

MAD

PROJECT ID:
WITH: N/A

5786-00-70

COUNTY:

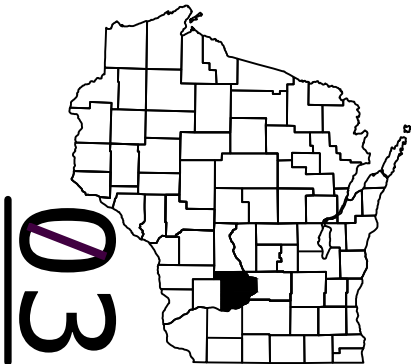
SAUK

SEPTEMBER 2025

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 = 42



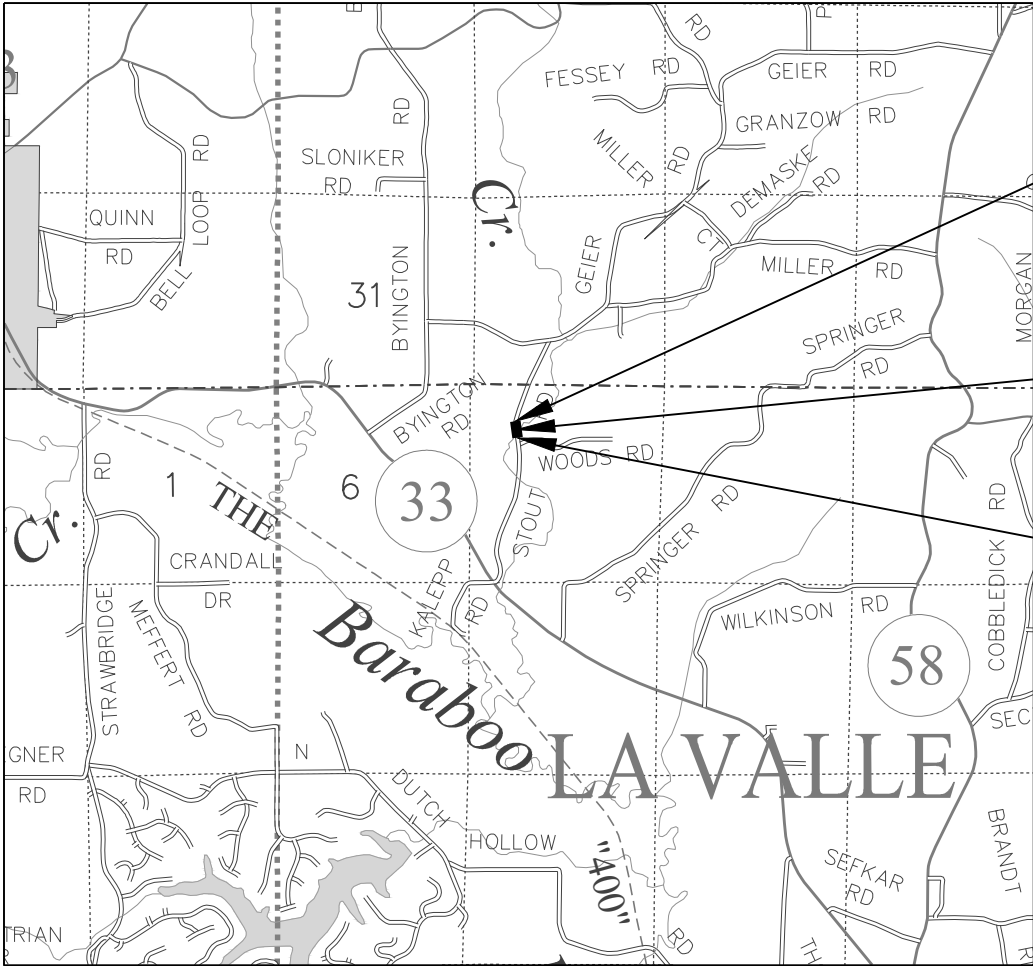
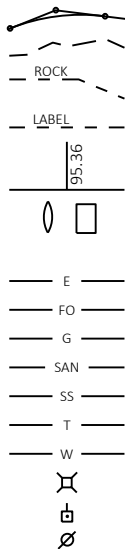
DESIGN DESIGNATION 5786-00-00

A.A.D.T.	2026	=	140
A.A.D.T.	2046	=	153
D.H.V.		=	20
D.D.		=	62/38
T.		=	7.7%
DESIGN SPEED		=	50 MPH
ESALS		=	22,000

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	



LAYOUT
SCALE 0 1 MI
TOTAL NET LENGTH OF CENTERLINE = 0.0270 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), SAUK COUNTY. NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

TOWN OF LAVALLE, STOUT ROAD

CROSSMAN CREEK BRIDGE B-56-0248

LOC STR
SAUK COUNTY

STATE PROJECT NUMBER
5786-00-70

STATE PROJECT

5786-00-70

FEDERAL PROJECT

PROJECT

WISC 2025593

CONTRACT

1

ACCEPTED FOR

TOWN OF LA VALLE

4-16-25
Date
Signature and Title of Official

ORIGINAL PLANS PREPARED BY

WESTBROOK
Associated Engineers, Inc.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588
PHONE (608) 588-7866
FAX (608) 588-7954



DATE: 4/16/25
(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	WESTBROOK ASSOCIATED ENGINEERS, INC.
Designer	WESTBROOK ASSOCIATED ENGINEERS, INC.
Project Manager	LORRAINE BETZEL, P.E.
Regional Examiner	SW REGION
Regional Supervisor	KYLE HEMP, P.E.

APPROVED FOR THE DEPARTMENT
DATE: 4/16/25
(Signature)

E

STANDARD ABBREVIATIONS

ABUT	ABUTMENT	ML OR M/L	MATCH LINE
AC	ACRE	NOM	NOMINAL
AGG	AGGREGATE	NC	NORMAL CROWN
∠	ANGLE	NO	NUMBER
AADT	ANNUAL AVERAGE DAILY TRAFFIC	PAVT	PAVEMENT
ASPH	ASPHALTIC	PLE	PERMANENT LIMITED EASEMENT
BK	BACK	PC	POINT OF CURVATURE
BAD	BASE AGGREGATE DENSE	PI	POINT OF INTERSECTION
BL OR B/L	BASE LINE	PT	POINT OF TANGENCY
BM	BENCH MARK	PCC	PORTLAND CEMENT CONCRETE
CL OR C/L	CENTER LINE	LB	POUND
Δ	CENTRAL ANGLE OR DELTA	PSI	POUNDS PER SQUARE INCH
CONC	CONCRETE	PE	PRIVATE ENTRANCE
CONST	CONSTRUCTION	PROJ	PROJECT
CP	CONTROL POINT	PL	PROPERTY LINE
CO	COUNTY	PRW	PROPOSED RIGHT OF WAY
CY	CUBIC YARD	R	RADIUS
D	DEGREE OF CURVE	RL OR R/L	REFERENCE LINE
DHV	DESIGN HOUR VOLUME	REQD	REQUIRED
DIA	DIAMETER	RT	RIGHT
DD	DIRECTIONAL DISTRIBUTION	R/W	RIGHT OF WAY
DWY	DRIVEWAY	RD	ROAD
EA	EACH	RDWY	ROADWAY
EL OR ELEV	ELEVATION	SHLDR	SHOULDER
EMB	EMBANKMENT	SPECS	SPECIFICATIONS
ESALS	EQUIVALENT SINGLE AXLE LOADS	SF	SQUARE FEET
EXC	EXCAVATION	SY	SQUARE YARD
EXIST	EXISTING	SDD	STANDARD DETAIL DRAWINGS
FERT	FERTILIZER	STH	STATE TRUNK HIGHWAY
FE	FIELD ENTRANCE	STA	STATION
FL OR F/L	FLOW LINE	SL OR S/L	SURVEY LINE
FT	FOOT	TEMP	TEMPORARY
CWT	HUNDRED WEIGHT	TLE	TEMPORARY LIMITED EASEMENT
IN DIA	INCH DIAMETER	TL OR T/L	TRANSIT LINE
INTERS	INTERSECTION	T	TRUCKS (PERCENT OF)
JT	JOINT	TYP	TYPICAL
LT	LEFT	VAR	VARIABLE
L	LENGTH OF CURVE	VC	VERTICAL CURVE
LF	LINEAR FOOT	VPC	VERTICAL POINT OF CURVATURE
LC	LONG CHORD OF CURVE	VPI	VERTICAL POINT OF INTERSECTION
LS	LUMP SUM	VPT	VERTICAL POINT OF TANGENCY
MGAL	ONE THOUSAND GALLONS	W	WEST

WISCONSIN DNR LIAISON

ANDY BARTA
DNR SOUTH CENTRAL REGION
3911 FISH HATCHERY RD
FITCHBURG, WI 53711
PHONE: (608) 235-2955
EMAIL: andrew.barta@wisconsin.gov

CONSULTANT LIAISON

AARON PALMER, P.E.
WESTBROOK ASSOCIATED ENGINEERS, INC.
619 EAST HOXIE ST
SPRING GREEN, WI 53588
PHONE: (608) 588-7866
EMAIL: apalmer@westbrookeng.com

TOWN OF LAVALLE

RAMON DEMASKIE
TOWN CHAIRMAN
P.O. BOX 30
LAVALLE, WI 53941
PHONE: (608) 985-7695
EMAIL: rdemaskie@allied.coop

COUNTY HIGHWAY COMMISSIONER

PATRICK GAVINSKI, P.E.
SAUK COUNTY
620 LINN ST
WEST BARABOO, WI 53913
PHONE: (608) 355-4855
EMAIL: patrick.gavinski@saukcountywi.gov

UTILITIES CONTACTS

ALLIANT ENERGY
ELECTRIC
TYLER DONOVAN
4902 N BILTMORE LN
MADISON, WI 53718
PHONE: (608) 963-9585
EMAIL: tylerdonovan@alliantenergy.com

LA VALLE TELEPHONE COOPERATIVE
COMMUNICATIONS
JOSH LIEN
PO BOX 28
LA VALLE, WI 53914
PHONE: (608) 985-7201
CELL: (608) 434-2796
EMAIL: joshl@rgtc.coop



Dial  or (800)242-8511

www.DiggersHotline.com

RUNOFF COEFFICIENT TABLE

LAND USE:	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
	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	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIPTURF:	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPETURF:			.25			.27			.28			.30
			.32			.34			.36			.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 = 0.22 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.16 ACRES

ORDER OF SECTION 2 DETAIL SHEETS

- GENERAL NOTES
- TYPICAL SECTIONS
- PERMANENT SIGNING
- ALIGNMENT DETAILS AND CONTROL POINT TIES

GENERAL NOTES

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

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

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LBS/SY/IN.

APPLY TACK COAT BETWEEN LAYERS OF HMA PAVEMENT AT A RATE OF 0.05 GAL/SY.

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

RIGHT OF WAY INFORMATION, AS SHOWN ON THE PLANS, IS APPROXIMATE.

THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE DONE WITH THE APPROVAL OF THE ENGINEER.

WHEN THE QUANTITY OF THE ITEMS OF BASE AGGREGATE, SUBBASE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYERS SHOWN ON THE PLAN IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL PREPARE AN EROSION CONTROL IMPLEMENTATION PLAN (ECIP) AND SUBMIT THE PLAN TO WISDOT AND WDNR FOR REVIEW AT LEAST 14 DAYS PRIOR TO THE PRECONSTRUCTION CONFERENCES.

EROSION CONTROL FEATURES, AS SHOWN IN THE PLANS, ARE AT APPROXIMATE LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND APPROVED BY THE ENGINEER. MAINTAIN EROSION CONTROL MEASURES UNTIL SUCH A TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

BIODEGRADABLE NON-NETTED MATTING SHALL BE USED ALONG STREAM CORRIDORS.

APPLY SEED, MULCH OR EROSION MAT, AND FERTILIZER TO ALL DISTURBED AREAS WITHIN 7 WORKING DAYS AFTER GRADING WORK IS COMPLETE.

SLOPES 2.5:1 OR STEEPER REQUIRE EROSION MAT.

THE PROPOSED SHOULDER WIDTH SHOWN IN THE TYPICAL SECTIONS ARE MINIMUM WIDTH. PERPETUATE EXISTING SHOULDERS THAT ARE WIDER THAN WHAT IS SHOWN IN THE TYPICAL SECTIONS.

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

THE CONTRACTOR'S PAVING OPERATION SHALL BE CONSISTENT WITH THE TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING, OR PARKING LANE.

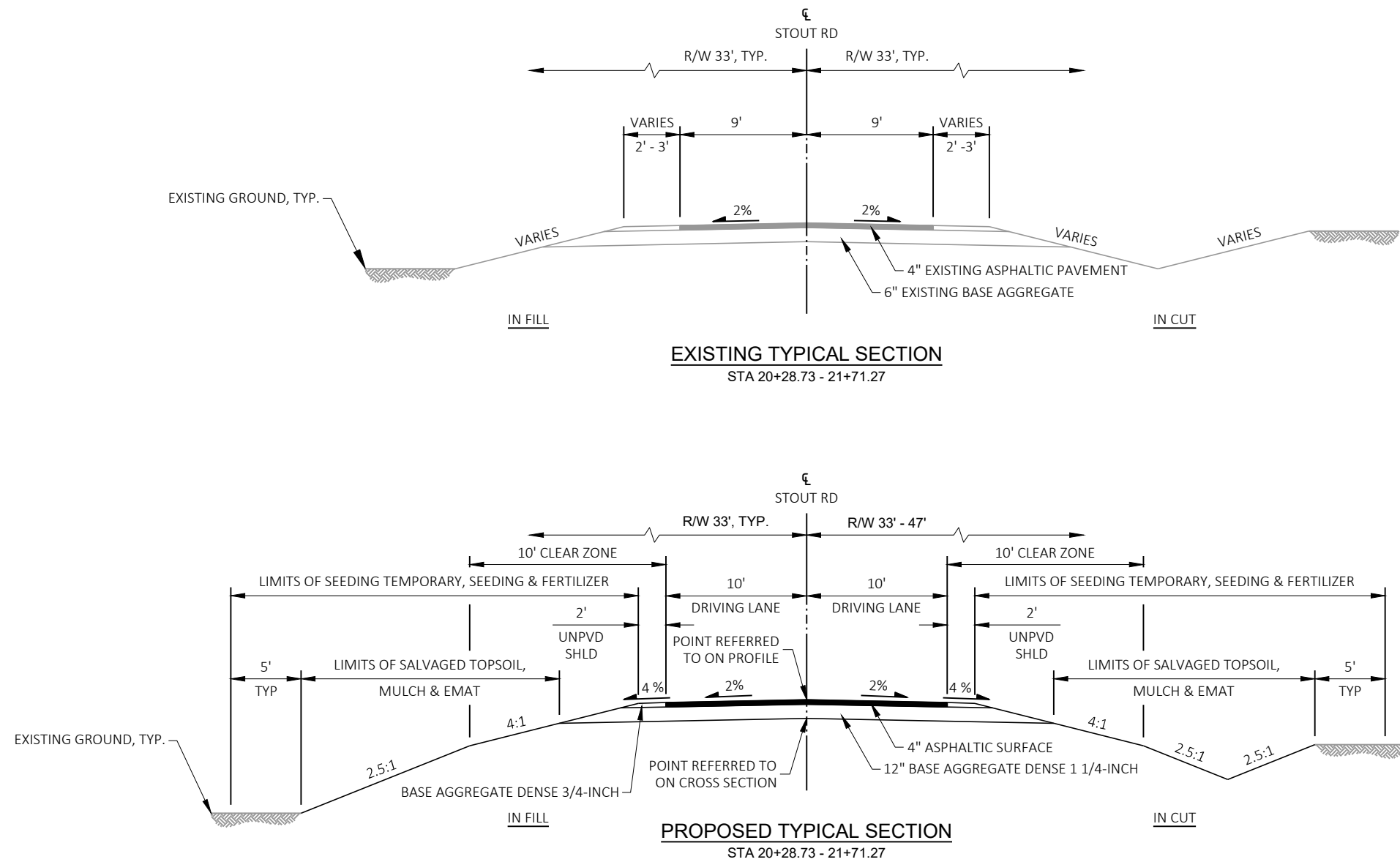
THE 4-INCH ASPHALTIC SURFACE SHALL BE CONSTRUCTED USING ONE (1) 2.25-INCH LOWER LAYER AND ONE (1) 1.75-INCH UPPER LAYER. THE PREFERRED LOWER LAYER IS 2.25-INCHES OF 3 LT 58-28 S. THE PREFERRED UPPER LAYER IS 1.75-INCHES OF 4 LT 58-28 S.

SAWCUTS, AS SHOWN ON THE PLANS, ARE SUGGESTED LOCATIONS AND MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER TO BETTER SUIT FIELD CONDITIONS.

THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PAVING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAYS SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER OPERATIONS ARE COMPLETED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

DO NOT DRIVE OR STORE EQUIPMENT, OR STORE CONSTRUCTION MATERIALS IN ENVIRONMENTALLY SENSITIVE AREAS, WETLANDS OR WATERWAYS.



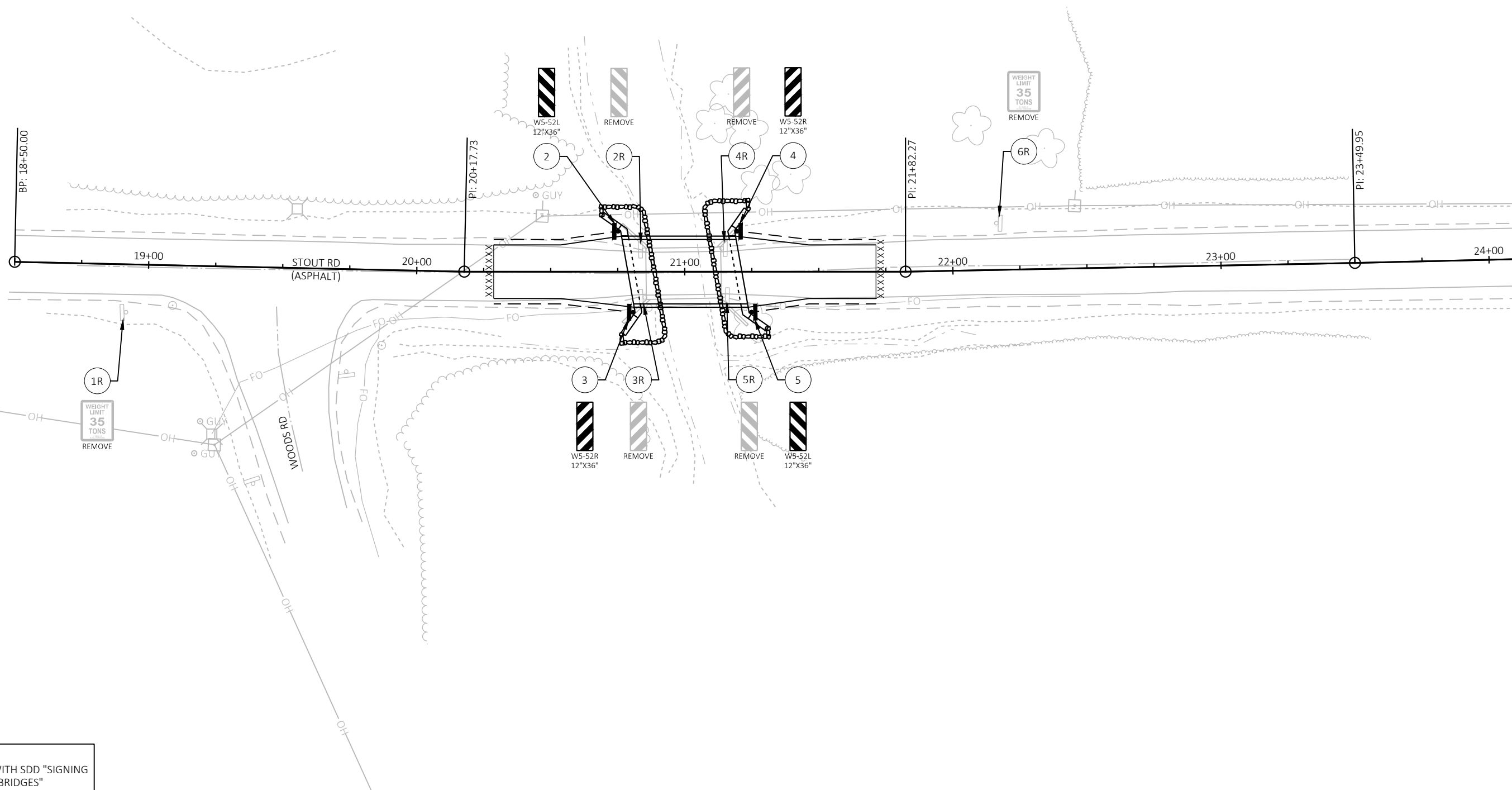
LEGEND: PERMANENT SIGNING

EXISTING SIGN

PROPOSED SIGN

DENOTES SIGN NUMBER

WORK CODE: R=REMOVE
SIGN COUNT SEQUENCE



NOTE:
CONSTRUCT IN ACCORDANCE WITH SDD "SIGNING
AND MARKING FOR TWO LANE BRIDGES"

PROJECT NO:	5786-00-70
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HWY: STOUT ROAD

COUNTY: SAUK

PERMANENT SIGNING

SHEET

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FILE NAME : G:\00-PROJECT FILES\2023\23052 ID 5786-00-00 TOWN OF LAVALLE, STOUT RD. CROSSMAN CREEK BRIDGE 8-56-0248\0-CAD\SHEETS\023201_PS.DWG
LAYOUT NAME - 023201_ps

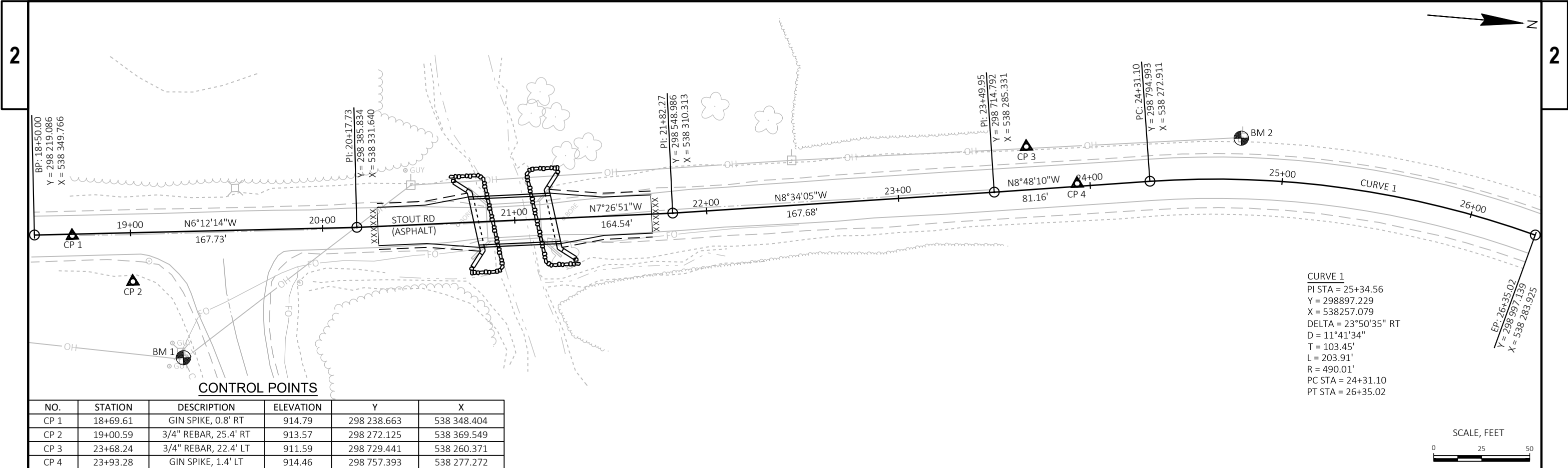
PLOT DATE : 1/29/2025 12:22 PM

PLOT BY : GAVIN WIPPERFURTH

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



Estimate Of Quantities

5786-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0220	Grubbing	ID	38.000	38.000
0004	203.0250	Removing Structure Over Waterway Remove Debris (structure) 01. P-56-114	EACH	1.000	1.000
0006	205.0100	Excavation Common	CY	144.000	144.000
0008	206.1001	Excavation for Structures Bridges (structure) 01. B-56-0248	EACH	1.000	1.000
0010	210.1500	Backfill Structure Type A	TON	280.000	280.000
0012	213.0100	Finishing Roadway (project) 01. 5786-00-70	EACH	1.000	1.000
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	14.000	14.000
0016	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	260.000	260.000
0018	455.0605	Tack Coat	GAL	14.000	14.000
0020	465.0105	Asphaltic Surface	TON	54.000	54.000
0022	502.0100	Concrete Masonry Bridges	CY	132.000	132.000
0024	502.3200	Protective Surface Treatment	SY	181.000	181.000
0026	505.0400	Bar Steel Reinforcement HS Structures	LB	4,070.000	4,070.000
0028	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	17,870.000	17,870.000
0030	513.4061	Railing Tubular Type M	LF	90.000	90.000
0032	516.0500	Rubberized Membrane Waterproofing	SY	12.000	12.000
0034	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	700.000	700.000
0036	606.0300	Riprap Heavy	CY	95.000	95.000
0038	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	140.000	140.000
0040	618.0100	Maintenance and Repair of Haul Roads (project) 01. 5786-00-70	EACH	1.000	1.000
0042	619.1000	Mobilization	EACH	1.000	1.000
0044	624.0100	Water	MGAL	2.800	2.800
0046	625.0500	Salvaged Topsoil	SY	300.000	300.000
0048	627.0200	Mulching	SY	100.000	100.000
0050	628.1504	Silt Fence	LF	300.000	300.000
0052	628.1520	Silt Fence Maintenance	LF	474.000	474.000
0054	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0056	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0058	628.2008	Erosion Mat Urban Class I Type B	SY	210.000	210.000
0060	628.6005	Turbidity Barriers	SY	230.000	230.000
0062	629.0210	Fertilizer Type B	CWT	0.400	0.400
0064	630.0130	Seeding Mixture No. 30	LB	26.000	26.000
0066	630.0200	Seeding Temporary	LB	16.000	16.000
0068	630.0500	Seed Water	MGAL	12.500	12.500
0070	633.5100	Markers ROW	EACH	4.000	4.000
0072	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0074	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0076	638.2602	Removing Signs Type II	EACH	6.000	6.000
0078	638.3000	Removing Small Sign Supports	EACH	6.000	6.000
0080	642.5001	Field Office Type B	EACH	1.000	1.000
0082	643.0420	Traffic Control Barricades Type III	DAY	1,380.000	1,380.000
0084	643.0705	Traffic Control Warning Lights Type A	DAY	2,760.000	2,760.000
0086	643.0900	Traffic Control Signs	DAY	1,200.000	1,200.000
0088	643.5000	Traffic Control	EACH	1.000	1.000
0090	645.0111	Geotextile Type DF Schedule A	SY	60.000	60.000
0092	645.0120	Geotextile Type HR	SY	174.000	174.000
0094	650.4500	Construction Staking Subgrade	LF	100.000	100.000
0096	650.5000	Construction Staking Base	LF	100.000	100.000
0098	650.6501	Construction Staking Structure Layout (structure) 01. 5786-00-70	EACH	1.000	1.000

Estimate Of Quantities

5786-00-70					
Line	Item	Item Description	Unit	Total	Qty
0100	650.9911	Construction Staking Supplemental Control (project) 01. 5786-00-70	EACH	1.000	1.000
0102	650.9920	Construction Staking Slope Stakes	LF	100.000	100.000
0104	690.0150	Sawing Asphalt	LF	41.000	41.000
0106	715.0502	Incentive Strength Concrete Structures	DOL	792.000	792.000
0108	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 21+00	EACH	1.000	1.000

3

NOTE:
ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

<u>GRUBBING</u>			<u>BASE AGGREGATE DENSE</u>						
STATION	LOCATION	201.0220 ID					305.0110 BASE AGGREGATE DENSE 3/4-INCH	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH	624.0100
21+25	19', RT	38							
	TOTAL	38							
			STATION	TO	STATION	LOCATION	TON	TON	WATER MGAL
			20+28.73	-	20+78.73	SOUTH APPROACH	7	130	1.4
			21+21.27	-	21+71.27	NORTH APPROACH	7	130	1.4
			TOTAL				14	260	2.8

FINISHING ITEMS										
				625.0500	627.0200	628.2008	629.0210	630.0130	630.0200	630.0500
				SALVAGED	MULCHING	EROSION MAT	FERTILIZER	SEEDING	SEEDING	SEED WATER
				TOPSOIL		URBAN	TYPE B	MIXTURE	TEMPORARY	
STATION	TO	STATION	LOCATION	SY	SY	CLASS I	TYPE B	NO. 30	LB	MGAL
							CWT	LB	LB	
20+29	-	20+76	SOUTH APPROACH, LT	16	16	---	0.05	3	2	1.5
20+29	-	20+81	SOUTH APPROACH, RT	54	---	54	0.07	5	3	2.4
21+19	-	21+71	NORTH APPROACH, RT	113	---	113	0.11	8	5	3.8
21+19	-	21+71	NORTH APPROACH, LT	58	58	---	0.07	5	3	2.3
UNDISTRIBUTED				59	26	43	0.10	5	3	2.5
TOTAL				300	100	210	0.40	26	16	12.5

SILT FENCE						628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
STATION	TO	STATION	LOCATION				
20+22	-	20+95	SOUTH APPROACH, RT			77	154
20+23	-	20+80	SOUTH APPROACH, LT			60	120
21+01	-	21+77	NORTH APPROACH, LT			80	160
21+61	-	21+76	NORTH APPROACH, RT			20	40
			UNDISTRIBUTED			63	---
			TOTAL			300	474

MOBILIZATIONS EROSION CONTROL				628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
LOCATION					
PROJECT				3	2
TOTAL				3	2

TURBIDITY BARRIERS		628.6005 SY
LOCATION		
SOUTH ABUTMENT		85
NORTH ABUTMENT		98
UNDISTRIBUTED		47
TOTAL		230

PERMANENT SIGNING									
STATION	LOCATION	SIGN NUMBER	SIGN CODE	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	REMARKS	
18+92	SOUTH APPROACH, RT	1R	R12-1	---	---	1	1	WEIGHT LIMIT 35 TONS	
20+75	SOUTH APPROACH, LT	2	W5-52L	1	3	---	---	BRIDGE HASH MARKS	
20+85	SOUTH APPROACH, RT	3	W5-52R	1	3	---	---	BRIDGE HASH MARKS	
20+81	SOUTH APPROACH, RT	3R	W5-52R	---	---	1	1	BRIDGE HASH MARKS	
20+85	SOUTH APPROACH, LT	2R	W5-52L	---	---	1	1	BRIDGE HASH MARKS	
21+14	NORTH APPROACH, LT	4R	W5-52R	---	---	1	1	BRIDGE HASH MARKS	
21+14	NORTH APPROACH, RT	5R	W5-52L	---	---	1	1	BRIDGE HASH MARKS	
21+19	NORTH APPROACH, LT	4	W5-52R	1	3	---	---	BRIDGE HASH MARKS	
21+25	NORTH APPROACH, RT	5	W5-52L	1	3	---	---	BRIDGE HASH MARKS	
22+17	NORTH APPROACH, LT	6R	R12-1	---	---	1	1	WEIGHT LIMIT 35 TONS	
			TOTAL	4	12	6	6		

MARKERS ROW			633.5100 EACH
STATION	OFFSET		
21+10	33' RT	1	
21+10	47' RT	1	
21+70	47' RT	1	
21+70	33' RT	1	
	TOTAL	4	

TRAFFIC CONTROL									
LOCATION	DURATION DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III NO.	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.5000 TRAFFIC CONTROL EACH				
SOUTH APPROACH	60	9	540	18	1,080	8	480	---	
NORTH APPROACH	60	9	540	18	1,080	8	480	---	
UNDISTRIBUTED	60	5	300	10	600	4	240	---	
PROJECT	---	---	---	---	---	---	---	1	
TOTAL		23	1,380	46	2,760	20	1,200	1	
PLACE TRAFFIC CONTROL IN ACCORDANCE WITH SDD 15C2 "BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP CLOSURES AND ADVANCED WIDTH RESTRICTION." PLACEMENT SUBJECT TO ENGINEER APPROVAL.									

CONSTRUCTION STAKING						650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	* 650.6501.01 CONSTRUCTION STAKING STRUCTURE LAYOUT 01. B-56-0248 EACH	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL 01. 5786-00-70 EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
STATION	TO	STATION	LOCATION							
20+29	-	20+79	SOUTH APPROACH	50	50	---	---	---	---	50
21+21	-	21+71	NORTH APPROACH	50	50	---	---	---	---	50
			PROJECT	---	---	1	1	1	1	---
			TOTAL	100	100	1*	1	1	1	100

SAWING ASPHALT			690.0150 LF
STATION	LOCATION		
20+29	SOUTH APPROACH		21
21+71	NORTH APPROACH		20
	TOTAL		41

* CATEGORY 0020

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

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	

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

CURVE DATA ABBREVIATIONS

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

NOTES:

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

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

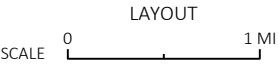
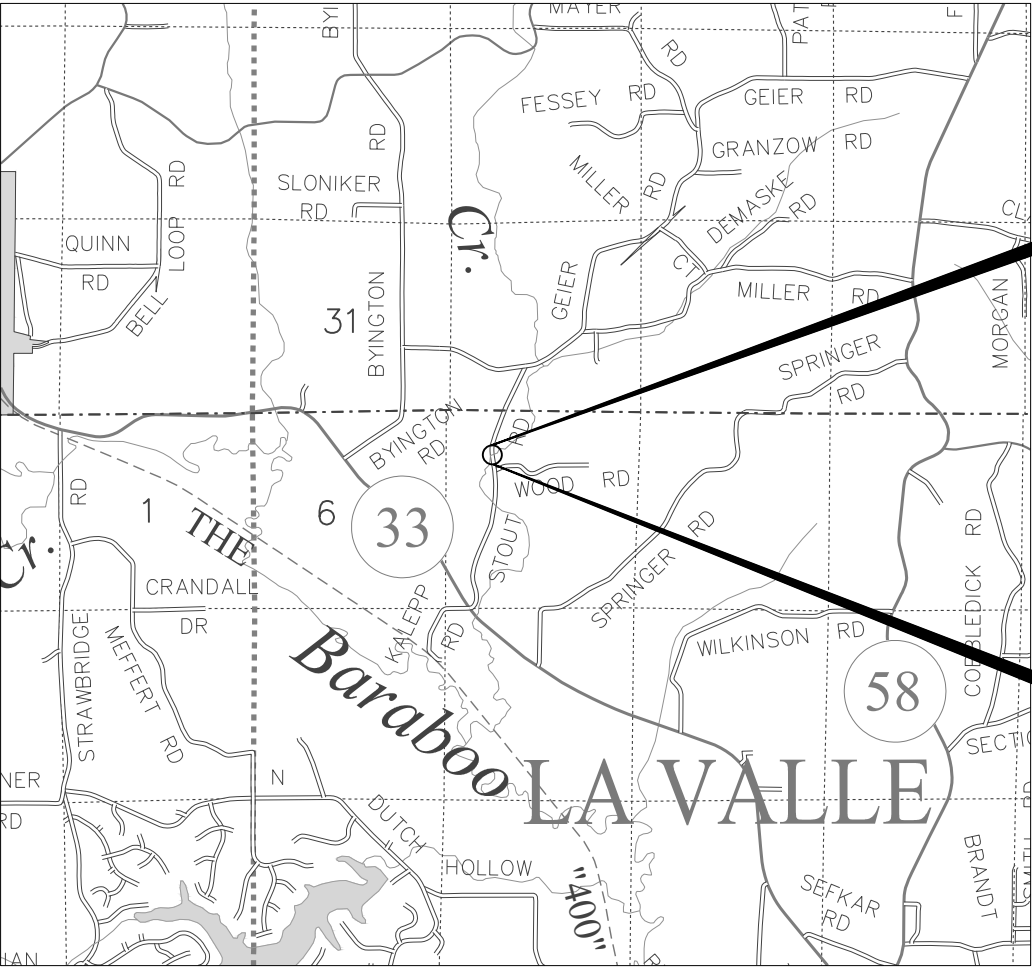
RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE TOWN OF LAVALLE.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE DETAIL PAGES.

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

JUNEAU COUNTY
TOWN OF SUMMIT
T-14-N
T-13-N
SAUK COUNTY
TOWN OF LAVALLE



TOTAL NET LENGTH OF CENTERLINE = 0.011 MI

R/W PROJECT NUMBER 5786-00-00	SHEET NUMBER	TOTAL SHEETS
FEDERAL PROJECT NUMBER	4.01	2
PLAT OF RIGHT OF WAY REQUIRED FOR TOWN OF LAVALLE, STOUT ROAD CROSSMAN CREEK BRIDGE B-56-0248		
LOC STR	SAUK COUNTY	
CONSTRUCTION PROJECT NUMBER 5786-00-70		

END RELOCATION ORDER

STA 21+70.00

Y = 298 536.819
X = 538 311.903

BEGIN RELOCATION ORDER

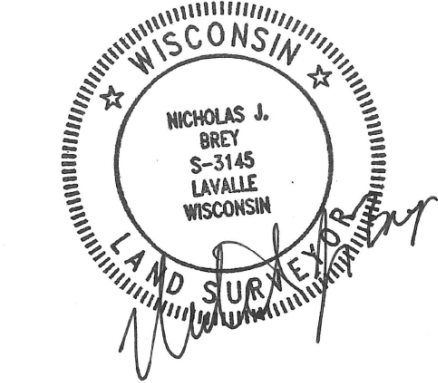
STA 21+10.00

Y = 298 477.325
X = 538 319.680

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

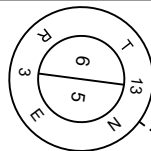
ACCEPTED FOR TOWN OF LAVALLE
DATE: 5-3-24
(SIGNATURE AND TITLE OF OFFICIAL)

ORIGINAL PLANS PREPARED BY
WESTBROOK
Associated Engineers, Inc.
619 East Hoxie St. | P.O. Box 429 | Spring Green, WI 53588
P: (608) 588-7866 | F: (608) 588-7954 | www.westbrookeng.com



DATE: 03-07-24
(Professional Land Surveyor Signature)

FOUND HARRISON MONUMENT
Y = 297 165.892
X = 537 047.766



SW ¼ - NW ¼
SEC 5

N44°07'25"E 1826.92'
MON TO R/L

RAYMOND D SELJE &
HELEN B SELJE

TOWN OF LAVALLE

N0°45'57"E 2826.67'
MON TO MON

FOUND HARRISON MONUMENT
Y = 299 992.308
X = 537 085.545



NW ¼ - NW ¼
SEC 5

RICHARD HANKO &
SANDRA K HANKO

CROSSMAN
CREEK

SLOPE INTERCEPT, TYP.

EXISTING R/W

18+00 N6°12'14"W 19+00 20+00 N7°26'51"W 21+00 22+00 N8°34'05"W 23+00 N8°48'10"W 24+00

STOUT ROAD

EXISTING R/W

LAVALLE TELEPHONE COOPERATIVE

ALLIANT ENERGY

SE ¼ - NW ¼
SEC 5

WOODS ROAD

BEGIN RELOCATION ORDER
STA 21+10.00
1,311.433' NORTH AND 1,271.914' EAST
OF THE W¼ CORNER OF SECTION 5,
T13N, R3E, TOWN OF LAVALLE,
SAUK COUNTY, WI
Y = 298 477.325
X = 538 319.680

JAMES E FIELD LC &
TERESA FIELD LC ET AL

PROPOSED R/W

END RELOCATION ORDER
STA 21+70.00
1,370.927' NORTH AND 1,264.137'
EAST OF THE W¼ CORNER OF
SECTION 5, T13N, R3E, TOWN OF
LAVALLE, SAUK COUNTY, WI
Y = 298 536.819
X = 538 311.903

NE ¼ - NW ¼
SEC 5

MATTHEW CHERNEY &
GREGORY D. CHERNEY
DOC# 629175

POINT TABLE

POINT NUMBER	STATION	OFFSET	Y	X
1	21+10.00	0.00'	298 477.325	538 319.680
2	21+10.00	33.00'	298 481.603	538 352.402
3	21+10.00	47.00'	298 483.417	538 366.284
4	21+70.00	47.00'	298 542.911	538 358.507
5	21+70.00	33.00'	298 541.097	538 344.625
6	21+70.00	0.00'	298 536.819	538 311.903

R/W COURSE TABLE

COURSE	BEARING	DISTANCE
1-2	N82°33'09"E	33.00'
2-3	N82°33'09"E	14.00'
3-4	N7°26'51"W	60.00'
4-5	S82°33'09"W	14.00'
5-6	S82°33'09"W	33.00'
6-1	S7°26'51"E	60.00'

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W REQUIRED ACRES		
			NEW	EXISTING	TOTAL
1	MATTHEW CHERNEY & GREGORY D. CHERNEY	FEE	0.019	0.045	0.064

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE
PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE TOWN OF LAVALLE.

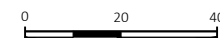
EXISTING RIGHT-OF-WAY
FOR STOUT ROAD BASED
ON THE C/L OF EXISTING
PAVEMENT AND WIS.
STATUTE 82.31 (2)

REVISION DATE

DATE 03/07/2024

GRID FACTOR N/A

SCALE, FEET



HWY: STOUT ROAD

COUNTY: SAUK

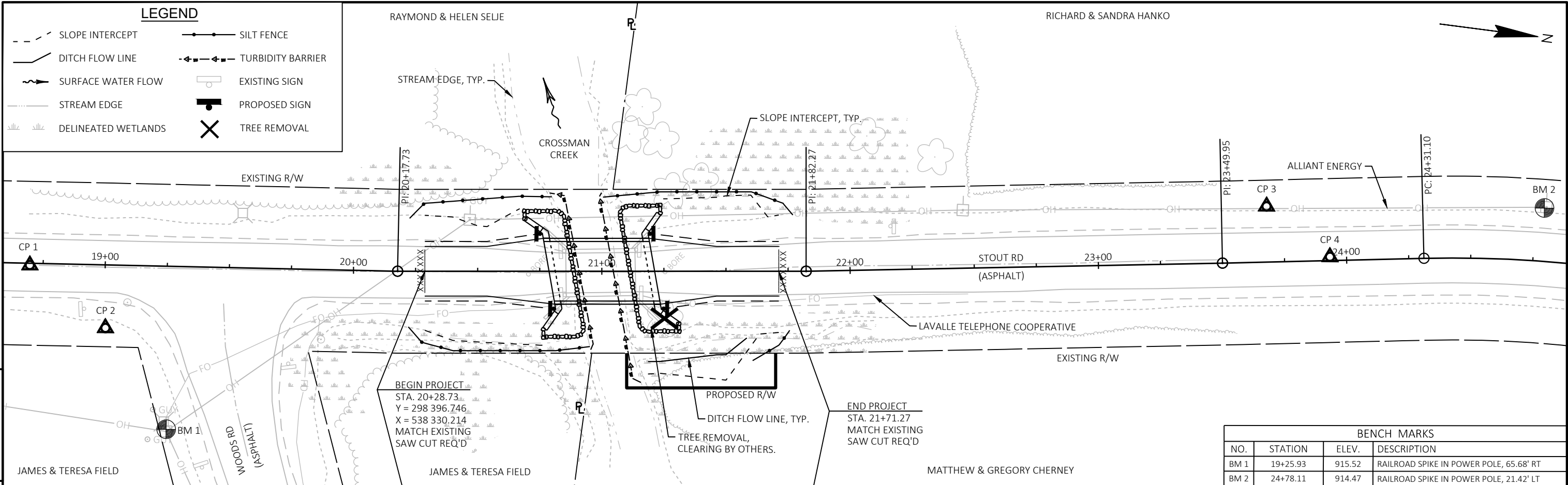
STATE R/W PROJECT NUMBER 5786-00-00

CONSTRUCTION PROJECT NUMBER 5786-00-70

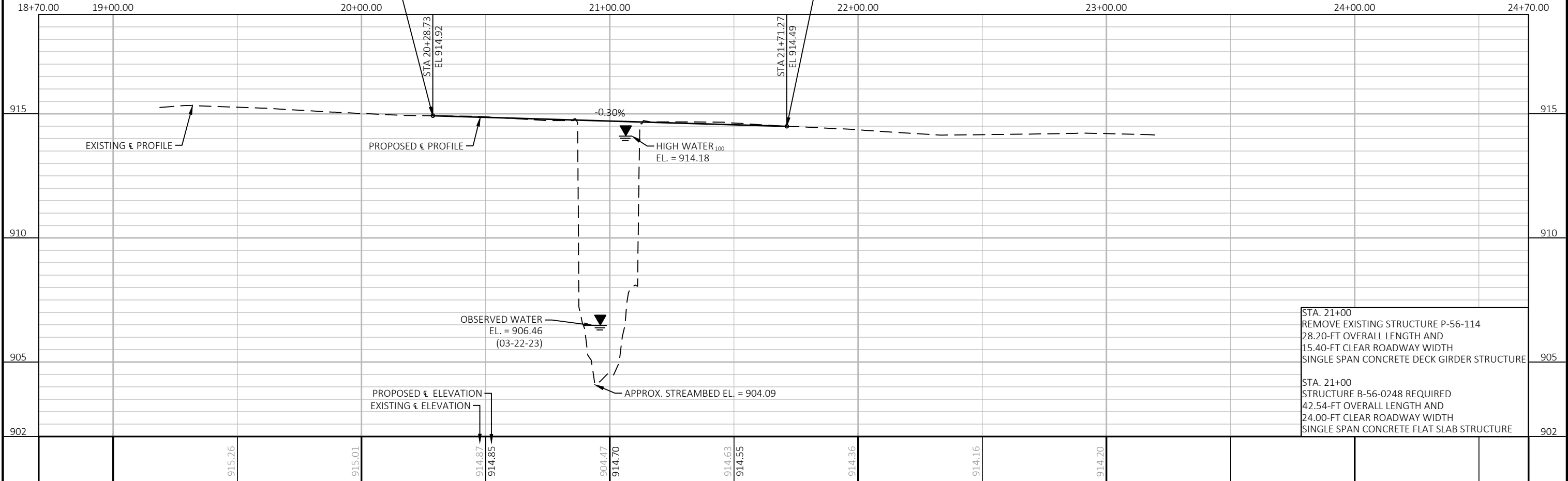
PLAT SHEET 4.02

PS&E SHEET _____

E



BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM 1	19+25.93	915.52	RAILROAD SPIKE IN POWER POLE, 65.68' RT
BM 2	24+78.11	914.47	RAILROAD SPIKE IN POWER POLE, 21.42' LT



STA. 21+00
REMOVE EXISTING STRUCTURE P-56-114
28.20-FT OVERALL LENGTH AND
15.40-FT CLEAR ROADWAY WIDTH
SINGLE SPAN CONCRETE DECK GIRDER STRUCTURE

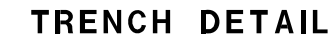
STA. 21+00
STRUCTURE B-56-0248 REQUIRED
42.54-FT OVERALL LENGTH AND
24.00-FT CLEAR ROADWAY WIDTH
SINGLE SPAN CONCRETE FLAT SLAB STRUCTURE

Standard Detail Drawing List

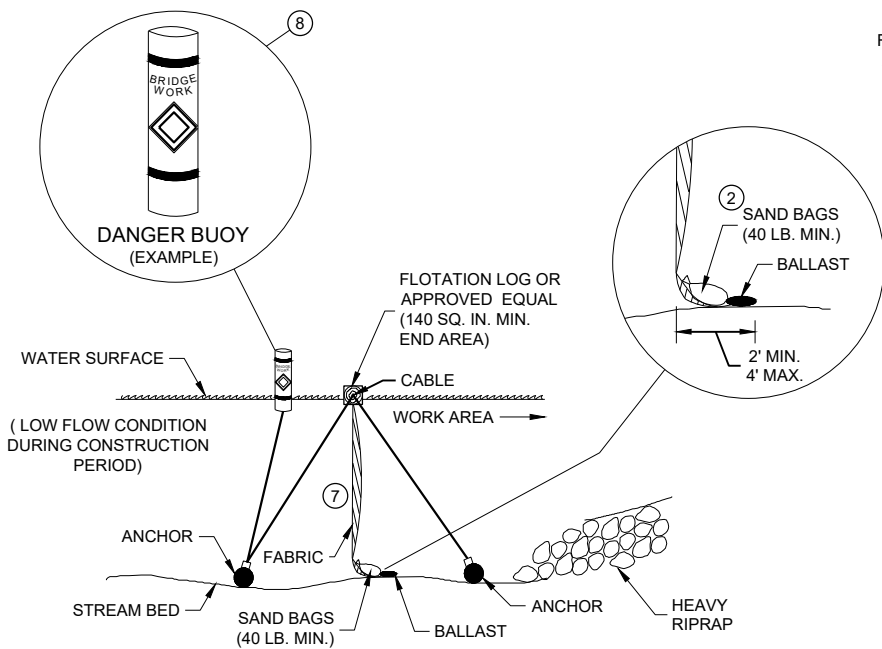
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-12	SIGNING & MARKING FOR TWO LANE BRIDGES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



- 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.

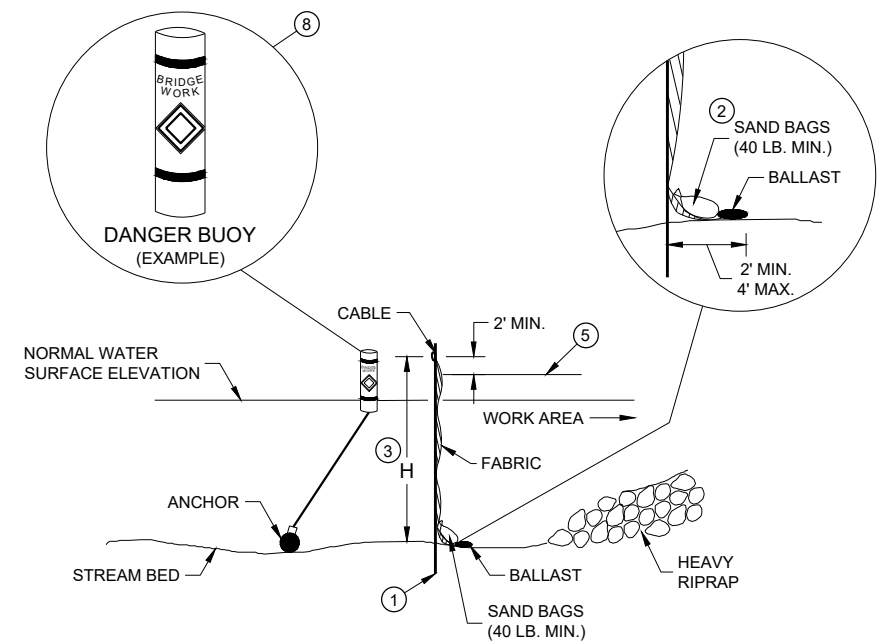


<div>SILT FENCE</div>	
<div>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</div>	
<div>APPROVED</div>	
<div>4-29-05</div>	<div>/S/ Beth Cannestra</div>
<div>DATE</div>	<div>CHIEF ROADWAY DEVELOPMENT ENGINEER</div>
<div>FHWA</div>	



SECTION B - B

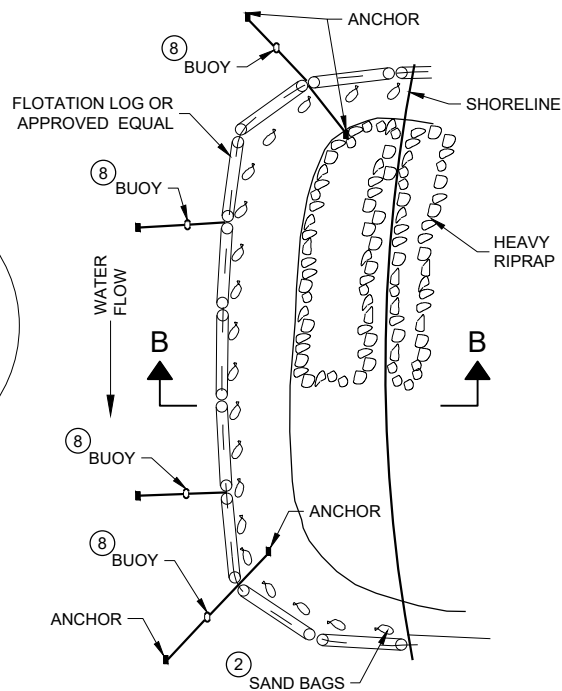
TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



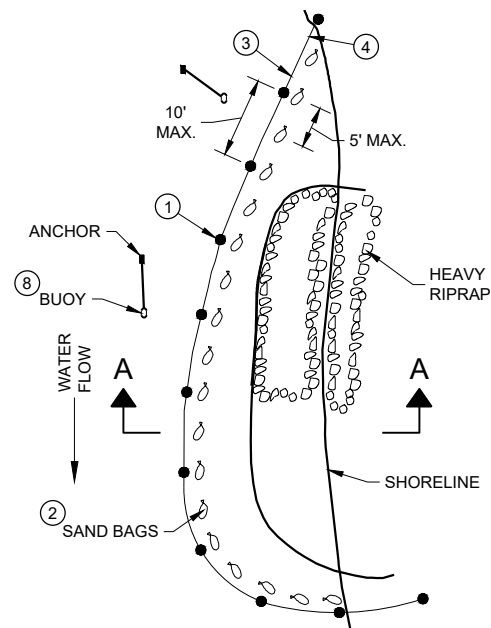
SECTION A - A

TURBIDITY BARRIER - STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS



PLAN VIEW



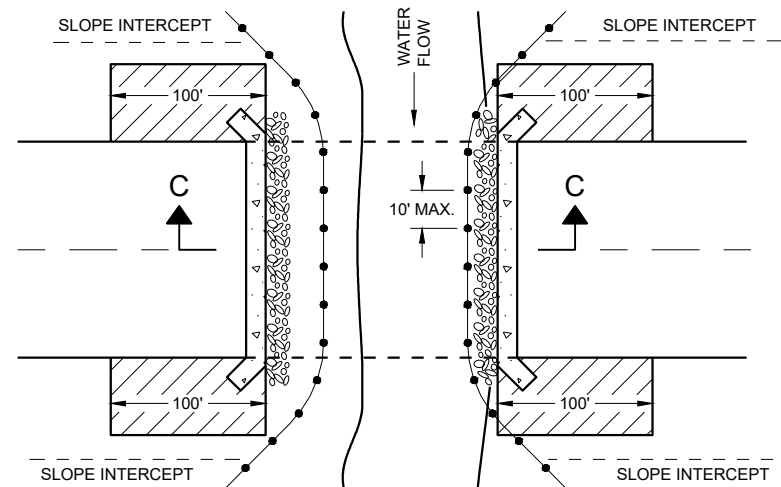
PLAN VIEW

GENERAL NOTES

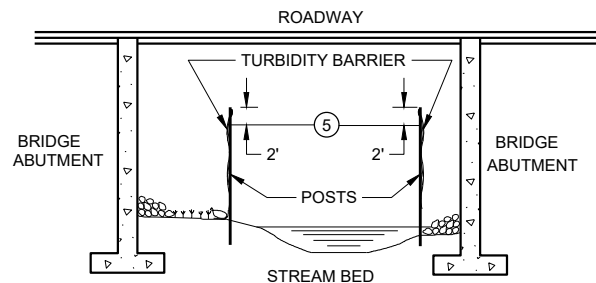
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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



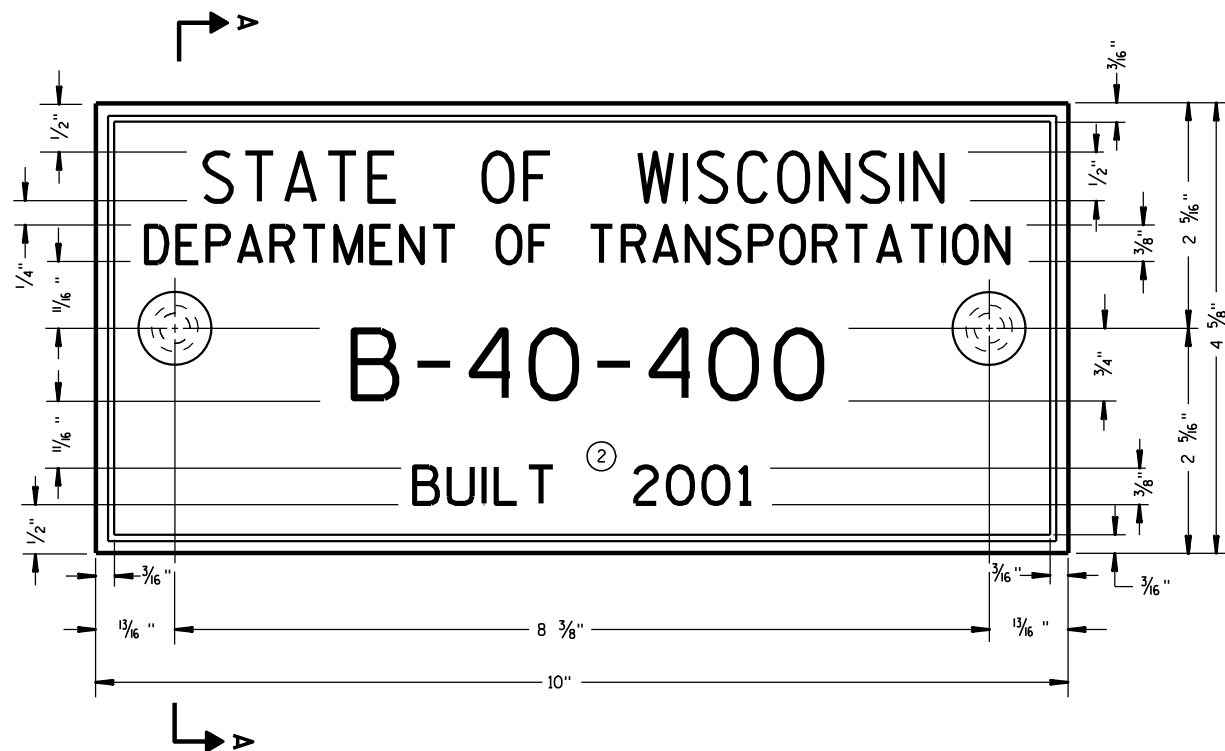
SECTION C - C

TURBIDITY BARRIER DETAIL SHOWING
TYPICAL PLACEMENT AT STRUCTURES

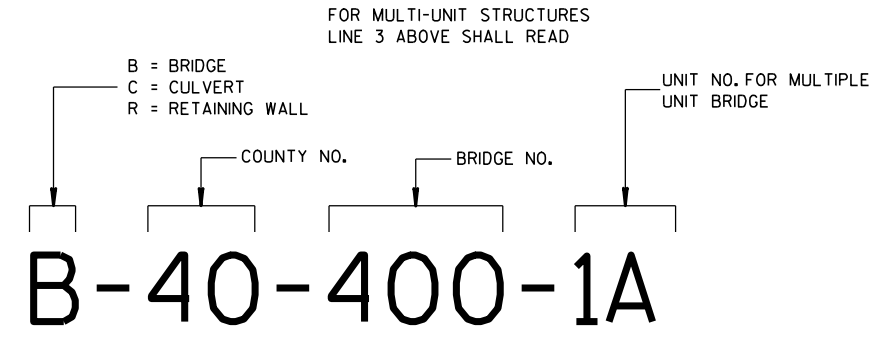
TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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



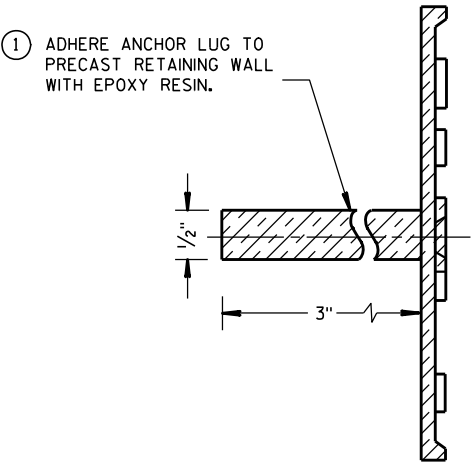
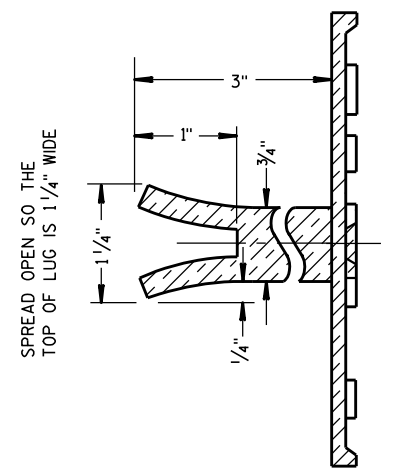
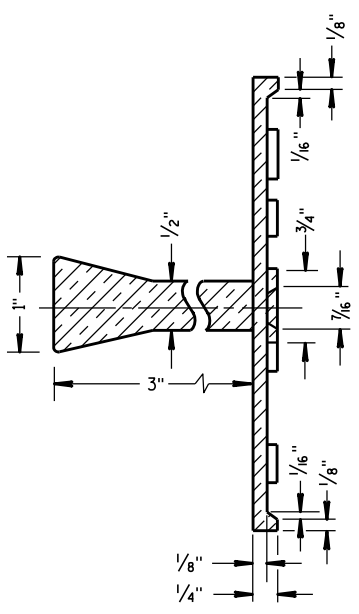
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

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.

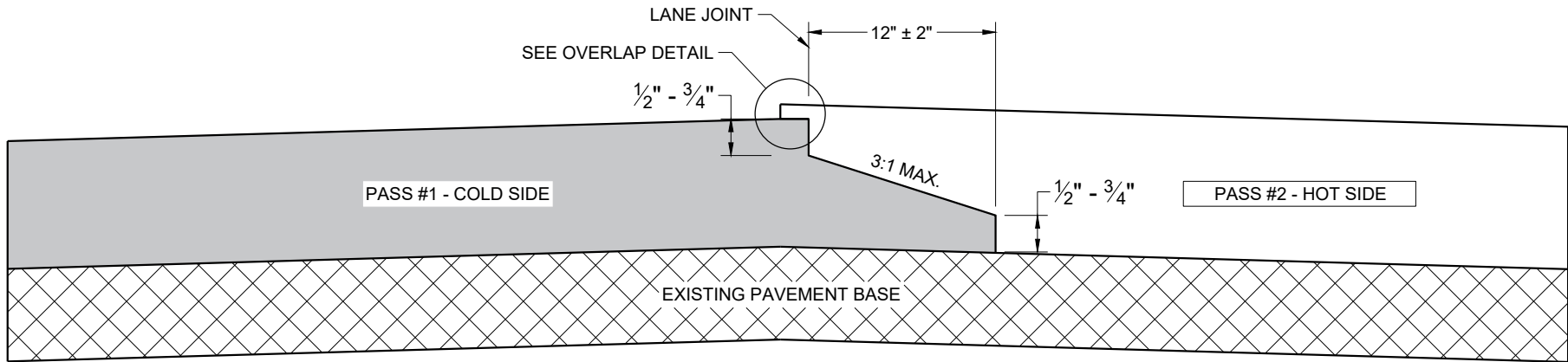
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

- 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.

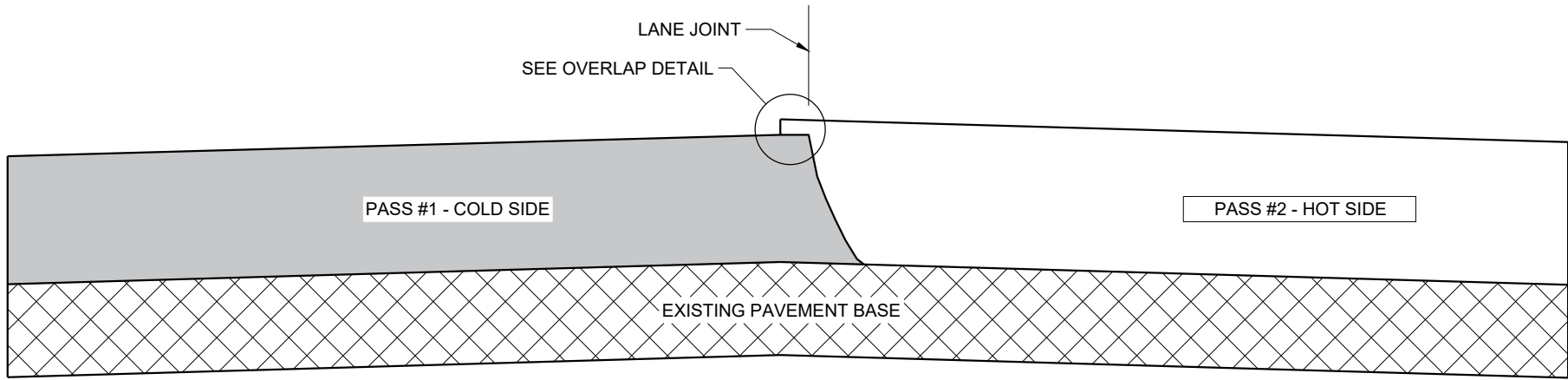


ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

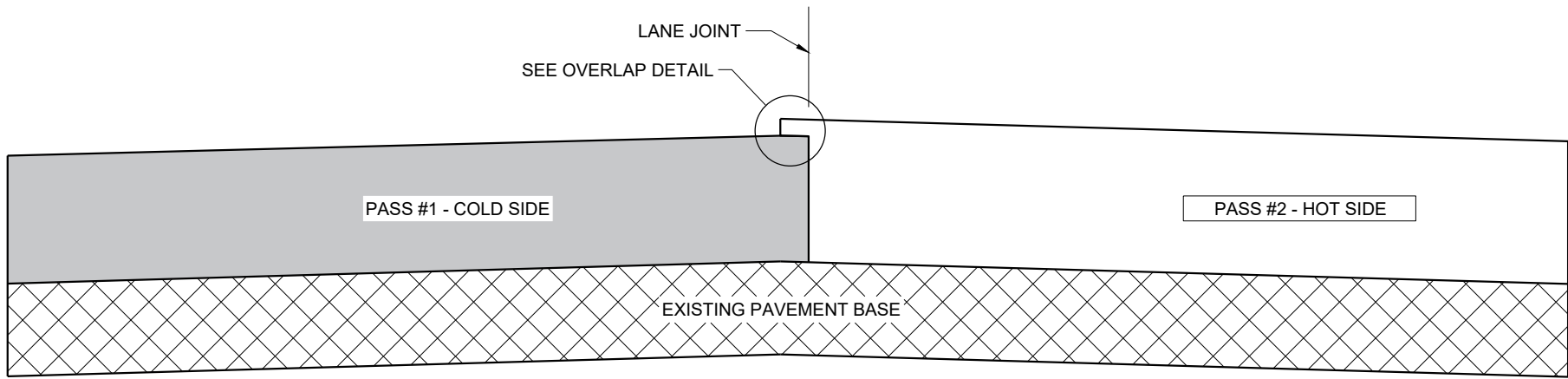
NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/26/10 DATE	/S/ Scot Becker CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA	



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

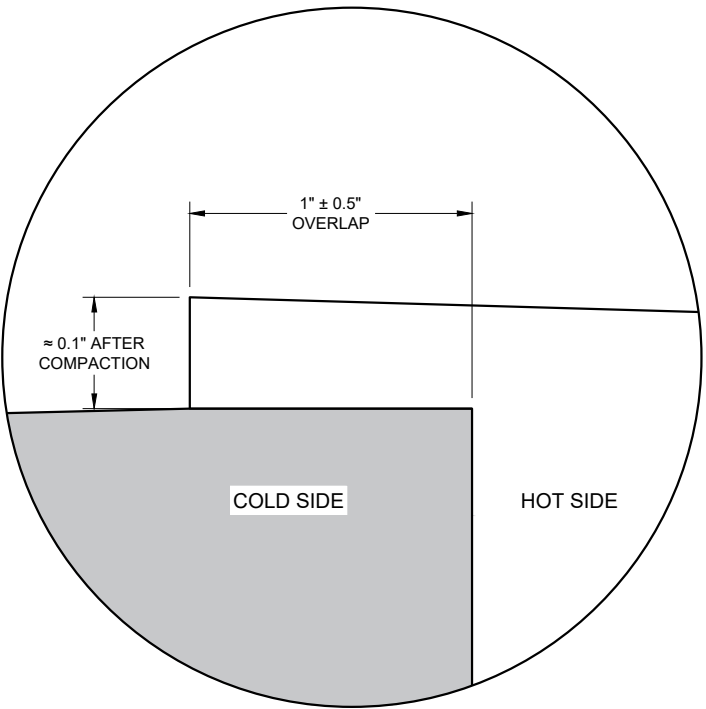
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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.

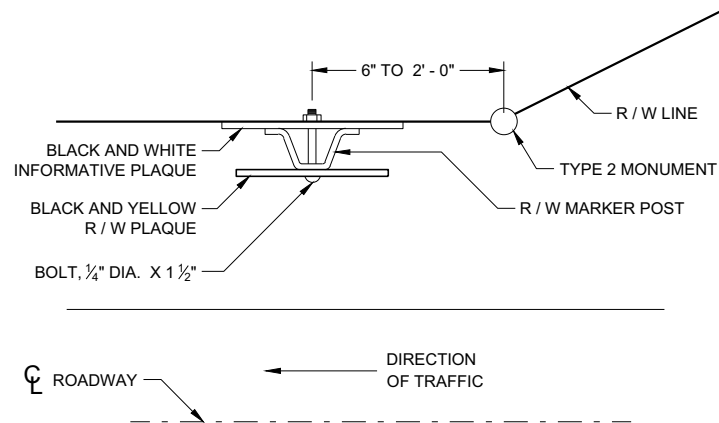


OVERLAP DETAIL (TYPICAL)

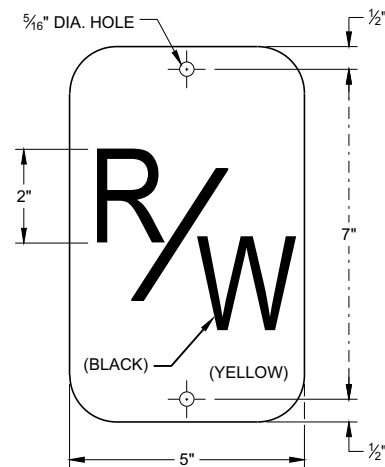
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

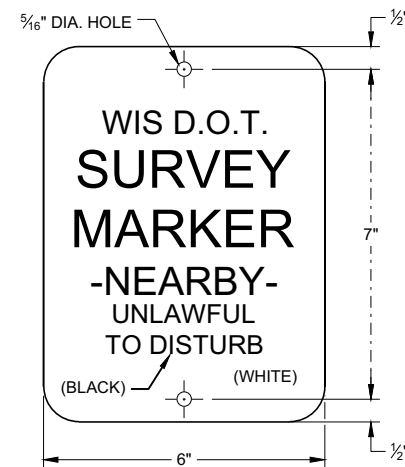


**PLAN VIEW
STEEL MARKER POST**



R / W PLAQUE

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



INFORMATIVE PLAQUE

GENERAL NOTES

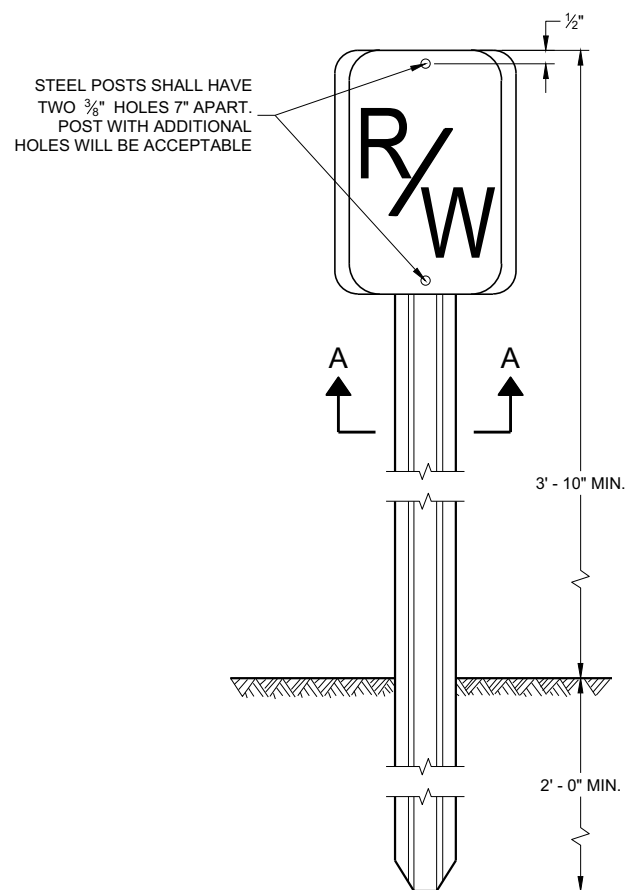
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

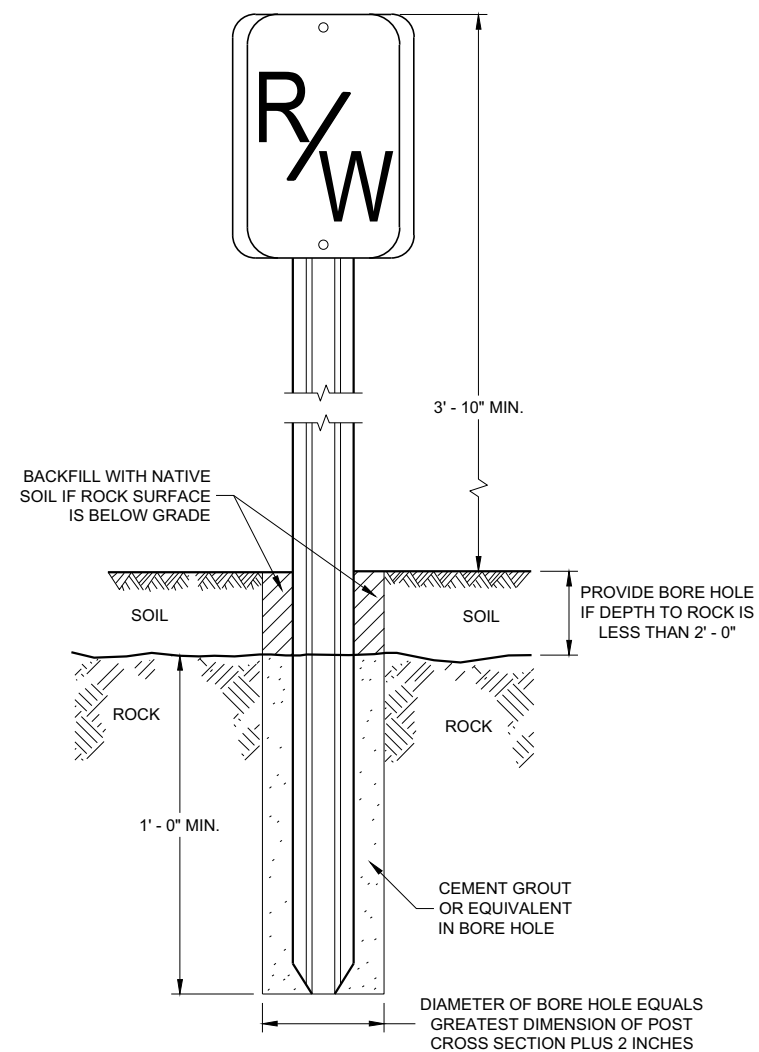
THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFORMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. "R/W" AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

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.

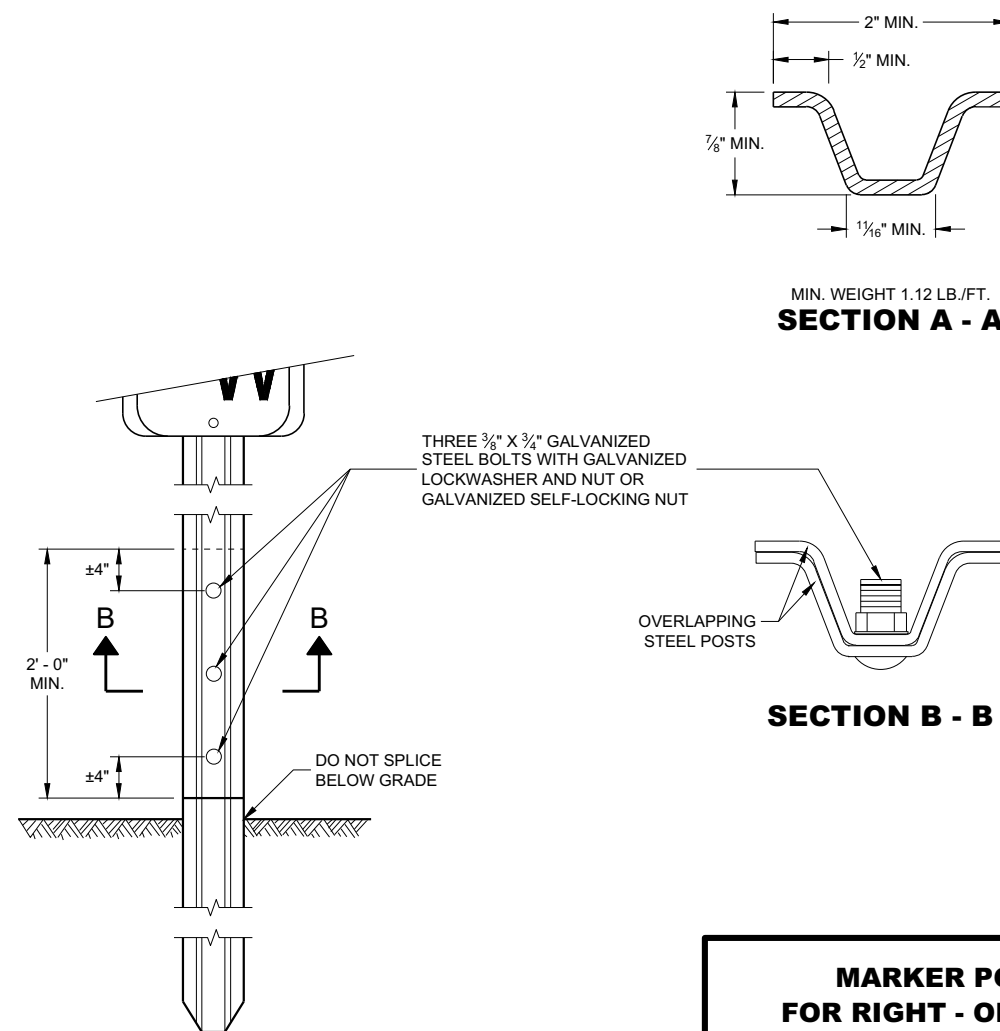
- ① IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3' - 10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR. FILL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



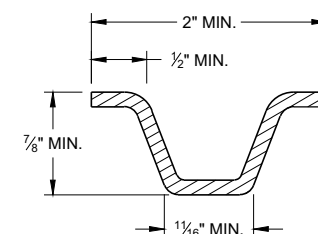
**FRONT VIEW
STEEL MARKER POST**



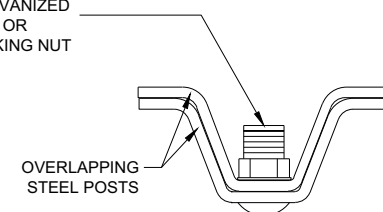
**FRONT VIEW
ROCK INSTALLATION** ①



**FRONT VIEW
SPLICE DETAIL**



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



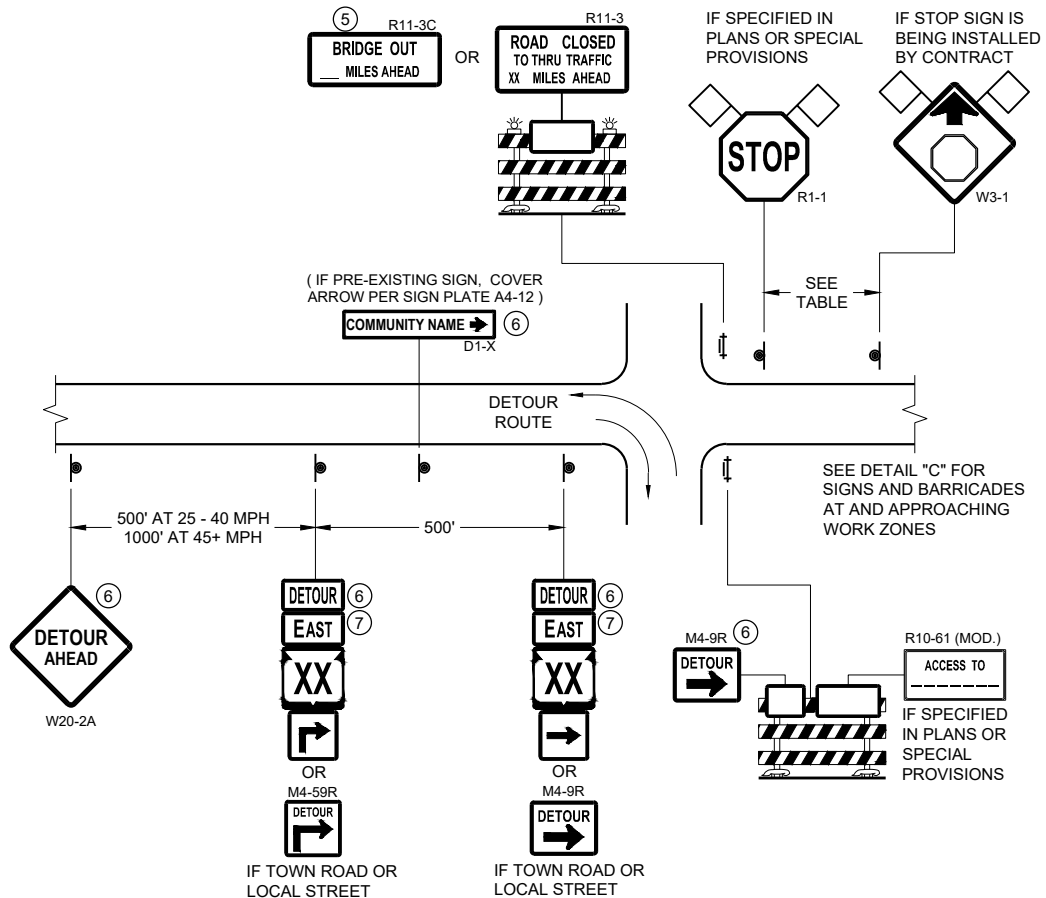
SECTION B - B

MARKER POST FOR RIGHT - OF - WAY

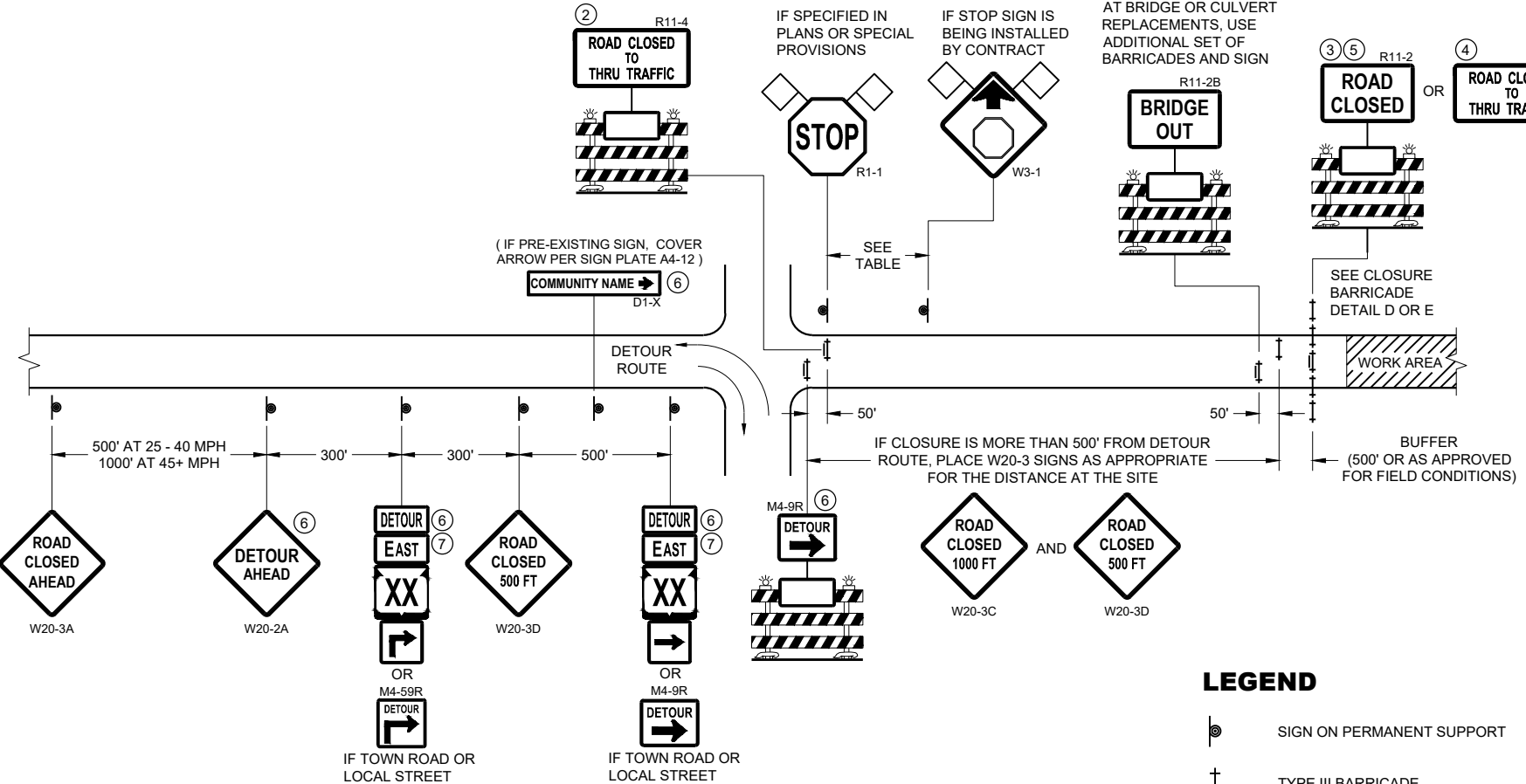
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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)



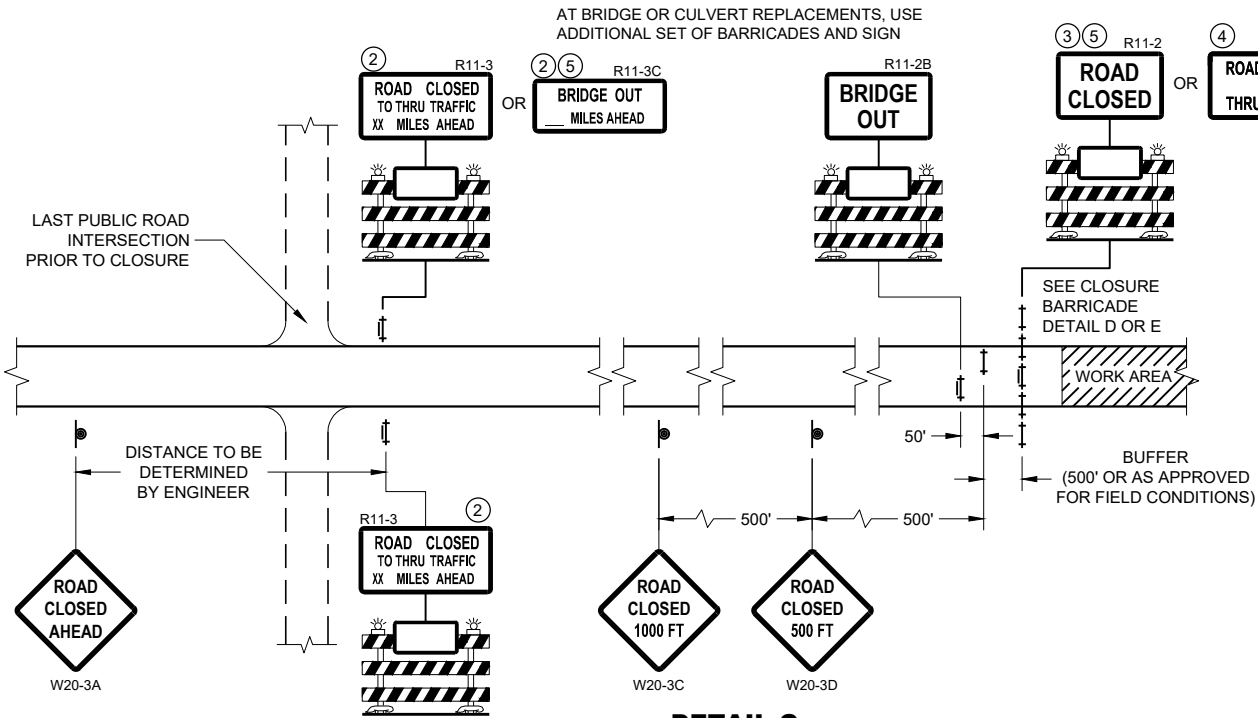
DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

- 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

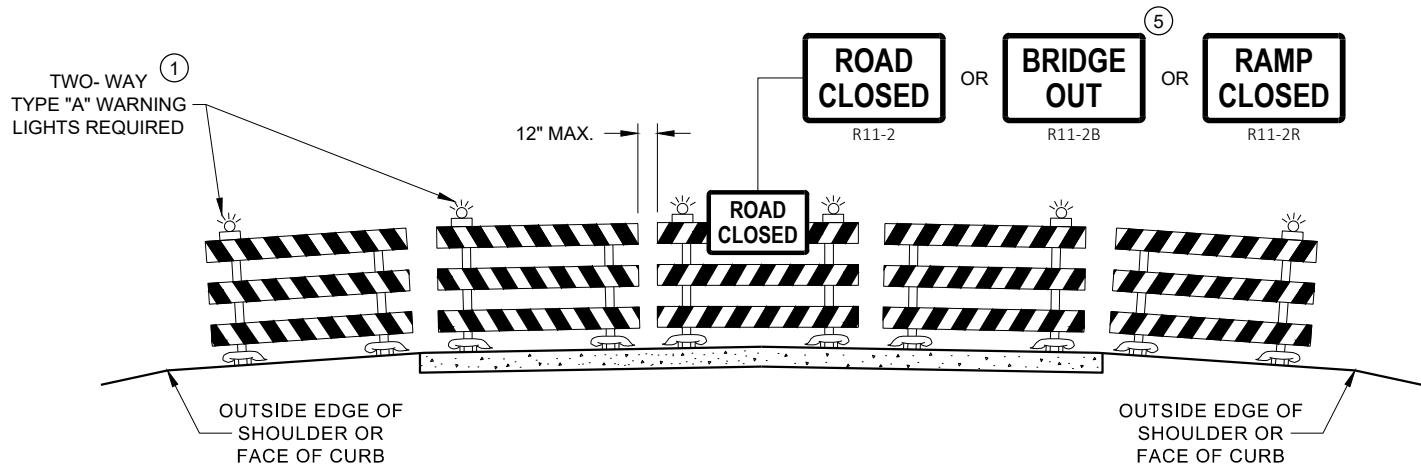


DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

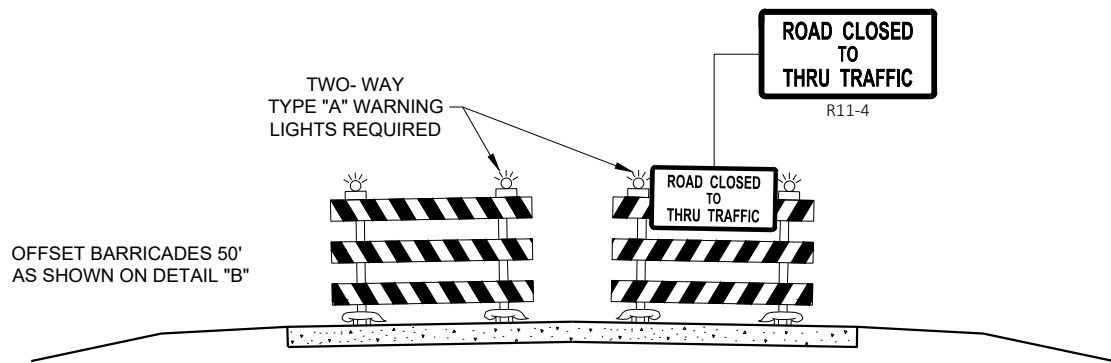
**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

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"

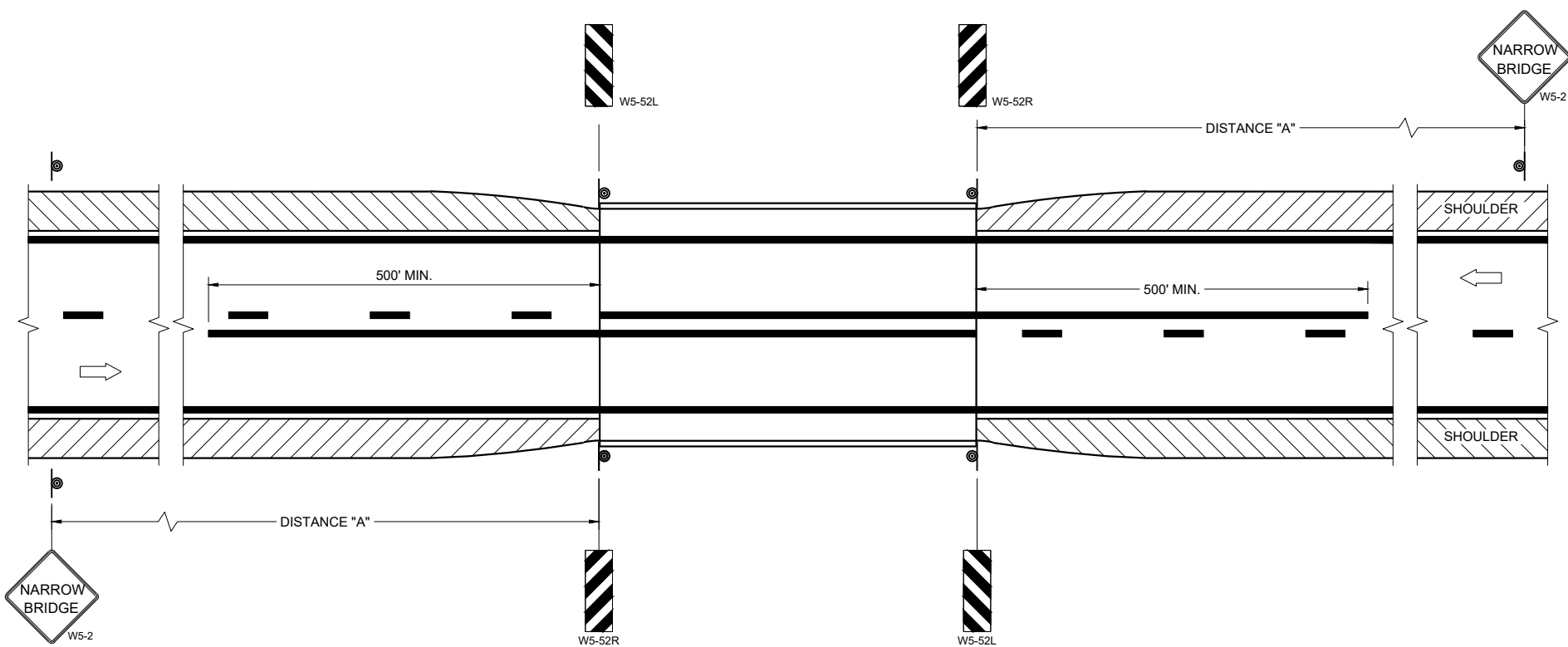
- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- 2 THESE SIGNS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

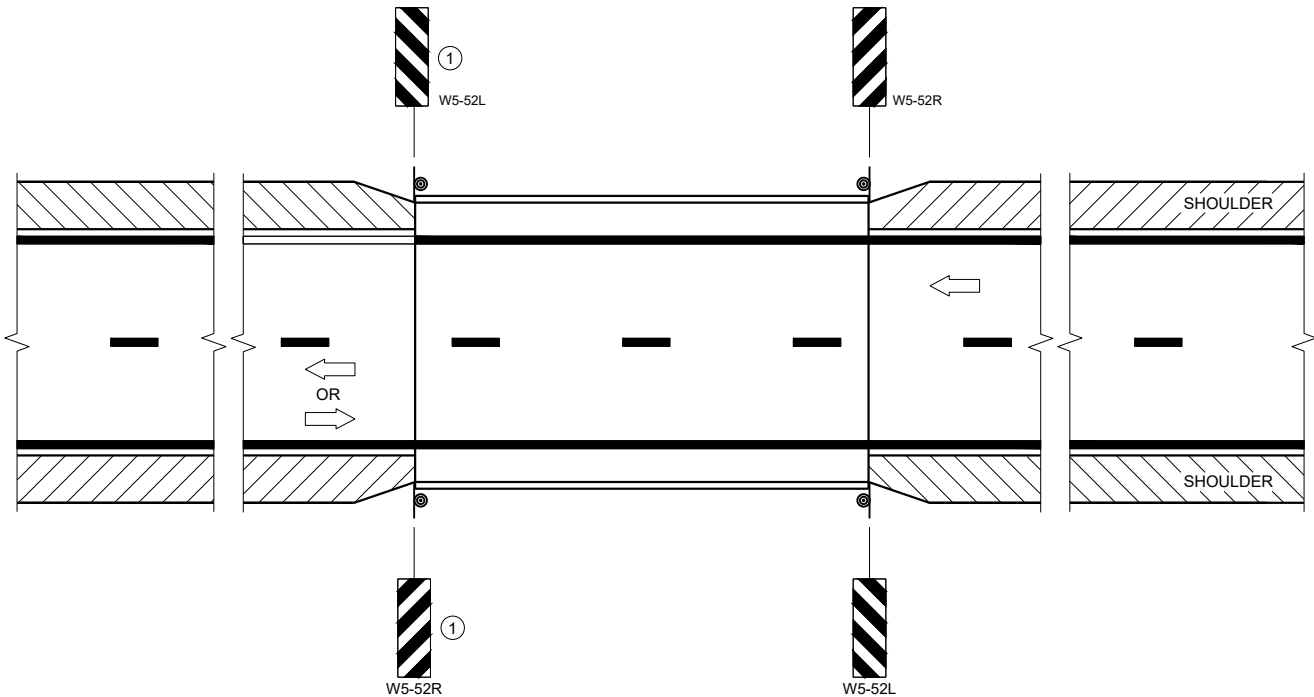
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

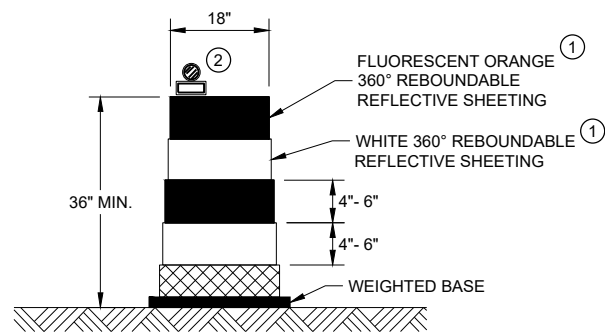
DISTANCE TABLE

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**

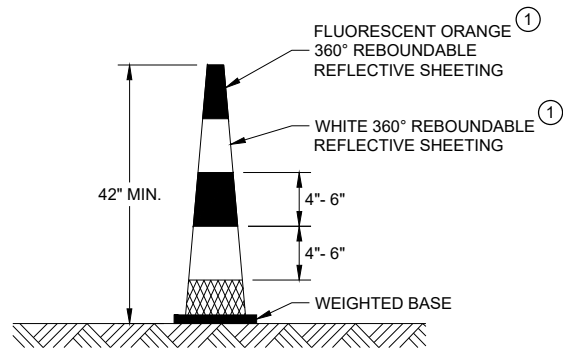
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



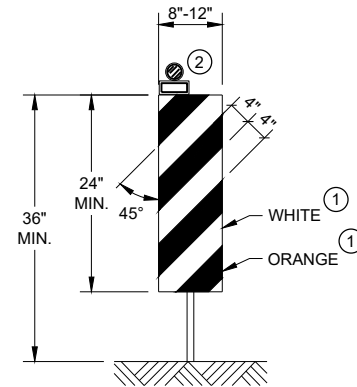
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



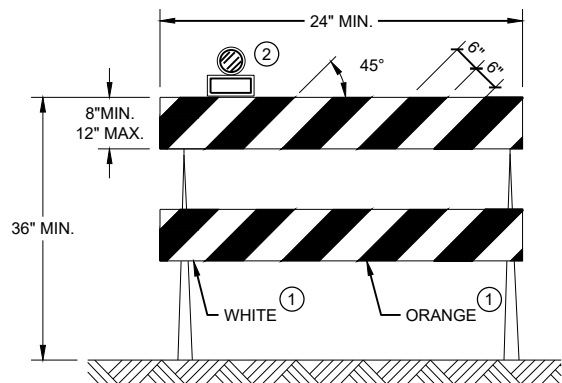
42" CONE

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



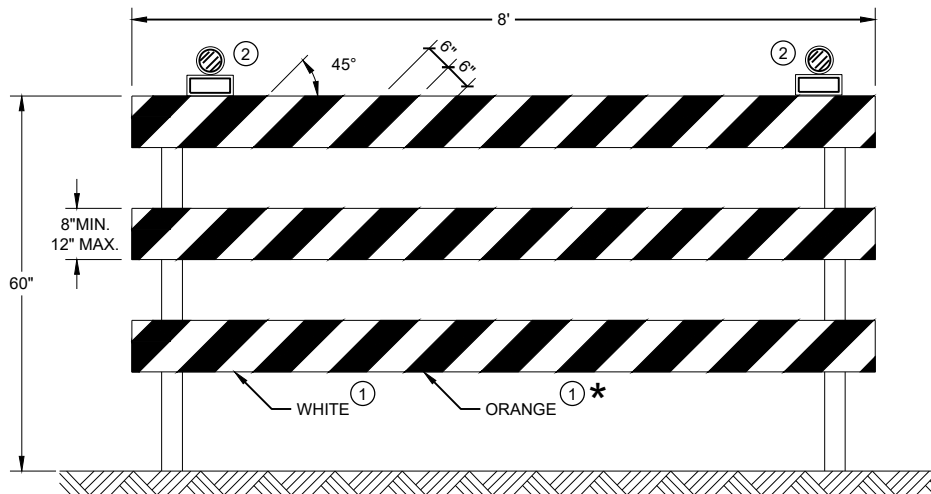
VERTICAL PANEL

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.

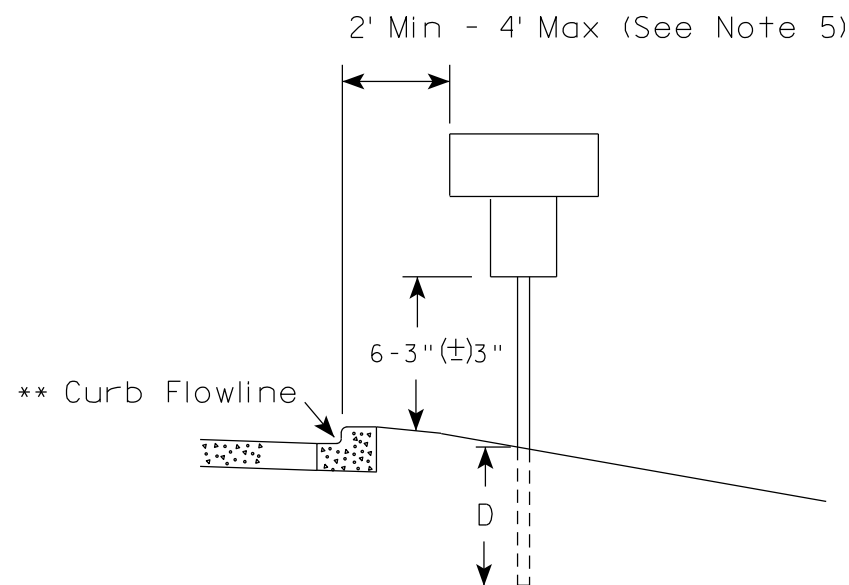
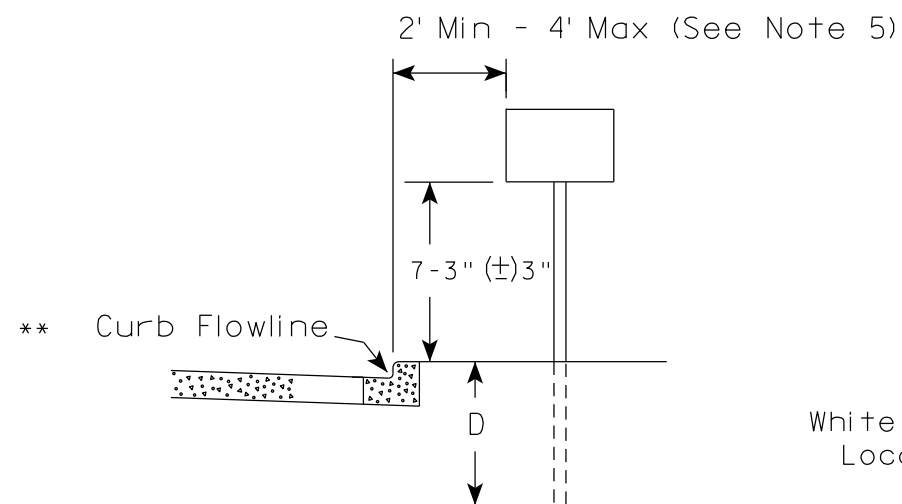
**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

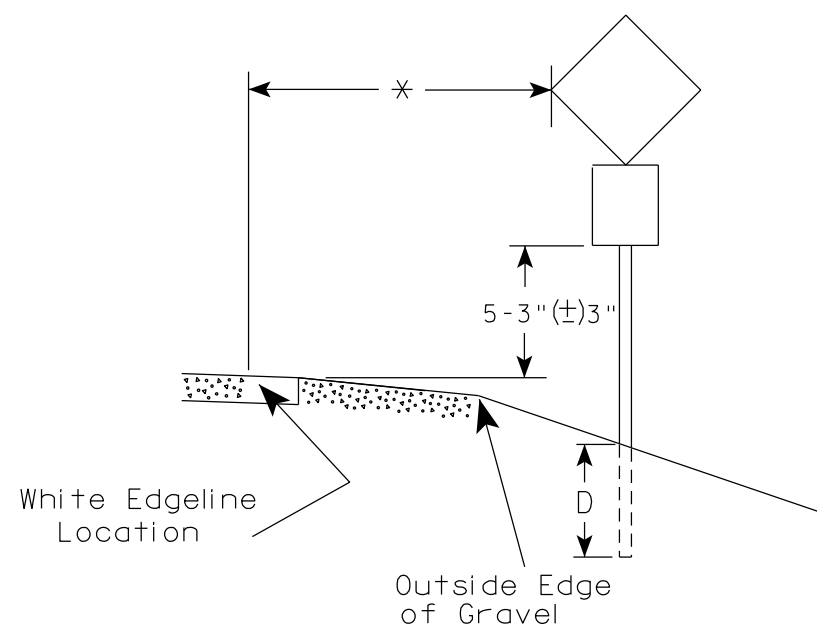
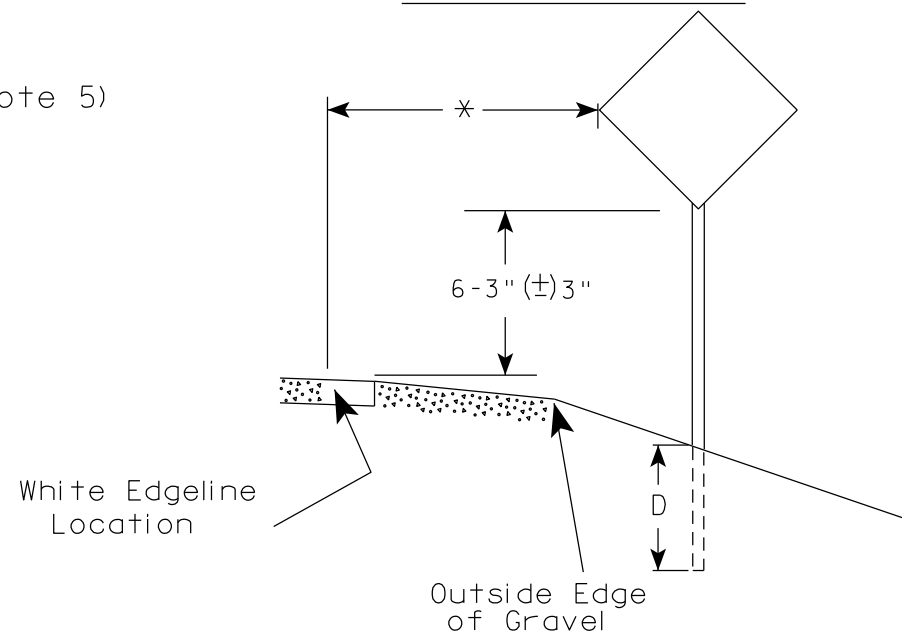
FHWA

URBAN AREA



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

RURAL AREA (See Note 2)



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

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'

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 12/6/23

PLATE NO. A4-3.23

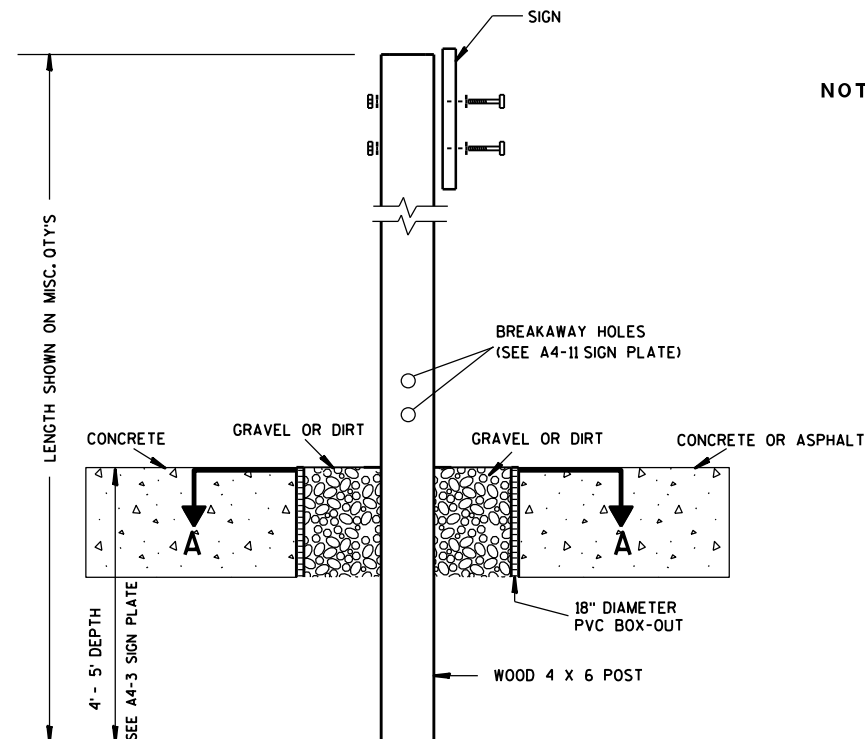
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

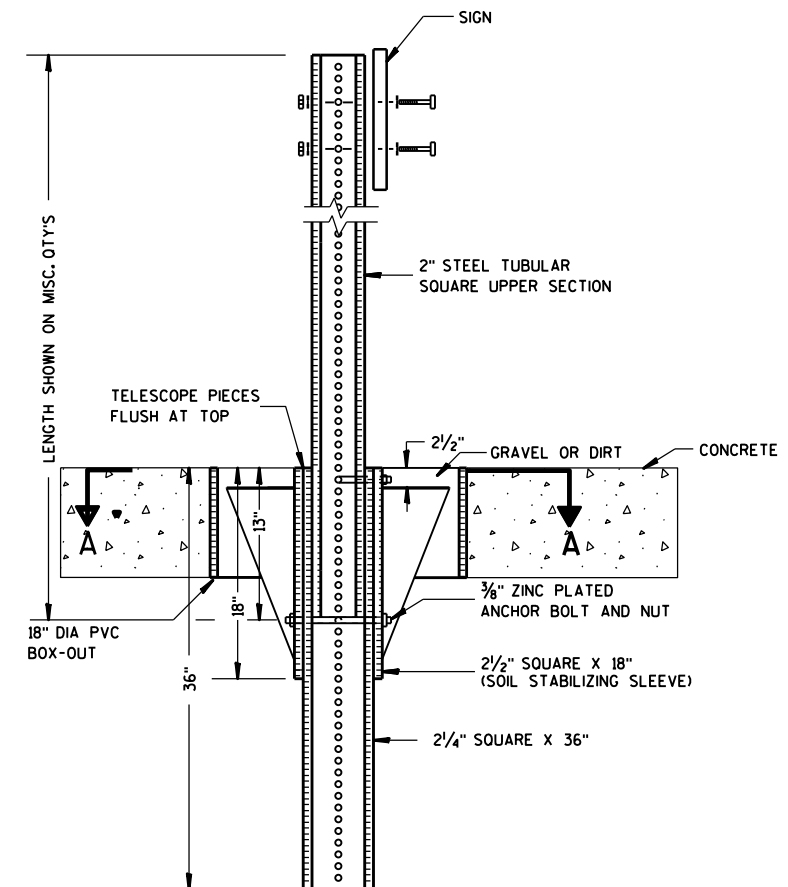
E



ELEVATION VIEW

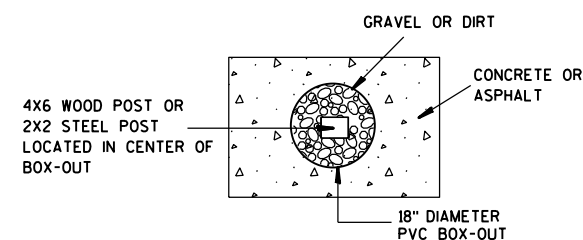
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- NOTES: 1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

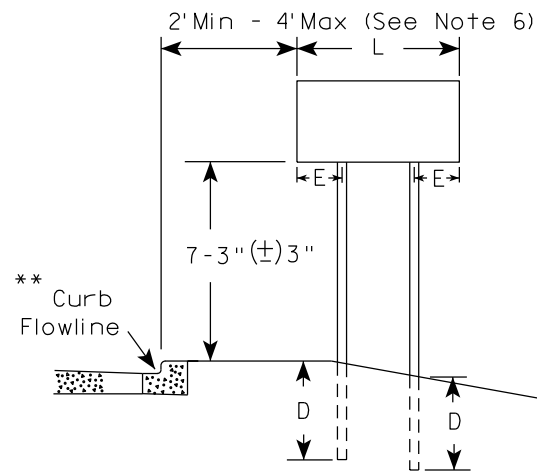
SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

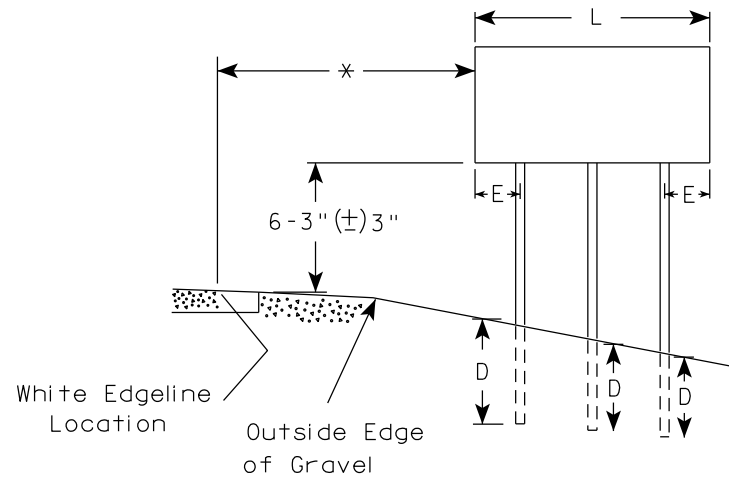
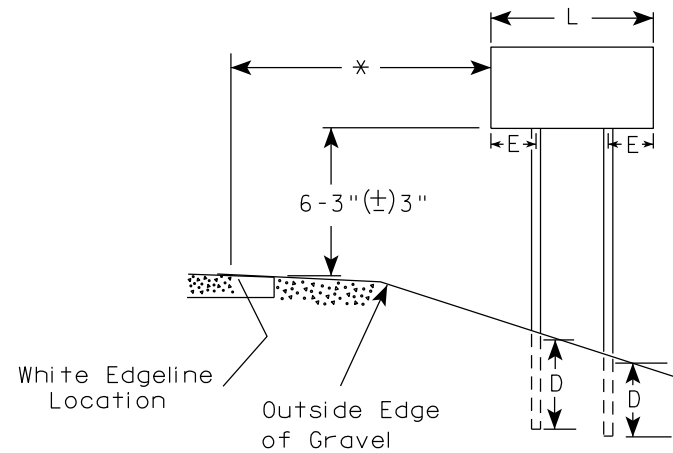
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

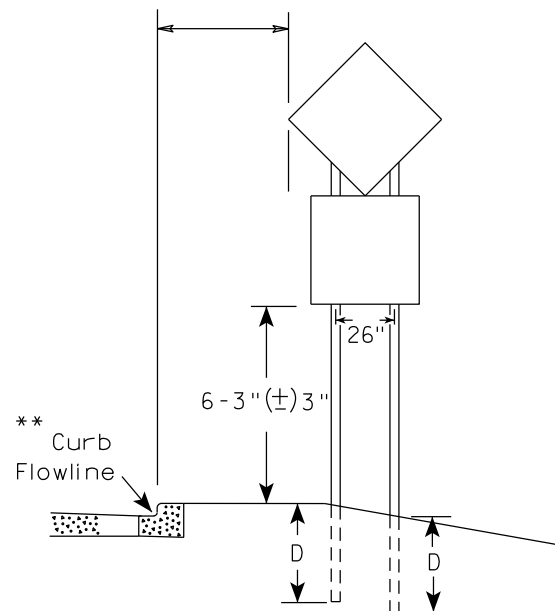
URBAN AREA



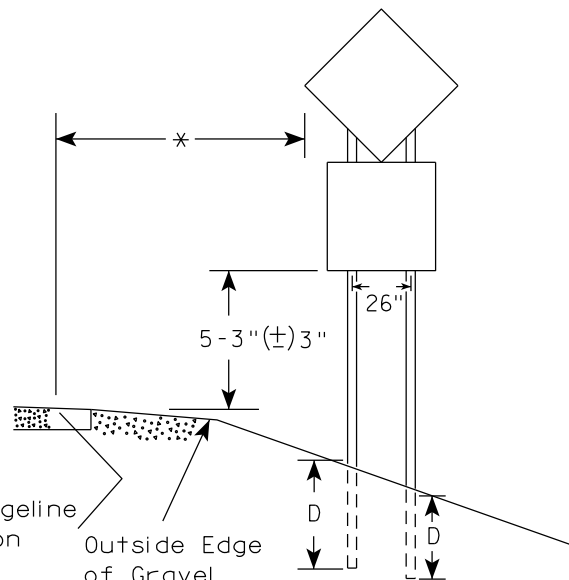
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

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

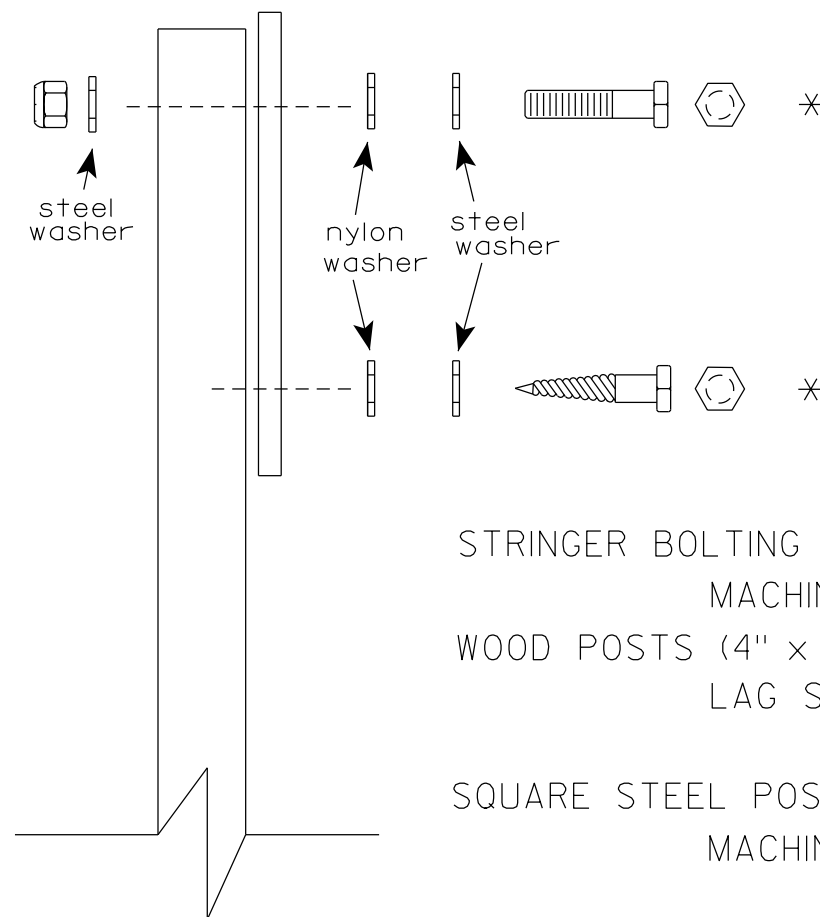
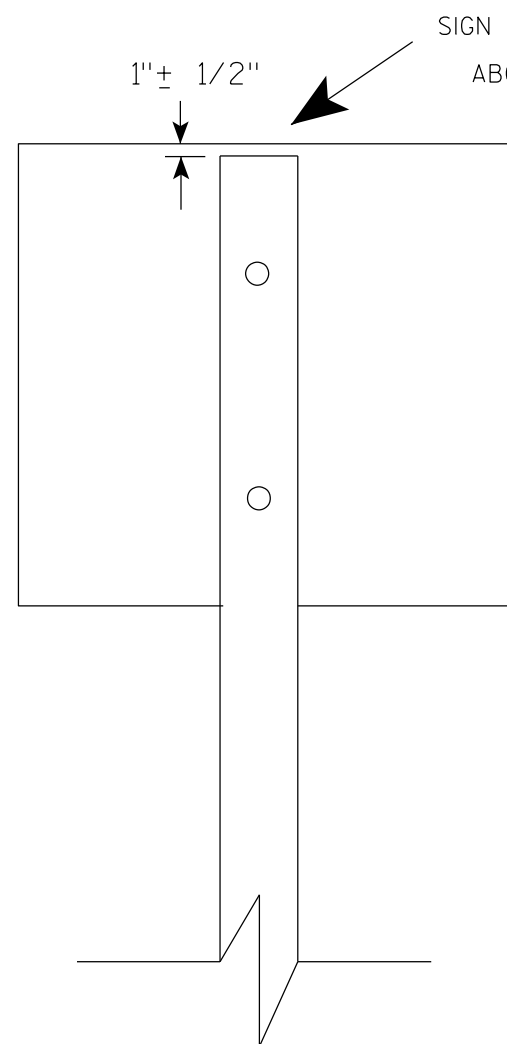
GENERAL NOTES

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

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

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

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



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

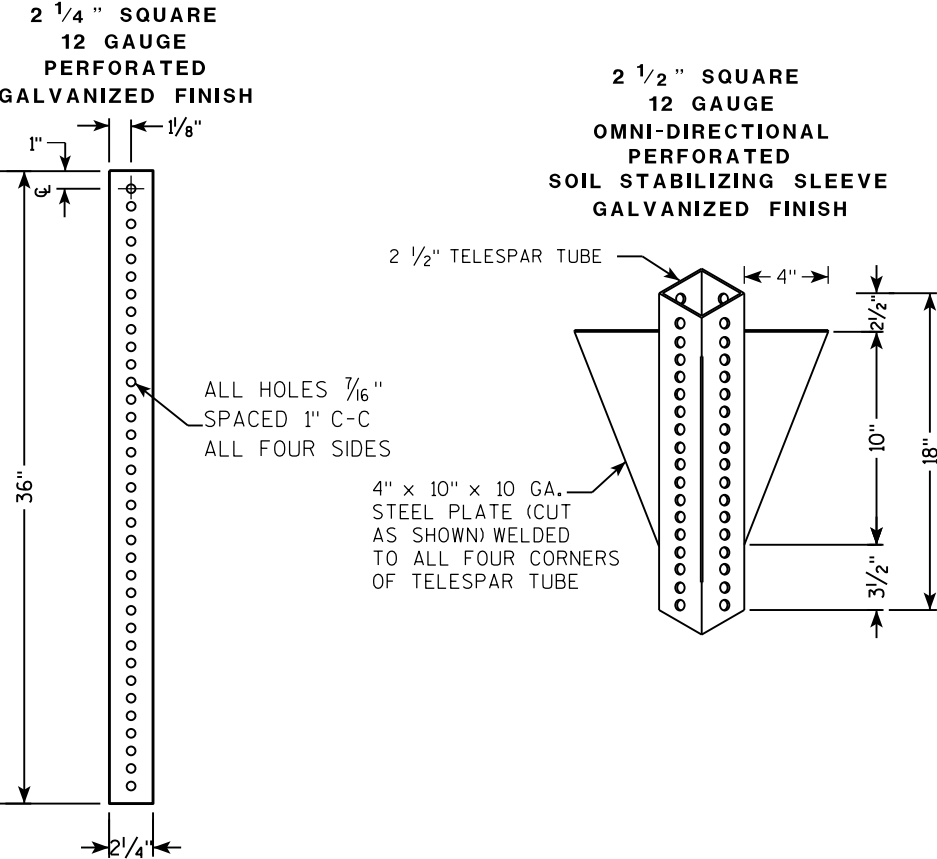
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

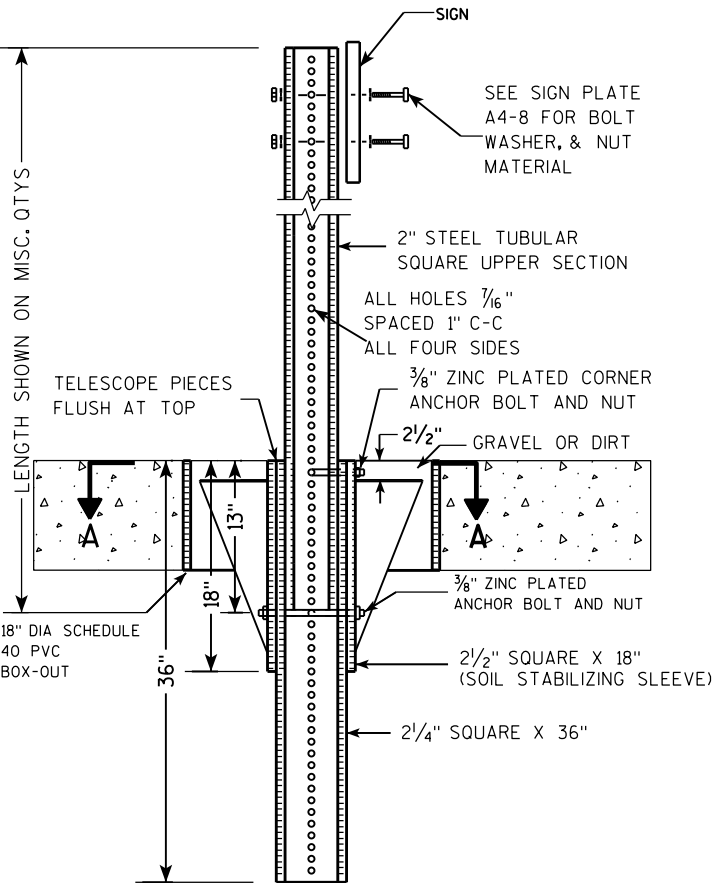
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

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

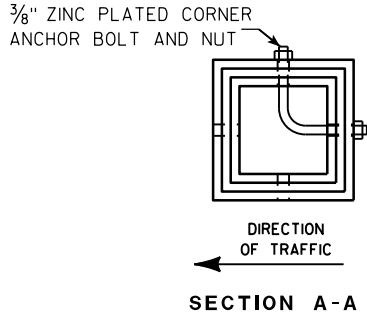
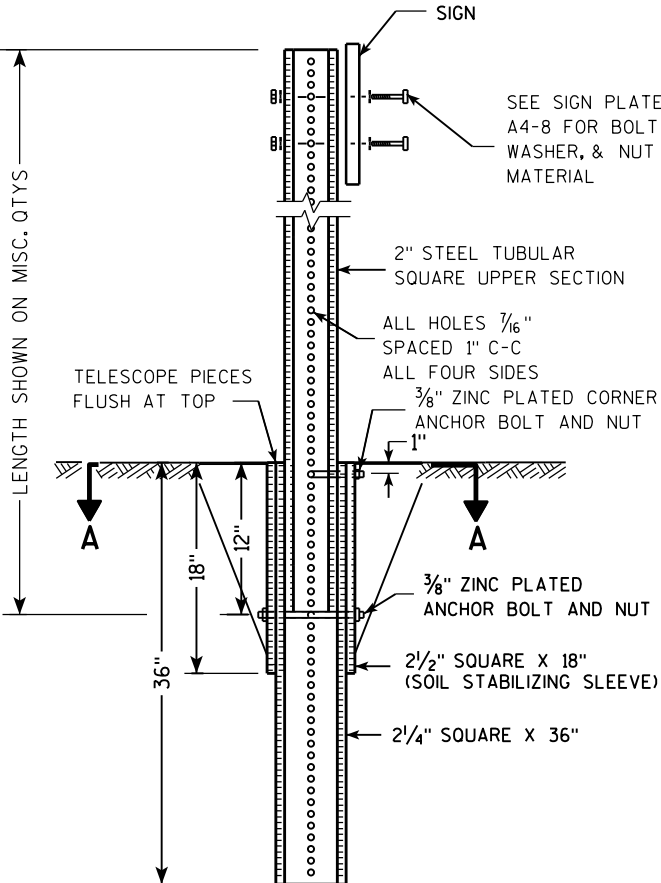
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)



Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

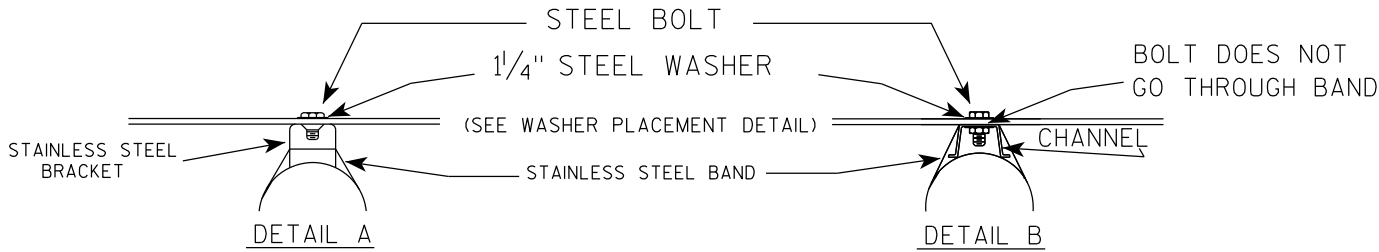
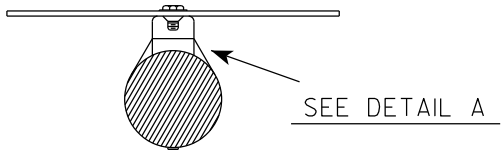
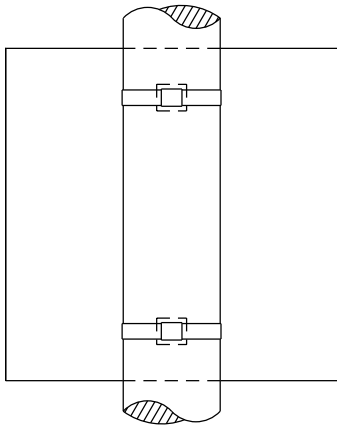
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

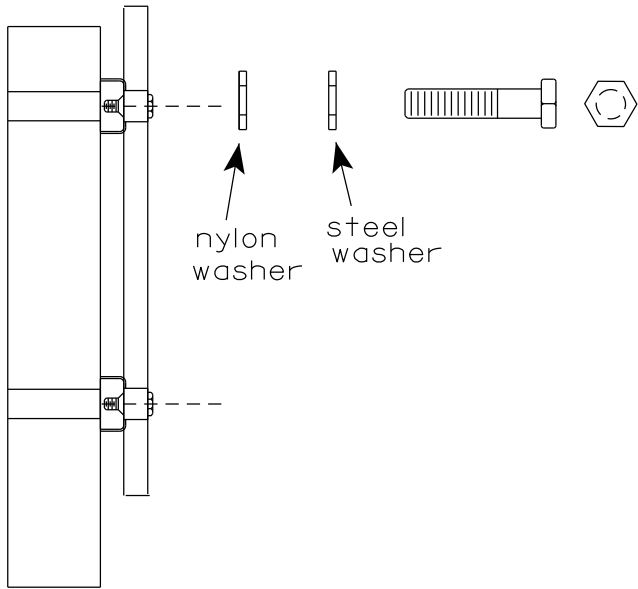
DATE 2/05/15 PLATE NO. A4-9.9

BANDING

SINGLE SIGN



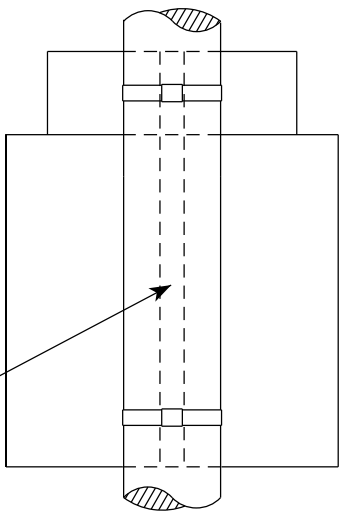
WASHER PLACEMENT



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



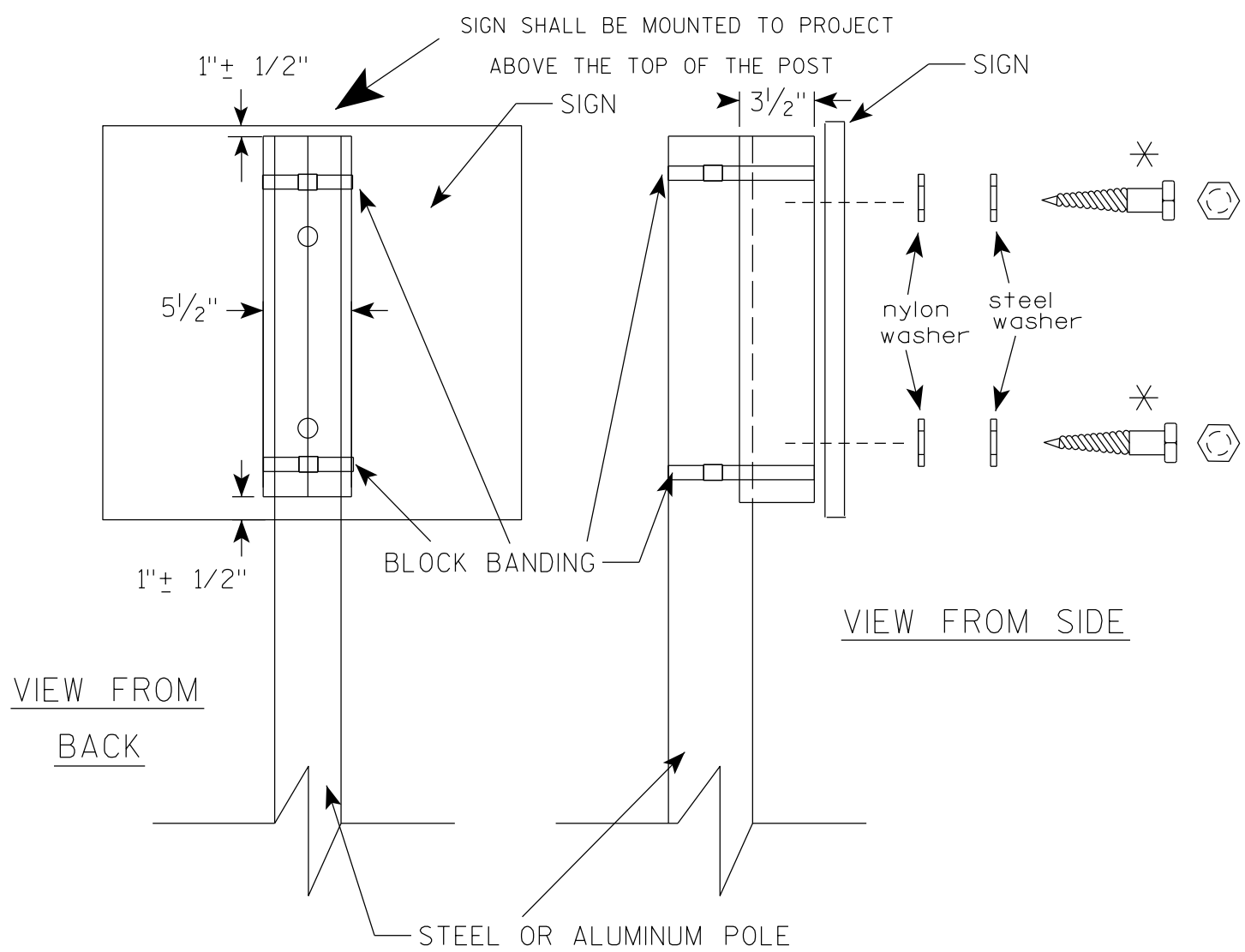
SEE DETAIL B

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

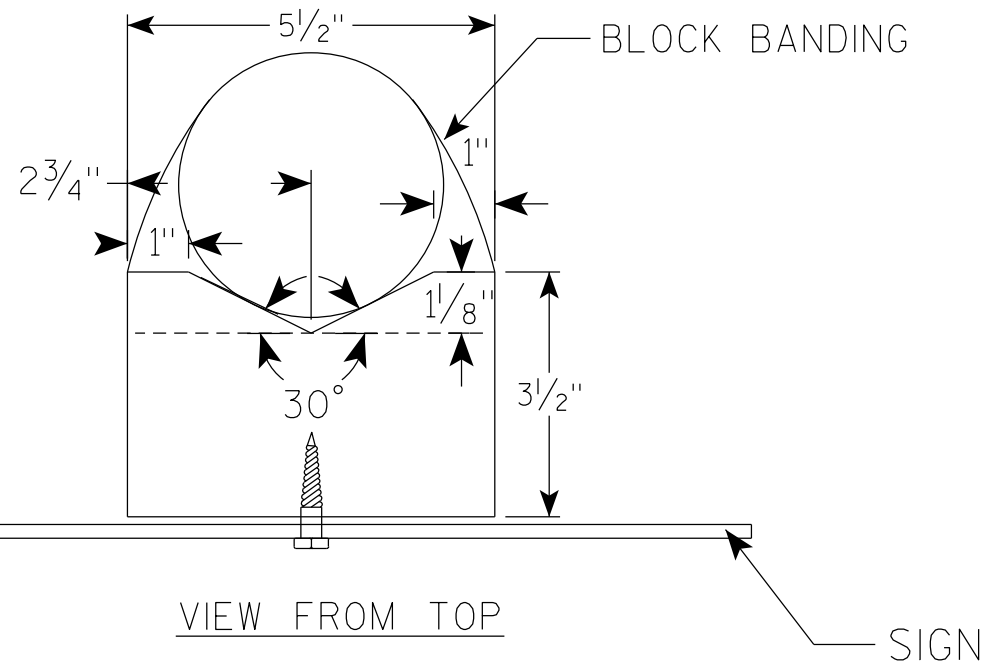
WISCONSIN DEPT OF TRANSPORTATION

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

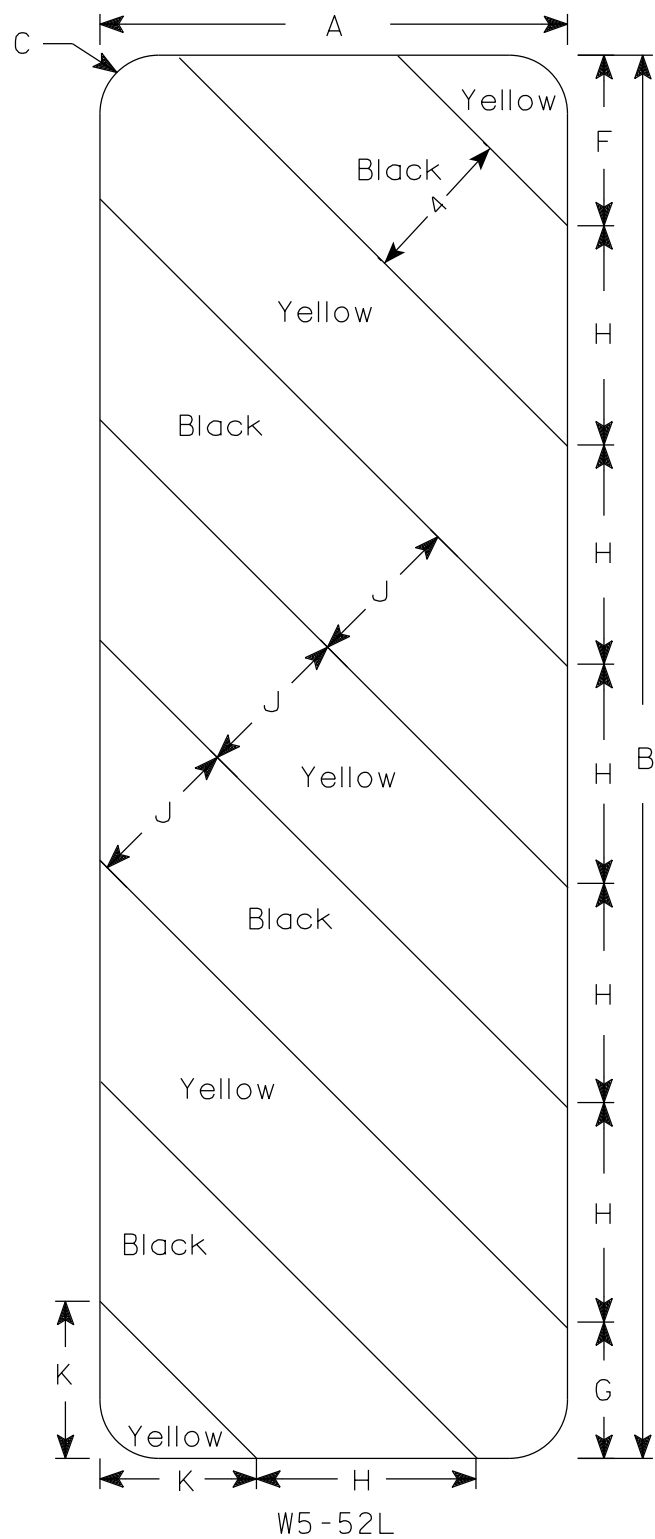
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

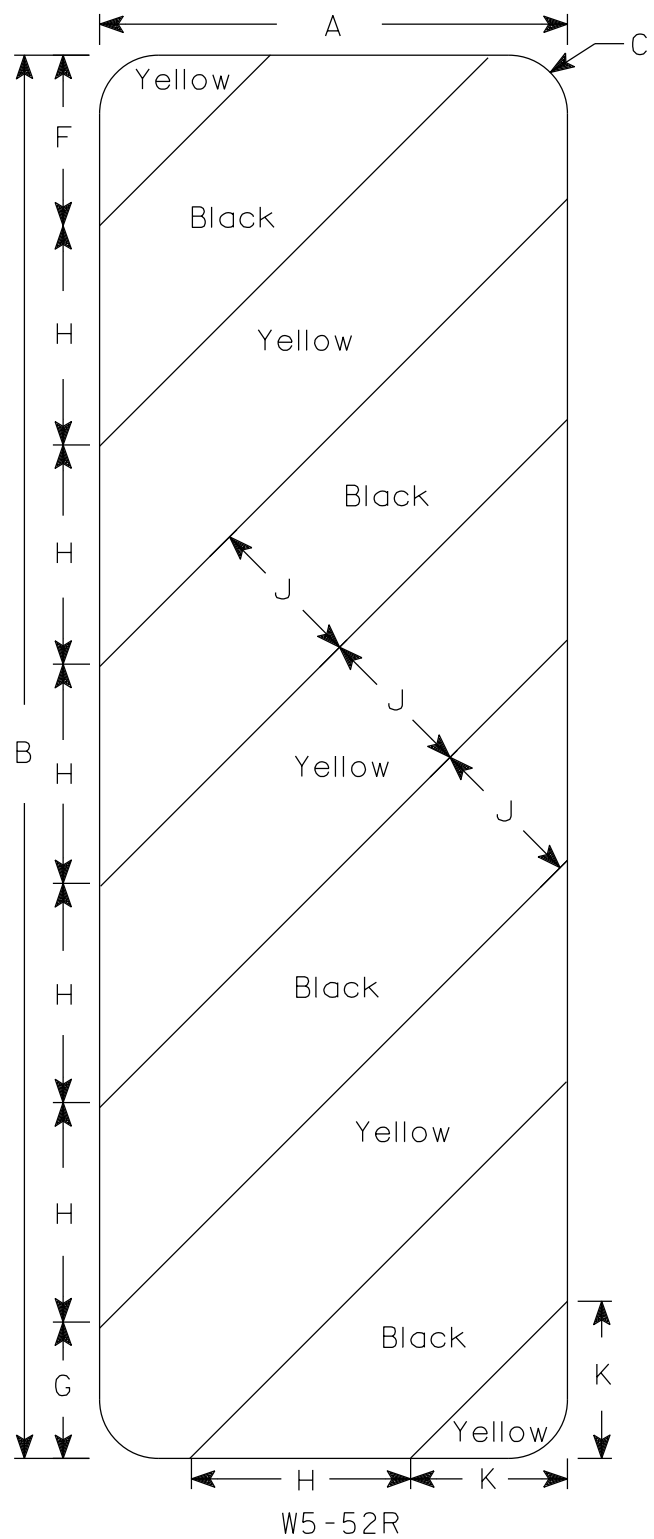
PROJECT NO:

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 5/16																6.75
4																											
5																											

STANDARD SIGN

W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

DESIGN DATA

LIVE LOAD:

DESIGN LOADING ————— HL-93
INVENTORY RATING FACTOR ————— RF=1.11
OPERATING RATING FACTOR ————— RF=1.45
WISCONSIN STANDARD PERMIT
VEHICLE RATING (WIS.-SPV): — 250 KIPS

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

MATERIAL PROPERTIES:

CONCRETE MASONRY, SLAB — f_c = 4,000 P.S.I.
ALL OTHER ————— f_c = 3,500 P.S.I.
HIGH-STRENGTH BAR STEEL
REINFORCEMENT ————— f_y = 60,000 P.S.I.

FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 140 TONS PER PILE** AT S. ABUT. AND 140 TONS PER PILE** AT N. ABUT. AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 50 FT PILE LENGTHS AT S. ABUT. AND 50 FT PILE LENGTHS AT N. ABUT.

**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 DYNAMIC FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA:

Q_{100} ————— 1,730 C.F.S.
 Q_{100} (THRU BRIDGE) ————— 1,673 C.F.S.
 Q_{100} (ROAD) ————— 57 C.F.S.
DRAINAGE AREA ————— 19.1 SQ. MI.
BRIDGE WATER AREA ————— 214 SQ. FT.
BRIDGE VELOCITY ————— 7.8 F.P.S.
HIGH WATER₁₀₀ EL. ————— 914.18 FT.
OVERTOPPING Q FREQ. ————— 44 YRS
SCOUR CRITICAL CODE — 5
 Q_2 ————— 566 C.F.S.
 Q_2 ELEVATION ————— 910.87 FT.
 Q_2 VELOCITY ————— 7.3 F.P.S.

TRAFFIC DATA:

STOUT ROAD
A.A.D.T. (2026) ————— 140
A.A.D.T. (2046) ————— 153
DESIGN SPEED ————— 50 M.P.H.

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
(608) 261-0261

CONSULTANT CONTACT
ANDY KNUTSON, P.E., S.E.
(608) 588-7866

NO.	DATE	REVISION	BY

WESTBROOK
Associated Engineers, Inc.

619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WI 53588
PHONE (608) 588-7866
FAX (608) 588-7954

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED *[Signature]* **05/27/25**
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-56-248

STOUT ROAD OVER CROSSMAN CREEK

COUNTY SAUK TOWN/CITY/VILLAGE LAVALLÉ

DESIGN SPEC. AASHTO LRFD DESIGN SPEC.

DESIGNED BY CDS DESIGN CK'D. JDO DRAWN BY CDS PLANS CK'D. ACK

GENERAL PLAN

SHEET 1 OF 8

NOTES

EXCAVATION AS INDICATED IN THE HATCH AREAS, TO BE INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-56-248".

G01 BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCLUDED WITH BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-56-248". LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

G02 "GEOTEXTILE TYPE DF SCHEDULE A" LIMITS. EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT FOR THE ENTIRE ABUTMENT BODY LENGTH.

G03 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED IN "ABUTMENT DETAILS" SHEET.

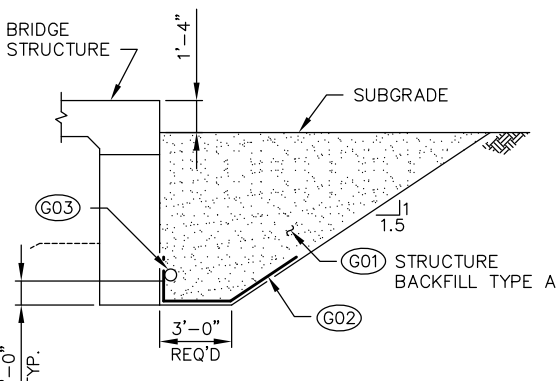
G04 NAME PLATE REQUIRED AND BENCH MARK CAP (WHEN SUPPLIED). FOR LOCATION SEE "ABUTMENTS" SHEET.

G05 REMOVE ALL PORTIONS OF EXISTING STRUCTURE IN CONFLICT WITH NEW ABUTMENT CONCRETE AND PILES. TYPICAL NEAR WINGS 1, 2, & 3. ALL REMOVAL TO BE INCLUDED WITH BID ITEM "REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS P-56-114".

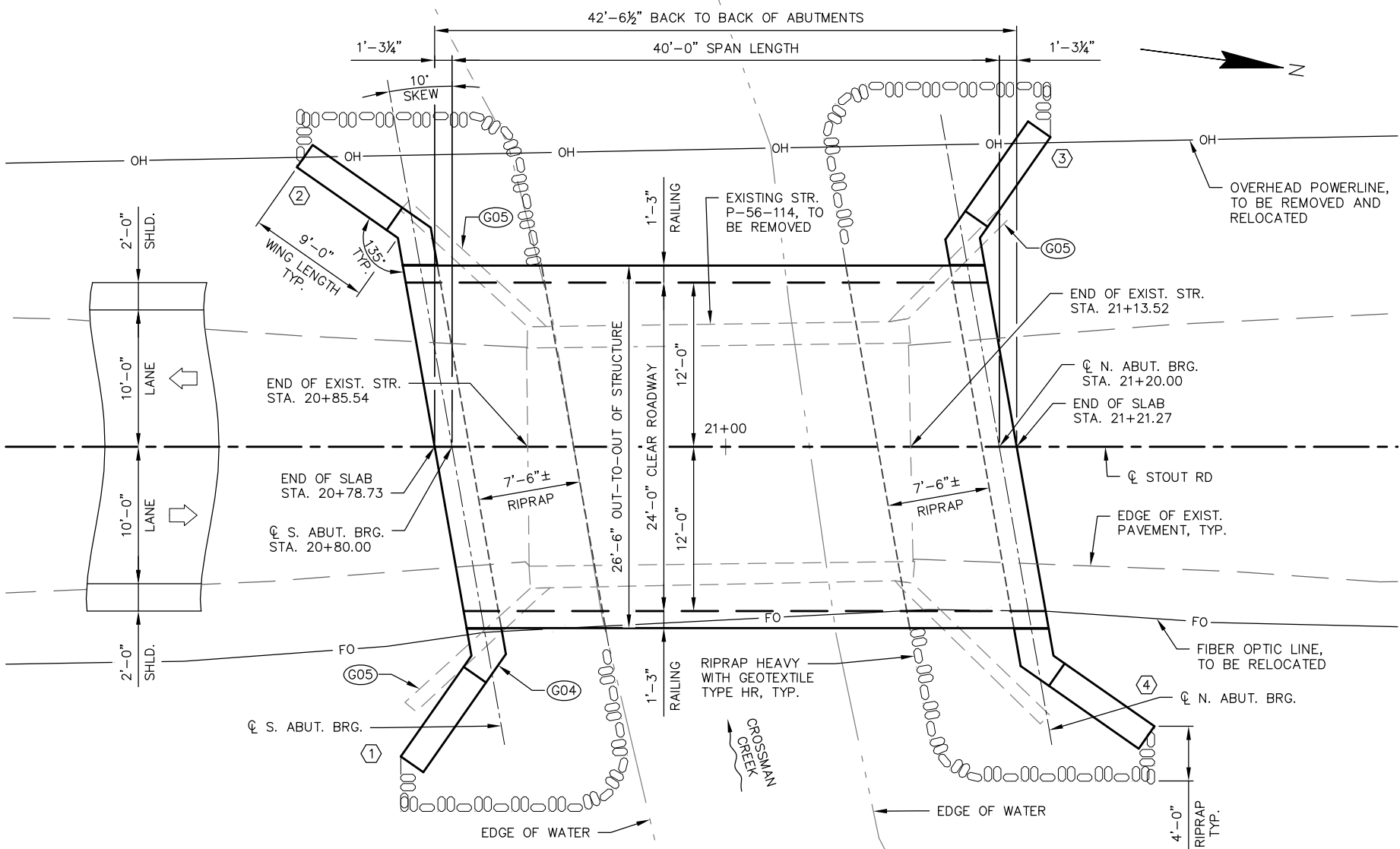
INDICATES WING NUMBER

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION, GENERAL NOTES & QUANTITIES
3. SUBSURFACE EXPLORATION
4. ABUTMENTS
5. ABUTMENT DETAILS
6. SUPERSTRUCTURE
7. SUPERSTRUCTURE DETAILS
8. RAILING TUBULAR TYPE M

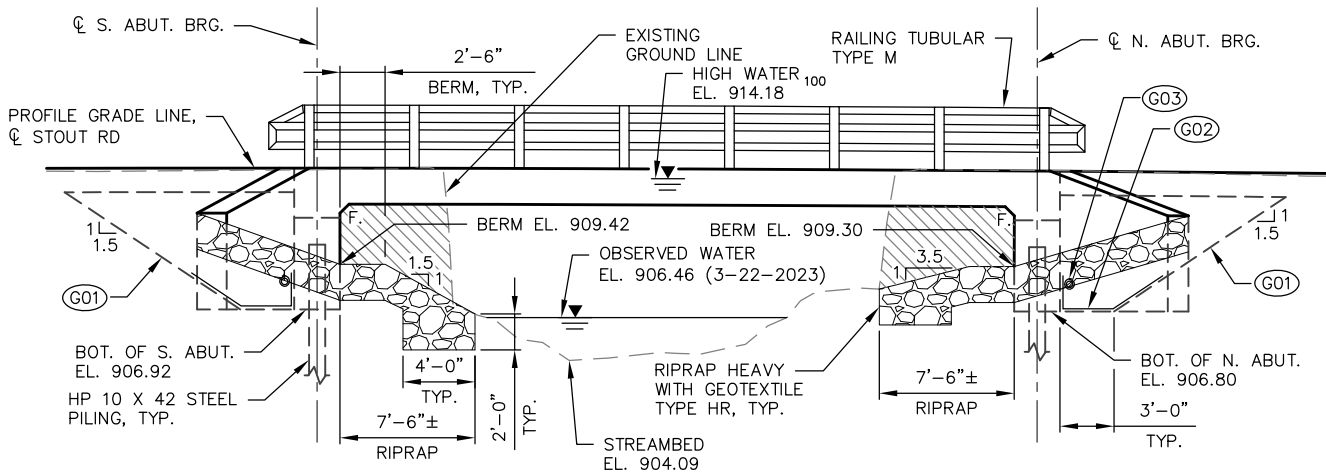


ABUTMENT BACKFILL DETAIL
(TYPICAL AT BOTH ABUTMENTS)



PLAN B-56-248

(SINGLE SPAN CONCRETE FLAT SLAB BRIDGE)



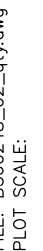
ELEVATION

(THRU CROSSMAN CREEK, LOOKING WEST)

BENCH MARKS

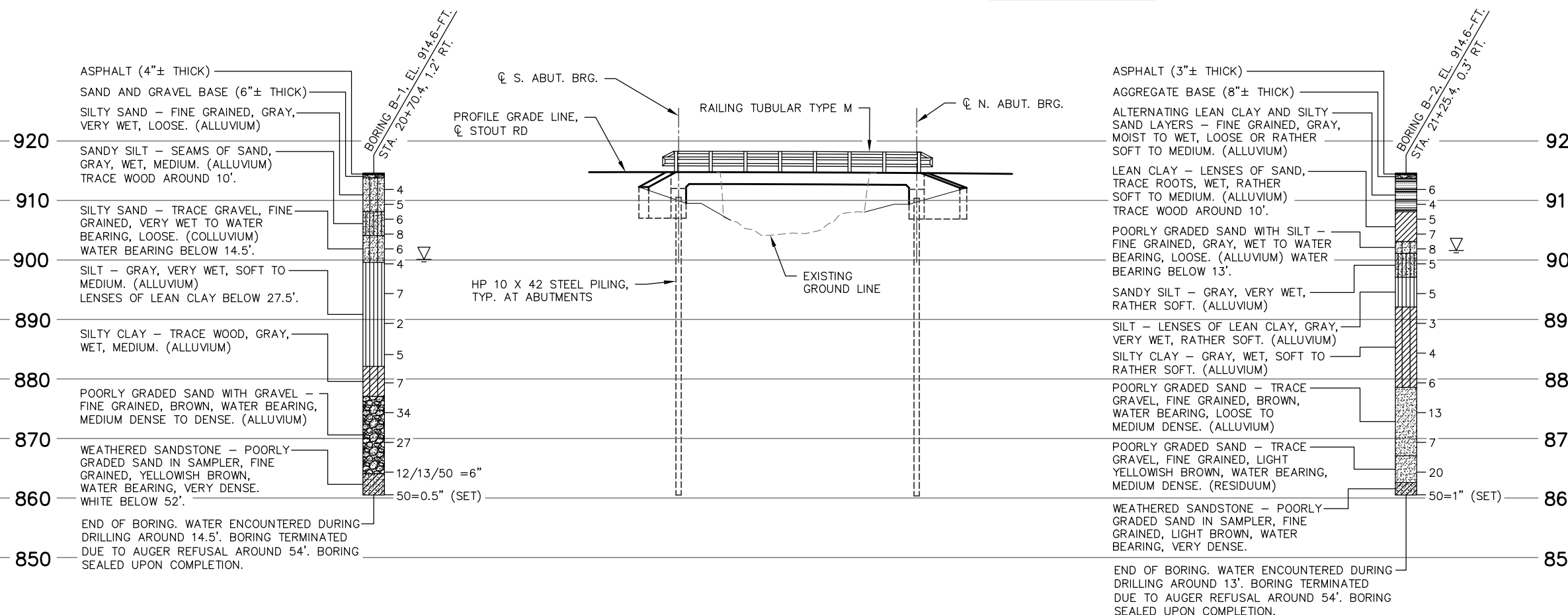
NO.	STATION/OFFSET	DESCRIPTION	ELEVATION
BM #1	19+25.93, 65.68' RT.	RR SPIKE IN POWER POLE	915.52
BM #2	24+78.11, 21.42' LT.	RR SPIKE IN POWER POLE	914.47
















HORIZONTAL DATUM AND ADJUSTMENT: NAD 83 (2011)
VERTICAL DATUM AND ADJUSTMENT: NAVD 88 (2012)
COORDINATE REFERENCE SYSTEM: WISCRS SAUK CO.



BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
BORING B-1	4/6/2023	298438.2	538326.0
BORING B-2	4/6/2023	298492.6	538318.0
BORINGS COMPLETED BY: CHOSEN VALLEY TESTING			
SUBSURFACE INVESTIGATION REPORT: CHOSEN VALLEY TESTING			
ALL COORDINATES REFERENCED TO WSCRS, SAUK COUNTY			

INDICATES WING NUMBER



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

BORING # EL STA./OFF SET

ST (1) (2) 0.25 17

▽

F-C
COBBLE OR BOULDER

WEATHERED LIMESTONE

CORE RUN #1 - 24'-29'
REC=80%, RQD=72%

- (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.

▽ AT TIME OF DRILLING
▼ END OF DRILLING
▼ AFTER DRILLING

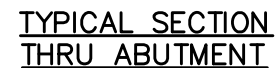
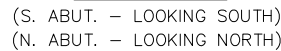
F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION					
STRUCTURE B-56-248					
		DRAWN BY	JDO	PLANS CK'D	ACK
SUBSURFACE EXPLORATION				SHEET 3 OF	

FILE: B560248_03_bor.dwg
PLOT SCALE:



 INDICATES WING NUMBER



ABUTMENTS

BILL OF BARS
BOTH ABUTMENTSCOATED = 2,820 LBS.
UNCOATED = 4,070 LBS.

MARK	COATED	S. ABUT.	N. ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
A501		64	64	5'-11"	X		BODY - STIRRUP - F.F. & B.F.
A502		32	32	6'-7"	X		BODY - STIRRUP - TOP
A403		24	24	3'-1"	X		BODY - TIES
A504		18	18	17'-1"			BODY - F.F.
A805		18	18	21'-11"	X		BODY - B.F.
A506	X	26	26	2'-0"			BODY - TOP DOWELS
A407	X	48	48	8'-6"	X	▲	WINGS 1 THRU 4 - STIRRUP - F.F. & B.F.
A408	X	18	18	7'-2"			WINGS 1 THRU 4 - F.F. & B.F.
A509	X	18	18	11'-9"	X		WINGS 1 THRU 4 - F.F.
A410	X	2	2	9'-8"			WINGS 1 THRU 4 - F.F.
A411	X	2	2	7'-5"			WINGS 1 THRU 4 - F.F.
A412	X	2	2	5'-1"			WINGS 1 THRU 4 - F.F.
A413	X	2	2	10'-6"	X		WINGS 1 THRU 4 - F.F. - TOP
A814	X	18	18	13'-3"	X		WINGS 1 THRU 4 - B.F.
A415	X	2	2	8'-3"			WINGS 1 THRU 4 - B.F.
A416	X	2	2	6'-0"			WINGS 1 THRU 4 - B.F.
A417	X	2	2	3'-8"			WINGS 1 THRU 4 - B.F.
A418	X	2	2	8'-11"	X		WINGS 1 THRU 4 - B.F. - TOP
A419	X	4	4	4'-7"	X		WINGS 1 AND 3 - F.F. CORNER
A420	X	4	4	3'-9"	X		WINGS 2 AND 4 - F.F. CORNER
A421	X	8	8	2'-8"	X		WINGS 1 THRU 4 - B.F. CORNER
A422	X	8	8	4'-0"	X		WINGS 1 THRU 4 - TOP CORNER

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

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

BUNDLE EACH ABUTMENT BARS SEPARATELY.

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

NOTES

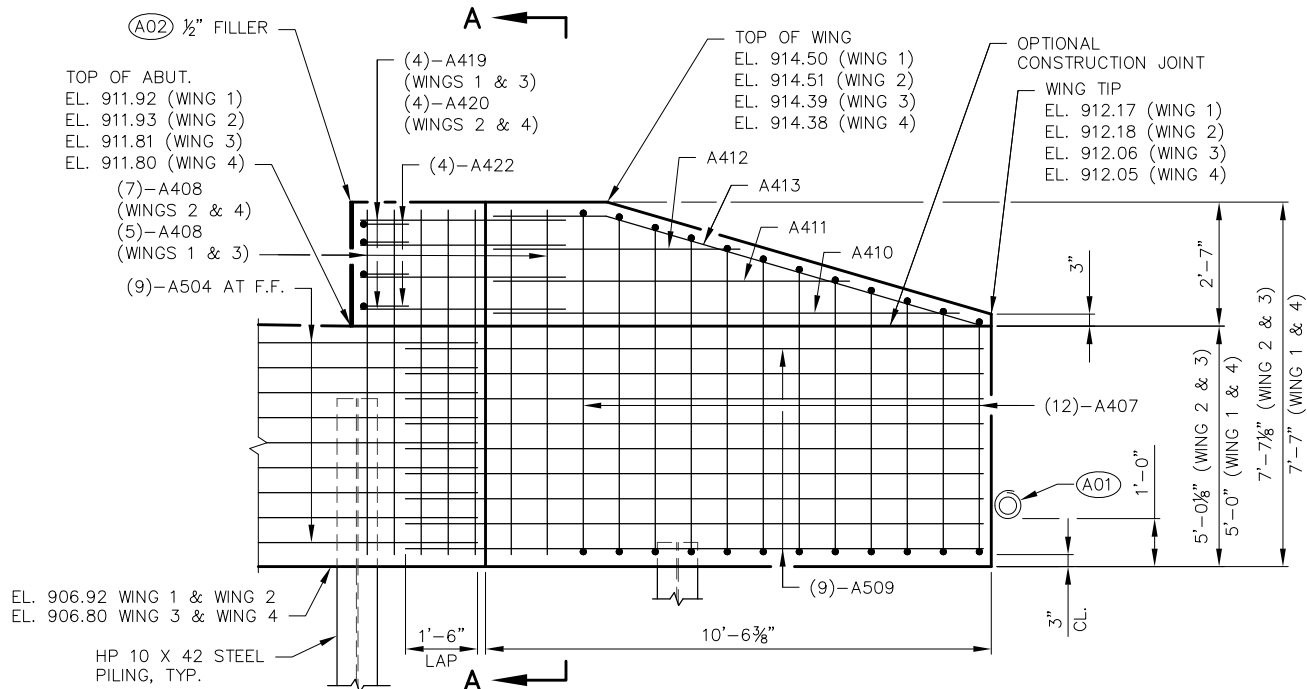
DO NOT PLACE FILL ABOVE 3'-0" FROM THE BOTTOM OF THE ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

SOUTH AND NORTH ABUTMENT TO BE SUPPORTED ON HP 10 X 42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 140 TONS PER PILE AT THE SOUTH ABUTMENT AND 140 TONS PER PILE AT THE NORTH ABUTMENT AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 50 FT PILE LENGTHS AT THE SOUTH ABUTMENT AND 50 FT PILE LENGTHS AT THE NORTH ABUTMENT.

SEE "CROSS SECTION, GENERAL NOTES & QUANTITIES" SHEET FOR HP 10 X 42 PILE SPLICE DETAILS.

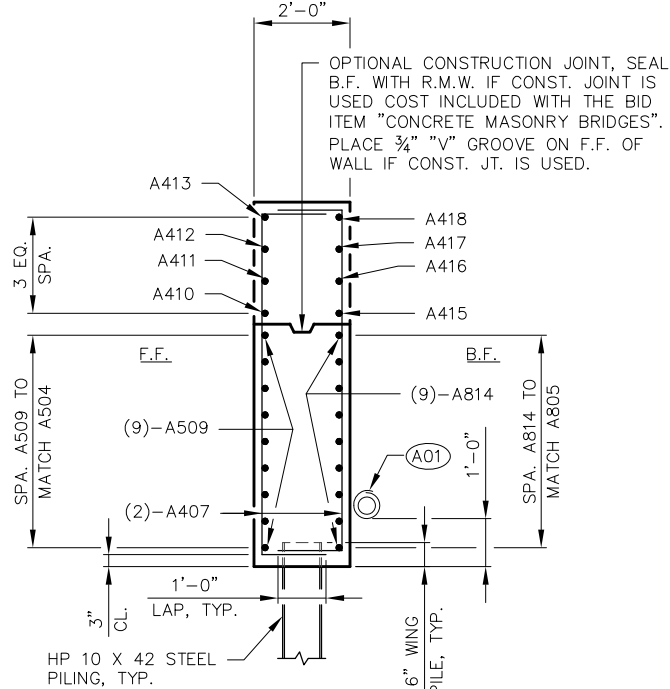
(A01) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON THIS SHEET. RODENT SHIELD SHALL BE INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(A02) SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.) ½" FILLER TO EXTEND FROM BRIDGE SEAT TO TOP OF WING.

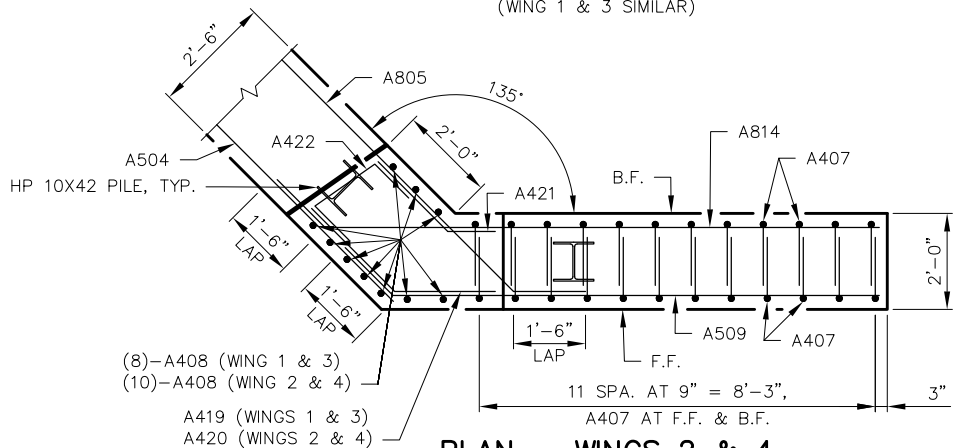


F.F. ELEVATION - WINGS 2 & 4

(WING 1 & 3 SIMILAR)

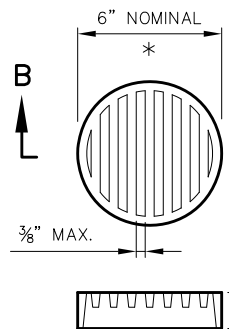


SECTION A-A



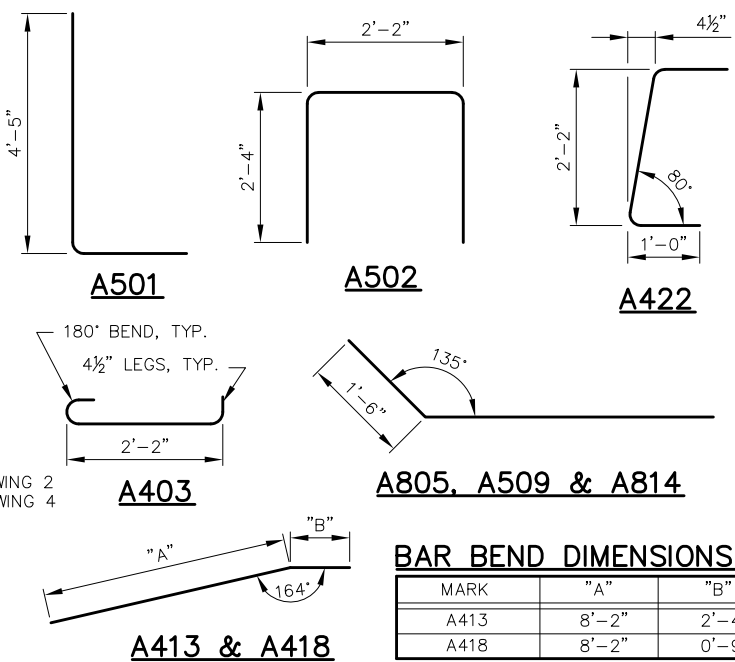
PLAN - WINGS 2 & 4

(WING 1 & 3 SIMILAR)



SECTION B-B

RODENT SHIELD DETAIL



BAR BEND DIMENSIONS

MARK	"A"	"B"
A413	8'-2"	2'-4"
A418	8'-2"	0'-9"

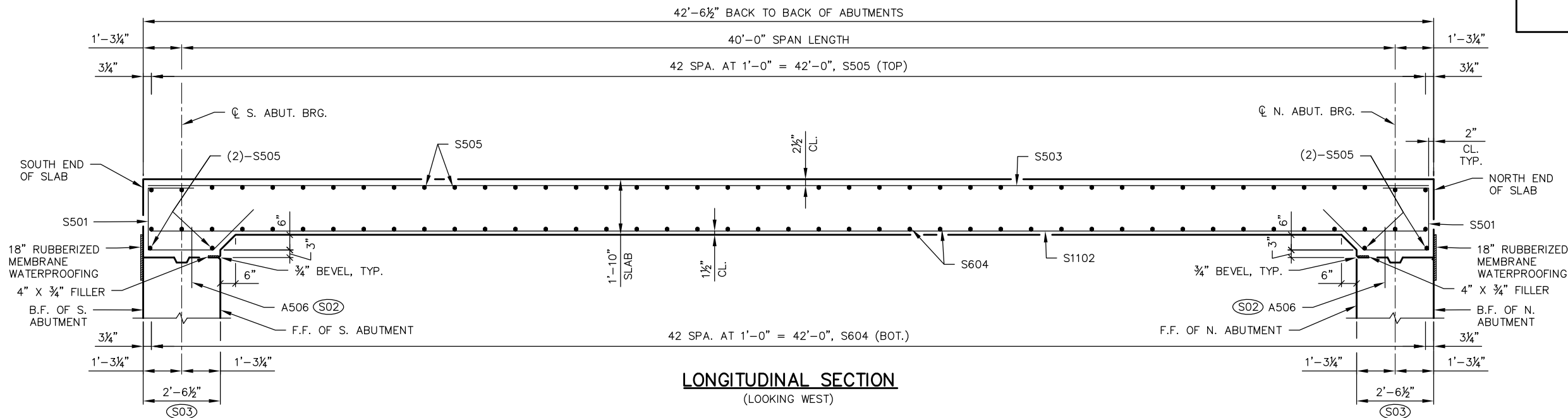
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
A407	8 SERIES OF 12	7'-4" TO 9'-8"

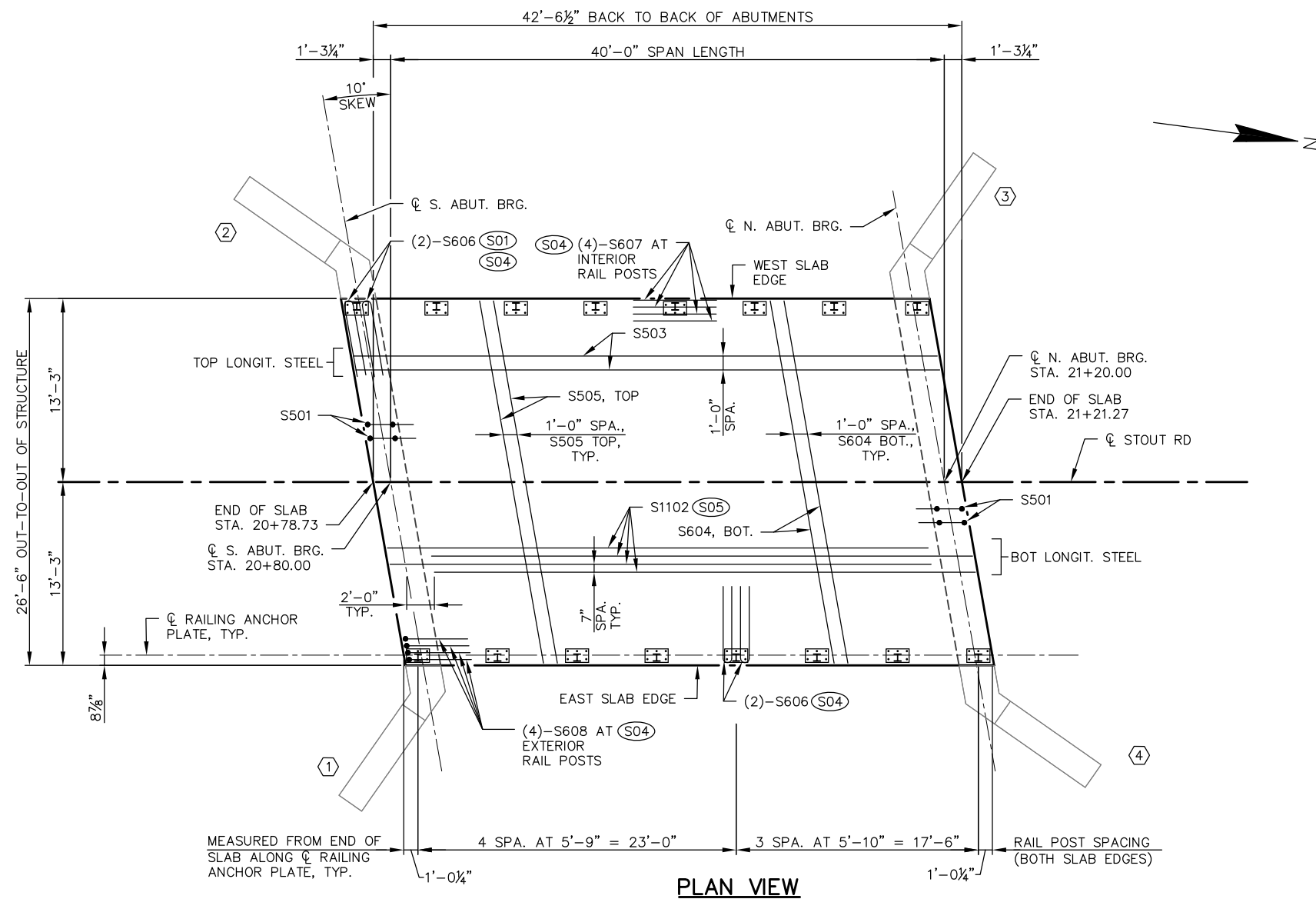
BUNDLE AND TAG EACH SERIES SEPARATELY.

F.F. - FRONT FACE
B.F. - BACK FACE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-56-248			
DRAWN BY JDO		PLANS CK'D	ACK
ABUTMENT DETAILS			SHEET 5 OF 8



LONGITUDINAL SECTION
(LOOKING WEST)



PLAN VIEW

NOTES

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 (+).

RAILING TO BE INSTALLED ON THE SLAB AFTER FALSEWORK HAS BEEN RELEASED.

(S01) ADJUST ORIENTATION OF S606 BAR AT END POST NEAR WINGS 2 & 4 TO ENSURE CLEAR COVER AT END OF SLAB.

(S02) SEE "ABUTMENTS" SHEET FOR PLACEMENT OF A506 BARS

(S03) DIMENSION IS TAKEN PARALLEL TO ϕ STOUT RD

(S04) SEE "RAILING TUBULAR TYPE M" SHEET FOR PLACEMENT OF RAIL POST REINFORCEMENT.

(S05) EXTEND ONE END OF THE S1102 BAR TO 2" CLEAR OF ONE BACK FACE OF ABUTMENT. ALTERNATE BETWEEN SOUTH AND NORTH ABUTMENTS ACROSS ENTIRE SLAB.

INDICATES WING NUMBER

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-56-248			
DRAWN BY JDO		PLANS CK'D	ACK
SUPERSTRUCTURE			SHEET 6 OF 8

F.F. - FRONT FACE
B.F. - BACK FACE

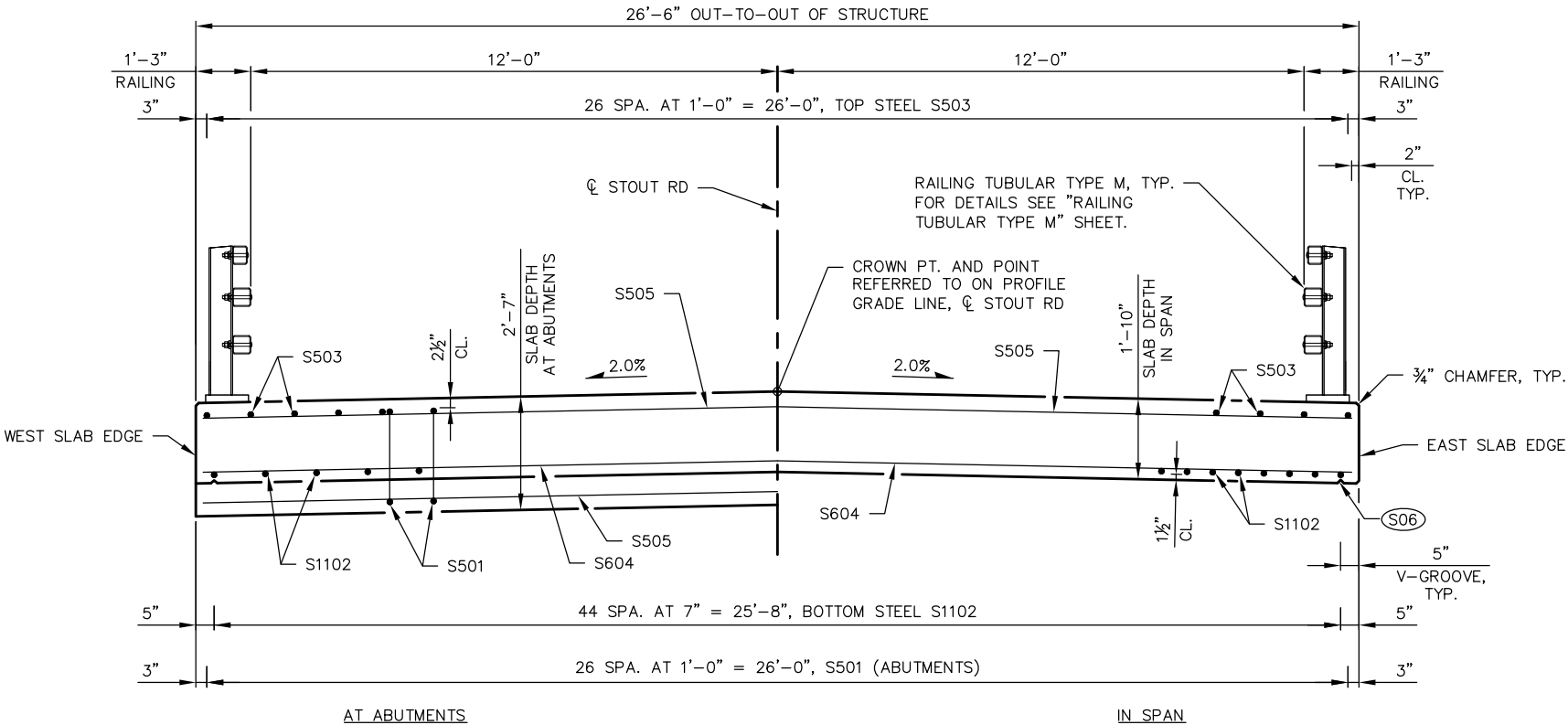
BILL OF BARS
SUPERSTRUCTURE

COATED = 15,050 LBS.

MARK	NUMBER		LENGTH	BENT	BAR SERIES	LOCATION
	COATED	UNCOATED				
S501	54		7'-3"	X		SLAB AT ABUTMENT - TIES LONGIT.
S1102	45		39'-1"			SLAB - BOTTOM LONGIT.
S503	27		42'-2"			SLAB - TOP LONGIT.
S604	43		26'-6"			SLAB - BOTTOM TRANS.
S505	47		26'-6"			SLAB - TOP & OVER ABUTMENTS TRANS.
S606	32		11'-6"	X		SLAB - TOP AT RAIL POSTS TRANS.
S607	48		6'-0"			SLAB - TOP AT INTERIOR RAIL POSTS LONGIT.
S608	16		4'-8"	X		SLAB - TOP AT EXTERIOR RAIL POSTS LONGIT.

THE FIRST OR FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

**CROSS SECTION THRU ROADWAY**

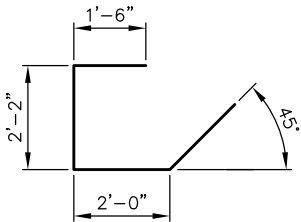
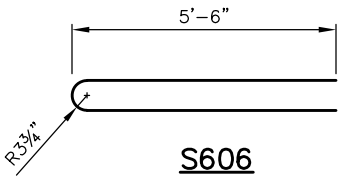
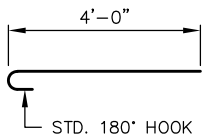
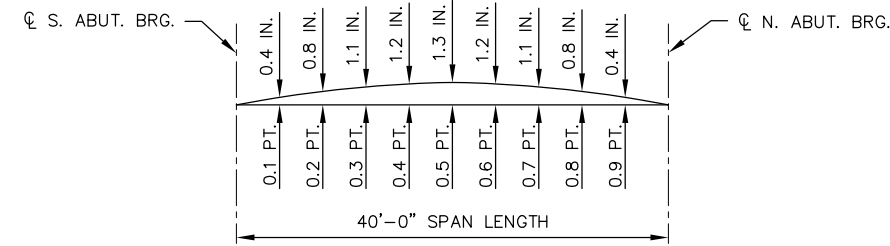
(LOOKING NORTH)

SURVEY TOP OF SLAB ELEVATIONS

	CL. S. ABUT. BRG.	5/10 PT.	CL. N. ABUT. BRG.
WEST SLAB EDGE			
CL. STOUT RD			
EAST SLAB EDGE			

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE CL. OF ABUTMENTS AND AT 5/10 POINTS TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE OF SLAB AND REFERENCE LINE. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

TOP OF SLAB ELEVATIONS			
SPAN PT	WEST SLAB EDGE	CL. STOUT RD	EAST SLAB EDGE
CL. S. ABUT.	914.51	914.77	914.50
0.1	914.50	914.75	914.49
0.2	914.49	914.74	914.47
0.3	914.48	914.73	914.46
0.4	914.46	914.72	914.45
0.5	914.45	914.71	914.44
0.6	914.44	914.69	914.43
0.7	914.43	914.68	914.41
0.8	914.42	914.67	914.40
0.9	914.40	914.66	914.39
CL. N. ABUT.	914.39	914.64	914.38

**S501****S606****S608****SLAB CAMBER DIAGRAM**

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.

NOTES

CAMBER SPAN AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

(S06) 3/4" V-GROOVE. EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUTMENT BODY. V-GROOVES ARE REQUIRED.

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STRUCTURE B-56-248			
DRAWN BY JDO		PLANS CK'D	ACK
SUPERSTRUCTURE DETAILS			SHEET 7 OF 8

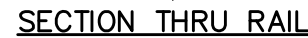


FIELD ERECTION JOINT DETAIL

SECTION B-B



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



TYPICAL RAIL TO POST CONNECTIONS



- ① W6 x 25 WITH 1½" x 1½" 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 1¼" x 11¾" x 1'-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. USE 1'-9" LONG IN ABUTMENT WINGS. AT POSTS, ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 16" USE 1'-3" LONG. USE 10¾" LONG AT ALL OTHER LOCATIONS. (AN EQUIVALENT THREADED ROD WITH NUTS AND HARDENED WASHERS MAY BE SUBSTITUTED FOR ANCHOR BOLTS IN WINGS IF REQ'D. FOR CONSTRUCTABILITY.)
- ④ ⅝" x 11" x 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1⅞" 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 ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, ⅜" x 1½" x 1½" MIN. WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION.)
- ⑦ ½" THK. BACK-UP PLATE WITH 2 - ⅞" x 1½" THREADED SHOP WELDED STUDS (NO. 12). BOLT TO RAIL AS SHOWN IN DETAIL. REQUIRED AT THREE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYMMETRICALLY ABOUT TUBES NO. 5A.
- ⑧ 1" DIA. HOLES IN PLATE NO. 7 & TUBES NO. 5A FOR ⅞" DIA. A325 BOLTS WITH HEX NUTS AND WASHERS. 6 HOLES IN TUBES AND PLATE NO. 7.
- ⑨ SPLICE SLEEVE FABRICATED FROM ¼" PLATE. PROVIDE "SLIDING FIT".
- ⑩ ⅜" x 3⅝" x 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.
- ⑩A ⅜" x 2⅝" x 2'-4" PLATE USED IN NO. 5, ⅜" x 3⅝" x 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.
- ⑪ ⅞" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER AND LOCK WASHER. USE 1⅝" x 1¼" LONGIT. SLOTTED HOLES IN PLATE NO. 10A. AT FIELD JOINTS AND 1⅝" x 2¼" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 10A. PROVIDE 1⅝" DIA. ROUND HOLES IN TUBES NO. 5 AND NO. 5A.

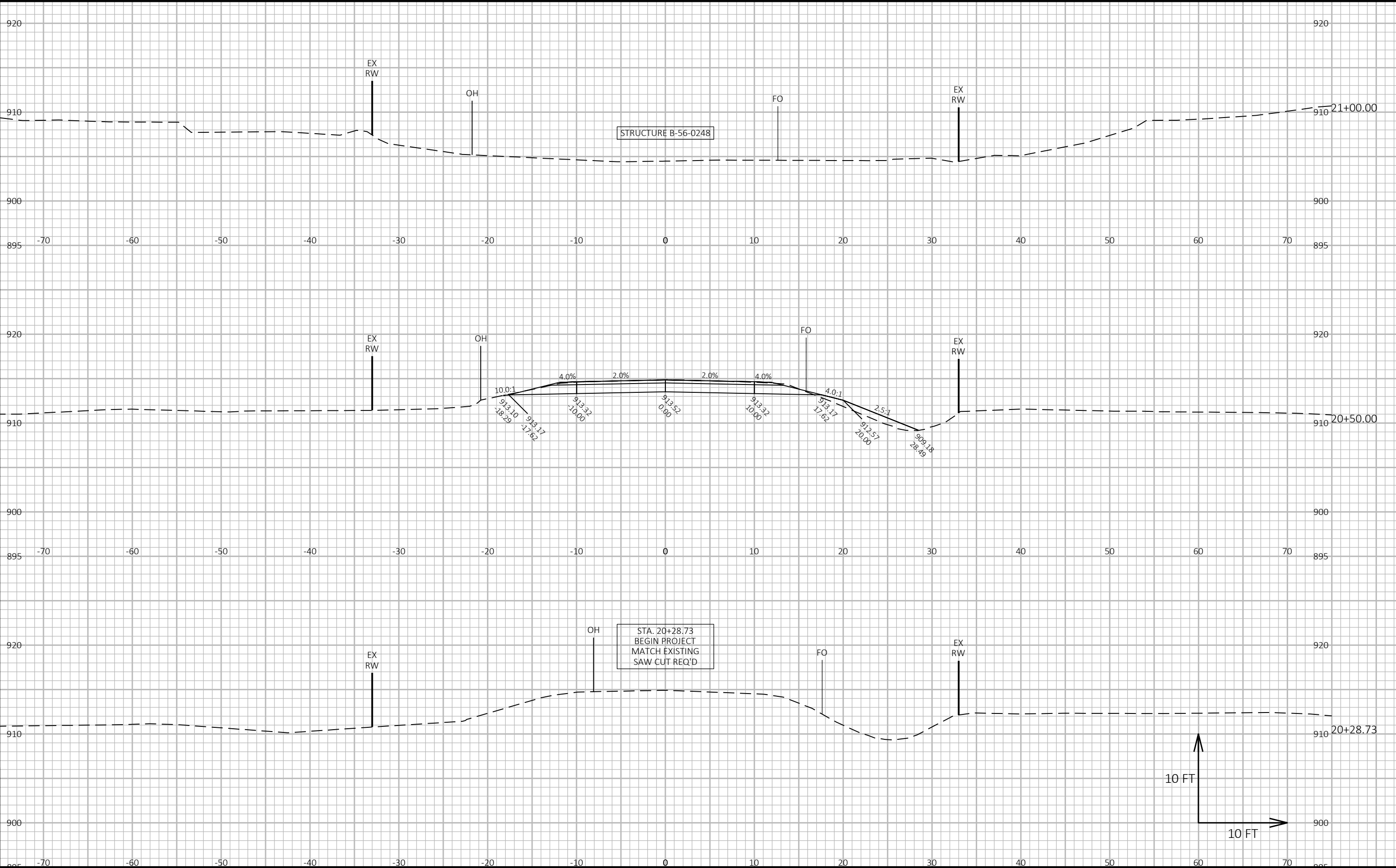
1. BID ITEM SHALL BE "RAILING TUBULAR TYPE M" WHICH INCLUDES ALL ITEMS SHOWN.
2. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY = 50 KSI. ANCHOR PLATES, 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 1/8 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.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-56-248			
DRAWN BY JDO		PLANS CK'D ACK	
RAILING TUBULAR TYPE M		SHEET 8 OF 8	

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
20+28.73	0.00	35.50	6.99	0.01	0	0	0	0	0	0
20+50.00	21.27	38.54	6.66	5.51	29	5	2	29	3	22
20+68.67	18.67	36.72	5.99	11.11	26	4	6	55	10	36
20+76.26	7.59	32.33	5.66	20.67	10	2	4	65	15	39
20+78.73	2.47	17.60	5.66	6.95	2	1	1	67	16	39
STRUCTURE B-56-0248										
DIVISION 1 TOTALS					67	12	13			

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
STRUCTURE B-56-0248										
21+21.27	0.00	19.14	4.25	26.32	0	0	0	0	0	0
21+23.74	2.47	34.53	4.25	37.24	2	0	3	2	4	-2
21+31.33	7.59	35.96	4.50	52.06	10	1	13	12	20	-9
21+50.00	18.67	52.51	5.00	43.02	31	3	33	43	61	-22
21+71.27	21.27	32.94	5.00	0.00	34	4	17	77	83	-14
		DIVISION 2 TOTALS			77	8	66			
		PROJECT TOTALS			144	20	79			

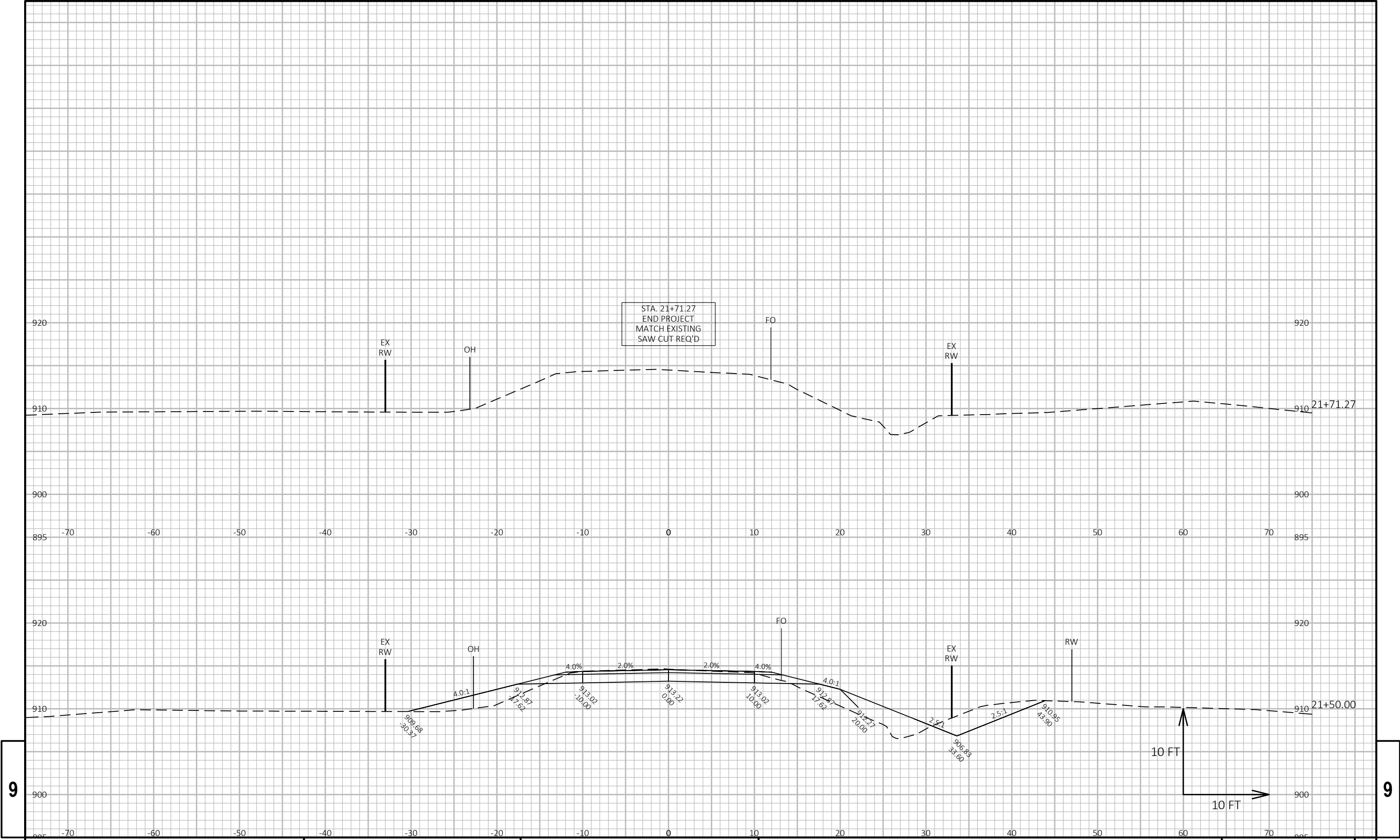
NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS. INCLUDES EXISTING PAVEMENT.
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - MASS ORDINATE	[(CUT) - (FILL * FILL FACTOR) - (SALVAGED/UNUSABLE PAVEMENT MATERIAL)]
	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS QUANTITY INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.



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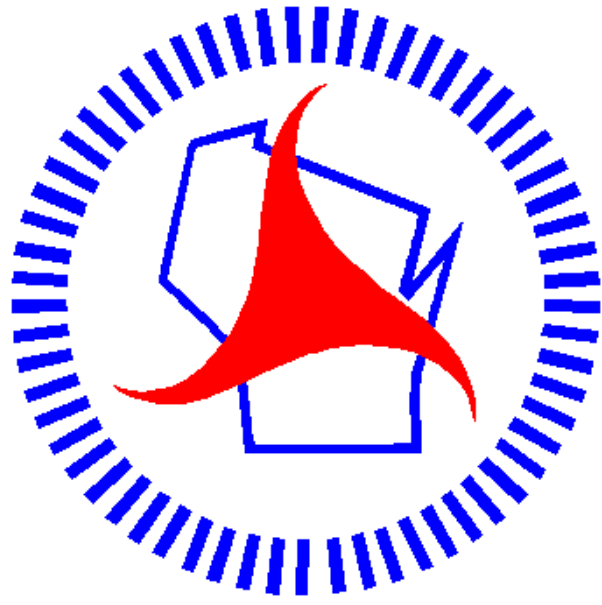
PROJECT NO: 5786-00-70	HWY: STOUT ROAD	COUNTY: SAUK	CROSS SECTIONS	SHEET	E
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PROJECT NO: 5786-00-70	HWY: STOUT ROAD	COUNTY: SAUK	CROSS SECTIONS	SHEET	E
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