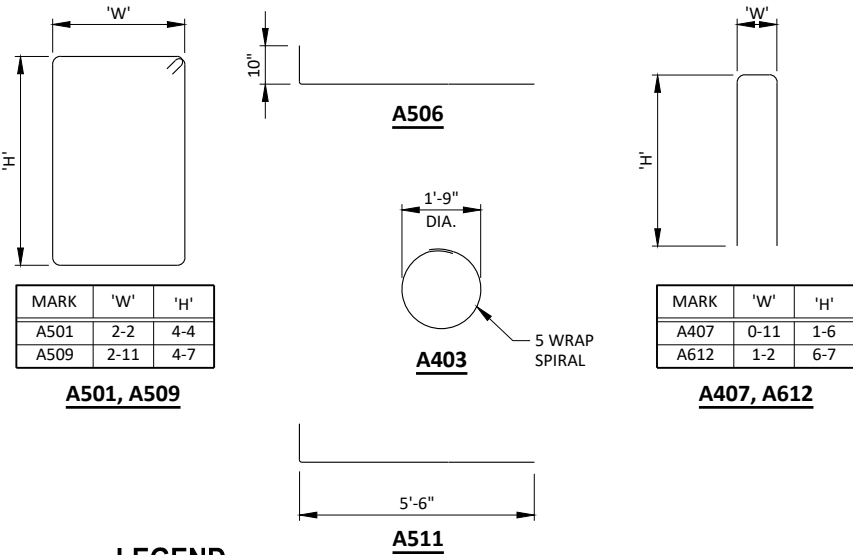
1,120 LB (COATED)
1,740 LB (UNCOATED)

BILL OF BARS
SOUTH ABUTMENT

BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	LOCATION
A501	45	13-8	X		BODY - VERT. - STIRRUP
A402	10	2-3			BODY - VERT. - 2 PER PILE
A403	5	28-0	X		BODY - VERT. - SPIRAL - 1 PER PILE
A604	11	36-2			BODY - HORIZ.
A605	6	20-4			BODY - HORIZ. B.F. - CENTER
A506	12	10-9	X		BODY - HORIZ. B.F. - ENDS
A407	15	3-9	X		BODY - VERT. - TOP BETWEEN SEATS
A408	6	8-6			BODY - HORIZ. - TOP BETWEEN SEATS
A509	8	15-8	X	X	WING 1 & 2 - VERT. - STIRRUP
A410	6	4-8		X	WING 1 & 2 - VERT.
A511	28	5-10	X	X	WING 1 & 2 - HORIZ. - F.F. & B.F.
A612	26	14-0	X	X	WING 1 & 2 - VERT. - TOP
A413	14	7-9	X		WING 1 & 2 - HORIZ. - BOTTOM
A414	20	9-7		X	WING 1 & 2 - HORIZ. - F.F. & B.F.
A615	4	9-7		X	WING 1 & 2 - HORIZ. - TOP

NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.



LEGEND

OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6.
3/4" "V" GROOVE AT FRONT FACE OF WING WALL AND HORIZONTAL 18" RUBBERIZED MEMBRANE WATERPROOFING AT BACK FACE IF CONSTRUCTION JOINT IS USED. COST IS INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY BRIDGES".

GIRDER SEAT. SEE SHEET 4 FOR ELEVATIONS

1/2" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINUOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE)

FINISH TOP SURFACE. SLOPE SAME AS SUPERSTRUCTURE.

NOTES

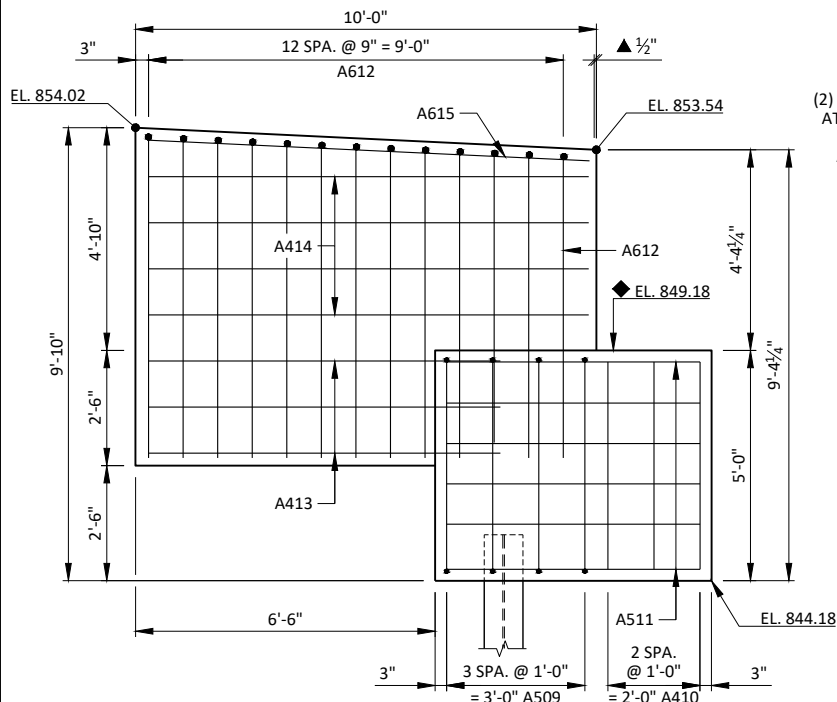
SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE THIS SHEET FOR BILL OF BARS.

SPACE REINFORCEMENT TO MISS PILING

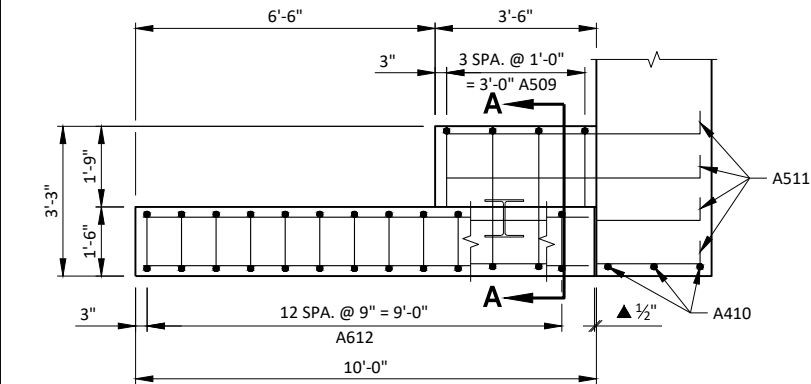
F.F. - FRONT FACE

B.F. - BACK FACE

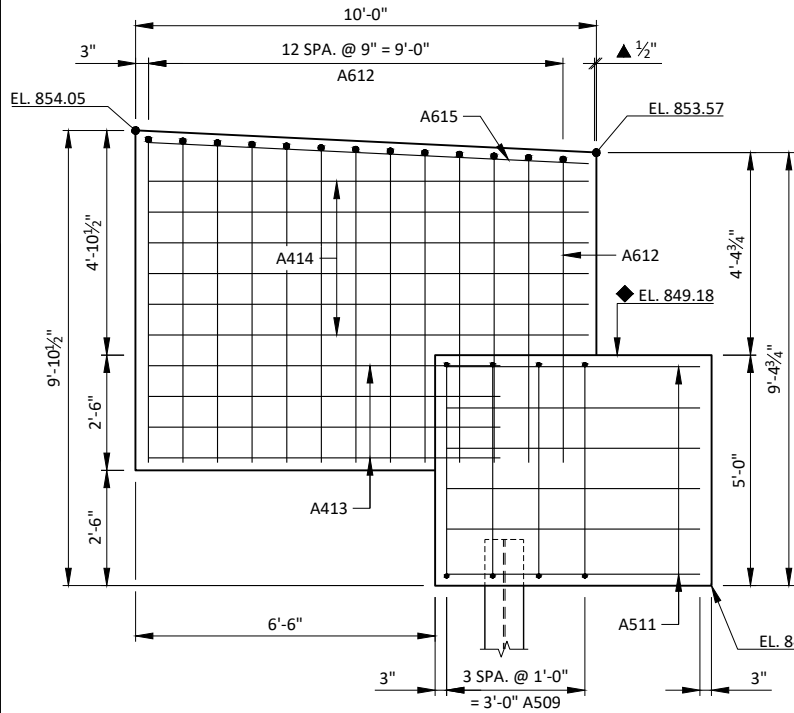
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-147			
DRAWN BY		CTMP	PLANS CK'D. PTB
SOUTH ABUTMENT DETAILS		SHEET 5 OF 13	



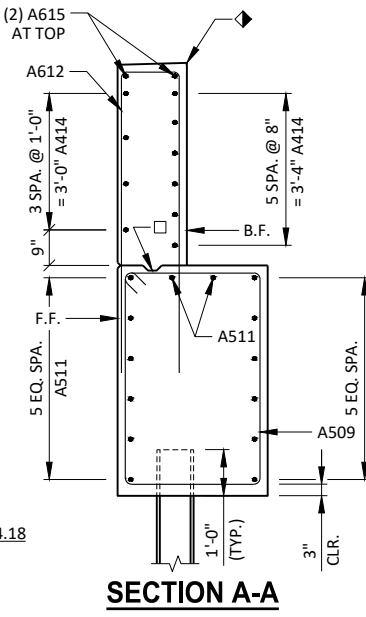
F.F. ELEVATION - WING 1



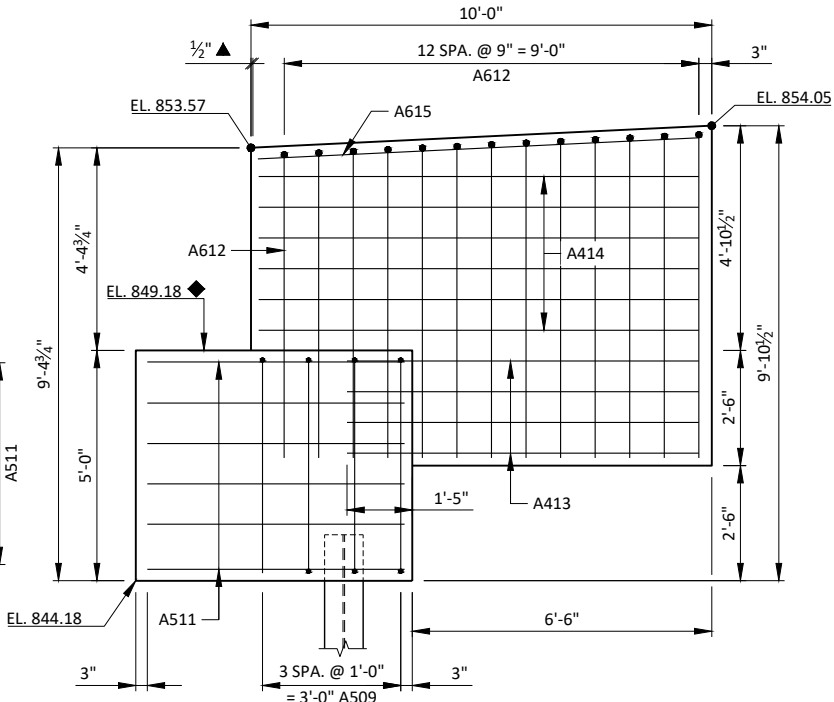
PLAN VIEW - WING 1



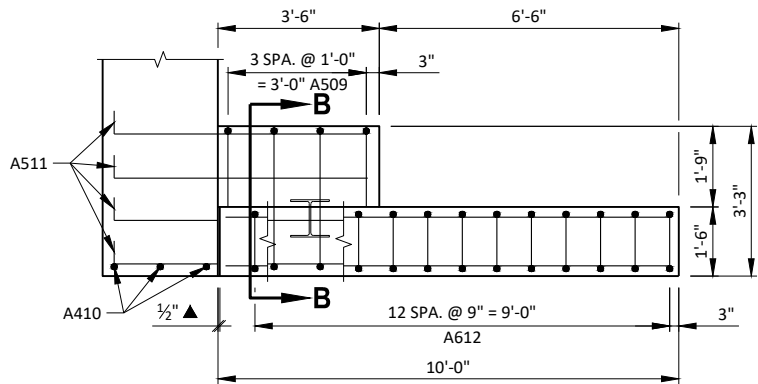
B.F. ELEVATION - WING 2



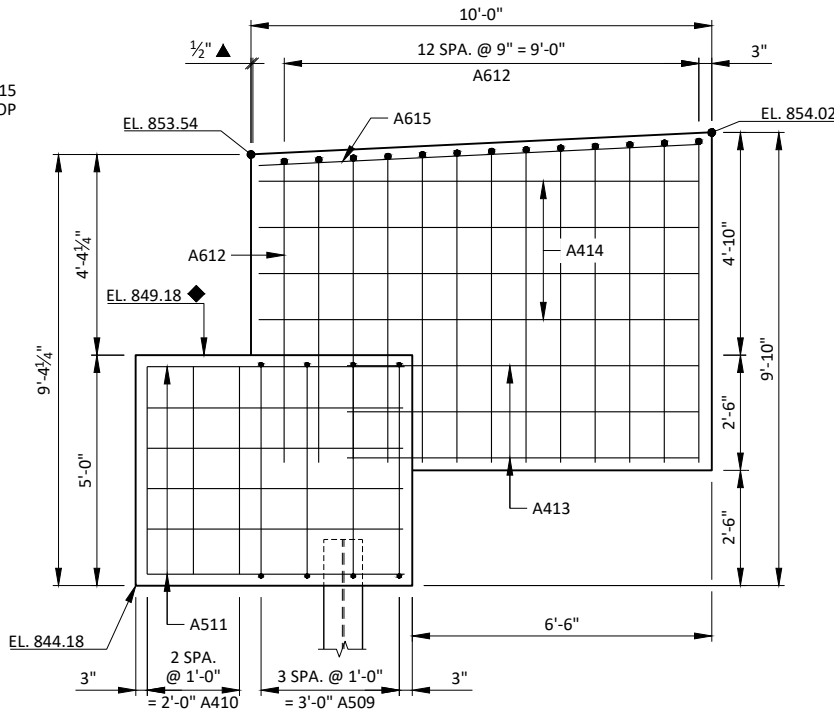
SECTION A-A



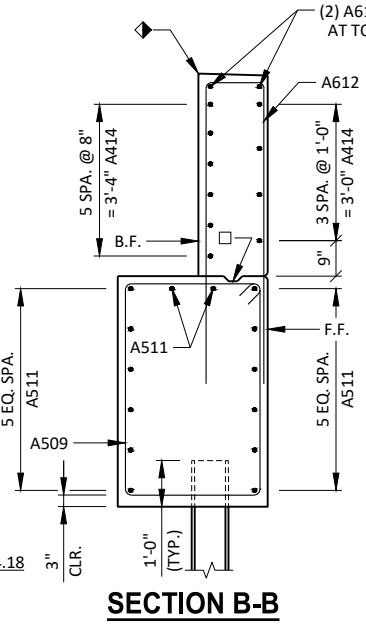
B.F. ELEVATION - WING 1



PLAN VIEW - WING 2

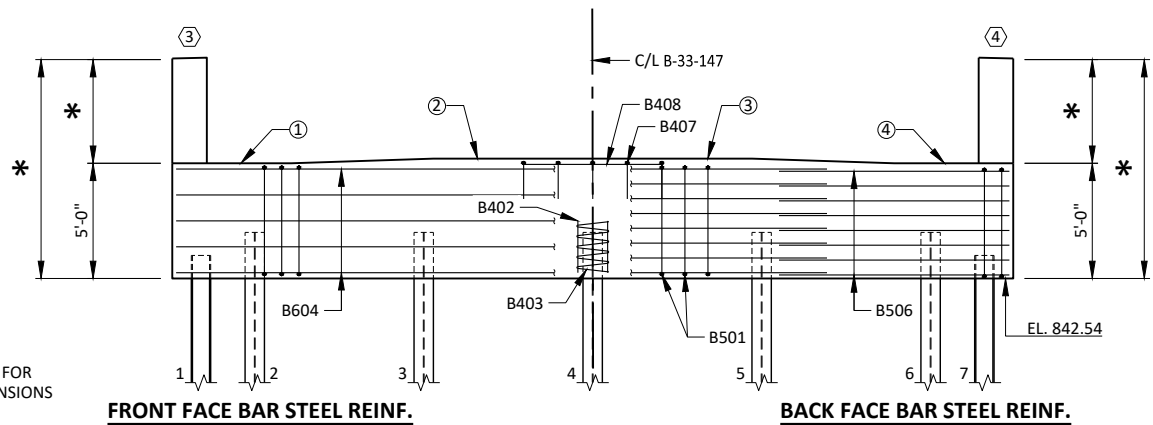


F.F. ELEVATION - WING 2

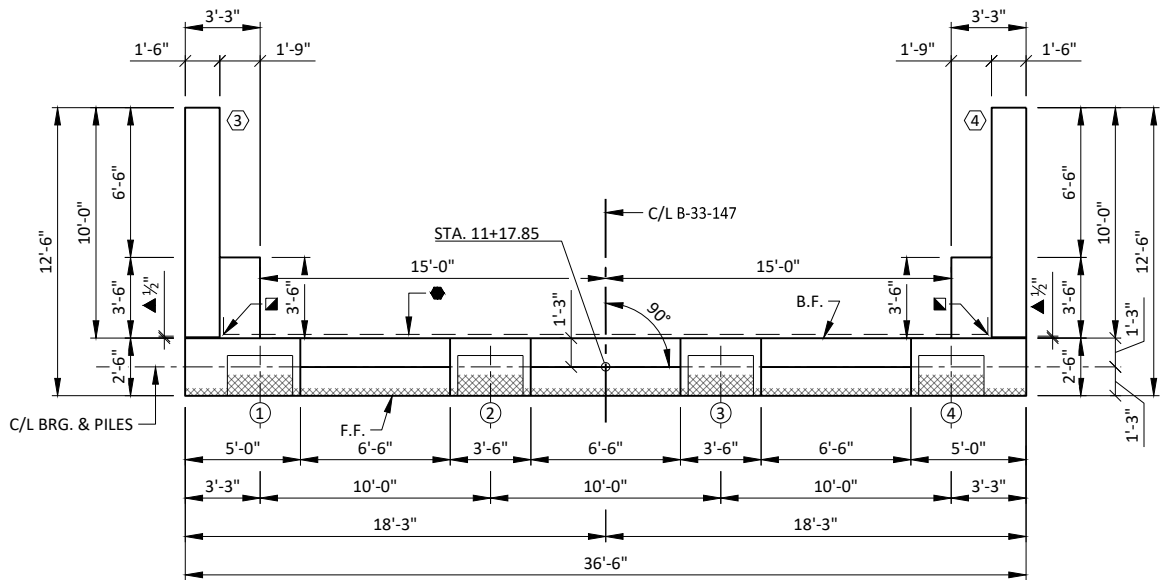


SECTION B-B

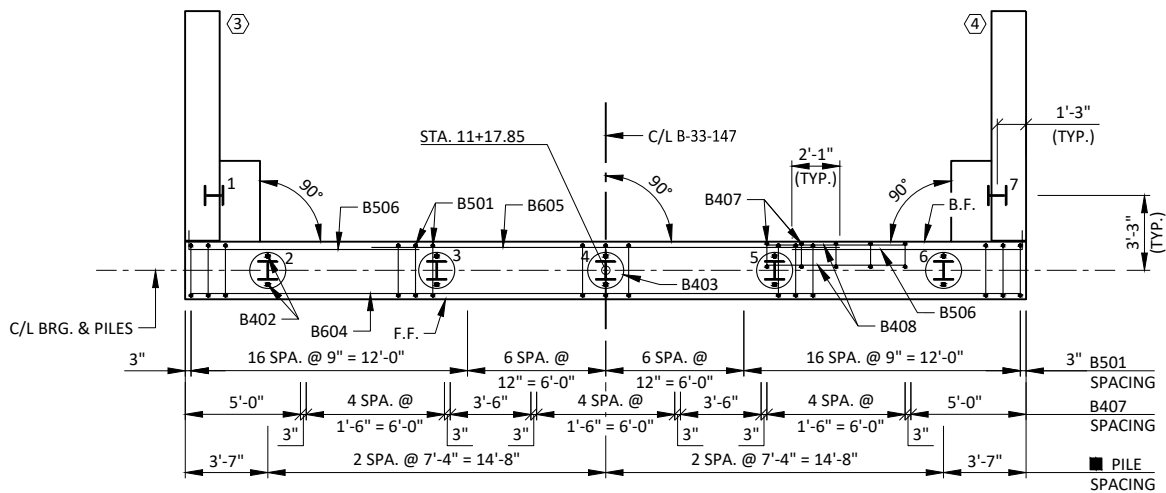
* SEE SHEET 7 FOR WING DIMENSIONS



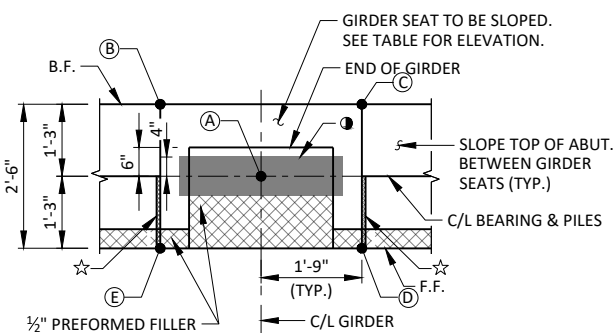
ELEVATION
(NORTH ABUTMENT LOOKING NORTH)



PLAN



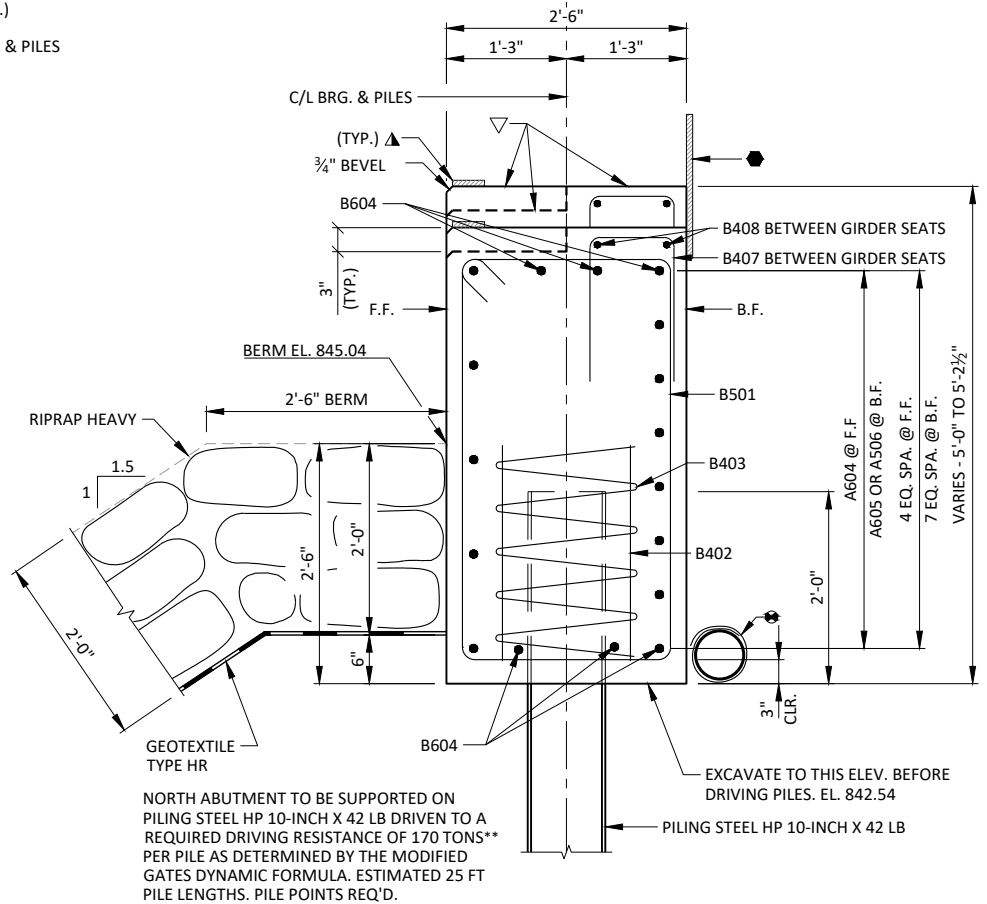
LAYOUT



GIRDER SEAT DETAIL
INTERIOR GIRDER SHOWN.
EXTERIOR GIRDERS SIMILAR.

GIRDER SEAT ELEVATIONS

GIRDER NUMBER	ELEV. (A)	ELEV. (B)	ELEV. (C)	ELEV. (D)	ELEV. (E)
1	847.54	847.51	847.51	847.57	847.57
2	847.74	847.71	847.71	847.77	847.77
3	847.74	847.71	847.71	847.77	847.77
4	847.54	847.51	847.51	847.57	847.57



TYPICAL SECTION THROUGH ABUTMENT BODY

LEGEND

- VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM 9" BELOW BRIDGE SEAT TO 1" BELOW TOP OF WINGS.
- 18" RUBBERIZED MEMBRANE WATERPROOFING. (HORIZONTAL)
- ▲ 1/2" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINUOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE)
- ▲ 1/2" x 4" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF DIAPHRAGM. USE 1/2" PREFORMED FILLER UNDER GIRDERS.
- PILE SPACING MEASURED AT BASE OF ABUTMENT BODY.
- ◆ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 2. RODENT SCREEN TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."
- ☆ 3/4" CORK FILLER ON VERTICAL GIRDER SEAT FACES THAT RUN PARALLEL WITH GIRDER.
- 1/2"x8"x2'-10" NON-LAMINATED ELASTOMERIC BEARING PAD.
- ▽ STEEL TROWEL ENTIRE TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- INDICATES WING NUMBER.

NOTES

- SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 7 FOR BILL OF BARS.
- DO NOT PLACE FILL HIGHER THAN 3 FEET FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.
- SPACE REINFORCEMENT TO MISS PILING
- F.F. - FRONT FACE
- B.F. - BACK FACE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-147			
DRAWN BY		CTMP	PLANS CK'D. PTB
NORTH ABUTMENT			SHEET 6 OF 13

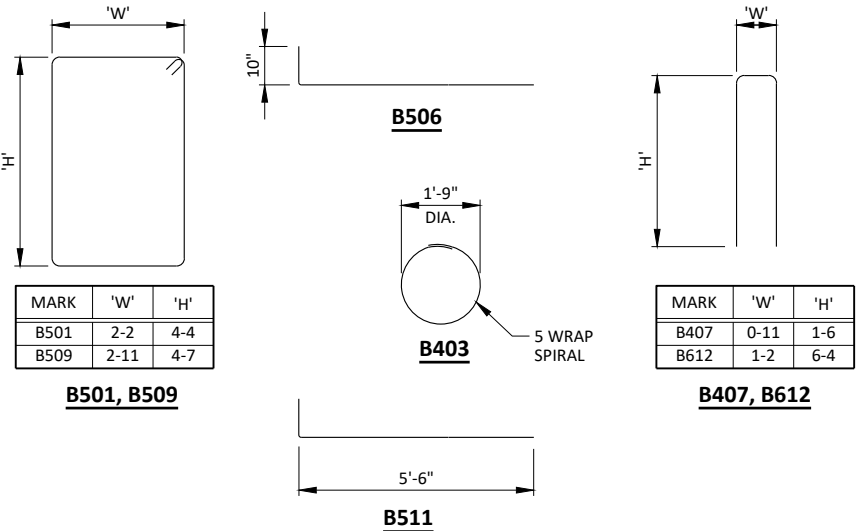
BILL OF BARS
NORTH ABUTMENT

1,110 LB (COATED)
1,740 LB (UNCOATED)

BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	LOCATION
B501	45	13-8	X		BODY - VERT. - STIRRUP
B402	10	2-3			BODY - VERT. - 2 PER PILE
B403	5	28-0	X		BODY - VERT. - SPIRAL - 1 PER PILE
B604	11	36-2			BODY - HORIZ.
B605	6	20-4			BODY - HORIZ. B.F.
B506	12	10-9	X		BODY - HORIZ. B.F.
B407	15	3-9	X		BODY - VERT. - TOP BETWEEN SEATS
B408	6	8-6			BODY - HORIZ. - TOP BETWEEN SEATS
B509	8	15-8	X	X	WING 3 & 4 - VERT. - STIRRUP
B410	6	4-8		X	WING 3 & 4 - VERT.
B511	28	5-10	X	X	WING 3 & 4 - HORIZ. - F.F. & B.F.
B612	26	13-6	X	X	WING 3 & 4 - VERT. - TOP
B413	14	7-9		X	WING 3 & 4 - HORIZ. - BOTTOM
B414	20	9-7		X	WING 3 & 4 - HORIZ. - F.F. & B.F.
B615	4	9-7		X	WING 3 & 4 - HORIZ. - TOP

NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.



LEGEND

OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6.
3/4" "V" GROOVE AT FRONT FACE OF WING WALL AND HORIZONTAL 18" RUBBERIZED MEMBRANE WATERPROOFING AT BACK FACE IF CONSTRUCTION JOINT IS USED. COST IS INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY BRIDGES".

GIRDER SEAT. SEE SHEET 6 FOR ELEVATIONS

1/2" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINUOUS JOINT SEALER. (1" DEEP & HOLD 3/8" BELOW SURFACE OF CONCRETE)

FINISH TOP SURFACE. SLOPE SAME AS SUPERSTRUCTURE.

NOTES

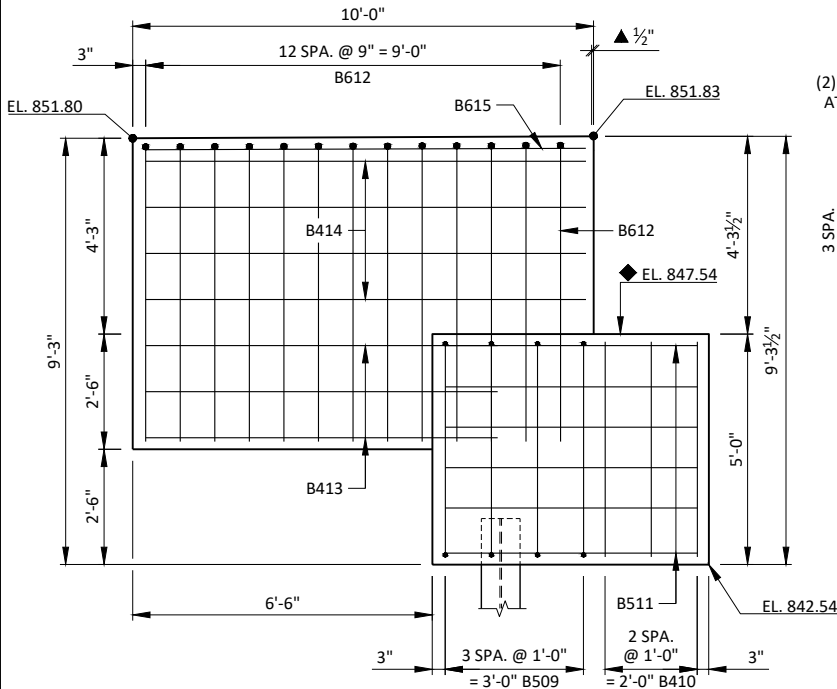
SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE THIS SHEET FOR BILL OF BARS.

SPACE REINFORCEMENT TO MISS PILING

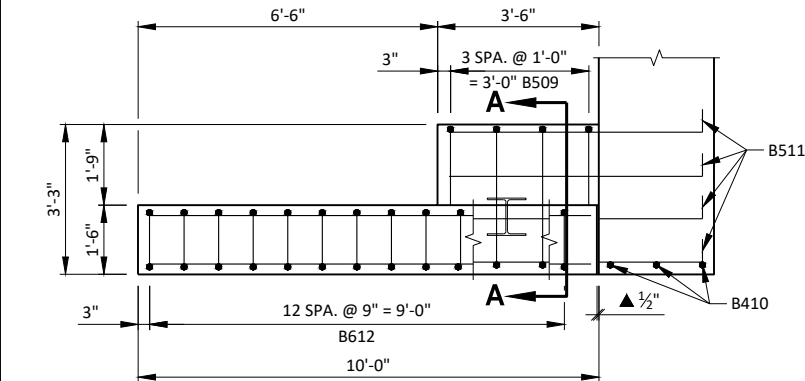
F.F. - FRONT FACE

B.F. - BACK FACE

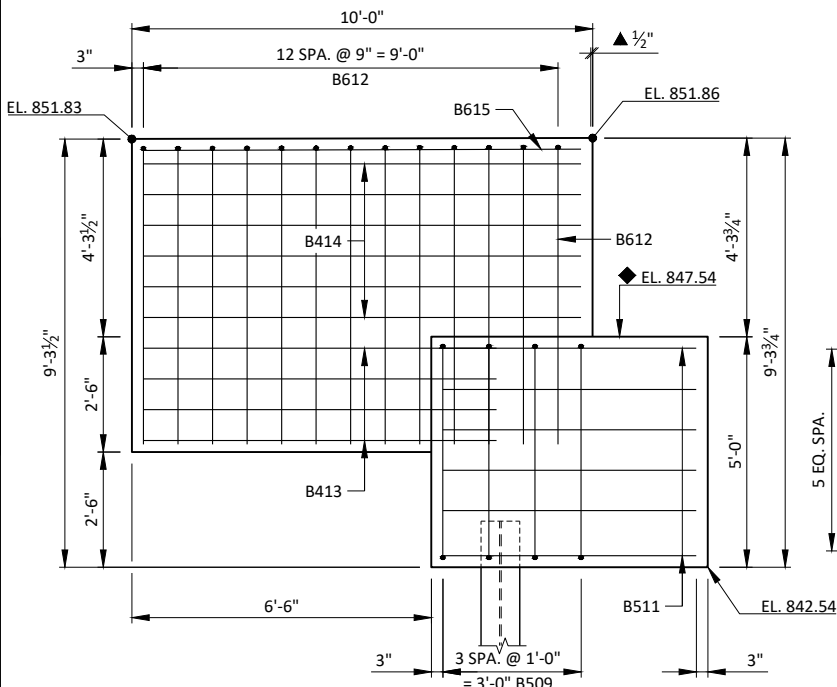
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-147			
DRAWN BY		CTMP	PLANS CK'D. PTB
NORTH ABUTMENT DETAILS		SHEET 7 OF 13	



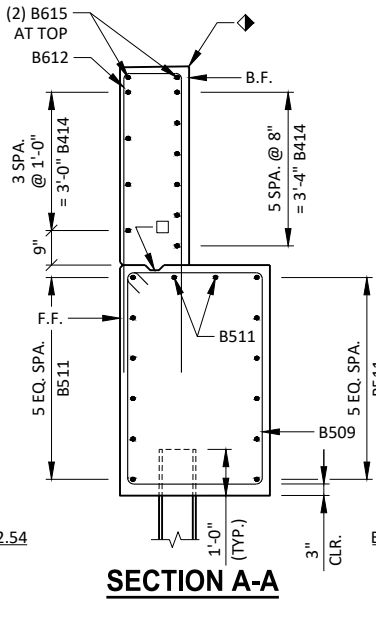
F.F. ELEVATION - WING 3



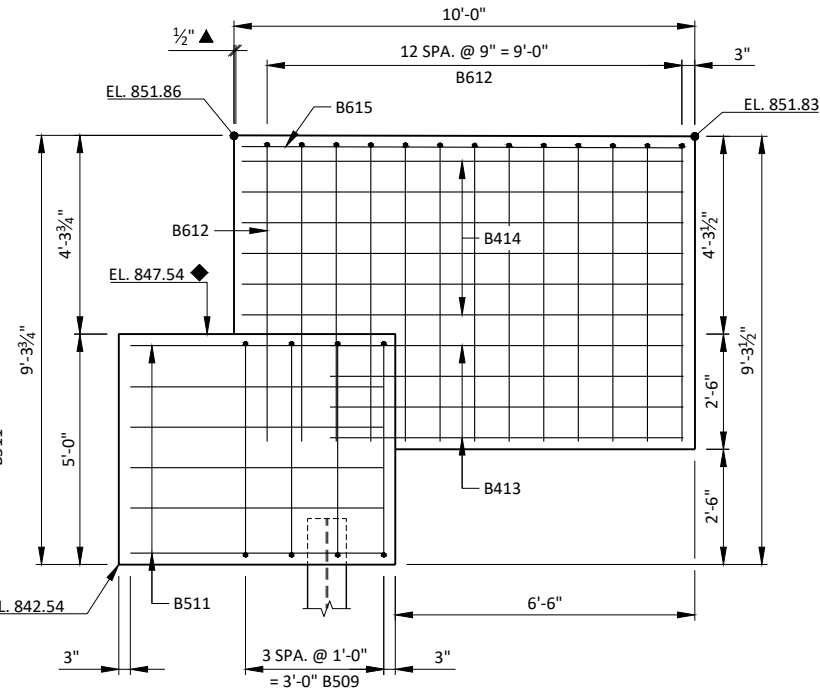
PLAN VIEW - WING 3



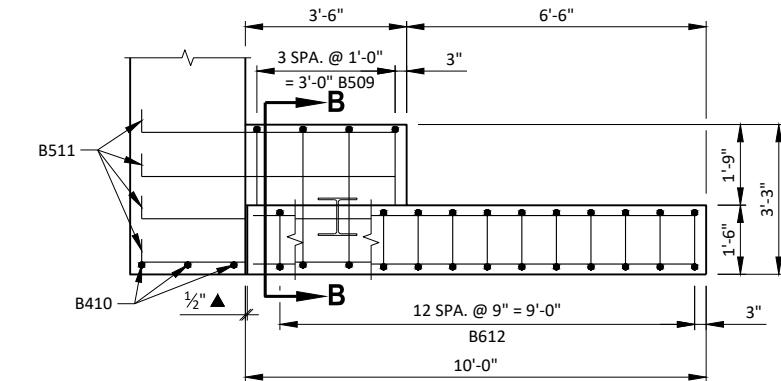
B.F. ELEVATION - WING 4



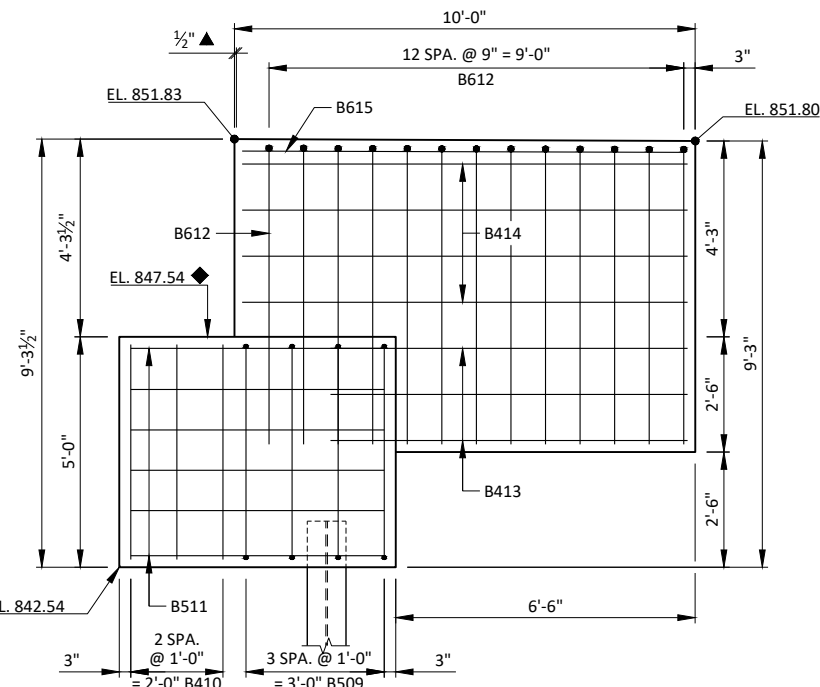
SECTION A-A



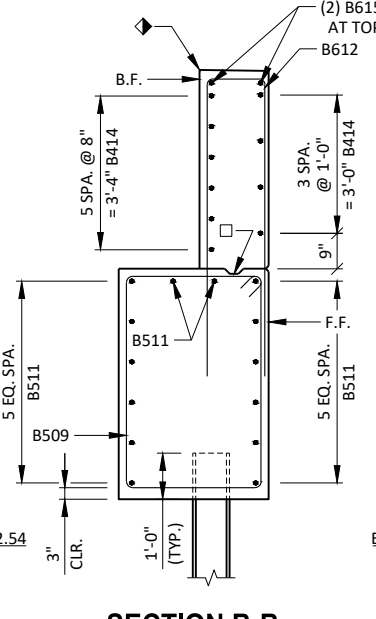
B.F. ELEVATION - WING 3



PLAN VIEW - WING 4



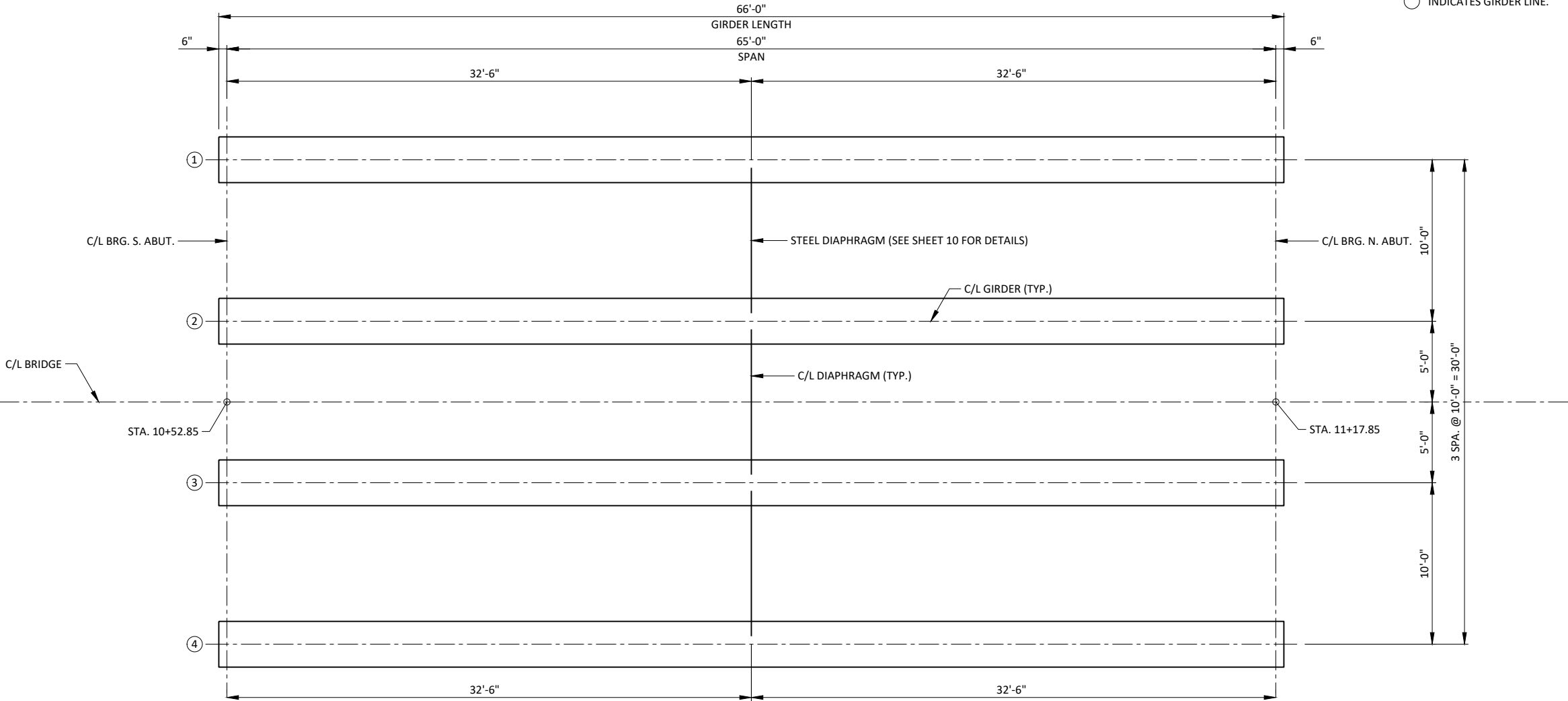
F.F. ELEVATION - WING 4



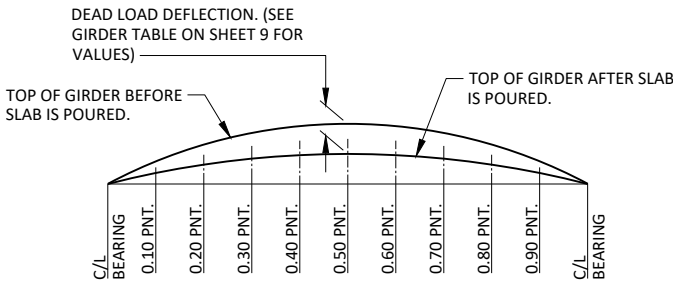
SECTION B-B

LEGEND

○ INDICATES GIRDER LINE.



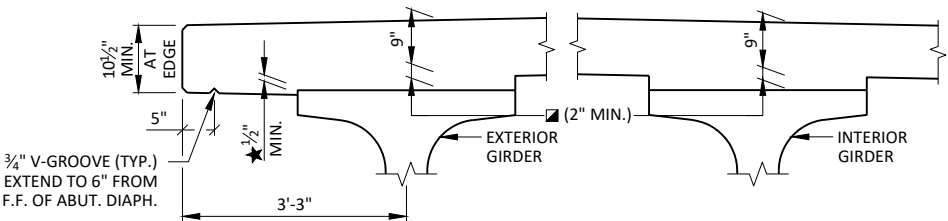
GIRDER LAYOUT



DEAD LOAD DEFLECTION DIAGRAM

TOP OF DECK ELEVATIONS

GIRDER LINE	C/L S. ABUT.	0.10 PNT.	0.20 PNT.	0.30 PNT.	0.40 PNT.	0.50 PNT.	0.60 PNT.	0.70 PNT.	0.80 PNT.	0.90 PNT.	C/L N. ABUT.
W. EDGE	853.48	853.21	852.96	852.73	852.53	852.35	852.20	852.07	851.97	851.89	851.84
1	853.55	853.27	853.02	852.80	852.60	852.42	852.27	852.14	852.04	851.96	851.90
2	853.75	853.47	853.22	853.00	852.80	852.62	852.47	852.34	852.24	852.16	852.10
C/L	853.85	853.57	853.32	853.10	852.90	852.72	852.57	852.44	852.34	852.26	852.20
3	853.75	853.47	853.22	853.00	852.80	852.62	852.47	852.34	852.24	852.16	852.10
4	853.55	853.27	853.02	852.80	852.60	852.42	852.27	852.14	852.04	851.96	851.90
E. EDGE	853.48	853.21	852.96	852.73	852.53	852.35	852.20	852.07	851.97	851.89	851.84



IF 2" MINIMUM HAUNCH HEIGHT "■" CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. MAXIMUM HAUNCH HEIGHT EQUALS "STIRRUP PROJECTION" MINUS 3".

TO DETERMINE "■" (AFTER GIRDERS ARE IN PLACE): OBTAIN THE ELEVATIONS OF THE TOP OF GIRDER AT THE C/L OF SUBSTRUCTURE UNITS AND AT EACH 1/10 POINT FOR EVERY GIRDER AND ALL SPANS, THEN PROCEED WITH THE PROCESS SHOWN BELOW.

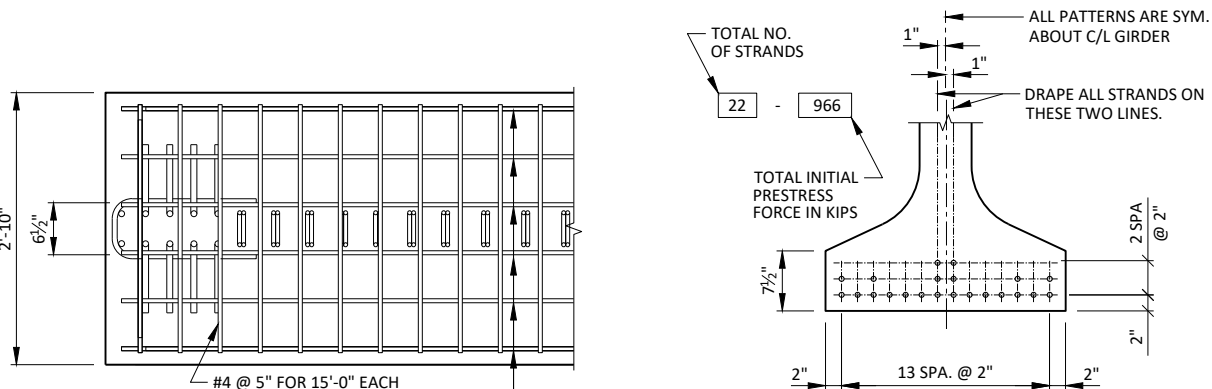
TOP OF DECK ELEVATION AT THE FINAL GRADE
-TOP OF GIRDER ELEVATION
+DEAD LOAD DEFLECTION
-SLAB THICKNESS
=HAUNCH HEIGHT "■"

NOTE: AN AVERAGE HAUNCH "■" OF 4" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

★ SLAB THICKNESS SHALL BE INCREASED AS NECESSARY TO CONCEAL INTERSECTION OF SLAB AND TOP OF GIRDER AT ALL FACIA GIRDERS.

SLAB HAUNCH DETAIL

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-147			
DRAWN BY		CTMP	PLANS CK'D. PTB
GIRDER LAYOUT			SHEET 8 OF 13



TOP FLANGE

TYP. STRAND PATTERN

THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN

SPAN	CAMBER (IN.)
1	1.6"

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

GIRDER NOTES

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 SECTION 503.3.3 OF STANDARD SPECIFICATION FOR GUIDANCE.

PRESTRESSING STRANDS SHALL BE 0.60" DIA.-7-WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER.

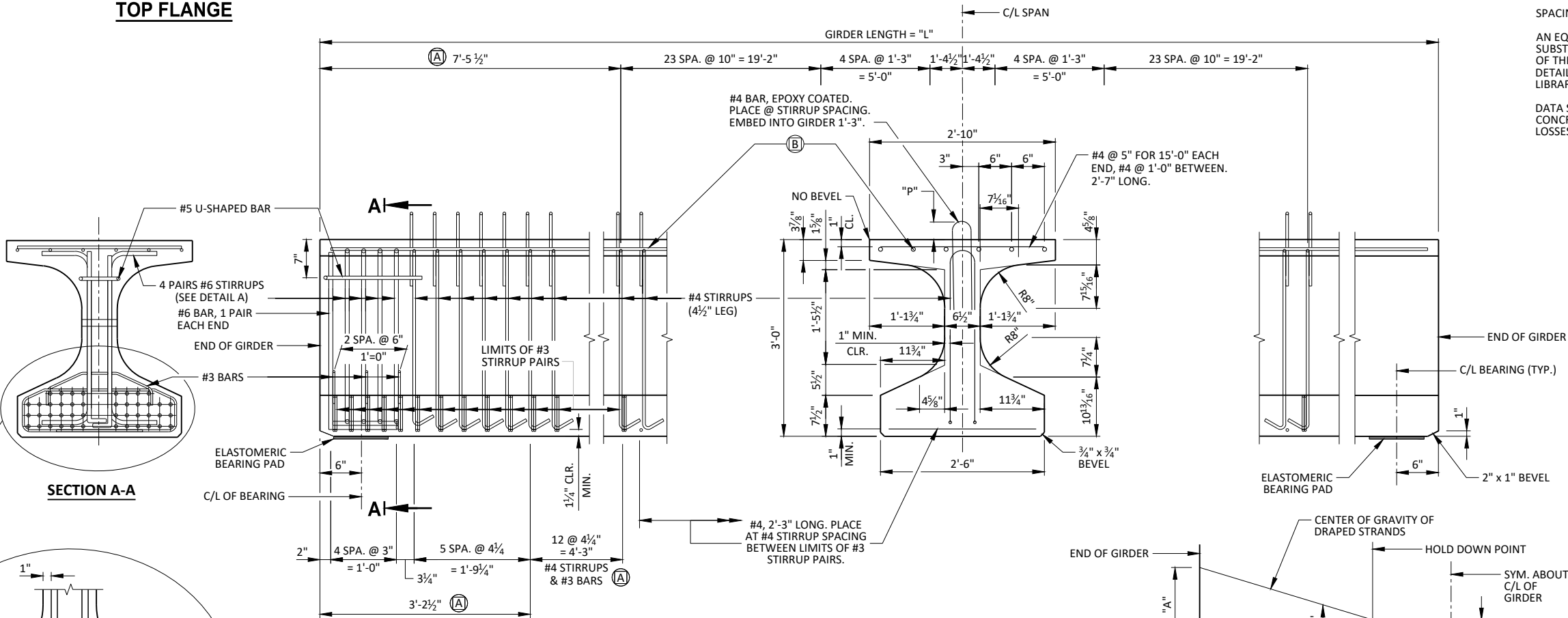
FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET. SEE SHEET 8 FOR LOCATIONS ALONG THE GIRDERS.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

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 MAINTENANCE SECTION. IF USED, WWF SUBSTITUTION DETAILS SHALL BE SUBMITTED ELECTRONICALLY TO THE WISDOT FABRICATION LIBRARY AND ACCEPTED PRIOR TO SHOP DRAWING SUBMITTAL.

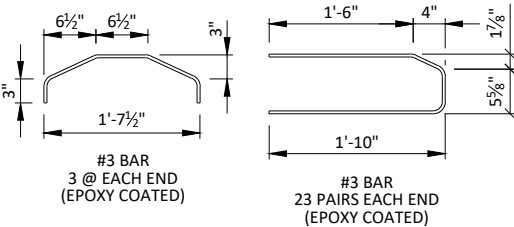
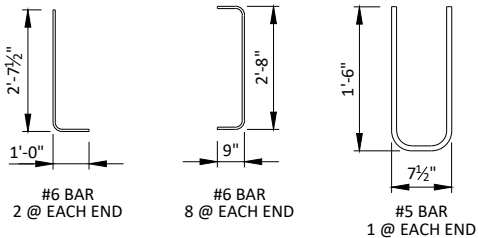
DATA SHOWN IN DEFLECTION DATA IS THEORETICAL AND MAY VARY WITH CONCRETE STRENGTH, VARIABLE PRESTRESS CONDITIONS AND PRESTRESS LOSSES.



SIDE VIEW & TYP. SECTION IN SPAN

- (A) DETAIL TYP. AT EACH END
- (B) 6 #4 BARS, FULL LENGTH, MAY BE SPLICED, USE 36" MIN. LAP

DRAPED STRAND PROFILE



SECTION A-A

BOTTOM FLANGE

DETAIL A

GIRDER DATA

GIRDER DATA																									
GIRDER LENGTH "L"	QUANT.	DEAD LOAD DEFL. (IN.)										CONC. STRGTH. f'c (KSI)	STIRRUP PROJECTION "p"			DIA. OF STRAND (IN.)	DRAPED PATTERN (INCHES)						UNDRAINED PATTERN		GIRDER NO.
		1/40	3/40	5/40	7/40	9/40	11/40	13/40	15/40	17/40	19/40		1ST 1/2	MID 1/2	END 1/2		TOTAL NO. OF STRANDS	f'ci (KSI) *	(INCHES)				TOTAL NO. OF STRANDS	f'ci (KSI) *	
																			"A"	"B" MIN.	"B" MAX.	"C"			
66'-0"	4	0.3	0.5	0.7	0.8	0.8	0.8	0.7	0.5	0.3	8.0	9"	7"	9"	0.6	22	6.8	32	11	14	4	--	--	1-4	

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

NOTE: SEE SHEET 8 FOR DEAD LOAD DEFLECTION DIAGRAM.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-147			
DRAWN BY		CTMP	PLANS CK'D. PTB
36W-INCH PRESTRESSED GIRDER DETAILS		SHEET 9 OF 13	

NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-33-147", EACH.

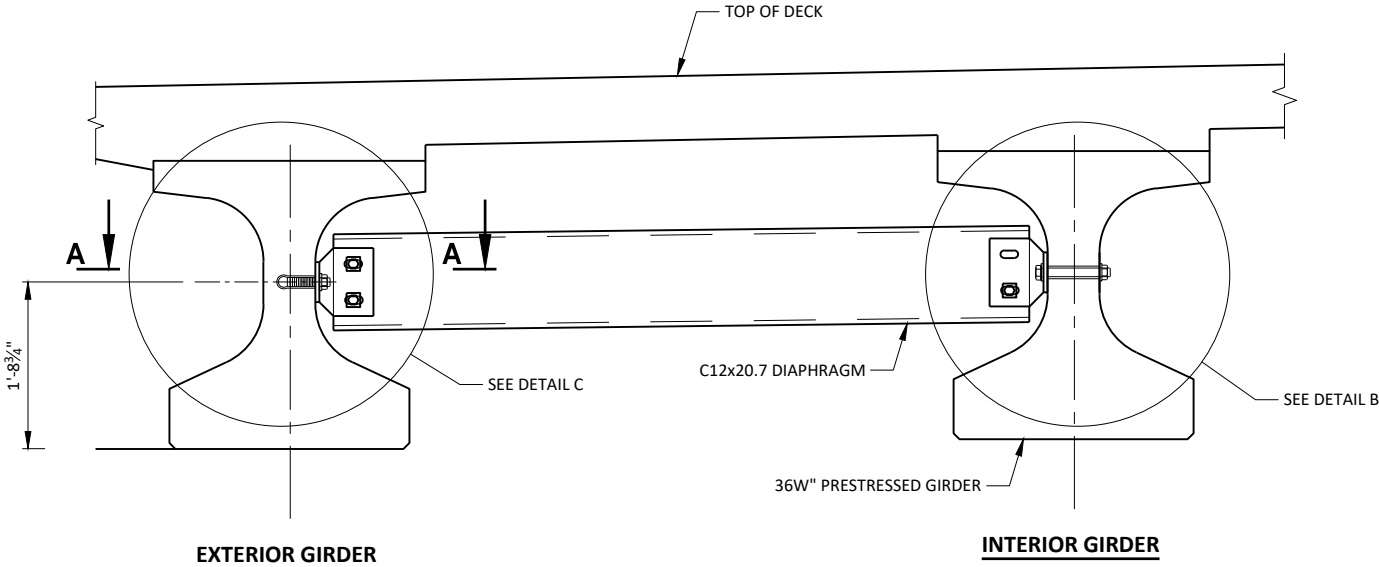
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

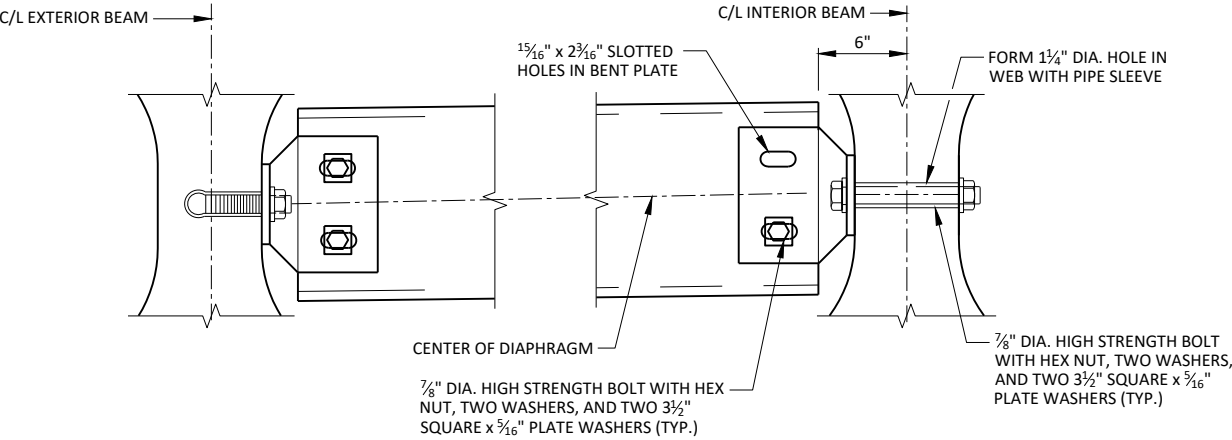
ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS ¼ TURN UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

PLACE ONE DIAPHRAGM AT MID-LENGTH OF GIRDER AS INDICATED ON SHEET 8.

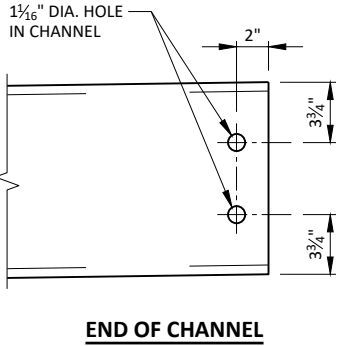


PART TRANSVERSE SECTION AT DIAPHRAGM

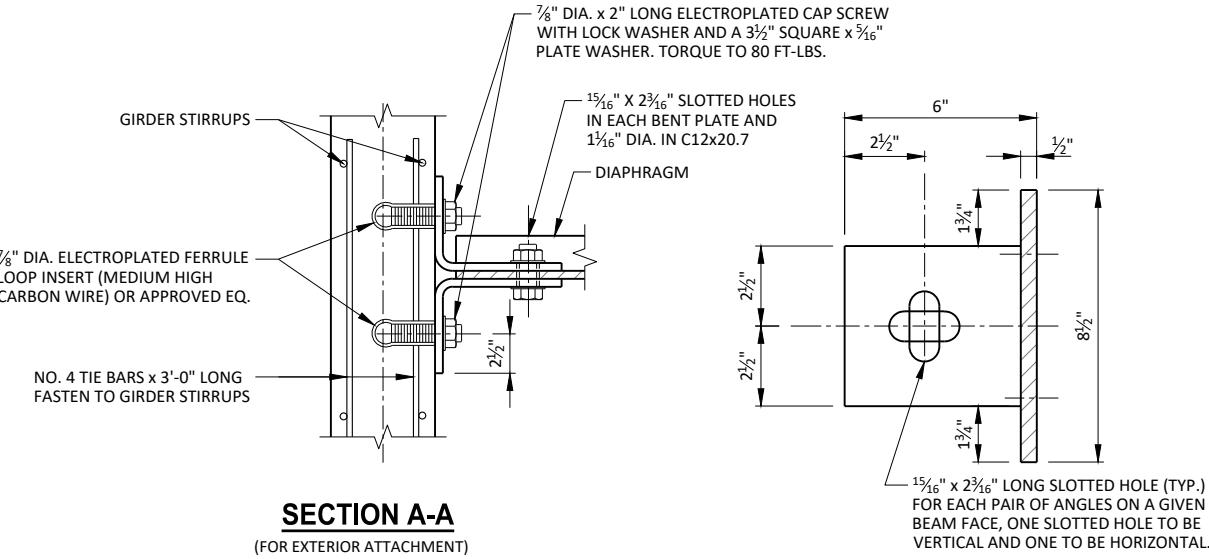


DETAIL C

DETAIL B

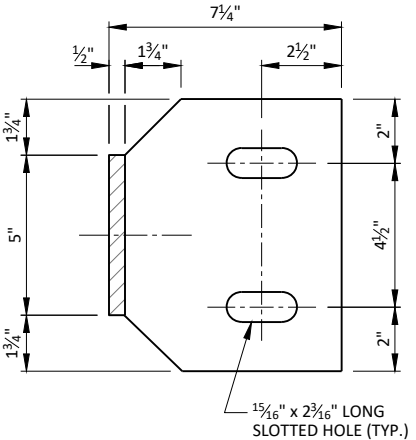


END OF CHANNEL

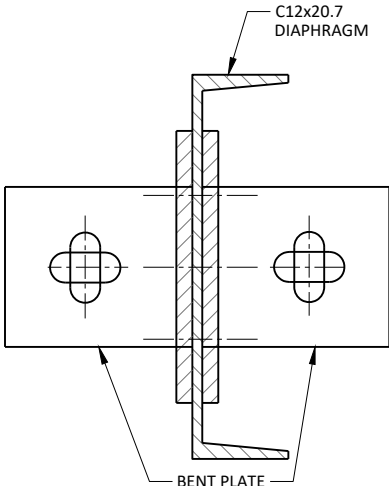


SECTION A-A
(FOR EXTERIOR ATTACHMENT)

BEAM FACE

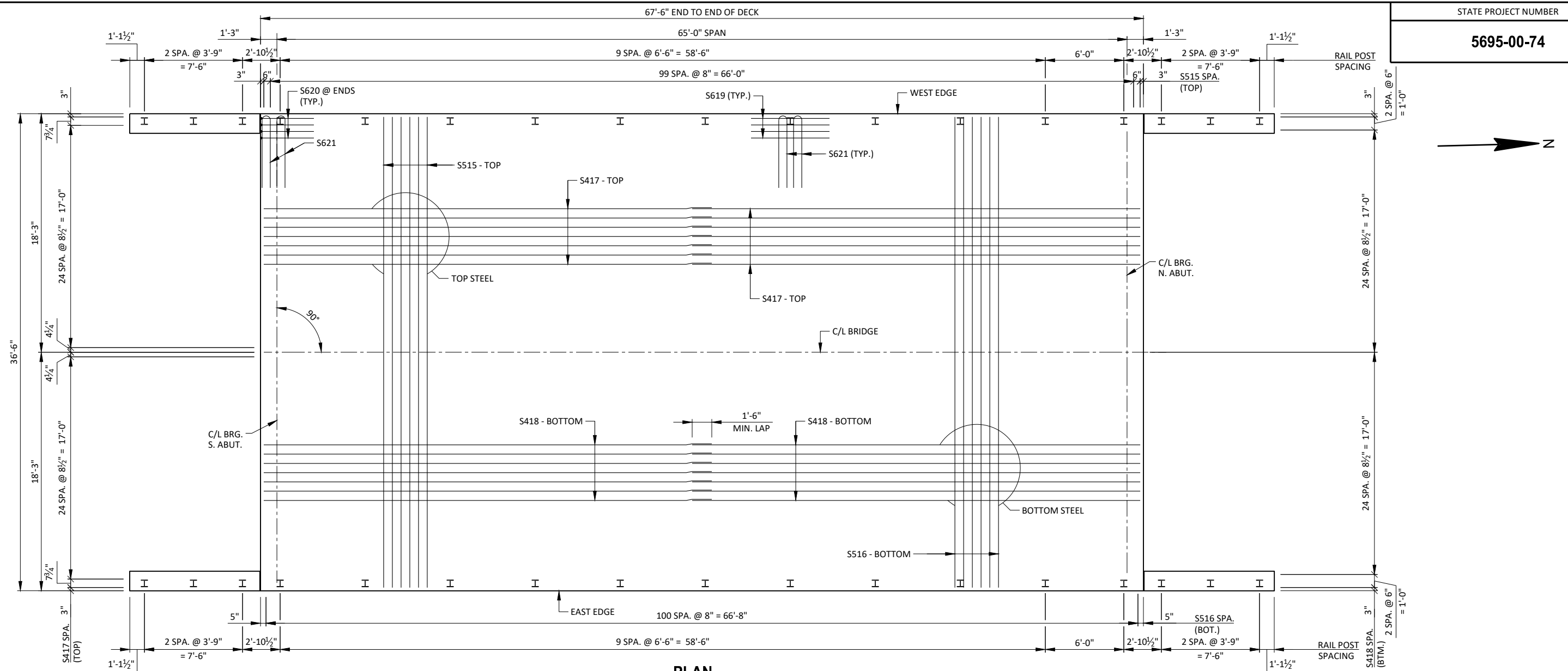


DIAPHRAGM FACE



ATTACHMENT TO CHANNEL

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-147			
DRAWN BY		CTMP	PLANS CK'D. PTB
STEEL DIAPHRAGM			SHEET 10 OF 13



BILL OF BARS
SUPERSTRUCTURE

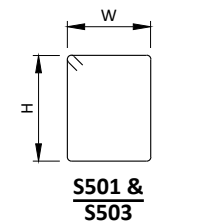
16,730 LB (COATED)

BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	LOCATION
S501	72	11-0	X	X	ABUT. DIAPHRAGM - VERT.
S502	72	5-11	X	X	ABUT. DIAPHRAGM - VERT. - TOP
S503	16	7-8	X	X	ABUT. DIAPHRAGM - VERT. - GIRDER FLANGE
S604	4	1-6		X	ABUT. DIAPHRAGM - HORIZ. - FRONT - ENDS - BOTTOM
S605	4	1-4		X	ABUT. DIAPHRAGM - HORIZ. - FRONT - ENDS - TOP.
S606	8	6-4	X	X	ABUT. DIAPHRAGM - HORIZ. - FRONT - ENDS
S407	8	2-6		X	ABUT. DIAPHRAGM - VERT. - ENDS
S608	6	7-0		X	ABUT. DIAPHRAGM - HORIZ. FRONT - BOTTOM.
S609	6	6-8		X	ABUT. DIAPHRAGM - HORIZ. FRONT - TOP.
S610	24	5-11		X	ABUT. DIAPHRAGM - HORIZ. FRONT
S611	12	36-2		X	ABUT. DIAPHRAGM - HORIZ. - BACK
S412	12	6-2		X	ABUT. DIAPHRAGM - HORIZ. BOT.
S413	48	3-3	X	X	ABUT. DIAPHRAGM - VERT. - BOT.
S514	16	6-0		X	ABUT. DIAPHRAGM - GIRDER WEB
S515	102	36-2		X	DECK - TOP - TRANSVERSE
S516	101	36-2		X	DECK - BOTTOM - TRANSVERSE
S417	104	34-4		X	DECK - TOP - LONGITUDINAL
S418	106	34-4		X	DECK - BOTTOM - LONGITUDINAL
S619	72	6-0		X	DECK - RAIL POSTS - INTERIOR
S620	16	4-10	X	X	DECK - RAIL POSTS - ENDS
S621	44	11-4	X	X	DECK - RAIL POSTS

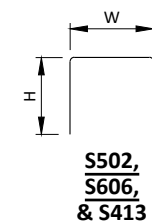
NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY.
SEE SHEET 12 FOR BAR SPACING IN THE DECK
AND THIS SHEET FOR BILL OF BARS.

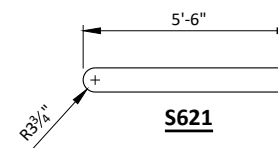
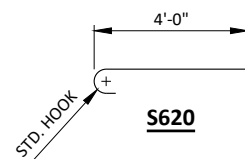
T.D. - TOP OF DECK



MARK	'H'	'W'
S501	3-0	2-2
S503	1-4	2-2



MARK	'H'	'W'
S502	2-0	2-2
S606	2-4	2-2
S413	1-3	0-11



NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

* LENGTH SHOWN IS AN AVERAGE LENGTH ONLY. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

5695-00-74

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-147			
		DRAWN BY	CTMP CK'D.
		PTB	
SUPERSTRUCTURE		SHEET 11 OF 13	



- 18" RUBBERIZED MEMBRANE WATERPROOFING (HORIZONTAL)
- ☆ ½" NON-LAMINATED ELASTOMERIC BEARING PAD AND ½" PREFORMED FILLER.
- ▲ 4"x ½" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF DIAPHRAGM.
- ◇ (1) 1½" DIAMETER HOLE IN WEB FOR (2) S514 HORIZONTAL BARS. BARS TO BE PLACED SYMMETRICAL ABOUT C/L OF GIRDERS.
- ▽ OPTIONAL CONSTRUCTION JOINT. IF USED, DECK POUR MUST BE WITHIN 2 WEEKS FROM THE TIME OF THE DIAPHRAGM POUR. IF OPTIONAL CONSTRUCTION JOINT IS USED, PLACE RUBBERIZED MEMBRANE WATERPROOFING BEHIND JOINT. COST IS INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES"

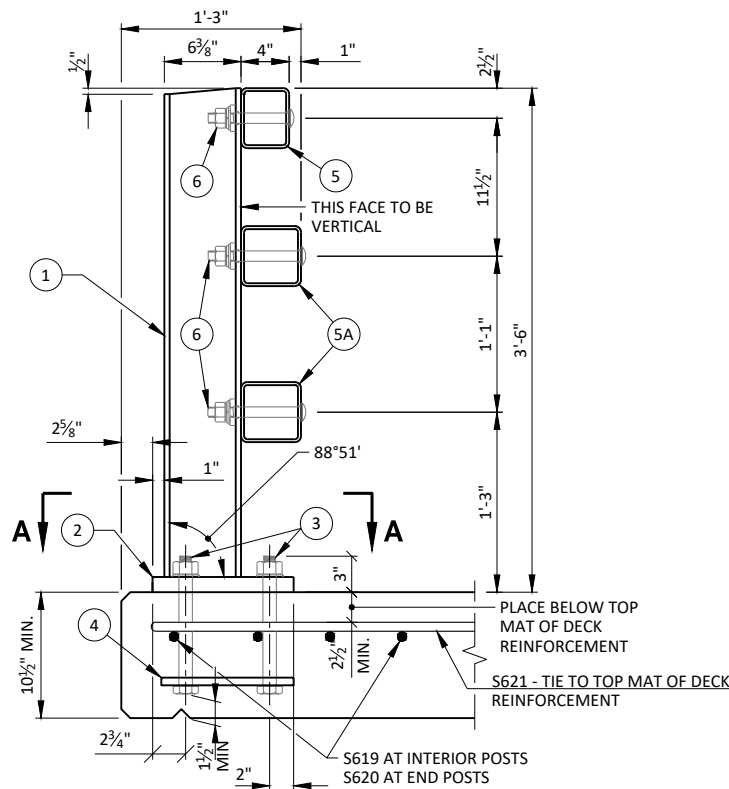
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-33-147			
DRAWN BY		CTMP	PLANS CK'D. PTB
SUPERSTRUCTURE DETAILS		SHEET 12 OF 13	

LEGEND

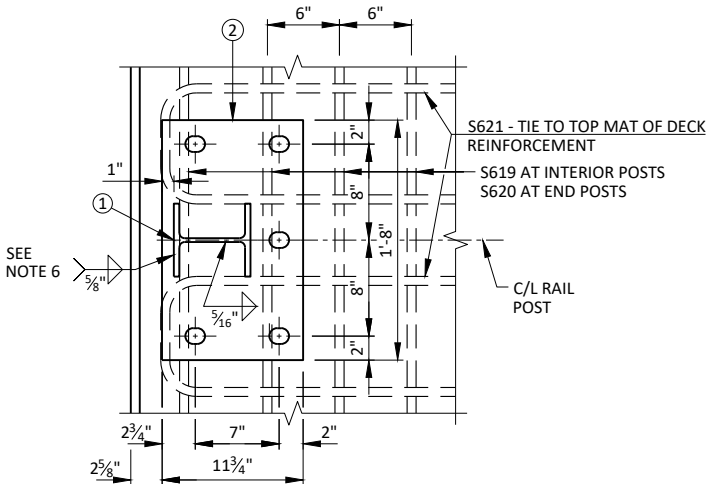
- ① W6x25 WITH 1½" x 1½" HORIZONTAL SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.
- ② PLATE 1¼"x11¾"x1'-8" WITH 1⅞" DIA. OVERSIZED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN.
- ③ ASTM A449 - 1½" 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. AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS < 16" USE 10 ¾" LONG. (AN EQUIVALENT THREADED ROD WITH NUTS AND HARDENED WASHERS MAY BE SUBSTITUTED FOR ANCHOR BOLTS IN WING IF REQ'D. FOR CONTRACTIBILITY.
- ④ ⅝"x11"x1'-8" ANCHOR PLATE (GALVANIZED) WITH 1⅞" DIA. HOLES FOR ANCHOR BOLTS NO. 3.
- ⑤ TSS 5x4x0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
- ⑤A TSS 5x5x0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
- ⑥ ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, ⅜"x1½"x1½" MIN. WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION).
- ⑨ SPLICE SLEEVE FABRICATED FROM ¾" PLATE. PROVIDE "SLIDING FIT".
- ⑩ ⅜"x3⅝"x2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.
- ⑩A ⅜"x2⅝"x2'-4" PLATE USED IN NO. 5, ⅜"x3⅝"x2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.
- ⑪ ⅞" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 1⅞"x1½" LONGIT. SLOTTED HOLES IN PLATE NO. 10A. AT FIELD JOINTS AND 1⅞"x2¼" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 10A. PROVIDE 1⅞" DIA. ROUND HOLES IN TUBES NO. 5 AND NO. 5A.

GENERAL NOTES

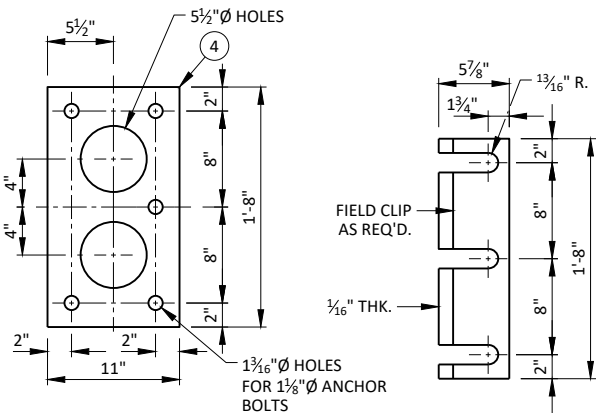
1. BID ITEM SHALL BE "RAILING TUBULAR TYPE M" WHICH INCLUDES ALL ITEMS SHOWN.
2. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY=50 KSI. ANCHOR PLATES AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.
3. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL ⅓ TURN.
4. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE.
5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
6. WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
7. 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.
8. 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.
9. 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 S.S.P.C. SPECIFICATIONS.
10. THIS RAILING MEETS NCHRP REPORT 350 EVALUATION CRITERIA FOR TEST LEVEL 4 (TL-4).



SECTION THROUGH RAILING ON DECK

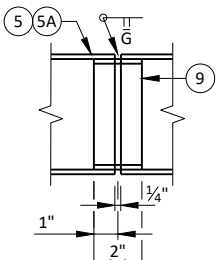


SECTION A-A

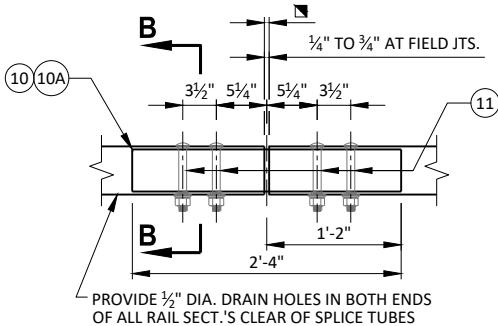


ANCHOR PLATE
AT RAIL TO DECK CONNECTION

POST SHIM
DETAIL

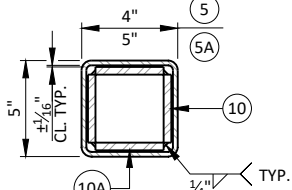


SHOP RAIL
SPLICE DETAIL
(LOCATION MUST BE
SHOWN ON SHOP DRAWINGS)

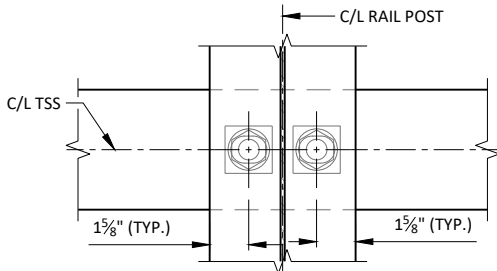


FIELD ERECTION JOINT DETAIL

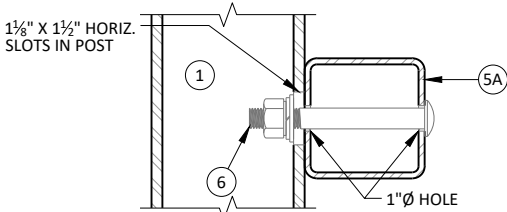
- RDWY. OPENING OR 2½" MIN. FOR STRIP SEAL EXP. JOINT & (⅜" TO ¾") OPENING FOR A1 ABUTMENT.



SECTION B-B



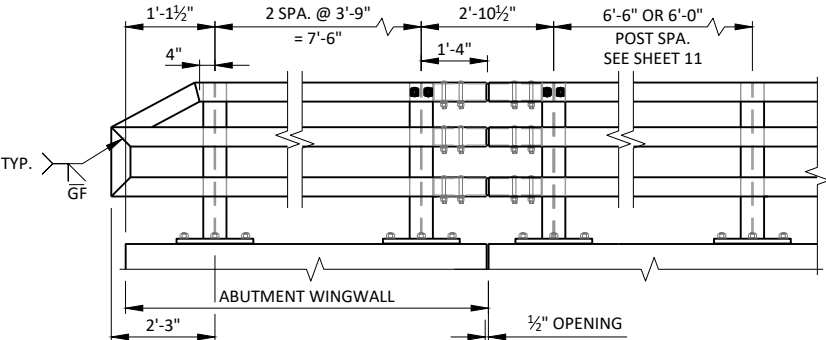
SECTION THROUGH POST WEB



SECTION THROUGH RAIL

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

TYPICAL RAIL TO POST CONNECTIONS



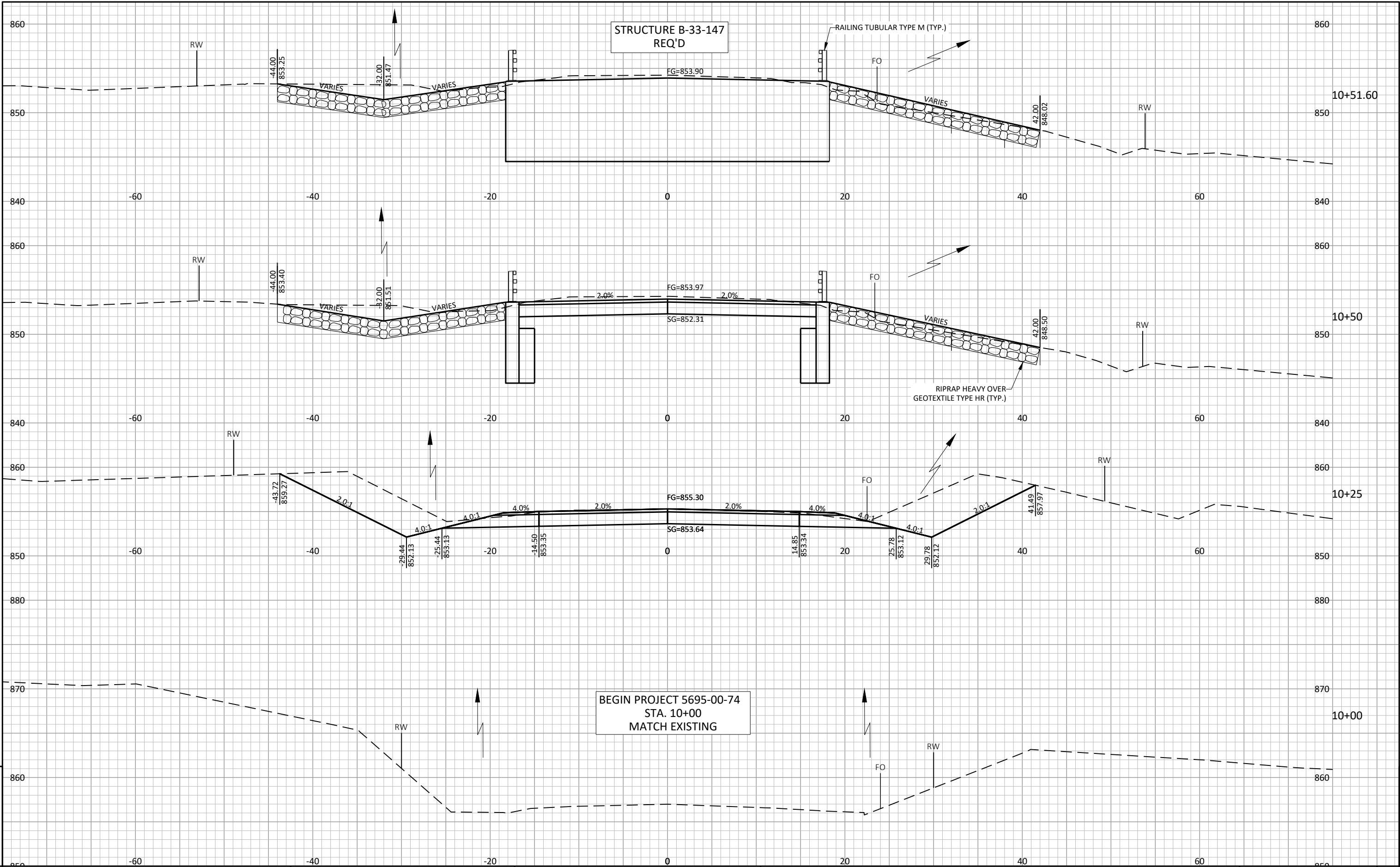
PART ELEVATION OF RAILING

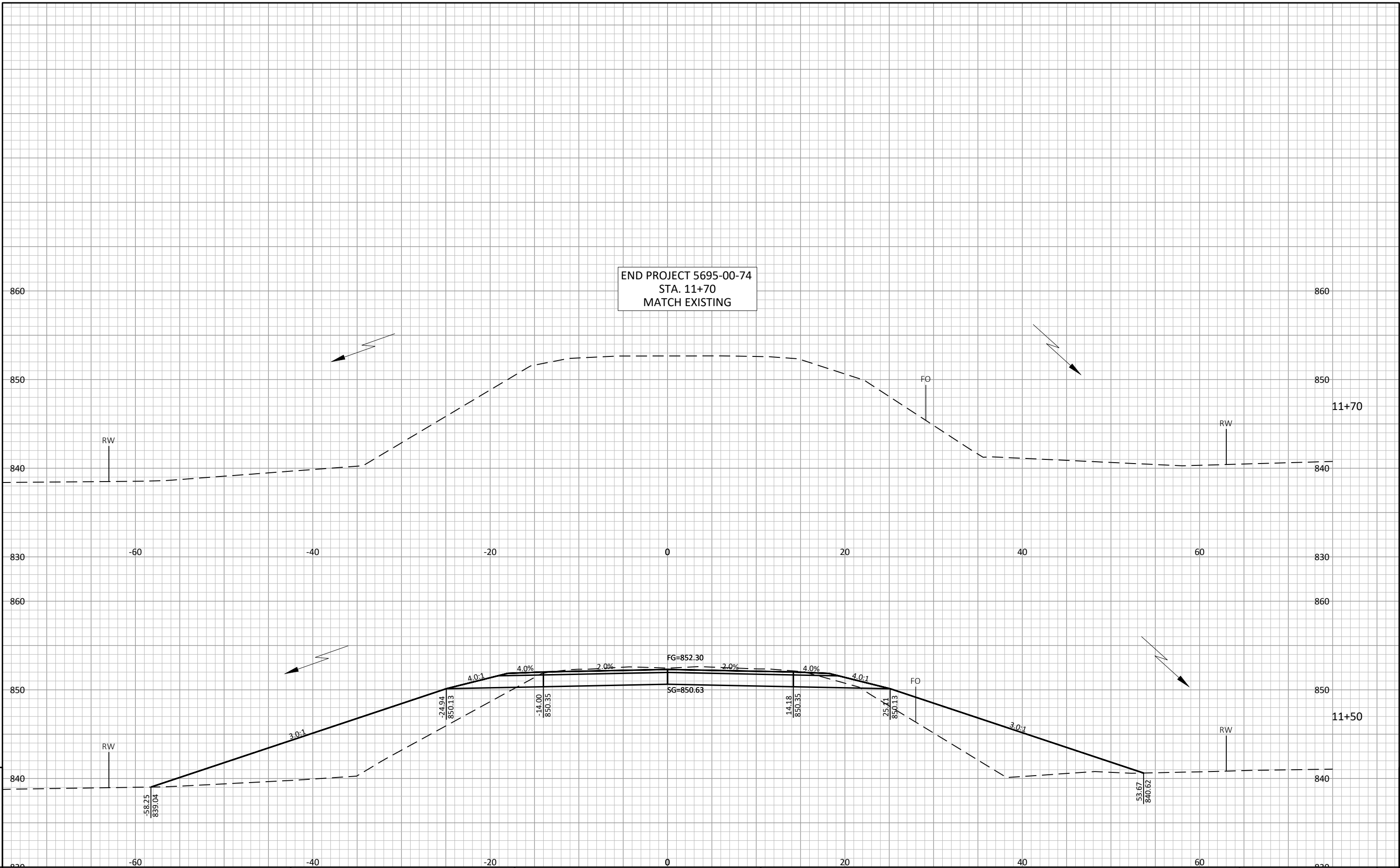
NO.	DATE	REVISION	BY
STRUCTURE B-33-147			
DRAWN BY		CTMP	PLANS CK'D. PTB
TUBULAR RAILING TYPE M		SHEET 13 OF 13	

EARTHWORK-CTH I

STATION	AREA (SF)		INCREMENTAL VOL (CY)			CUMMULATIVE VOLUME (CY)			
	CUT	FILL	CUT NOTE 1	FILL	FILL (25%) NOTE 2	CUT 1.00 NOTE 1	FILL	FILL (25%) NOTE 2	MASS ORDINATE NOTE 3
10+00	0	0	84	0	0	84	0	0	84
10+25	180	0	120	0	0	204	0	0	204
10+50	80	0	6	0	0	210	0	0	210
10+52	80	0	15	8	10	225	8	10	215
11+19	67	34	61	128	160	286	136	170	116
11+25	67	34	24	88	110	310	224	280	30
11+50	64	242	0	0	0	310	224	280	30
COLUMN TOTALS =			310	224	280				30

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - FILL 25%	(UNEXPANDED FILL)*1.25
3 - MASS ORDINATE	CUT + ROCK (10%) +REDUCED MARSH (60%) - FILL (25%)





END PROJECT 5695-00-74
STA. 11+70
MATCH EXISTING



Wisconsin Department of Transportation

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through innovation and exceptional service.

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